

WATERLOO

Annual
Performance
Indicators

2011

UNIVERSITY OF
WATERLOO

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Introduction

This seventh annual edition of the University of Waterloo's Performance Indicators report is published with two purposes. First, it is meant to be a reference, an objective and reliable compilation of data on a selection of key indicators. Second, its figures and graphs, including historic trends and comparison with other universities, provide valuable evidence of the needs and opportunities that will be addressed in future planning.

Last year's Indicators report promised "a change in focus from the content of the performance indicator metrics to a report on progress relative to our Sixth Decade Plan", a guiding document that was approved in 2006 for the 2007-17 period. This report continues that emphasis, and appears simultaneously with a major university-wide planning and consultation exercise, a "Mid-Cycle Review" that will realign the Sixth Decade Plan and introduce an accountability framework with action plans and measures of success. The review will be guided by uWaterloo's foundational pillars and these include academic excellence; research excellence and impact; co-operative education; graduate studies; internationalization and entrepreneurship. Many of these matters are explicitly addressed in sections of these Indicators.

The University of Waterloo has come a long way since it was founded in 1957 to help meet the employment needs of industry in central Ontario through an innovative co-operative education program. By the 1970s the university had a national presence, and since the 1980s an international profile. For the past two decades, uWaterloo has been recognized for academic excellence and "innovation", as reflected in the Maclean's magazine rankings. The Sixth Decade Plan explicitly sought to put the university among the top five institutions in Canada by 2017.

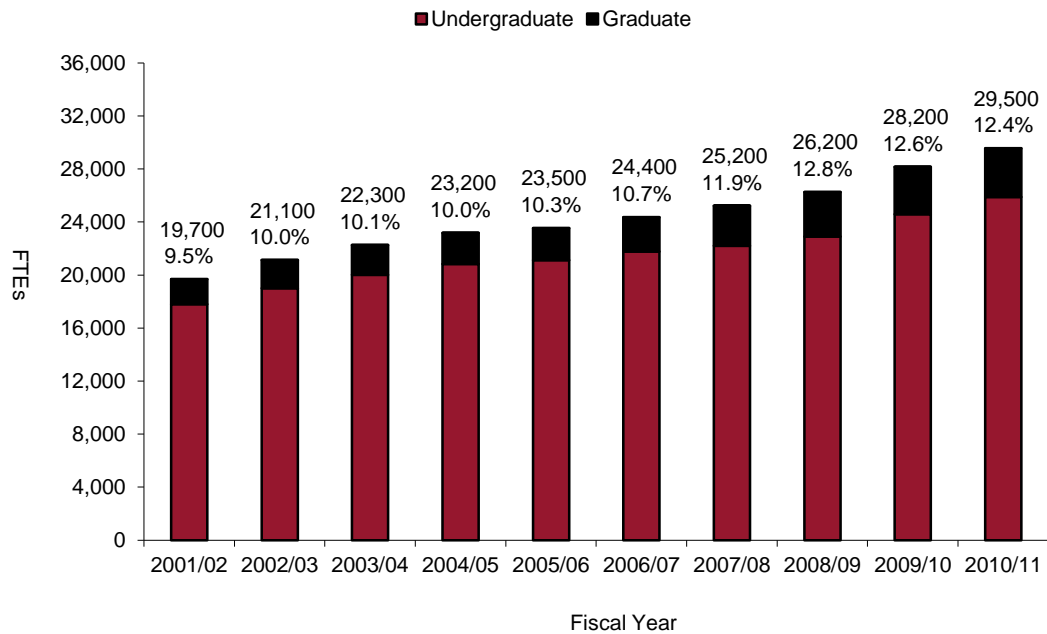
The 2010/11 academic and fiscal year was a period of transition for the University of Waterloo; at the speed at which international and national politics, economics and culture, as well as the academic world, now move, perhaps every year will now be a period of transition. The University of Waterloo concludes 2011 with a new president, the completion of a number of key buildings on the main campus, a balanced budget, a growing enrolment at its high-profile campus in the United Arab Emirates, exciting plans for continued and internationally important development in the Research and Technology Park, and many other positive signs. Change brings opportunities and challenges for our students, faculty and staff as we continue our pursuit of excellence. The opportunities will be best seized, and the challenges best faced, by those who have an accurate set of facts to define the realities and the 2011 Key Performance Indicators serve this purpose.

Overview 2011

The Performance Indicator Report continues to provide a reliable, well-defined set of metrics for use across uWaterloo campus and in the wider community. The Performance Indicator Report will continue to offer a foundation data set that can be used as a starting point for other analyses that inform our decision making. Following the mid-cycle review of the Sixth Decade plan goals, we will be developing a set of more specific accountability measures that will complement the existing performance indicators and provide a more in-depth look at our progress and success.

Our Students

FTE¹ Enrolment – Undergraduate and Graduate

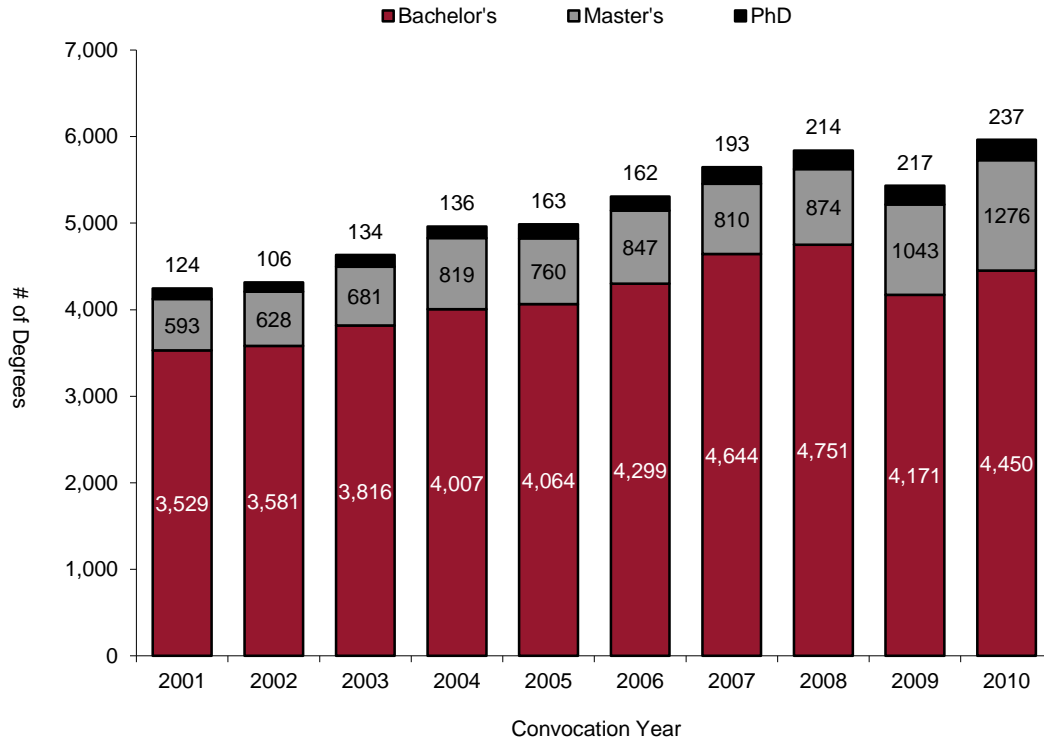


Relevance: Sixth decade goals set a target for graduate student enrolment to be 25 per cent of the total student population.

Performance: In 2010/11, graduate enrolment represented 12.4 per cent of our student population.

¹ FTE = full-time equivalent.

Degrees Granted

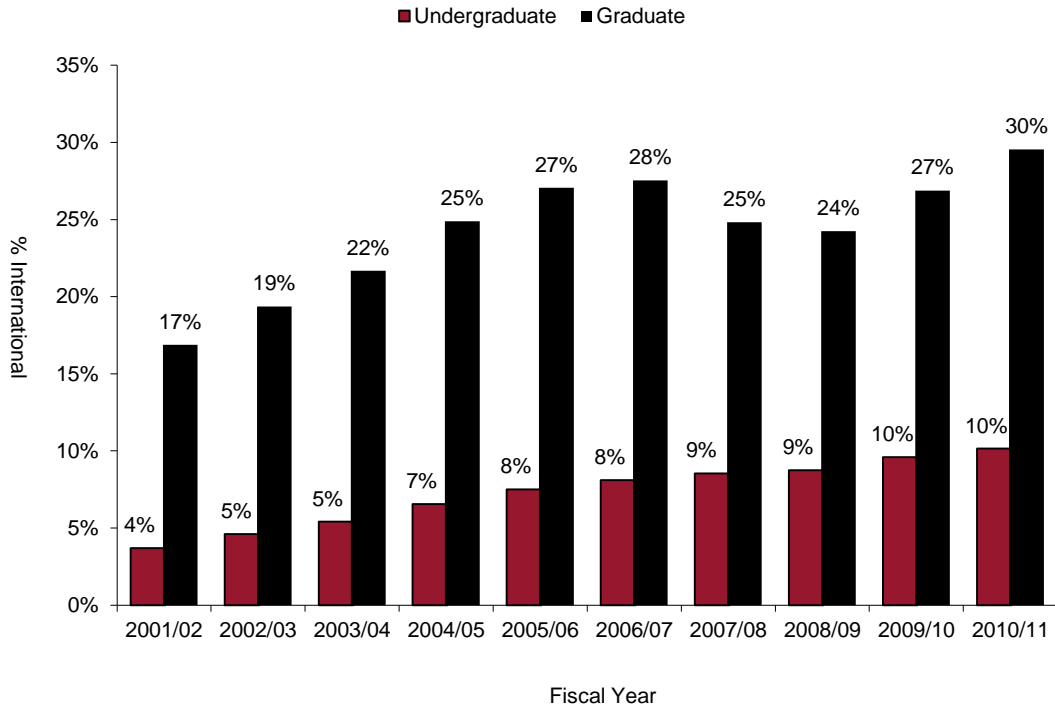


Relevance: An output measure of our academic programs and quality of students.

Performance: The decline in the 2009 undergraduate degrees granted count may be attributed to the elimination of Ontario's OAC (Grade 13) year. The effects can be seen during and immediately following the beginning of the 2002/03 cohort. It will be difficult to draw concrete conclusions until all students from the double cohort have completed their studies, although we can see an increase again in 2010.

For graduate degrees granted, we expect to see a steady increase, as we realize our graduate enrolment targets.

International Students as % of their Respective Populations

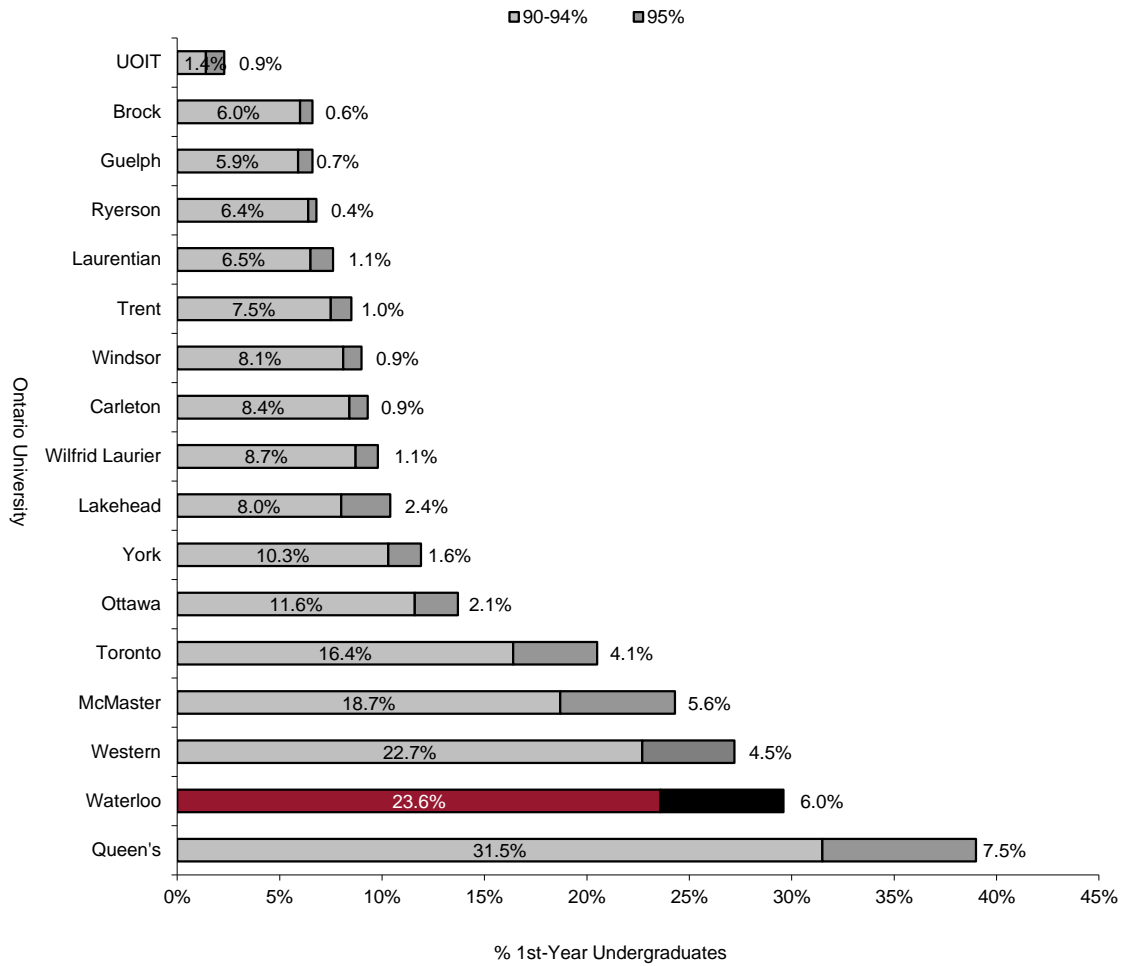


Relevance: Internationalization is a cornerstone of our sixth decade plan. Our goal is that international students will represent 20 per cent of our undergraduate student population and 30 per cent of our graduate student population.

Performance: In 2010/11 the undergraduate international percentage remained steady at 10 per cent. The graduate percentage increased to 29.54 per cent bringing us almost to our goal of 30 per cent.

Internationalization at UW includes the experience gained through study abroad and exchange opportunities and international co-op work terms. In 2010/11, over 200 uWaterloo students participated in an international exchange or study abroad experience.

Entering Averages of 90%+ as Compared to Ontario Universities - Fall 2009²

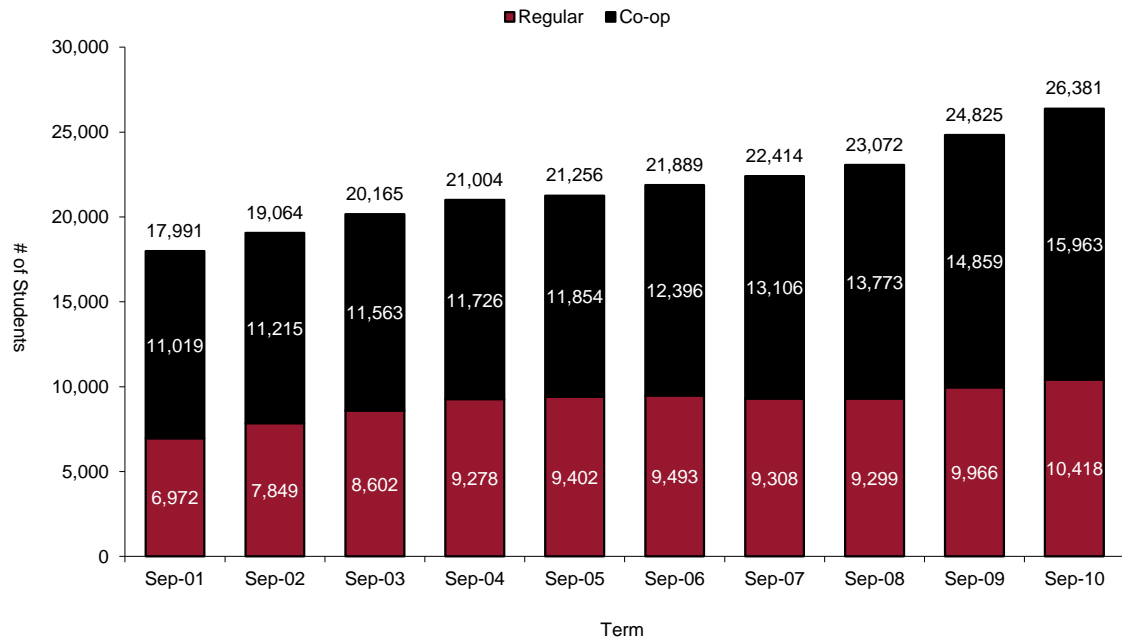


Relevance: We strive to be among the top three institutions in Canada attracting first-year students with entering average grades of 90 per cent plus.

Performance: In prior years we have used the Maclean's survey as a source for entering grade average data, which allowed us to collect results for our U15 peers. That data source is no longer available for all of our U15 peers. We now present the Ontario system, which shows uWaterloo second to Queen's in the percentage of students with entering averages of 90 per cent or higher.

² 2009 is the most recent data available from Common University Data Ontario (CUDO) for the 2011 report.

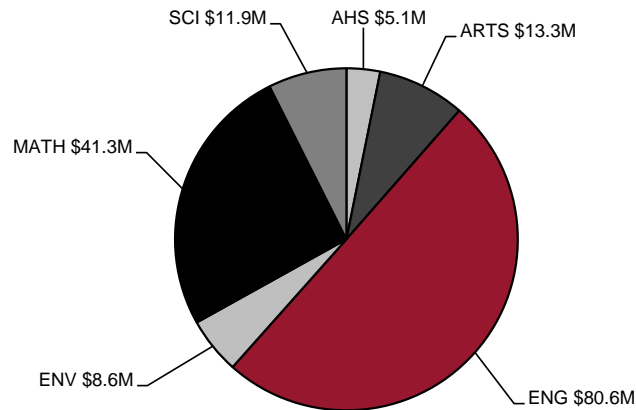
Fall Full-time Count of Undergraduate Students by System of Study (Includes Students on a Work Term)



Relevance: UW will maintain its position as the leading co-operative education university in the world.

Performance: The percentage of students registered in undergraduate co-operative education programs has increased to 61 per cent in fall 2010. In fall 2010, we see a six per cent increase in our total fall full-time count.

Total Earnings by Students on Co-op Work Term 2010/11³ - \$161,000,000



Relevance: Guarantee to meet the financial needs of ALL qualified Canadian students through a combination of scholarships, research internships, student loans, and co-op jobs.

Performance: In 2010/11 co-op students' estimated earnings were \$161 million compared to \$139 million in 2009/10.

A comprehensive review of co-operative education and career services done in 2005 and a review of the employment process completed in 2006 led the department of Co-operative Education and Career Services (CECS) to create a strategic framework for co-op renewal encompassing the recommendations of both reviews. The framework was further enhanced in 2008, following the development of an employer relations and marketing strategy.

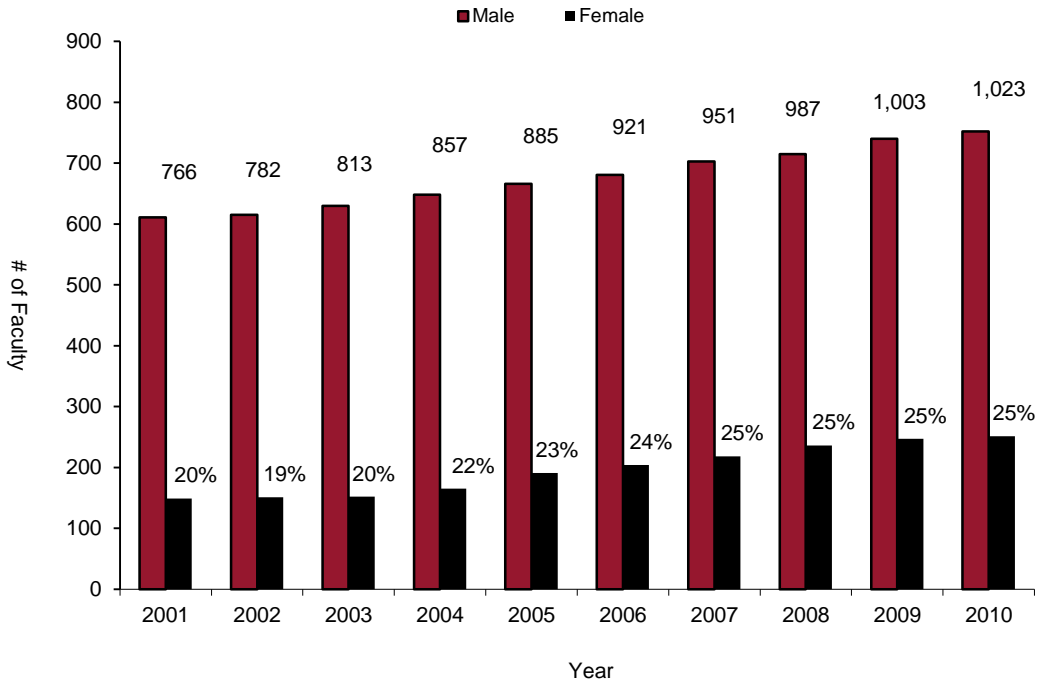
Significant progress has been made in all areas of the framework, notably:

- Implementation of a new marketing and business development strategy to develop and harvest opportunities with employers new to uWaterloo co-op.
- The addition of 20 new or amended academic programs to the employment requirement portfolio.
- Achieving the status of delivery agent for Industry Canada's Small Business Internship Program. This program has been an unqualified success for both employers and students.
- The development of performance metrics to measure the effectiveness of the renewal strategies focusing on student employment.

³ AHS = Applied Health Sciences; ENG = Engineering; ENV = Environment; SCI = Science.

Our Faculty

Count of Full-time Faculty by Gender and Percentage Female⁴

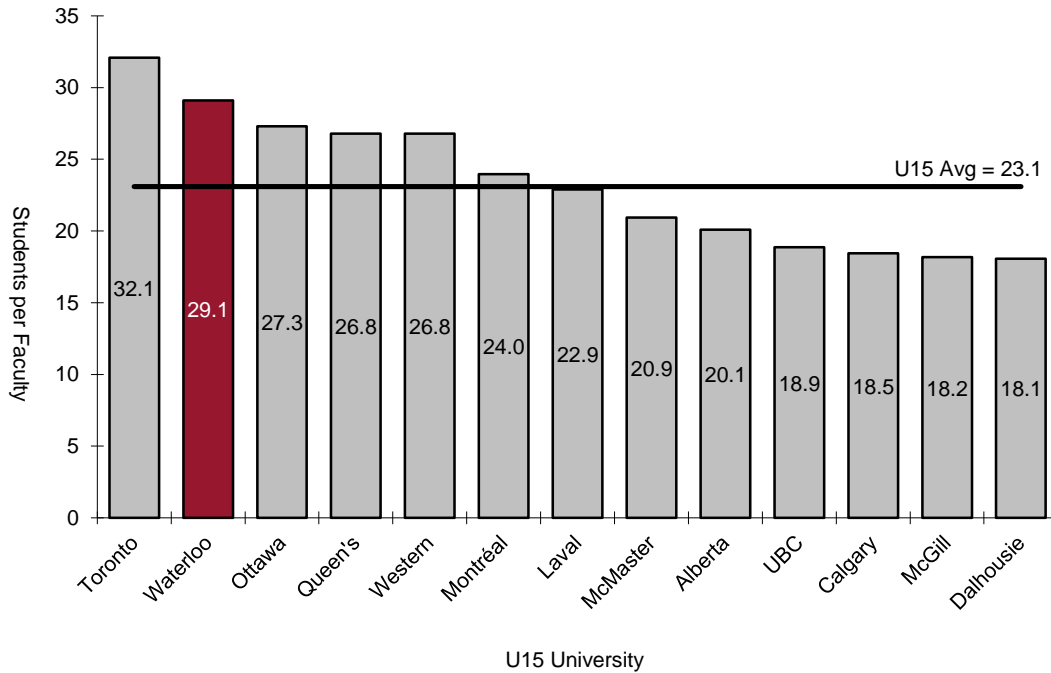


Relevance: Our sixth decade goals include a target of at least 1,000 full-time faculty members by 2017.

Performance: While we have experienced a steady increase in the number of full-time faculty members over the past several years, with 1,023 in 2010, our goal for our student to faculty ratio of 20:1 remains a challenge due to our increasing student population. In addition, our percentage of female faculty members has not significantly increased in the past six years. More work is needed to address both of these important issues.

⁴ Source: Statistics Canada UCASS – As of October 1st of each survey year.

Full-time Student to Full-time Tenure and Tenure-stream Faculty Ratio as Compared to U15⁵ Universities 2009/10



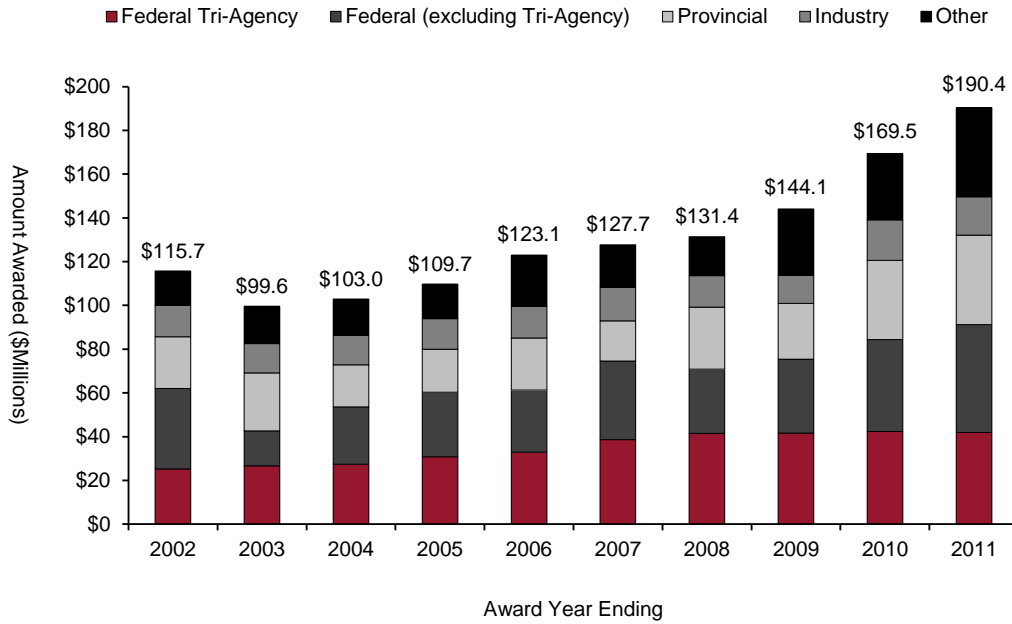
Relevance: Sixth decade goal aims to reduce the student to faculty ratio to 20:1.

Performance: In 2009/10 uWaterloo had one of the highest ratios of full-time student to full-time tenure and tenure-stream faculty among our U15 Data Exchange peers. Though we have continued to hire full-time faculty members, our undergraduate population increased nearly 19 per cent over 2006/07. This is an area that is currently being examined at uWaterloo in terms of both definition of the student to faculty ratio and its evaluation as a measure of student experience.

⁵ University of Saskatchewan and University of Manitoba data not available at the time of publication of this report. Toronto data not available for 2009/10, so 2008/09 numbers are presented.

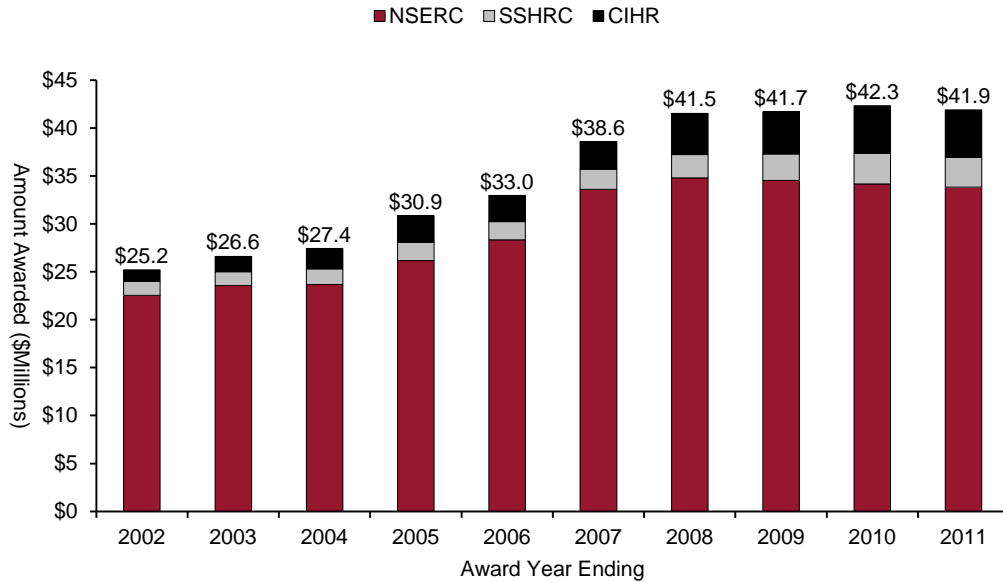
Our Research

Total Sponsored Research Awards by Source



Relevance: Increase research awards to 50 per cent of the operating revenue from the current level of 30 per cent.

Performance: Our 2010/11 research awards represents about 35 per cent of our 2010/11 operating revenue.

Federal Tri-Agency Research Awards 2002-2011⁶

Relevance: NSERC grants—to be among the top three institutions in Canada; SSHRC grants—to be among the top 10 institutions in Canada; to quadruple CIHR grants—to \$12.5 million.

Performance: Relative to the U15, in the period 2006 to 2011, we ranked seventh in percentage increase in research awards from the NSERC granting council. In 2010/11, we ranked fifth in absolute dollars awarded (see Figure 3.2.H and 3.2.K in the research section).

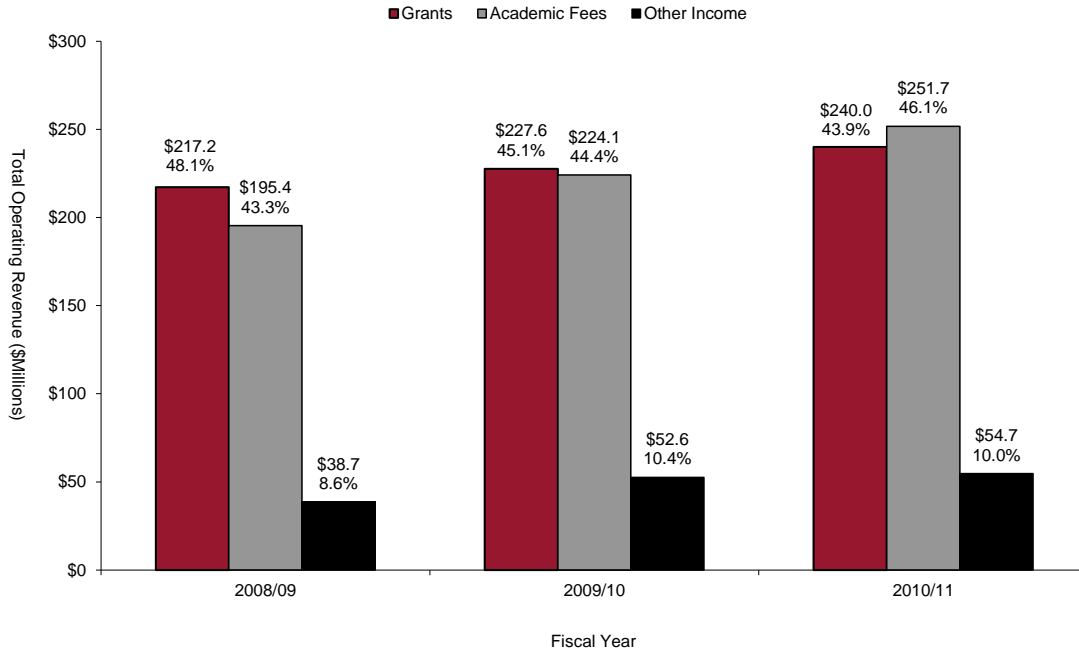
Relative to the U15, in the period 2006 to 2011, we ranked first in percentage increase in research awards from the SSHRC granting council. In 2010/11, we ranked twelfth in absolute dollars awarded (see Figure 3.2.I and 3.2.L in the research section).

Relative to the U15, in the period 2006 to 2011, we ranked first in percentage increase in research awards from the CIHR granting council. In 2010/11 our absolute dollars awarded was \$5.8 million (see Figure 3.2.J and 3.2.M in the research section).

⁶ NSERC = Natural Sciences and Engineering Research Council; SSHRC = Social Sciences and Humanities Research Council; CIHR = Canadian Institutes of Health Research.

Our Resources

Operating Revenue by Source⁷

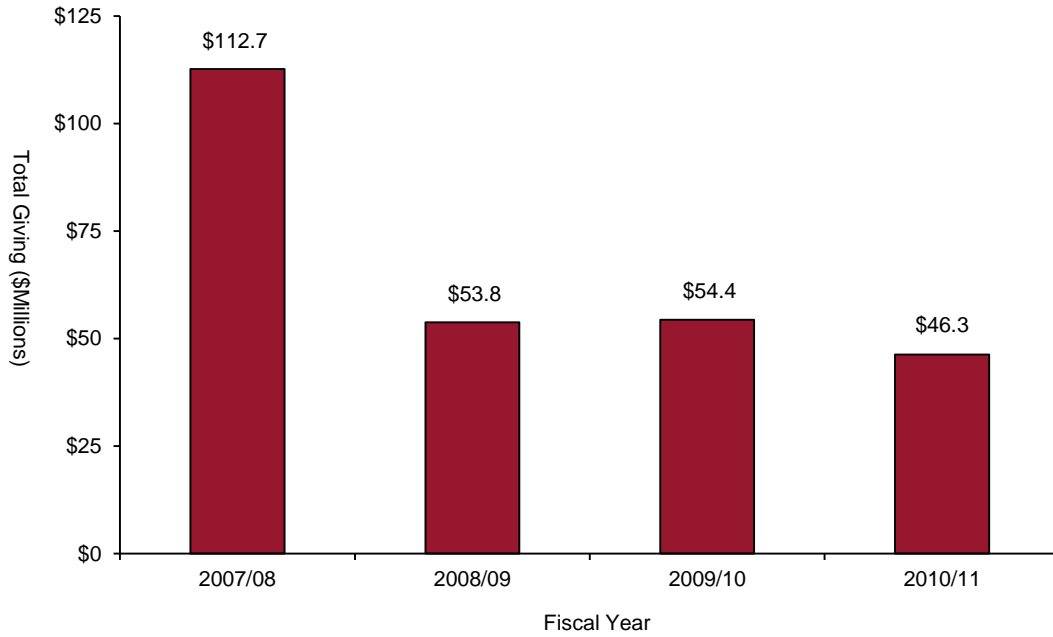


Relevance: UW will have incremental resources to support its pursuit of academic excellence.

Performance: In 2010/11, our operating revenue increased to about \$546 million, up from \$504 million in 2009/10, an increase of approximately eight per cent.

⁷ Grants are comprised mainly of Ministry of Training, Colleges and Universities operating grants; other income includes items such as external sales of goods and services (by academic and academic support units), investment income and application fees.

Sixth Decade Private Sector Contributions (Dollars Received in Millions)



Relevance: Sixth decade goal aims to raise annual funds of 20 per cent of the operating budget. Cumulative funds raised by Campaign Waterloo, by 2017, are to exceed one billion dollars.

Performance: Annual funds raised in 2010/11 amounted to \$46.3 million, representing eight per cent of the operating revenue.

In 2010/11, to coincide with President David Johnston’s departure, we closed Campaign Waterloo, the second largest university campaign in Canadian history, reaching a total of more than \$613 million in private-sector gifts. We have now shifted our reporting to reflect the timing and priorities of the University’s sixth decade to advance our vision of being a global leader and research-intensive university.

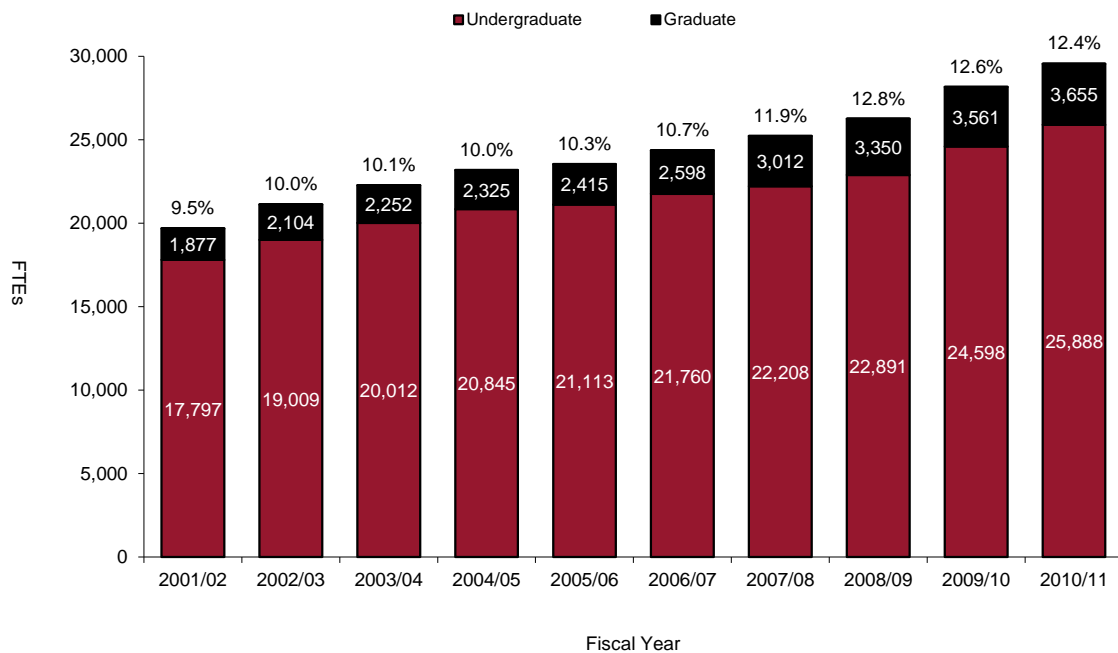
1. Undergraduate Studies

The University’s vision for our sixth decade supports a proactive approach to innovative undergraduate education, including strategic management of our undergraduate enrolment, continued focus on relevance and excellence in co-operative education, global engagement, improved student-faculty ratio, and the recruitment, and retention of excellent students. We believe in the value of covering the scope of higher education from quality undergraduate programs to much needed innovative graduate and professional education.

1.1 ENROLMENT

Figure 1.1.A⁸

FTE Enrolment – Undergraduate and Graduate



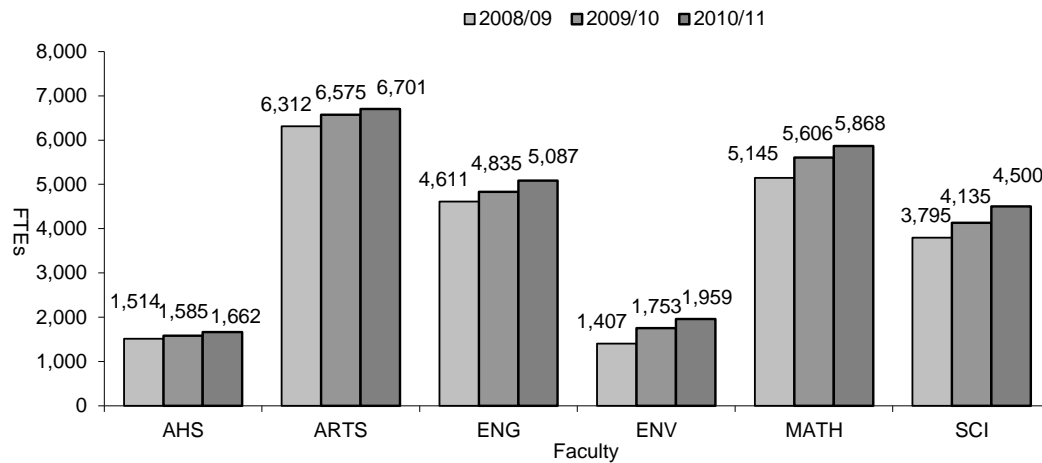
For most schools with only a regular system of study—where students register in the fall and winter terms—the count of fall, full-time students is the best method to measure the size of their student population. At uWaterloo, because of co-op, we count students in two ways: annual full-time equivalent students (FTEs), and term counts of students. In an academic year, full-time undergraduate students usually register for two terms; co-op students, depending on their program, will register for one or two terms and will be on work term for the remaining terms.

⁸ Percentage of undergraduate FTE students displayed.

When we count annual FTEs our goal is to measure the size of our on-campus student population and to accurately represent each student. Since a full-time undergraduate student usually registers for two terms, we count them as .5 FTE in each term; part-time enrolment is converted to FTEs by dividing the total annual (three terms) courses taken by 10, the expected annual number of courses for a full-time student.

Figure 1.1.B⁹

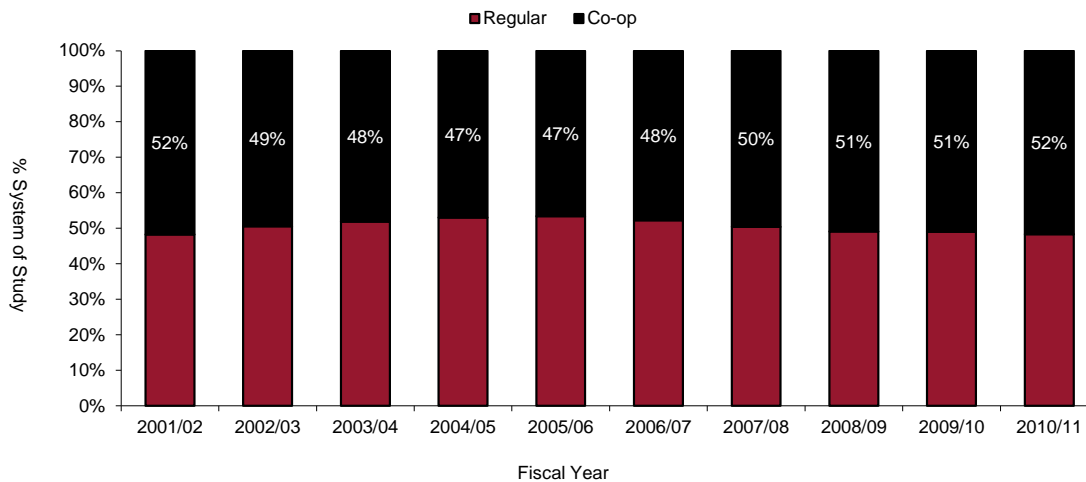
FTE Enrolment by Faculty



When we count students in the fall term, we also include those in our co-operative education programs who are off-campus on a work term. Since co-op students are not always registered for two academic terms in a year, our annual FTE count is lower than our count of fall full-time students. When counting co-op students on a work term, we include those students who were unable to find a job.

Figure 1.1.C

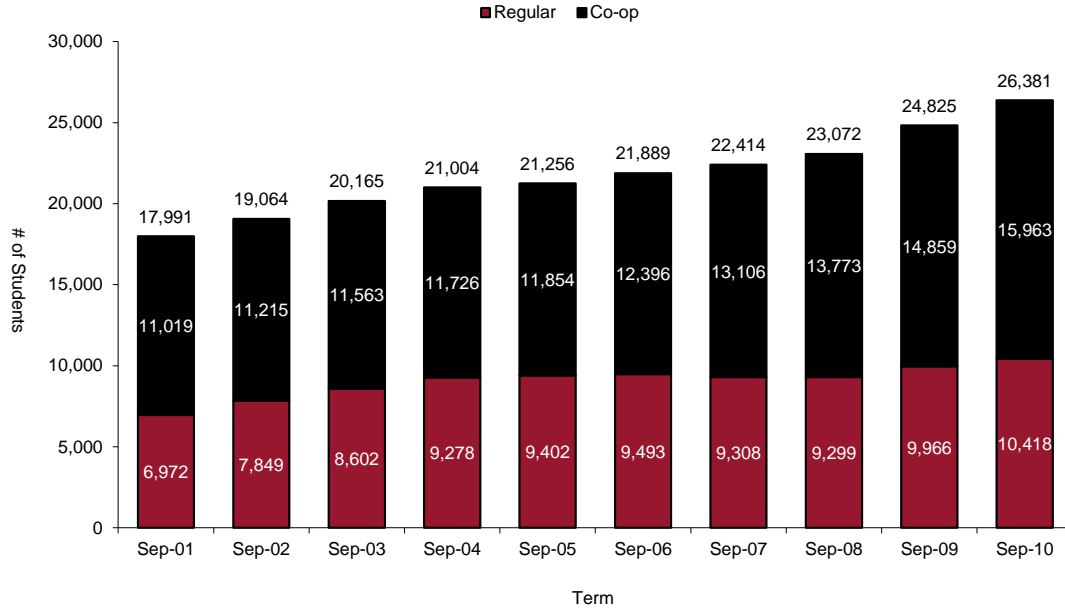
% Undergraduate FTE Students by System of Study



⁹ Software Engineering is offered jointly by the Faculties of Engineering and Mathematics and enrolment is split evenly between these two Faculties. Computing and Financial Management is offered jointly by the Faculties of Arts and Mathematics and enrolment is split between these two faculties. The Renison Bachelor of Social Work program is not shown, which had 107 students in 2008/09, 110 in 2009/10 and 111 in 2010/11.

Figure 1.1.D

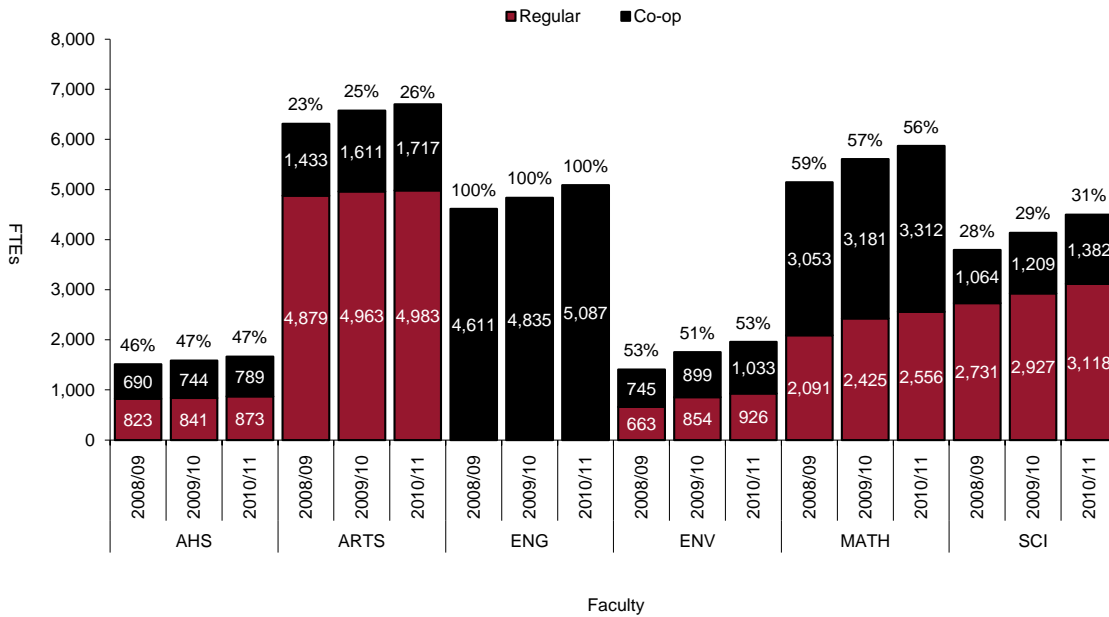
Fall Full-time Count of Undergraduate Students by System of Study (Includes Students on a Work Term)



Based on the count of students in the fall term, about 61 per cent of undergraduates were registered in co-operative programs in the fall of 2010.

Figure 1.1.E

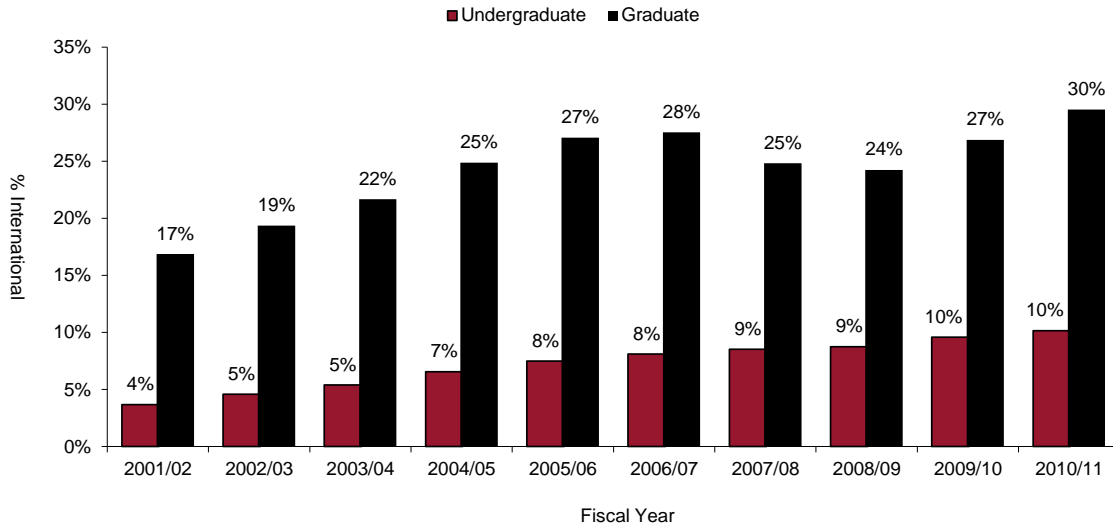
Undergraduate FTE Students by System of Study (% Co-op Indicated)



The international percentages in Figure 1.1.F and Figure 1.1.G will help us assess our annual progress on the University's priority of increased internationalization.

Figure 1.1.F

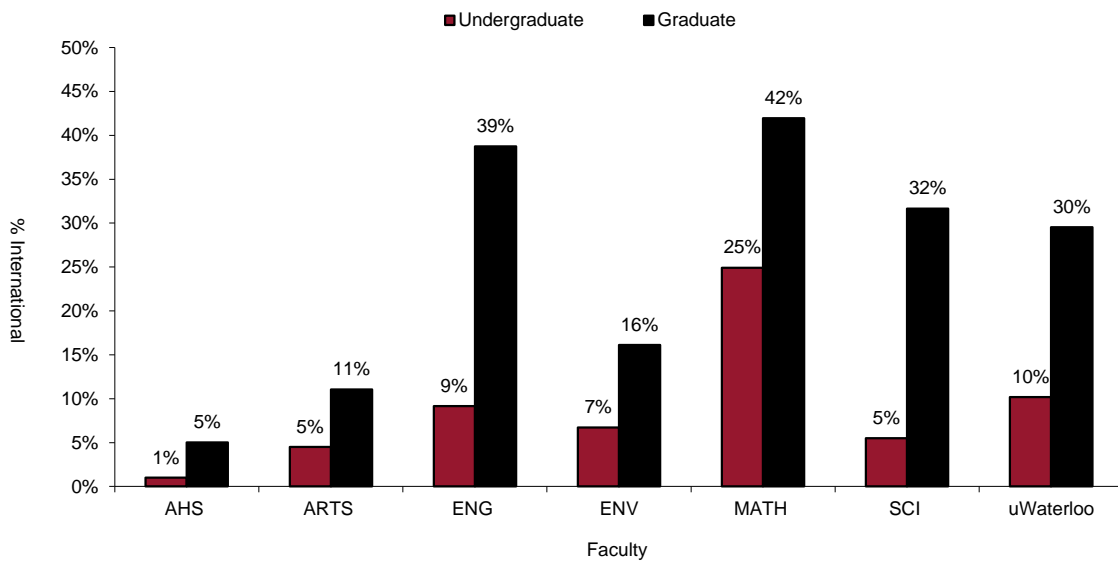
International Students as % of their Respective Populations



At the University level, international students make up 10 per cent of undergraduate enrolment and 30 per cent of graduate enrolment.

Figure 1.1.G

International Students as % of their Respective Populations 2010/11



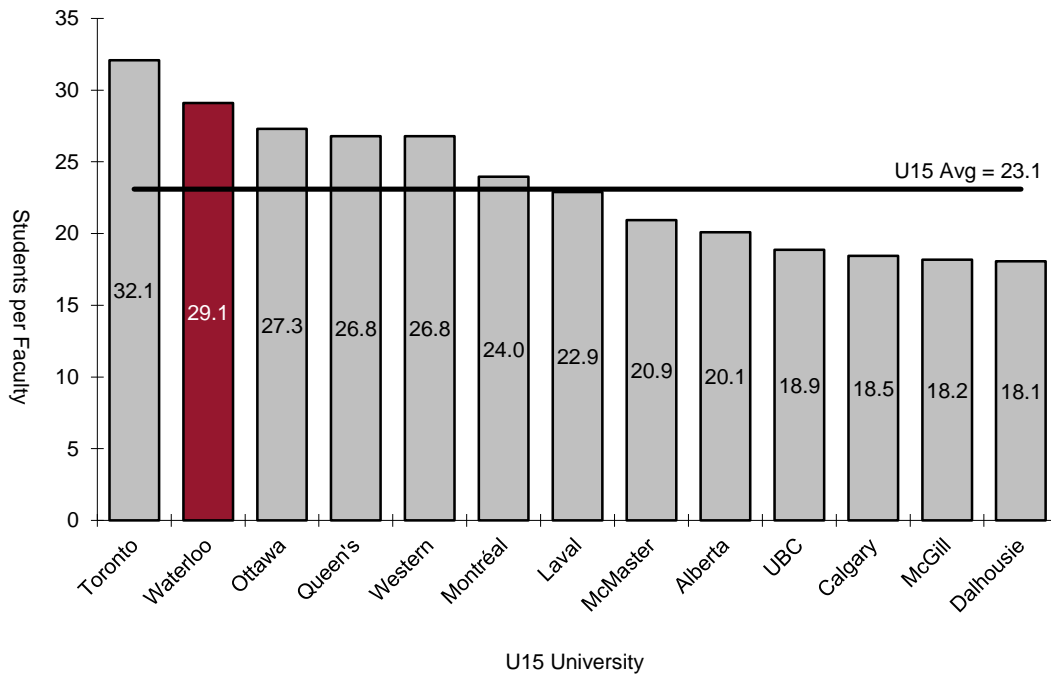
1.2 STUDENT TO FACULTY RATIO

The student to faculty ratio is considered a reasonable indicator of the quality of education at universities. The time and attention a faculty member is able to devote to each individual student is directly related to the quality of that student’s educational experience. The student to faculty ratio is also an indicator of the level and allocation of resources in our academic units.

In order to measure ourselves against our peers, we look at FTE students per tenure and tenure-stream faculty (Figure 1.2.A). Despite efforts to increase the number of faculty members, our student to faculty ratio remains one of the highest of the U15 universities.

Figure 1.2.A¹⁰

FTE Students to Full-time Tenure and Tenure-stream Faculty Ratio as Compared to U15 Universities 2009/2010



At uWaterloo, we have two additional measures that we use internally for decision-making and resource allocation—full-time equivalent (FTE) students taught by each Faculty (distinct from students registered in each Faculty); and the capacity of a Faculty to generate operating grants, a measure we call basic income teaching units, or BTUs. We then take ratios of these measures to the size of our complement faculty, which is the number of ongoing faculty positions (filled and open) for which the University has made a budgetary commitment.

The concept of FTE students taught is fairly straight forward—it represents the total number of FTE students who are taught in the Faculty including students registered in other Faculties. We convert courses taught by each faculty to equivalent students taught using a formula that takes into account course weights and the average course load for students in the faculty.

¹⁰ Source: U15 Data Exchange. University of Saskatchewan and University of Manitoba were not members of the U15 during this data project. Toronto data not available for 2009/10, so 2008/09 numbers are presented.

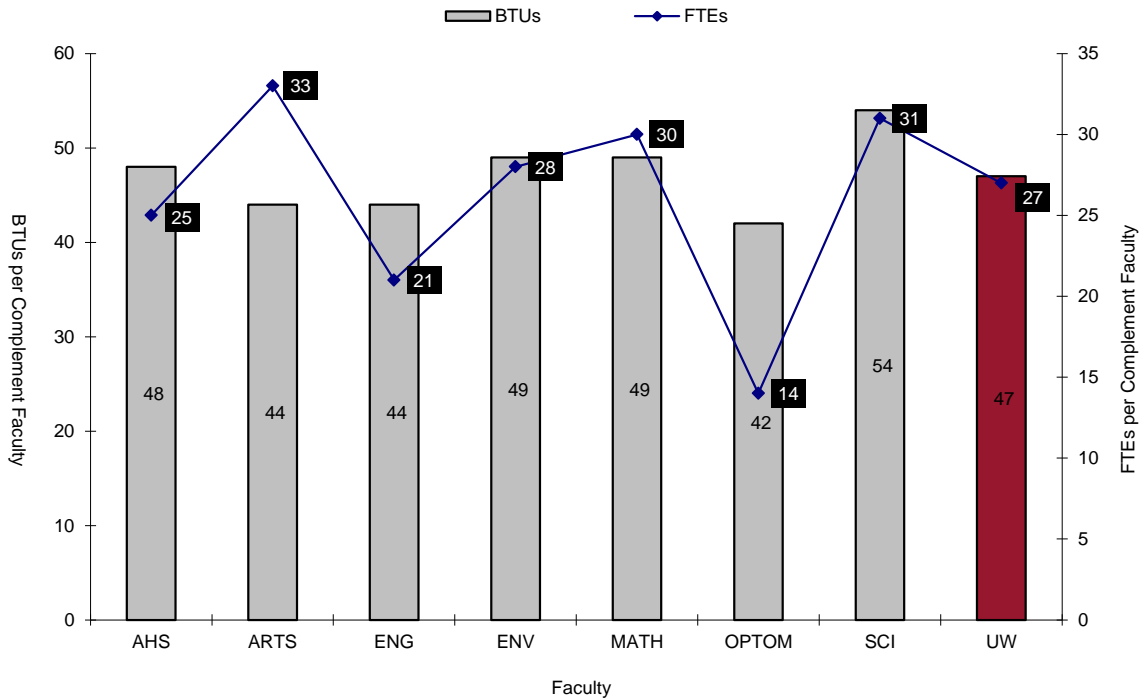
For example, the Faculty of Arts may register 100 students and teach the equivalent of 140 students because students in other faculties take Arts courses to complete their degree requirements.

The concept of BTUs brings in another dimension—the operating grant revenue generated by students registered in a faculty. Each student reported to the government for funding purposes generates a specified number of basic income units, or BIUs, depending on their program and level of study. BIUs are defined by the Ministry of Training, Colleges and Universities. In order to distribute the BIU funds across the faculties according to the amount of teaching activity, we convert student term courses taught to BTUs using the average course load for the faculty and the average BIU weight of the students registered in that faculty.

The chart below shows the two measures described above—FTE students taught per complement faculty and the BTUs generated per complement faculty. We separate Optometry from Science since teaching ratios for Optometry are lower due to clinical teaching requirements.

Figure 1.2.B

BTUs and FTE Students Taught per Complement Faculty¹¹ 2010/11



¹¹ Complement faculty are ongoing faculty positions – filled and open – supported by operating funds, for which the University has made a budgetary commitment. Source: Finance. OPTOM = Optometry.

1.3 GRADE AVERAGES

Entering grade average¹² is one indicator of the quality of the student. At uWaterloo we seek to admit the brightest students possible. In fall 2005, uWaterloo established The President's Scholarship to guarantee a minimum \$2,000 scholarship to all students with an incoming average of over 90 per cent. In fall 2006, uWaterloo established a \$1,000 scholarship for students with an 85-90 per cent average.

Figure 1.3.A

Students Entering UW with Averages 90%+ Fall 2010

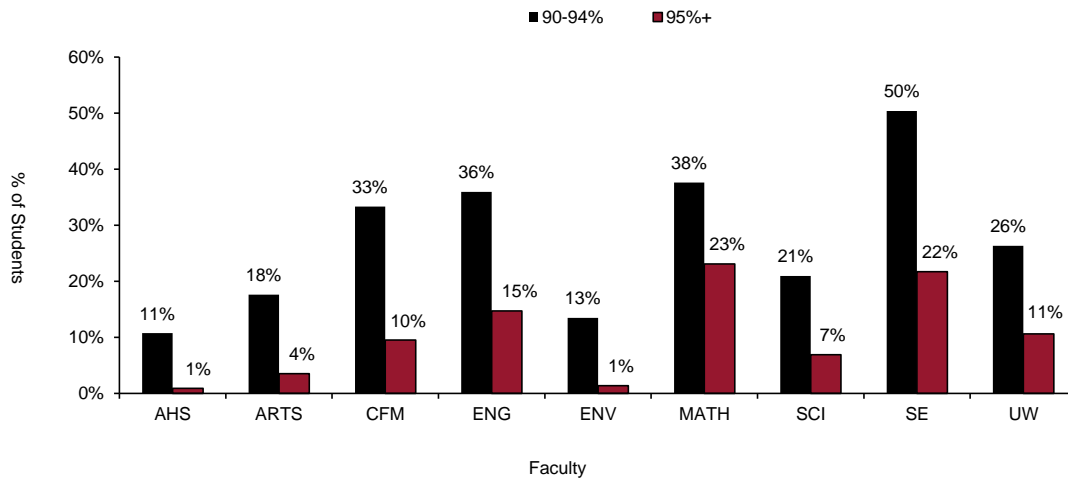
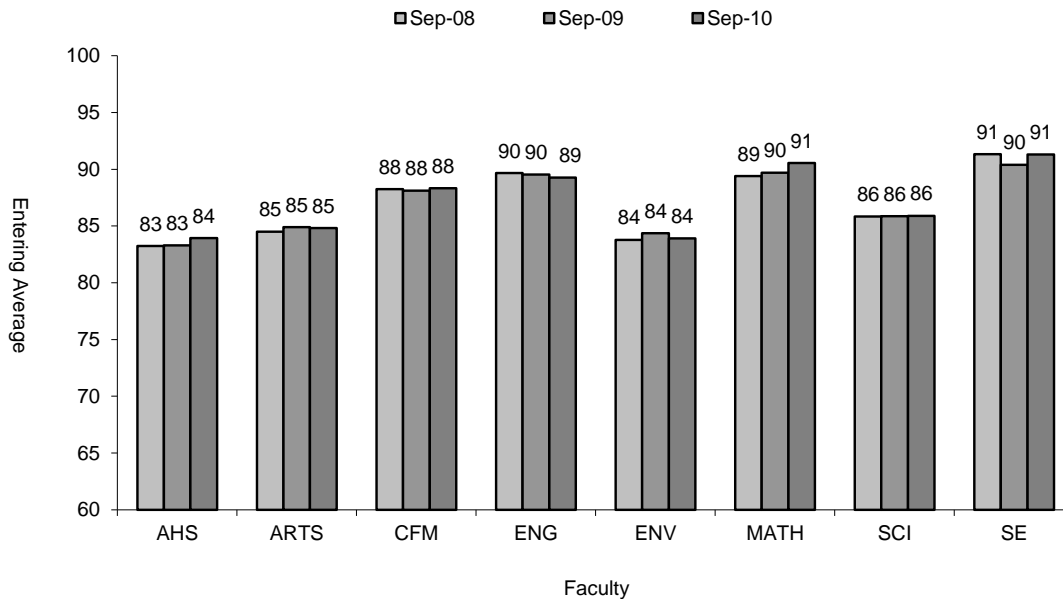


Figure 1.3.B

Entering Grade Averages (Average, Basis of Admission) Full-time First-year Undergraduate



¹² CFM = Computing and Financial Management; SE = Software Engineering.

To understand better the range of entering averages we present the break out of the 25th and 75th percentiles. For example, in 2010, for the Faculty of Arts, we see that the average entering grade was 85 per cent (Figure 1.3.B); we see the 25th percentile entering grade average was 81 per cent (Figure 1.3.C) and the 75th percentile entering grade average was 89 per cent (Figure 1.3.D). These measures tell us that of the students registered in the Faculty of Arts, in fall 2010, 75 per cent had a grade average higher than 81 per cent and 25 per cent had a grade average higher than 89 per cent.

Figure 1.3.C¹³

Entering Grade Averages (25th Percentile) Full-time First-year Undergraduate

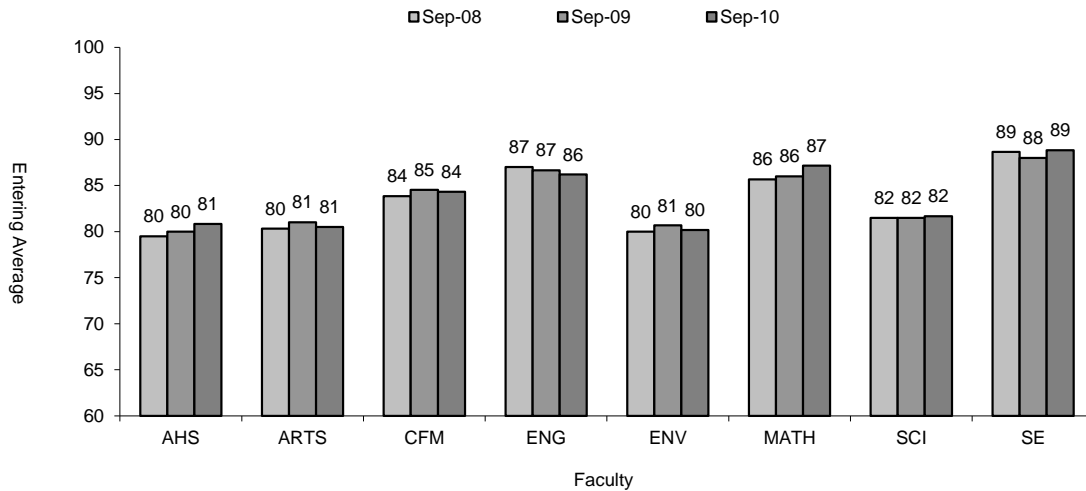
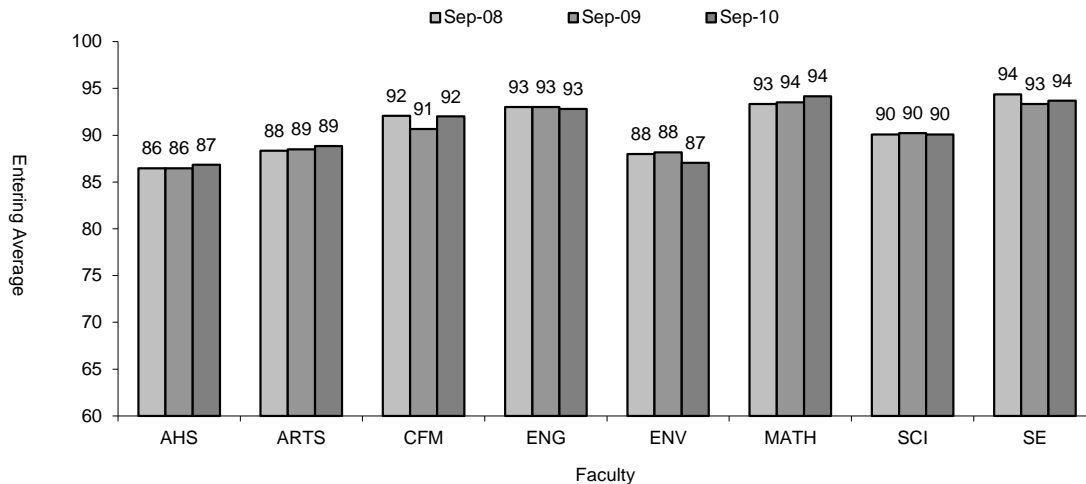


Figure 1.3.D¹⁴

Entering Grade Averages (75th Percentile) Full-time First-year Undergraduate

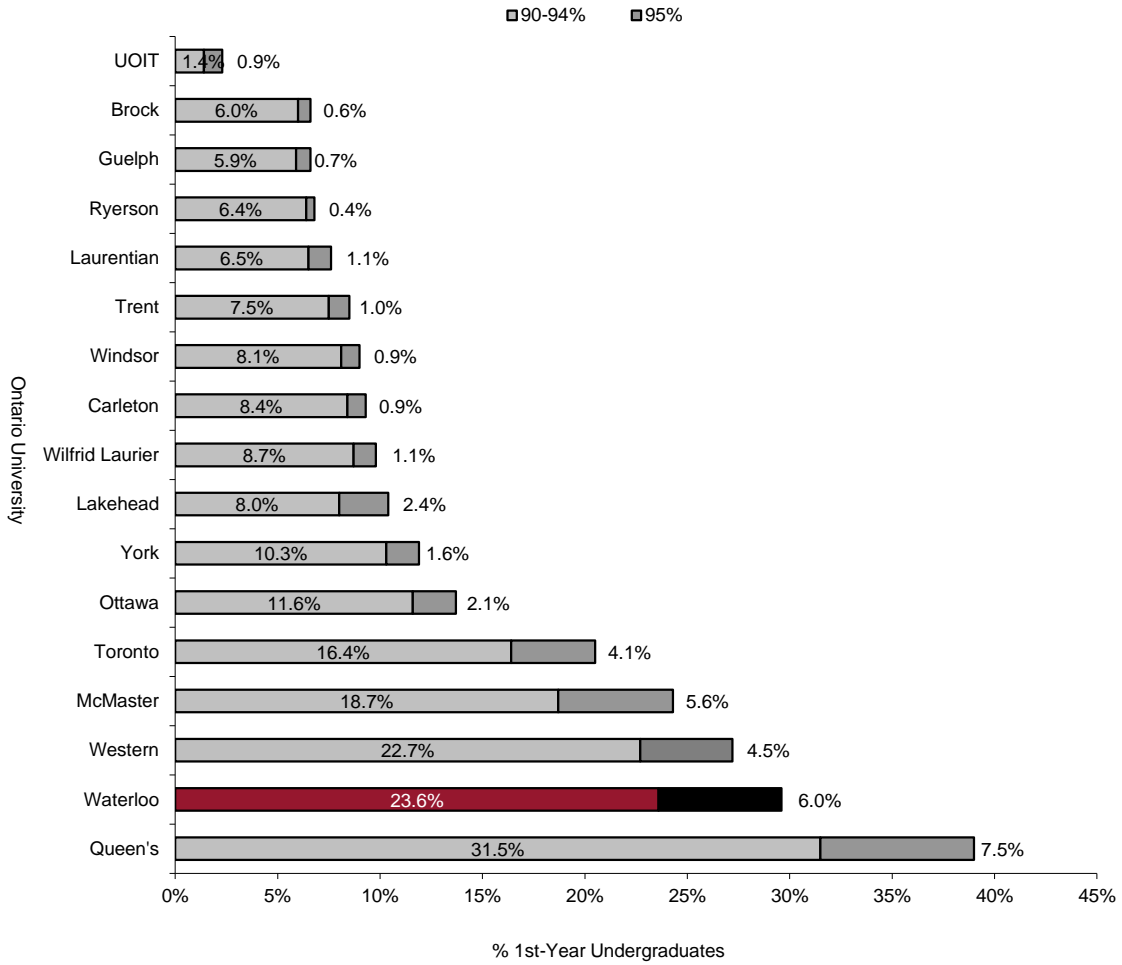


¹³ The 25th Percentile means that 75 per cent of students entered with grade averages higher than the mark indicated.

¹⁴ The 75th Percentile means that 25 per cent of students entered with grade averages higher than the mark indicated.

Figure 1.3.E

Entering Averages of 90%+¹⁵ as Compared to Ontario Universities Fall 2009



¹⁵ Source: CUDO (Common University Data Ontario). Nipissing University not included as the data was not available at time of publication.

1.4 OFFER, ACCEPTANCE, AND YIELD RATES

In this section, we look at the number of applications, offers, confirmations, and registrations by Faculty. We monitor these measures to gauge the level of interest in a particular Faculty, the offer rate (number of offers versus number of applications), the acceptance rate (number of confirmations versus number of offers), and the yield rate (number of registrations versus number of applications).

These rates help us to understand and predict demand for our programs, and to improve our strategy for making offers. For example, if we want 100 students to register from a pool of 2,000 applicants, we need to decide how many students should receive offers. Depending on the anticipated acceptance rate, the answer may be 150, 200 or even 600 students.

Figure 1.4.A through Figure 1.4.H show three recent years of application activity including changes in activity levels in each Faculty. Software Engineering and Computing and Financial Management have separate charts as these programs are split between Faculties and it is not possible to split applications across Faculties.

Figure 1.4.A

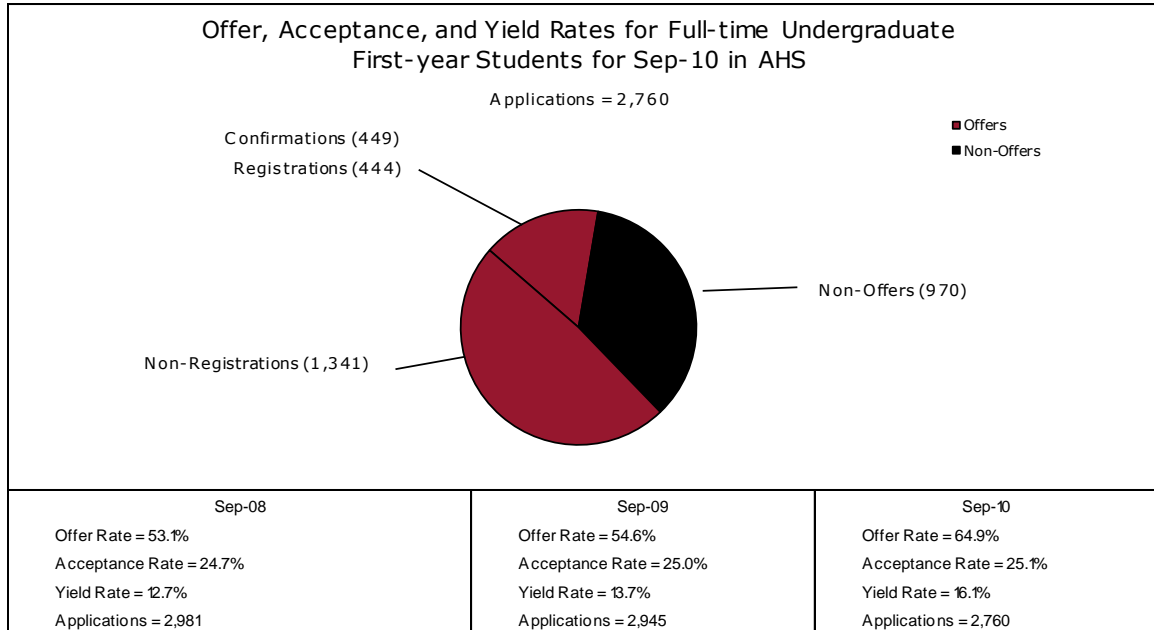


Figure 1.4.B

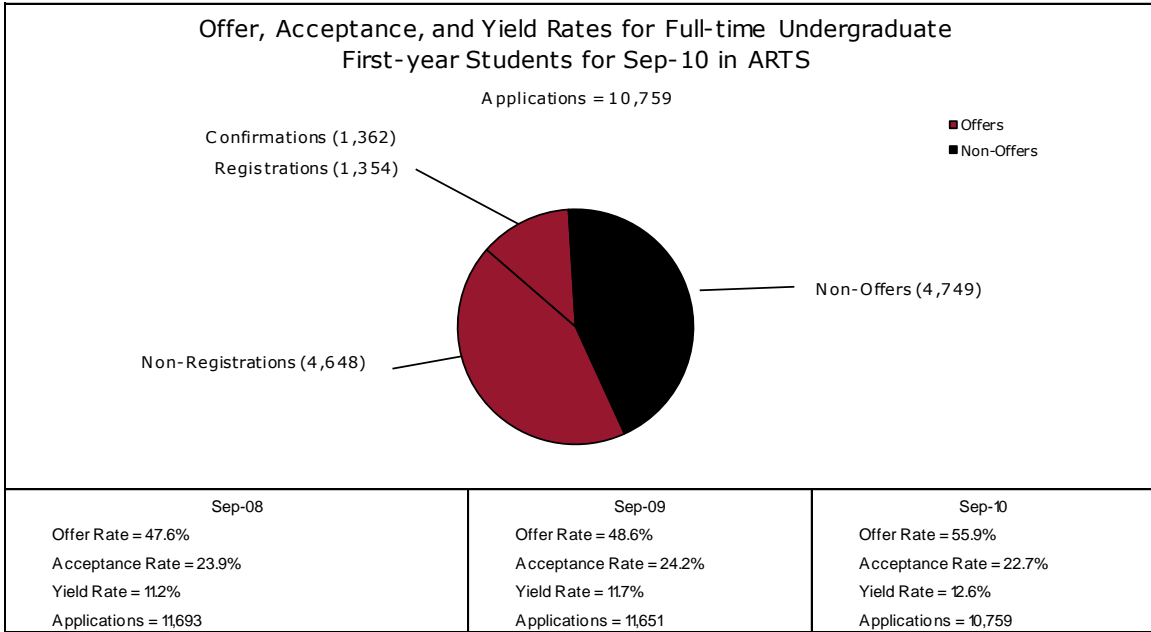


Figure 1.4.C

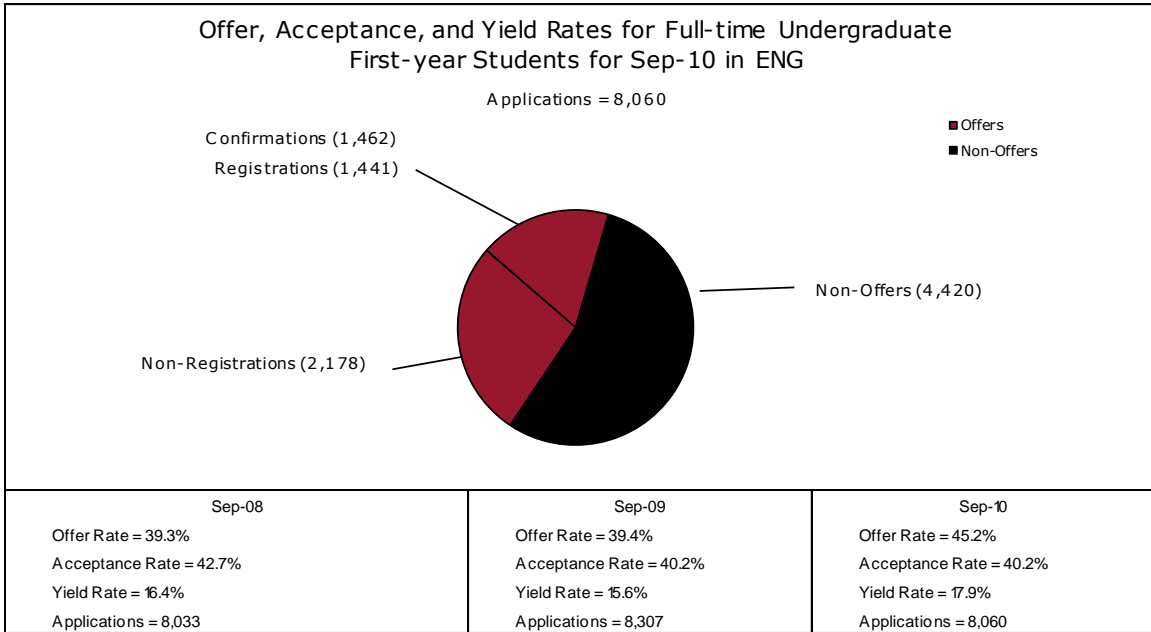


Figure 1.4.D

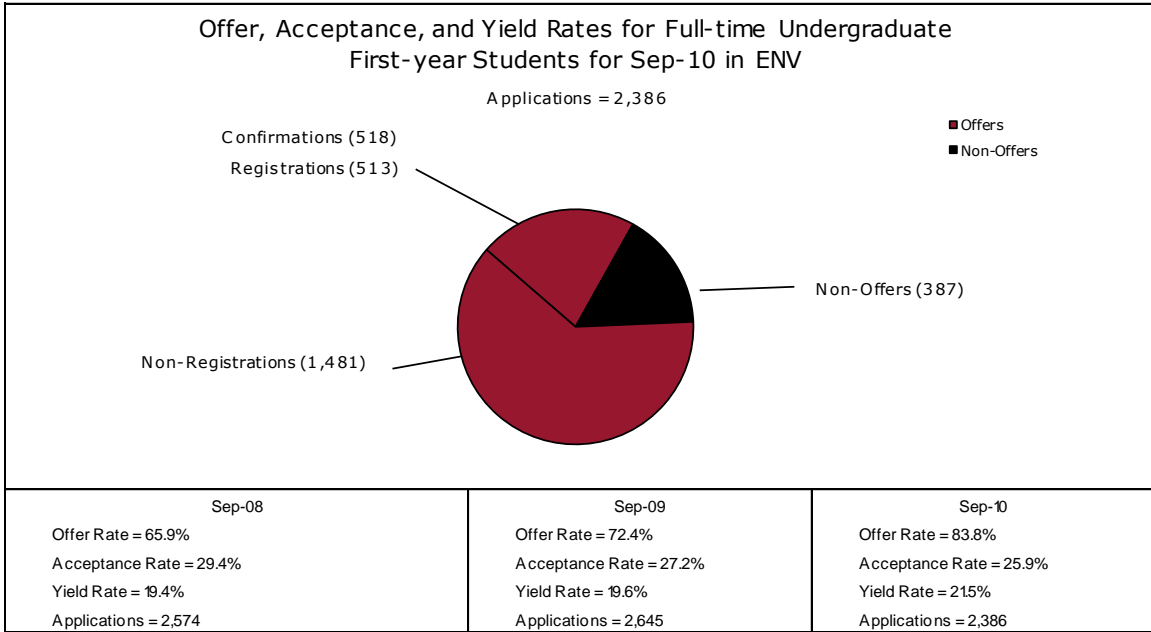


Figure 1.4.E

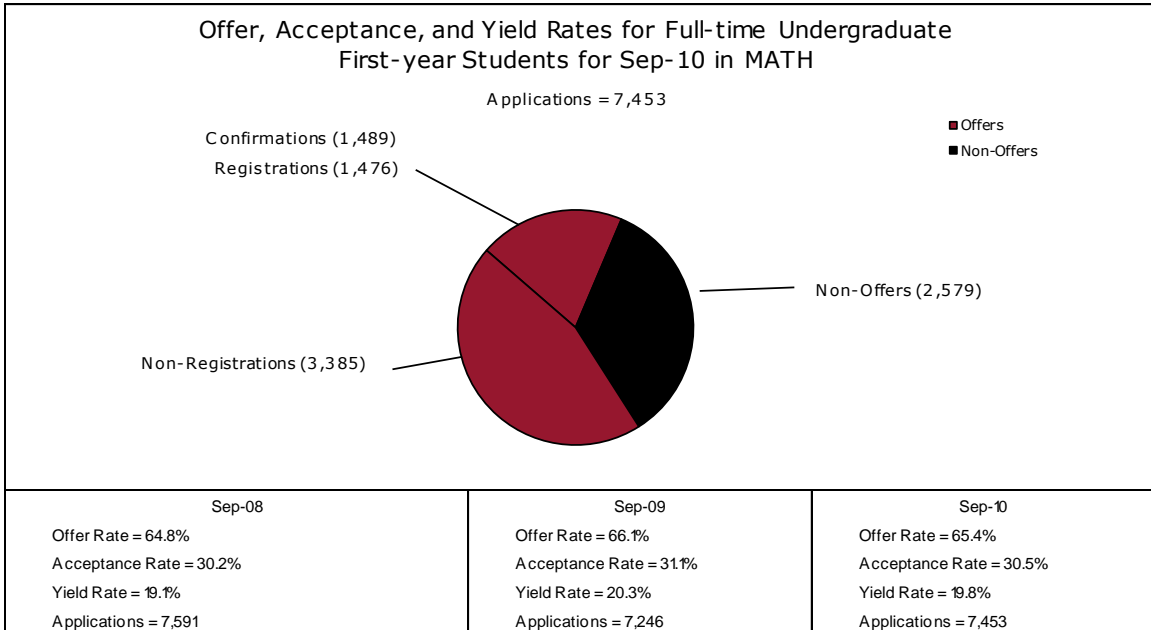


Figure 1.4.F

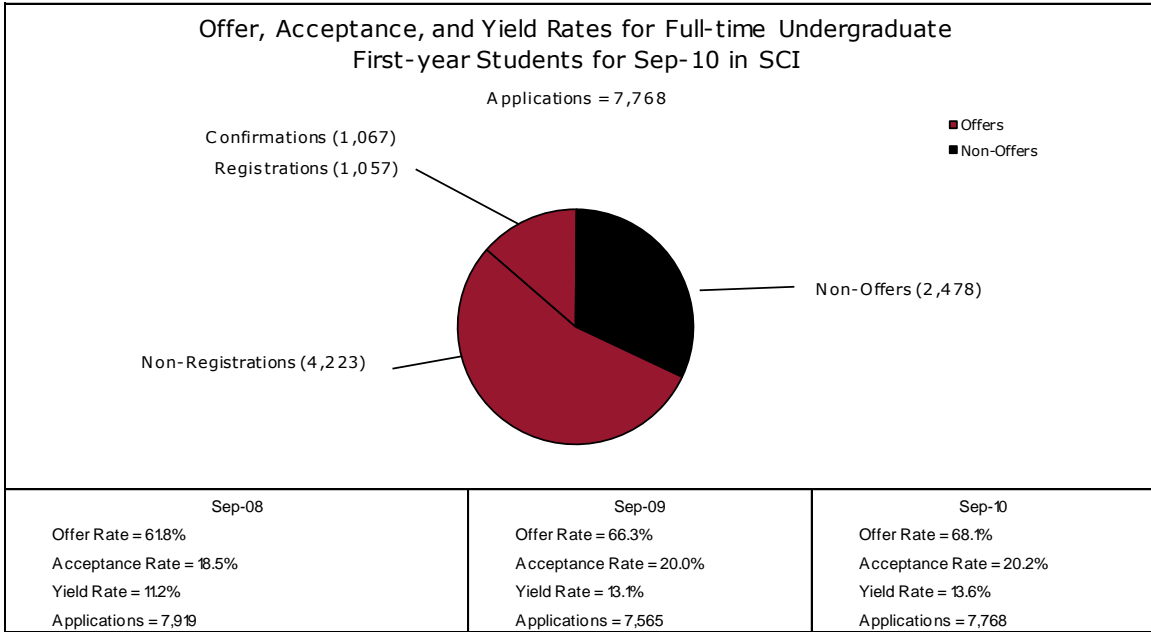


Figure 1.4.G

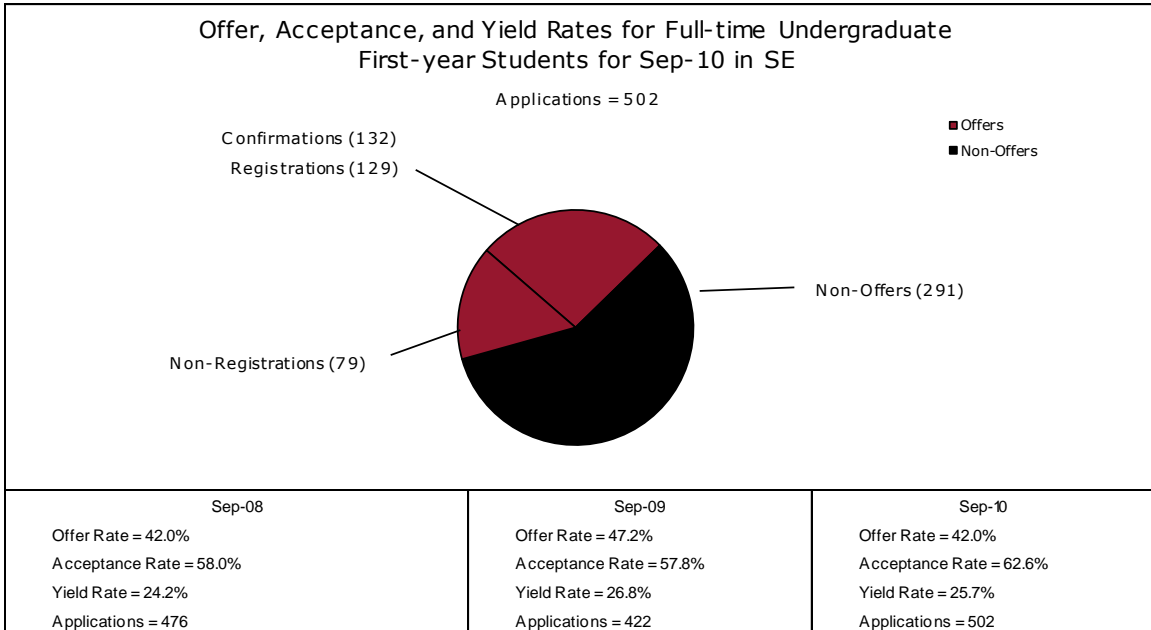
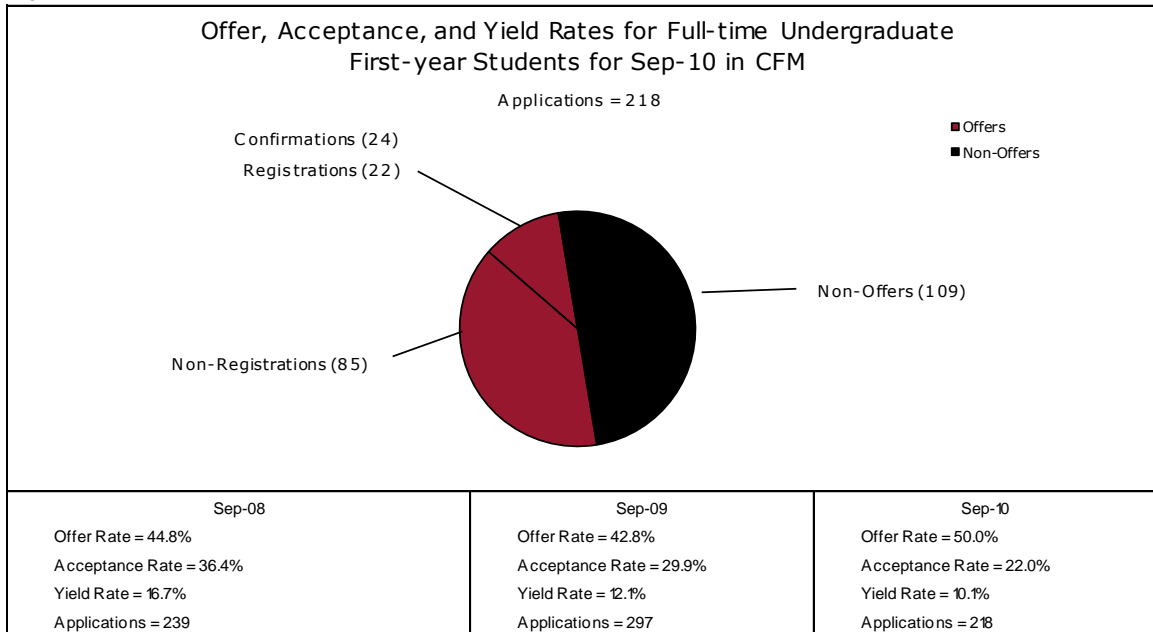


Figure 1.4.H



1.5 GEOGRAPHIC SOURCE

Understanding the geographical outreach of the University of Waterloo allows us to assess the strength of our reputation and influence beyond the local community.

Figure 1.5.A¹⁶

Geographic Distribution of First-year Registrants as Reported by City of School Last Attended Sep-10

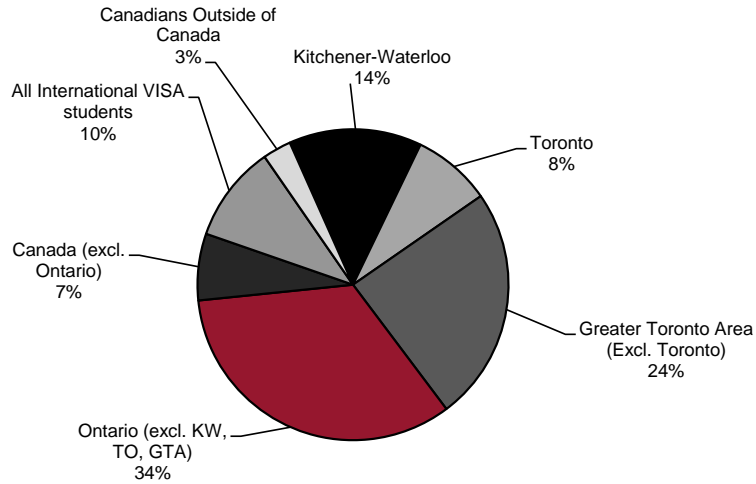
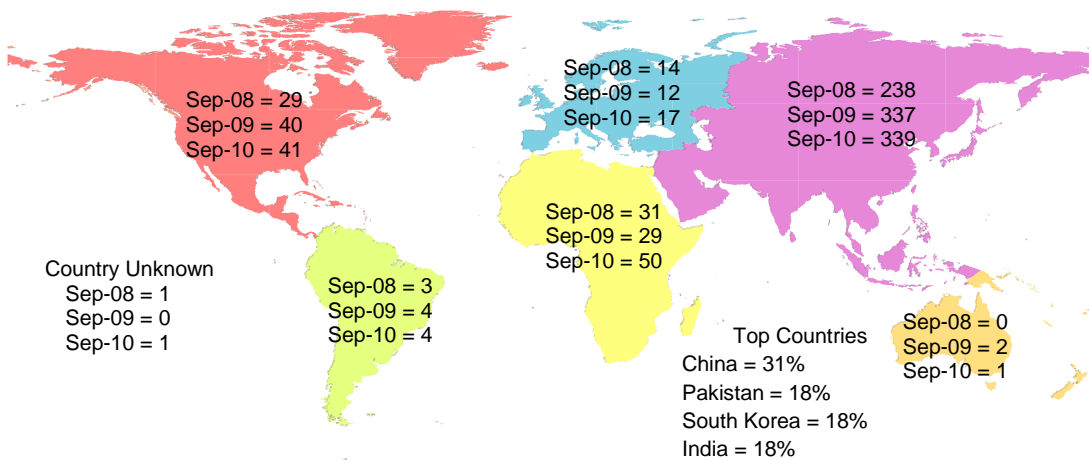


Figure 1.5.B¹⁷

New International Undergraduate Students by Region of Origin (By Continent, Excluding Permanent Residents)



¹⁶ Visa students are placed into the “All International VISA students” category first, then for the remaining students, the country and city of last school attended is examined.

¹⁷ Continental North America excludes Canada. Source: The Ministry of Training, Colleges and Universities (MTCU) collects statistical and financially related data on students in Ontario universities and related institutions; collectively this information makes up the University Statistical Enrolment Report (USER) database. Figure 1.5.B uses USER country of citizenship, visa students only, fall terms only for new students.

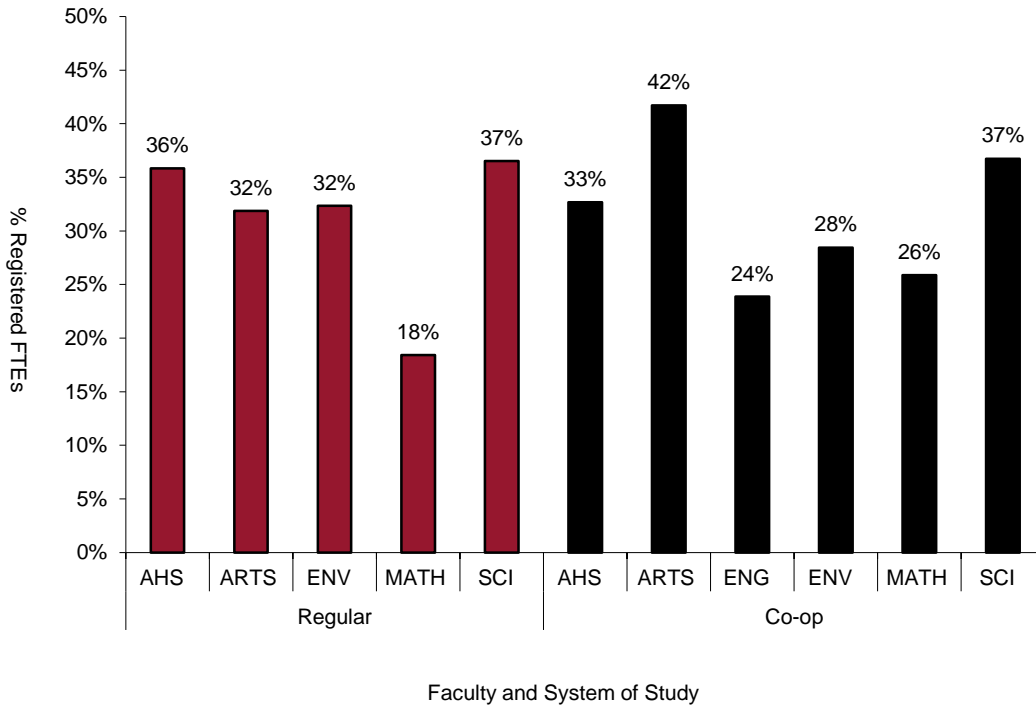
1.6 OSAP PARTICIPATION

The Ontario Student Assistance Program (OSAP) provides eligible students with various types of assistance based on financial need. Figure 1.6.A shows the percentage of our students receiving OSAP by Faculty and system of study, while Figure 1.6.B shows the average dollar amount of the awards received by those students participating in the program, also by Faculty and system of study.

In some cases, OSAP funds are not sufficient to meet the financial need of the student. To address this issue, UW guarantees to fund unmet need as defined by OSAP or a student assistance program from another Canadian province. The University aspires to identify students in need and ensure that all eligible students admitted to full-time undergraduate programs have the financial assistance necessary to complete their studies. Students are required to seek financial support from all sources, including family, employment, loans, and government support programs.

Figure 1.6.A

% Registered FTE Students Receiving OSAP 2009/10¹⁸



We expect co-op earnings to partially offset the financial commitments of students, and may expect the average OSAP paid to be lower for co-op students than regular stream students.

¹⁸ 2009/10 includes fall 2009, winter 2010, and spring 2010

Figure 1.6.B

Average OSAP per FTE Student 2009/10

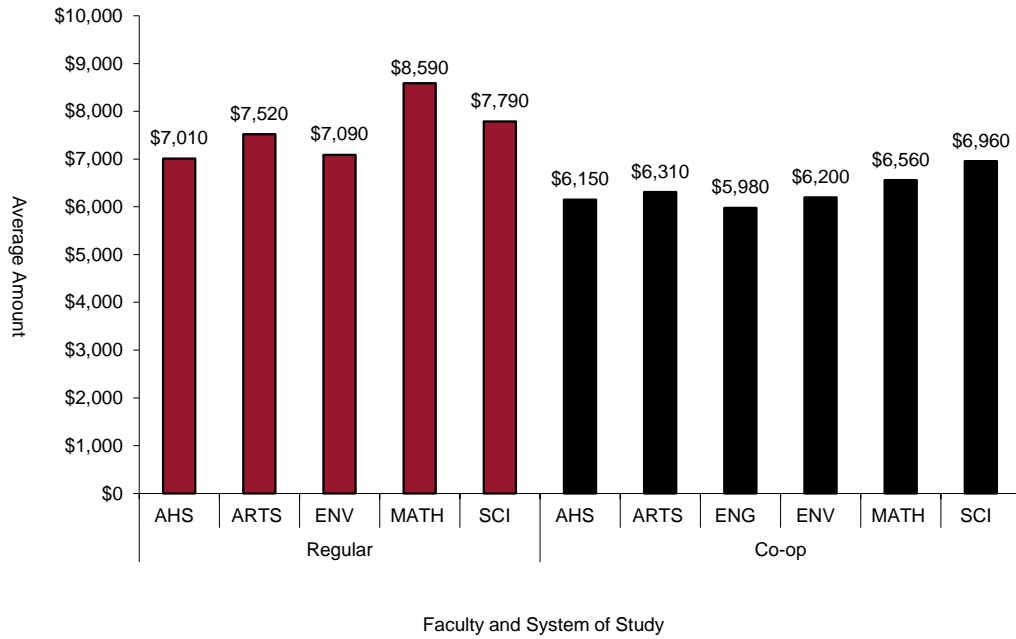


Figure 1.6.C

Financial Support to Undergraduate Regular FTE Students 2009/10								
Faculty	OSAP	Grants	Scholarships	Bursaries	Other (Non-UW)	Total Support	Average Support	% Supported
AHS	\$2,117,290	\$516,729	\$80,600	\$142,200	\$109,501	\$2,966,321	\$8,547	41%
ARTS	\$12,052,824	\$3,078,458	\$576,830	\$726,360	\$650,170	\$17,084,642	\$9,173	37%
ENV	\$1,960,965	\$468,242	\$225,933	\$119,450	\$111,566	\$2,886,156	\$8,366	40%
MATH	\$4,156,783	\$1,065,448	\$1,426,625	\$534,350	\$258,739	\$7,441,945	\$9,227	31%
SCI	\$8,333,356	\$1,973,428	\$530,437	\$460,300	\$420,674	\$11,718,196	\$9,372	43%

Figure 1.6.D

Financial Support to Undergraduate Co-op FTE Students 2009/10								
Faculty	OSAP	Grants	Scholarships	Bursaries	Other (Non-UW)	Total Support	Average Support	% Supported
AHS	\$1,496,606	\$392,188	\$300,487	\$170,200	\$229,925	\$2,589,406	\$7,230	48%
ARTS	\$4,244,717	\$1,069,402	\$1,141,358	\$849,200	\$775,189	\$8,079,865	\$8,764	57%
ENG	\$6,535,564	\$1,620,957	\$3,842,376	\$2,171,200	\$1,560,852	\$15,730,949	\$7,796	44%
ENV	\$1,585,470	\$438,485	\$373,708	\$185,150	\$262,640	\$2,845,453	\$7,474	42%
MATH	\$5,409,393	\$1,508,649	\$2,474,381	\$974,520	\$1,340,798	\$11,707,741	\$8,450	44%
SCI	\$3,090,446	\$806,250	\$495,733	\$836,450	\$384,221	\$5,613,101	\$9,438	49%

1.7 STUDENT ENGAGEMENT

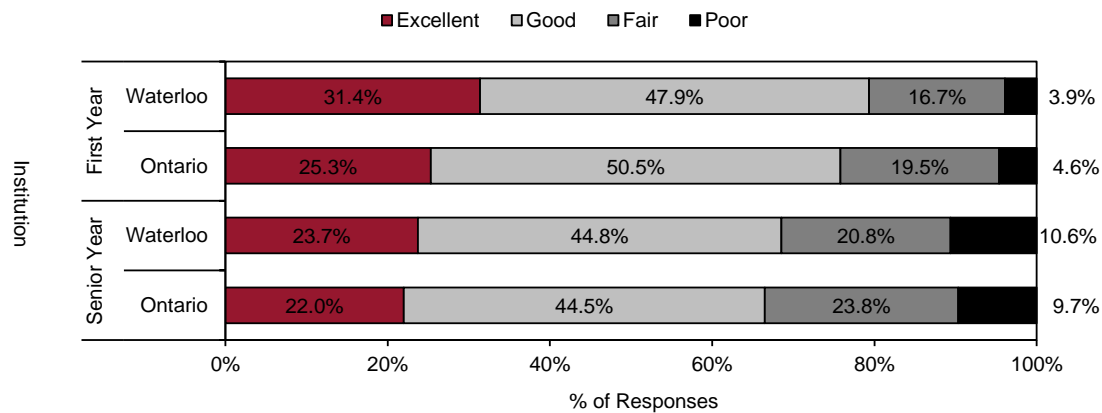
The National Survey of Student Engagement (NSSE) was launched in 1999 by the Indiana University Centre for Postsecondary Research with a mandate to investigate the relationship between student behaviour and educational success. Through hundreds of thousands of survey responses collected since 1999, at more than 1,000 different universities and colleges across Canada and the United States, a clear conclusion has emerged. What students do while in university matters. Specifically, the degree to which students are engaged in their education, and with their institution, matters a great deal. Student engagement, measured by participation in productive learning activities such as working on group projects outside of class, and discussing ideas from readings or classes with others outside of class, involvement in campus organizations, interaction with peers and faculty members, and satisfaction with their educational experience are all positively correlated with desired outcomes such as higher retention and graduation rates.

In the 2008 survey, University of Waterloo had an overall participation rate of 41 per cent, with 4,170 students responding. In the 2011 survey, our overall participation rate was 25 per cent, with 3,080 students responding.

Interaction with faculty members, and the quality and value of those interactions is one indication of student engagement. Receiving prompt feedback from faculty on academic performance, working with faculty members on research projects, discussing ideas from class with faculty members outside of class, all contribute to improved faculty-student interaction and increased student engagement. Figure 1.7.A charts the responses of students asked to evaluate the quality of academic advising they have received. As compared to our peers in Ontario uWaterloo appears to be performing slightly above the provincial average. Our positive responses drop somewhat between our first-year students and our graduating-year students, as they do at our peer institutions in Ontario.

Figure 1.7.A¹⁹

2011 NSSE: Overall, how would you evaluate the quality of academic advising you have received at your institution?

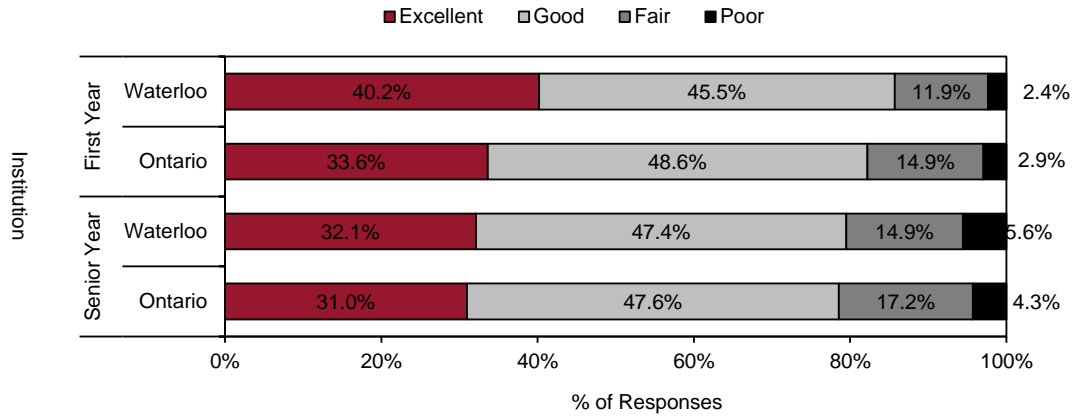


When asked to evaluate their entire educational experience at UW as shown in Figure 1.7.B, uWaterloo has roughly the same proportion of our students responding positively with a rating of “Excellent” or “Good” as the students at our peer institutions across Ontario. The University of Waterloo does have a slightly larger proportion of students answering Excellent with 40.2 per cent of first-year students and 32.1 per cent of graduating-year students giving us the highest possible response to this question. Again there is a small decline between our first-year and graduating-year students, as there also was in students across Ontario.

¹⁹ Source: The National Survey of Student Engagement.

Figure 1.7.B²⁰

2011 NSSE: How would you evaluate your entire educational experience at this institution?

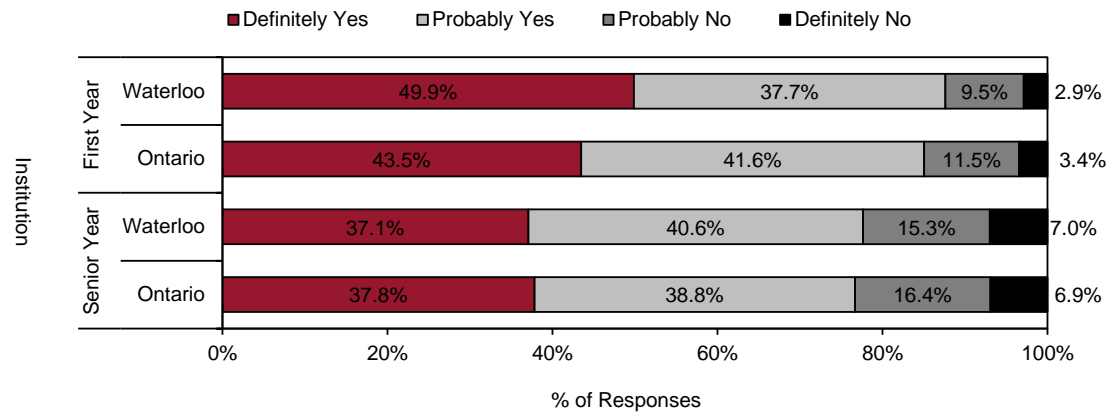


The choice of which institution to attend for their post-secondary education is one of the most important decisions many of our students ever make. Numerous factors weigh heavily when making that decision and Figure 1.7.C shows their response when asked if given the opportunity to start over again whether they would choose the same institution. Overall 87.6 per cent of our first-year students and 77.7 per cent of our graduating-year students responded that they would “Definitely” or “Probably” choose UW again, as compared to 85.1 per cent of first-year students and 76.6 per cent of graduating-year students across Ontario.

While it is encouraging that most of our students express satisfaction with their decision, there are 44 first-year students and 68 graduating students that responded that they would “Definitely Not” choose UW again. A better understanding of the reasons behind these varying levels of satisfaction, will help inform future strategy, and are but one way in which NSSE results are used to help us improve as an institution.

Figure 1.7.C²¹

2011 NSSE: If you could start over again, would you go to the same institution you are now attending?



²⁰ Source: The National Survey of Student Engagement.

²¹ Source: The National Survey of Student Engagement.

1.8 RETENTION, GRADUATION, DEGREES GRANTED, AND DEGREE DISTRIBUTION

In 2006, the University of Waterloo participated, for the first time, in the Consortium for Student Data Exchange (CSRDE) retention and graduation study. The CSRDE is a consortium of colleges and universities, both public and private, which shares student retention and graduation data. Along with many Canadian institutions, and all Ontario universities, UW will use the CSRDE results to help us measure our performance against similar institutions across North America.

In the charts below we have chosen public institutions as our comparator. The CSRDE survey is based on the premise that an institution’s retention and completion rates depend largely on how selective the institution is, where selectivity is defined by entering students’ average SAT or ACT test scores. CSRDE reports the retention and graduation results by four levels of selectivity: Highly Selective – SAT above 1100 (maximum 1600) or ACT above 24 (maximum 36); Selective – SAT 1045 to 1100 or ACT 22.5 to 24; Moderately Selective – SAT 990 to 1044 or ACT 21 to 22.4; Less Selective – SAT below 990 or ACT below 21.

Figure 1.8.A indicates that 89.4 per cent of uWaterloo’s full-time, first-year students who entered into a first-entry undergraduate program in 2009 continued their studies in 2010. This is compared to an 87.5 per cent retention rate cited at highly selective public institutions.

Figure 1.8.A

Retention Rate Waterloo vs. Other North American Public Institutions by Selectivity of the 2009 Full-time First-year Cohort Continuing in their Studies in 2010

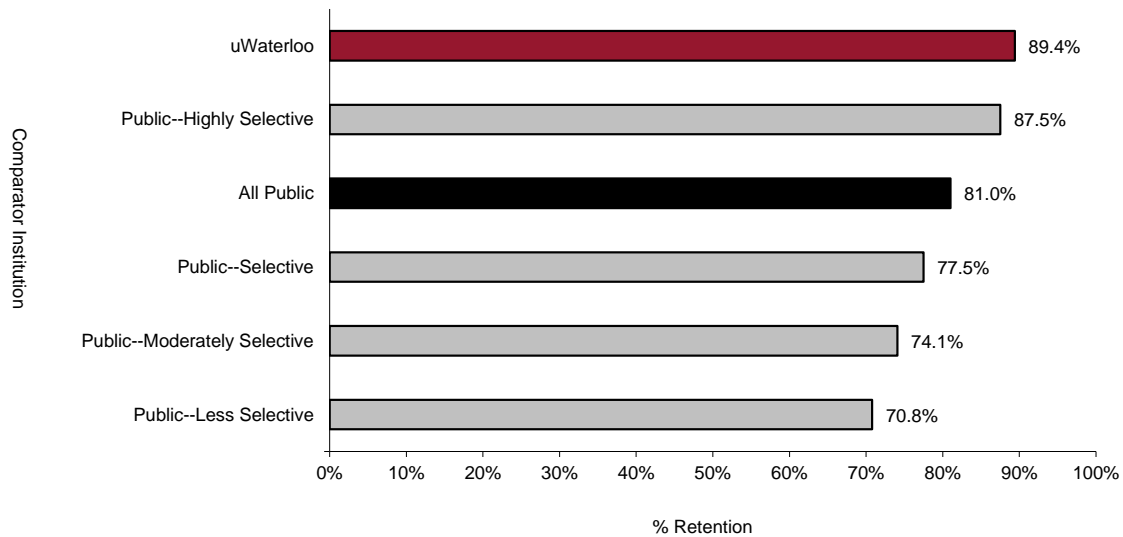


Figure 1.8.B

Six-year Graduation Rate Waterloo vs. Other North American Public Institutions by Selectivity of the 2004 Full-time First-time First-year Cohort Graduating by 2009

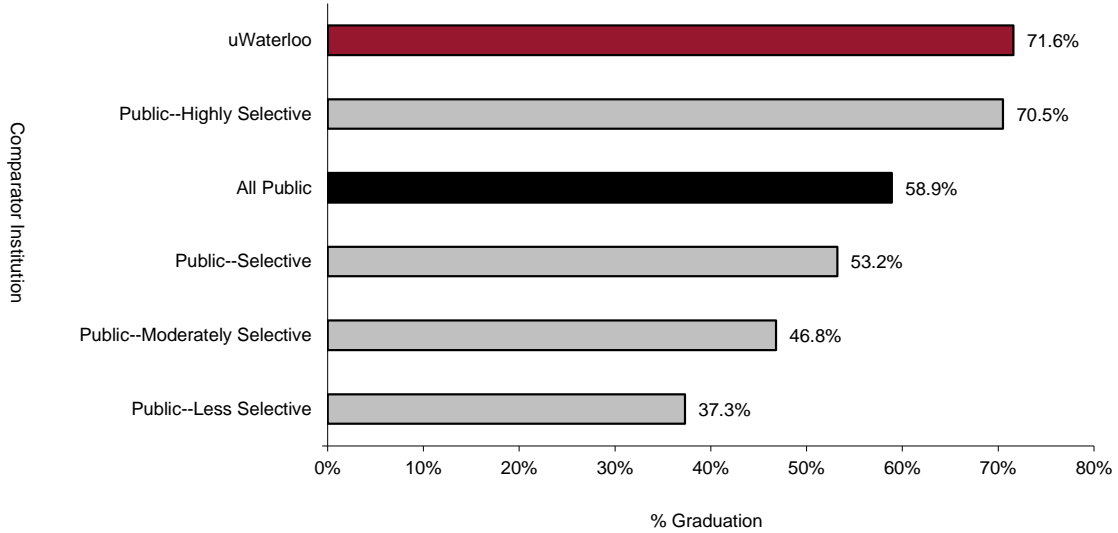
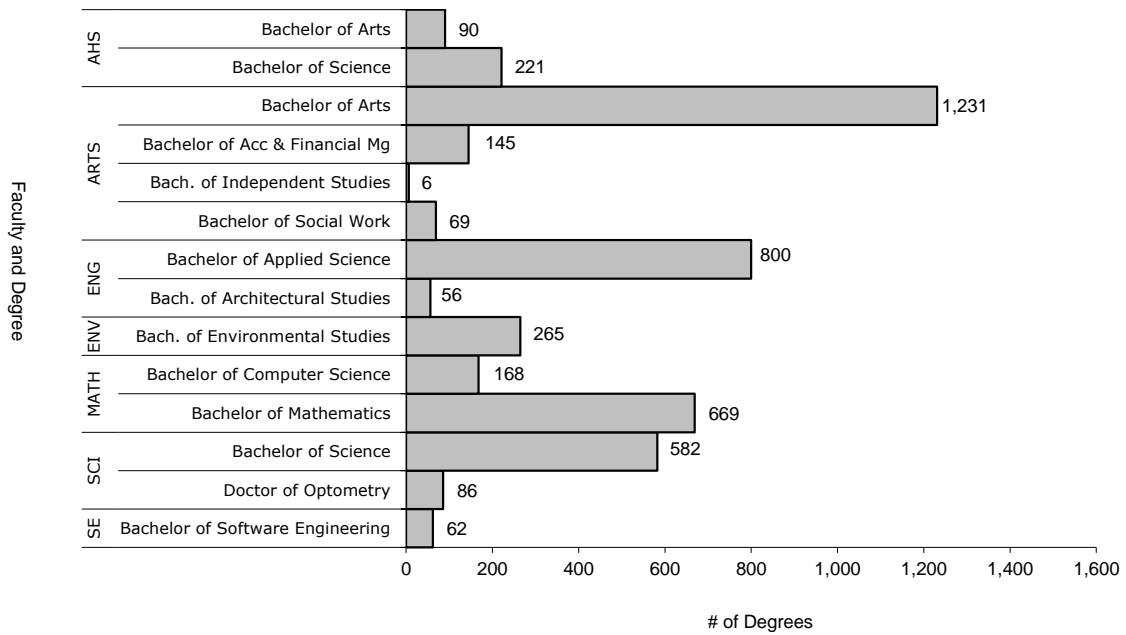


Figure 1.8.C shows the number of undergraduate degrees conferred in 2010 by Faculty and the type of degree granted. In total, 4,450 undergraduate degrees were conferred in 2010.

Figure 1.8.C

Undergraduate Degrees Granted - 2010



The University of Waterloo also monitors undergraduate degree distribution by academic Faculty. We track each cohort of students to determine the percentage who graduate with a degree from their Faculty of first registration, who graduate from another uWaterloo Faculty, who are still studying, or who have withdrawn. We also calculate the three-year average of the number of full-time terms to complete a degree in their Faculty of first registration.

When the Ministry of Training, Colleges and Universities measures degree completion rates, it typically allows a six-year window for students in a four-year program to complete their degree. Since students in a co-operative program generally require an extra year to complete their academic studies, due to their work term employment, we typically allow a seven-year window. Hence, we look at degree completion in 2011 for the 2004/05 cohort. We also show the 2002/03 and 2003/04 cohorts for comparison.

Figure 1.8.D

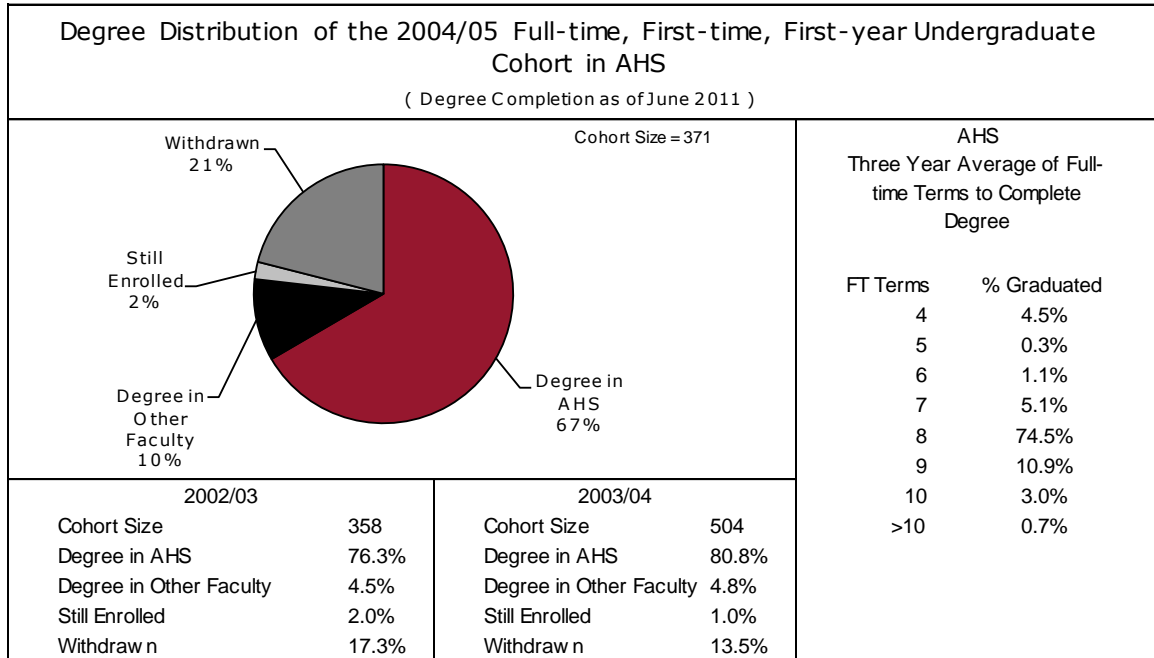


Figure 1.8.E

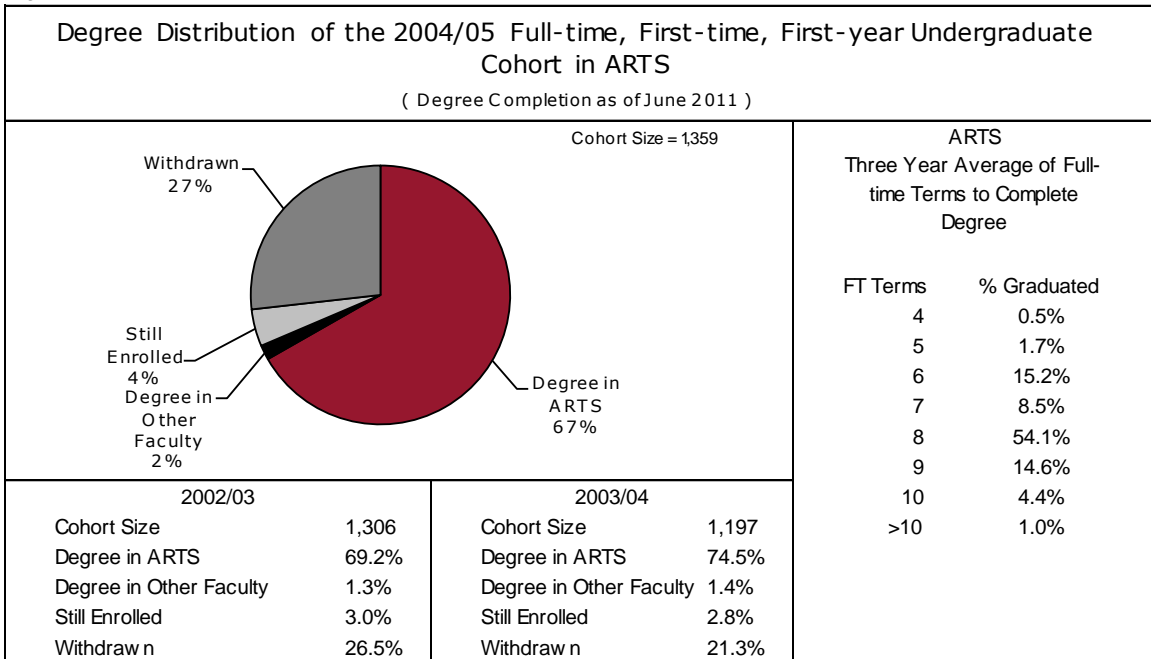


Figure 1.8.F

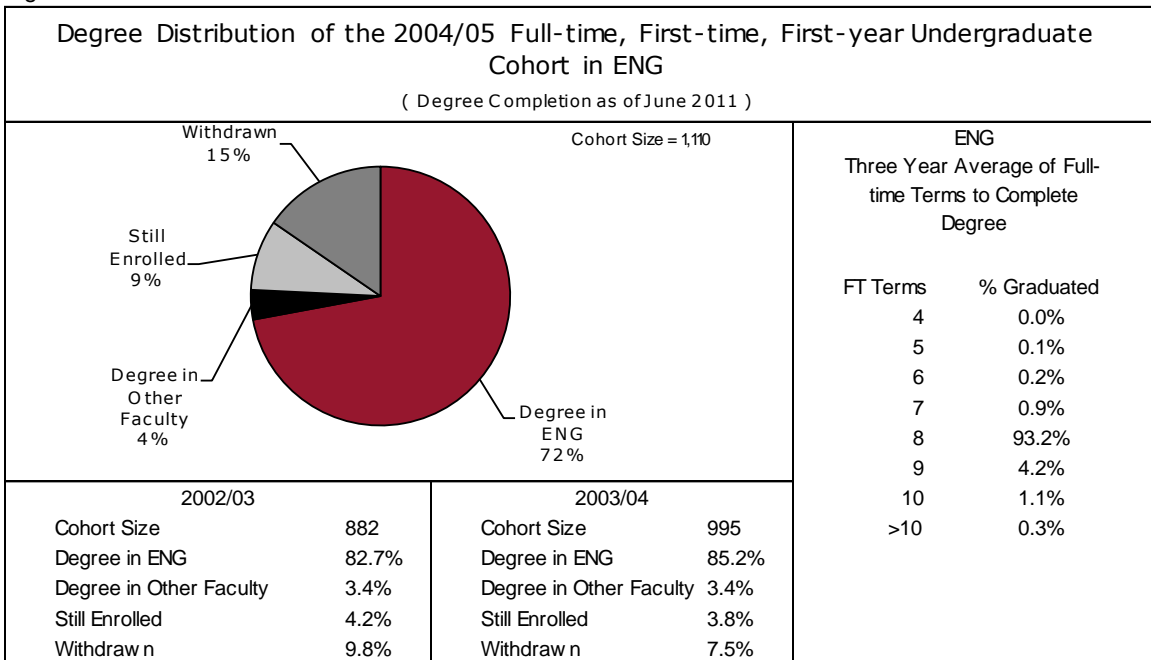


Figure 1.8.G

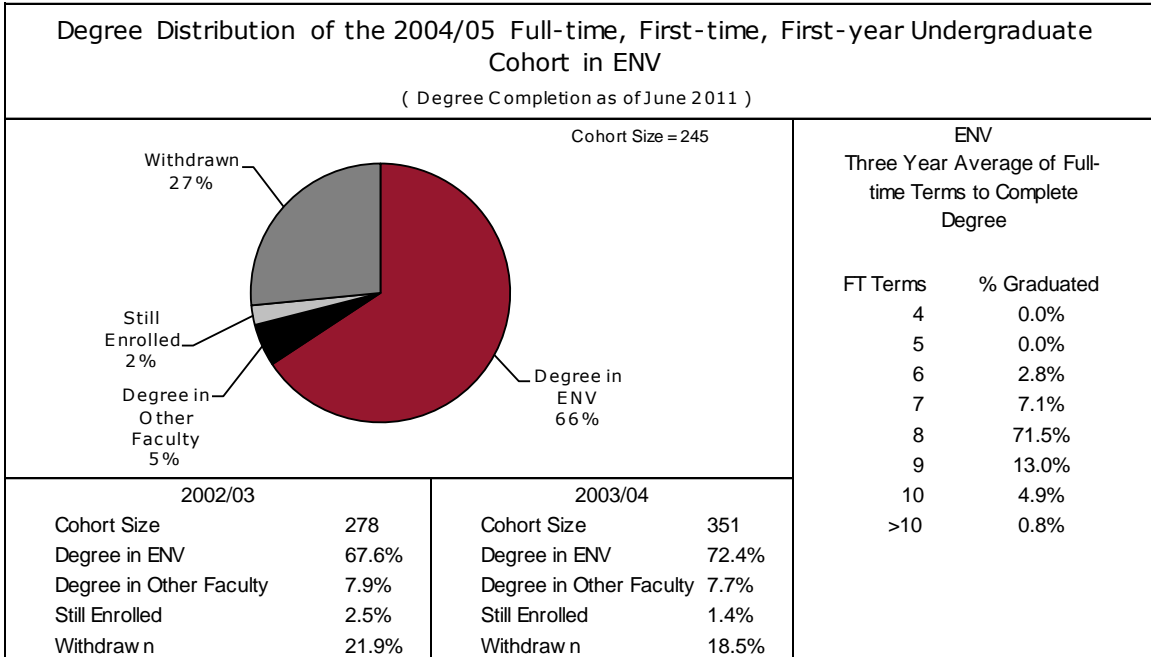


Figure 1.8.H

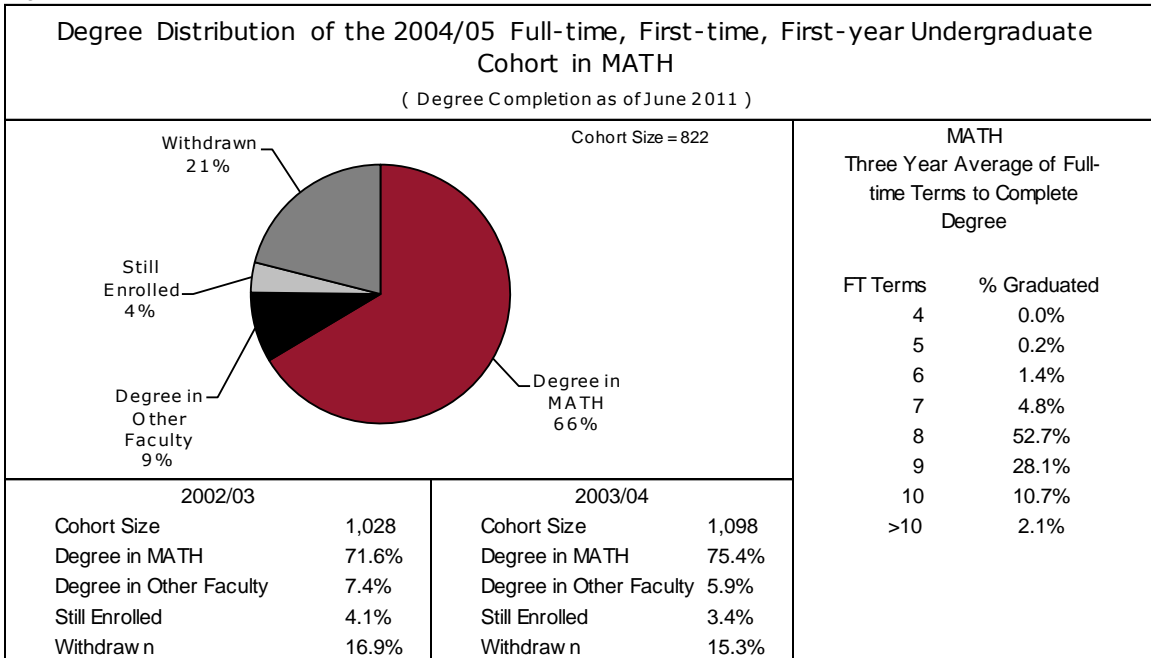


Figure 1.8.I

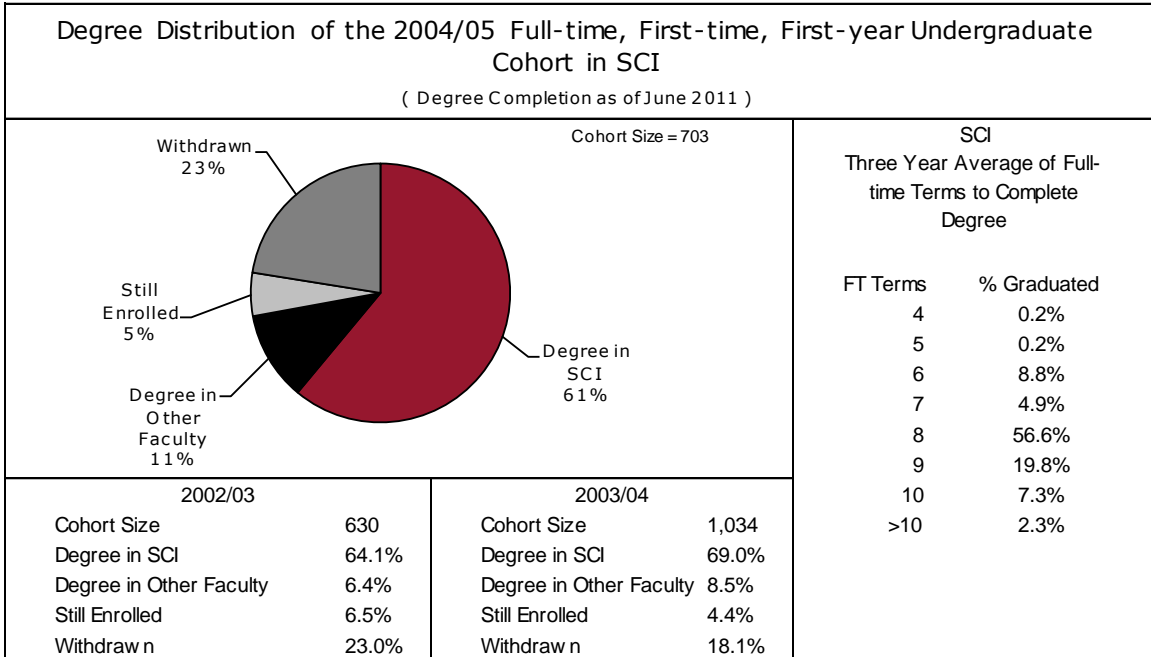
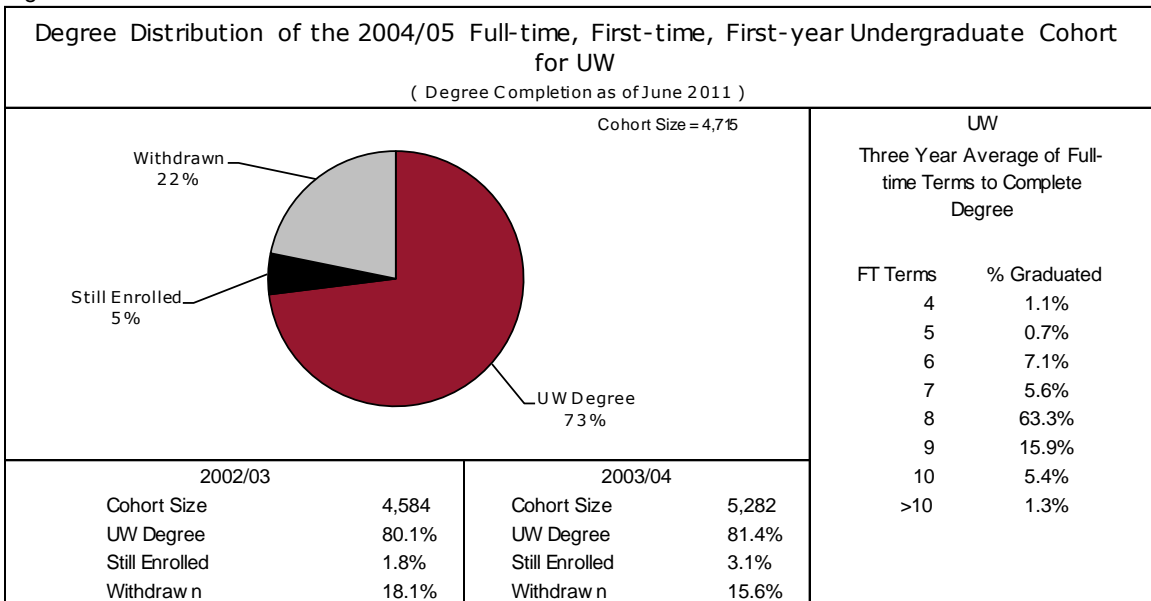


Figure 1.8.J²²



²² The degree completion rate here differs from that in the CSRDE chart due to a difference in methodology and timing.

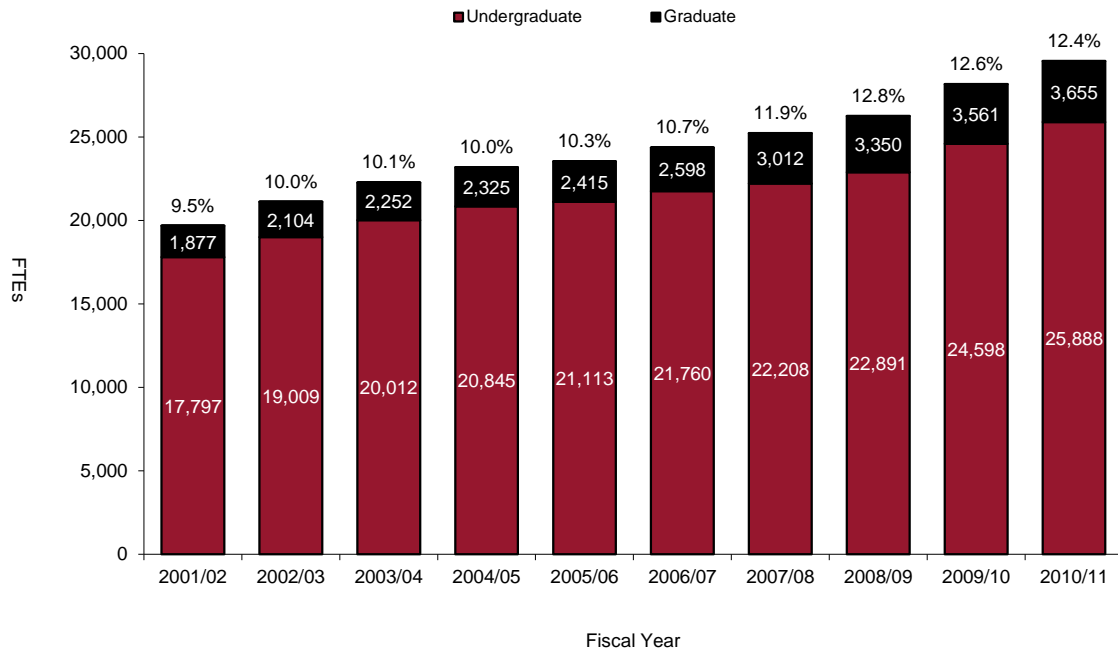
2. Graduate Studies

The University of Waterloo’s vision for our sixth decade supports a proactive approach to innovative graduate education, with a goal to double our graduate enrolment. To guide that process and to monitor our progress we focus in this section on our graduate enrolment, student to faculty ratio, quality of students, global engagement, recruitment, student support, student satisfaction, degree completion rates, and degrees granted.

2.1 ENROLMENT

Figure 2.1.A

FTE Enrolment - Graduate and Undergraduate



Full-time graduate students normally register for three terms per year and generate 1.0 FTE annually. A part-time student registered for three terms per year would generate 0.3 FTE annually.

Figure 2.1.B

Graduate FTE Enrolment – 10 Year History

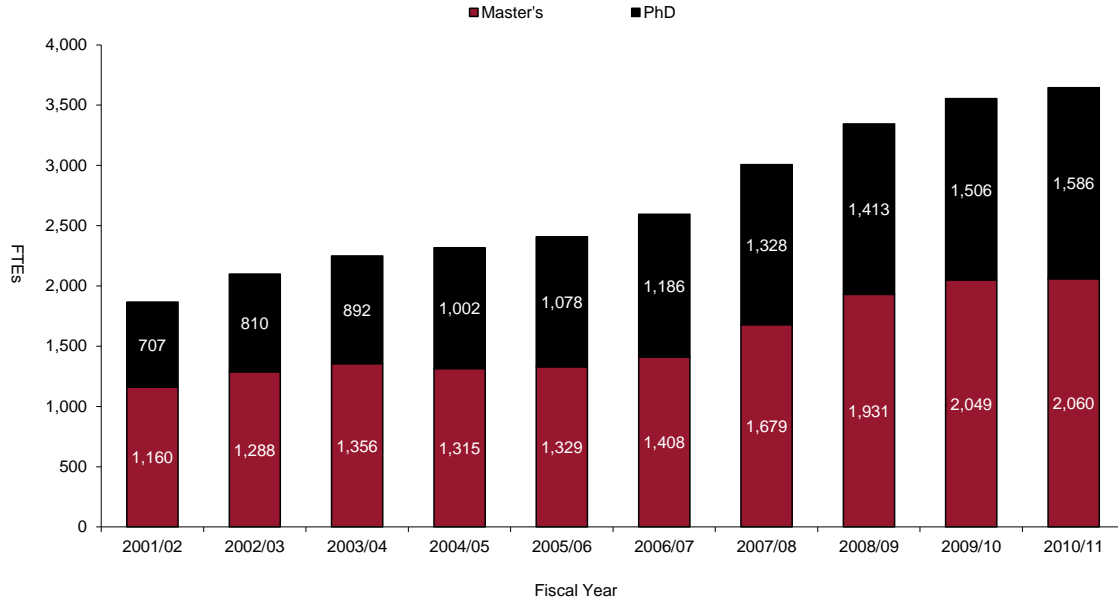
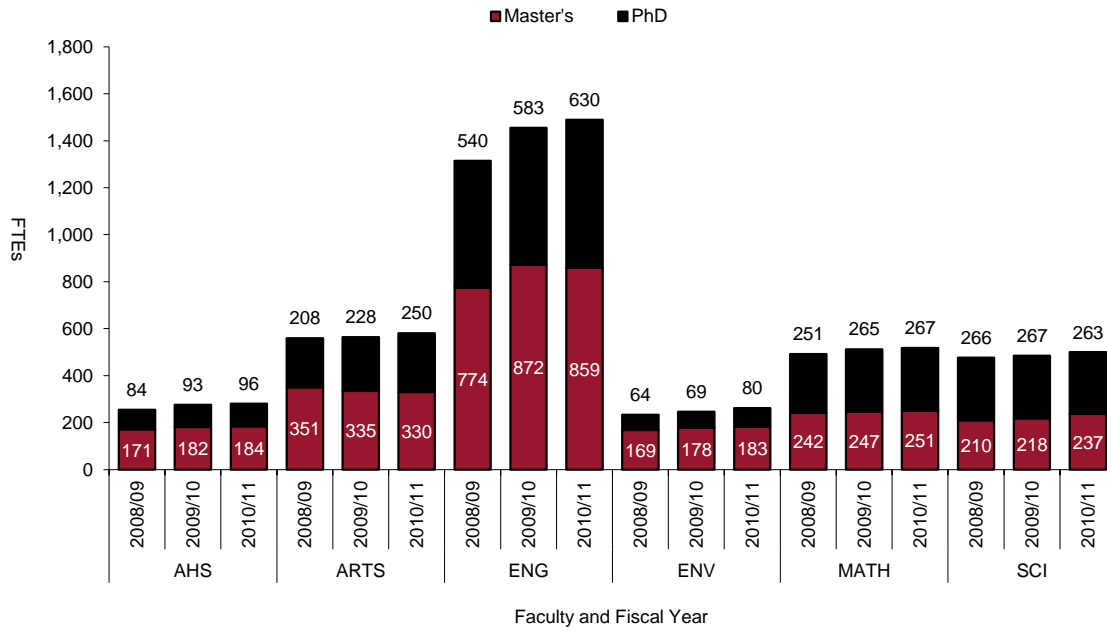


Figure 2.1.C²³

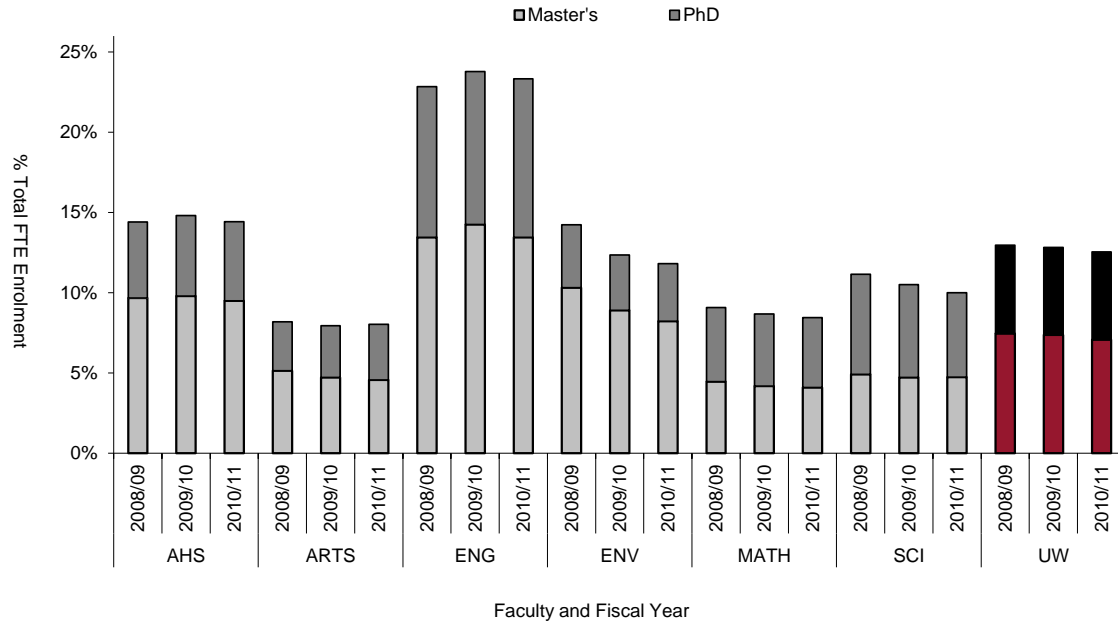
Graduate FTE Enrolment



²³ In 2010/11, there were 15.4 FTE enrolled in Theology that are not represented in the graph.

Figure 2.1.D

Graduate Student Enrolment as a % of Total Enrolment

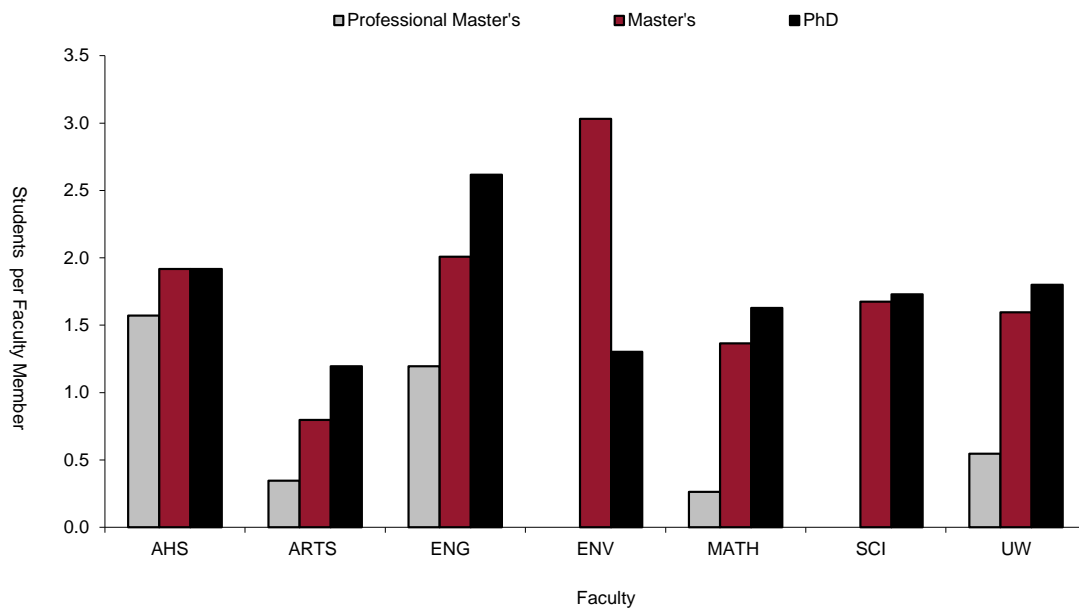


2.2 STUDENT TO FACULTY RATIO

The graduate student to faculty ratio is considered a reasonable indicator of the intensity of graduate education at universities. The ratios below are intended to represent this graduate studies intensity at the Faculty level. However, we recognize that some faculty members supervise as many as six or more students at a time, and some supervise no graduate students—an issue that requires management and monitoring at the department level.

Figure 2.2.A²⁴

Full-time, Degree-Seeking Graduate Student to Tenure and Tenure-Stream Faculty Ratio, Fall 2010



2.3 QUALITY OF STUDENTS

The amount of external scholarship support generated by graduate students is one measure of their quality.

Rather than counting the number of individual students, we calculate the number of students in a given Faculty, and the number of students receiving some form of external scholarship funding, in terms of annual full-time equivalents (FTEs). FTEs allow for three terms of changing data to be reported in an annual time frame. For example, if a student studies for two terms in Engineering and then changes to the Faculty of Science in the third term of a year, we would report 0.66 FTEs of activity in the Faculty of Engineering and 0.33 FTEs of activity in the Faculty of Science. The same is true for calculating FTEs of funding. If a student receives an external scholarship for two terms in a year, then we would say that he or she received 0.66 FTEs of external scholarship support.

²⁴ Professional master's programs at uWaterloo are defined by the Graduate Studies Office and include Accounting, Business, Digital Experience Innovation, Business, Entrepreneurship & Technology, Health Informatics, Master of Engineering programs, Mathematics, Pharmacy, Public Health, Public Service, Quantitative Finance, and Taxation.

Figure 2.3.A and Figure 2.3.B show the percentage of annual FTE students (who are Canadians or Permanent Residents) in a particular Faculty at the master's or doctoral level receiving an external scholarship. Over the past three years there has been an increase in both master's and doctoral level enrolment, particularly in the master's professional and part-time programs. Faculties with the most significant part-time enrolment increases show the most significant downward trend in percentage of domestic students holding external awards. Only a limited number of awards are available from Canada-wide sources to full-time domestic students in research programs at Canadian universities. However, it is important to note that the total number of domestic awards held at uWaterloo did increase.

Figure 2.3.A

Percentage of FTE Master's Students (Canadian and Permanent Resident) with External Awards

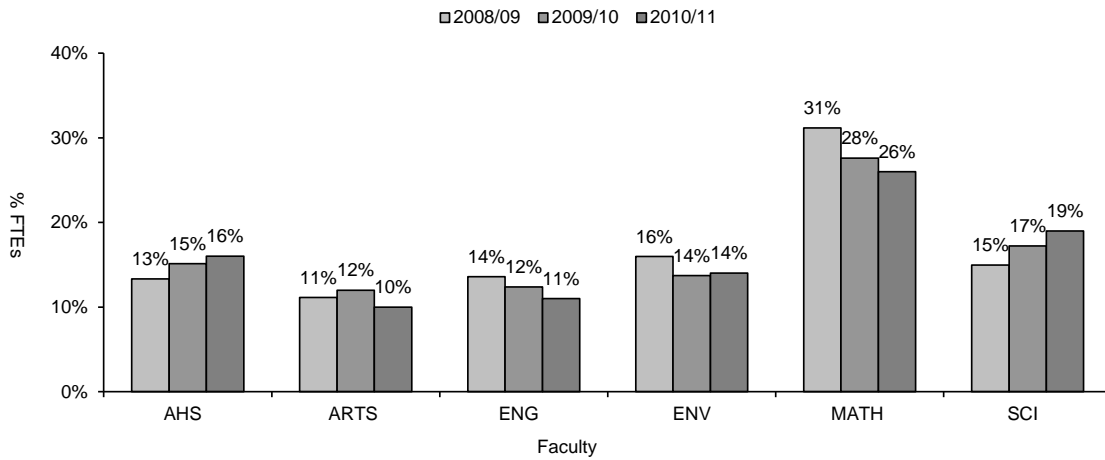


Figure 2.3.B

Percentage of FTE Doctoral Students (Canadian and Permanent Resident) with External Awards

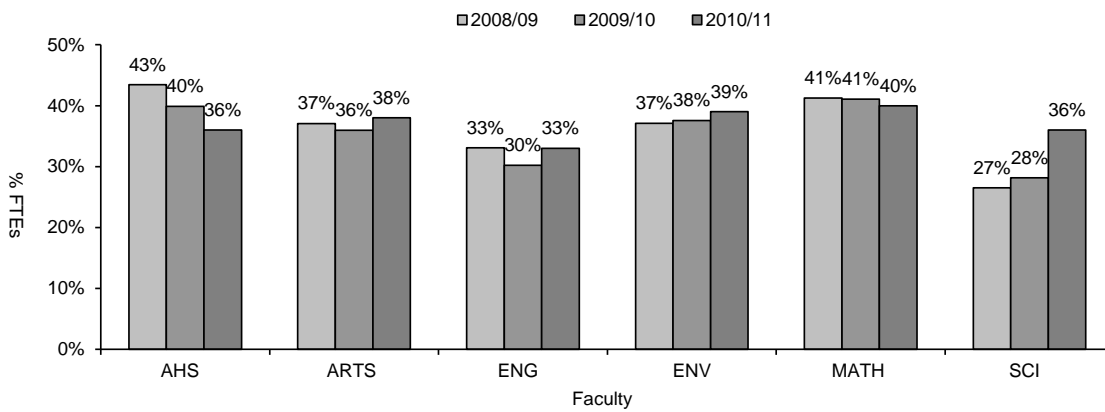
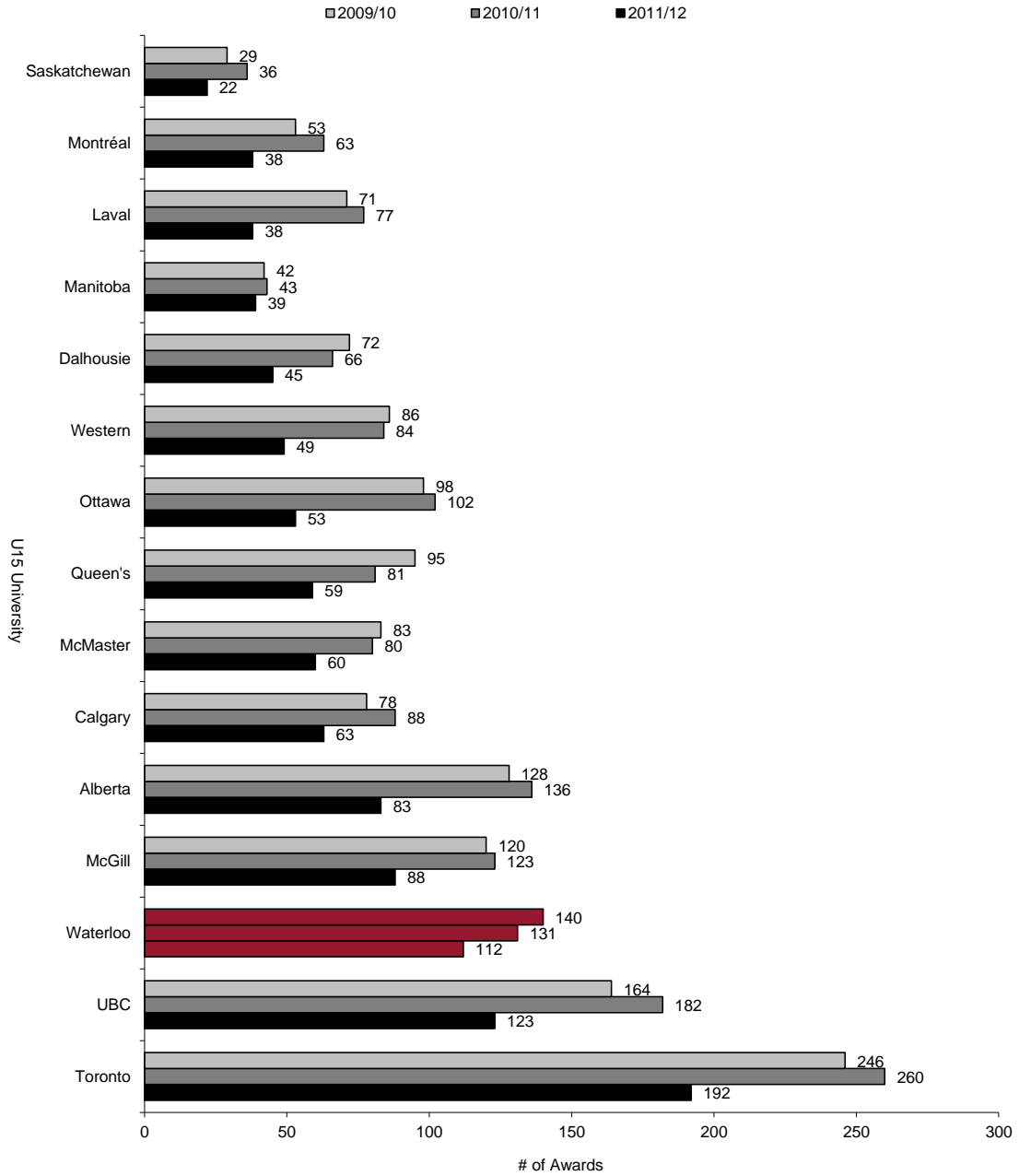


Figure 2.3.C, below, shows Natural Sciences and Engineering Research Council (NSERC) postgraduate awards to uWaterloo students, including those who may attend graduate studies at other institutions, and similar data for those institutions in the U15.

Figure 2.3.C

NSERC Postgraduate Awards by Year of Competition and U15 University

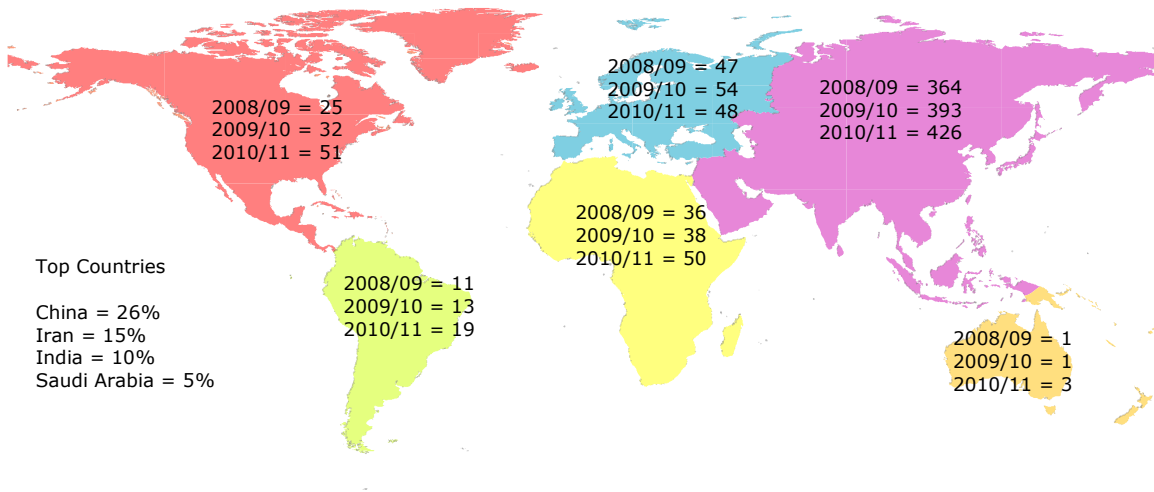


2.4 GEOGRAPHIC SOURCE

Understanding the geographical outreach of the University of Waterloo allows us to assess the strength of our reputation and influence beyond the local community. The strength of our reputation can be measured in part by the breadth of the area from which we draw students.

Figure 2.4.A²⁵

New International Graduate Students by Region of Origin (By Continent, Excluding Permanent Residents)



2.5 GRADUATE APPLICATION, OFFER, AND YIELD RATES

Entry to graduate studies is fundamentally different from the undergraduate programs, particularly in the area of offer and yield rates. Similar to the undergraduate case, we track the offer rate (number of offers versus number of applications), and the yield rate (number of registrations versus number of applications). However, the process and expectations for applications in graduate studies are decidedly different. Applicants seek more specialized and advanced programs based on their unique research interests and career plans. In some cases, applicants seek to study with a particular faculty member.

At any time, up to the start of the admission term, applicants can choose a competitive offer from another university. Science and technology programs are highly competitive. All programs endeavour to attract highly qualified students.

Figure 2.5.A through Figure 2.5.L show numbers of applications and the offer and yield rates for each of the most recent three years, by level of study (master's or doctoral) for each Faculty.

²⁵ Permanent Residents are not included in this chart because uWaterloo's definition of international involvement focuses more on students that have recently come from another country than those students who have been in Canada for a number of years and have become Permanent Residents. Continental North America excludes Canada. Source: USER Country of Citizenship, Visa Students only, fall terms only.

Figure 2.5.A

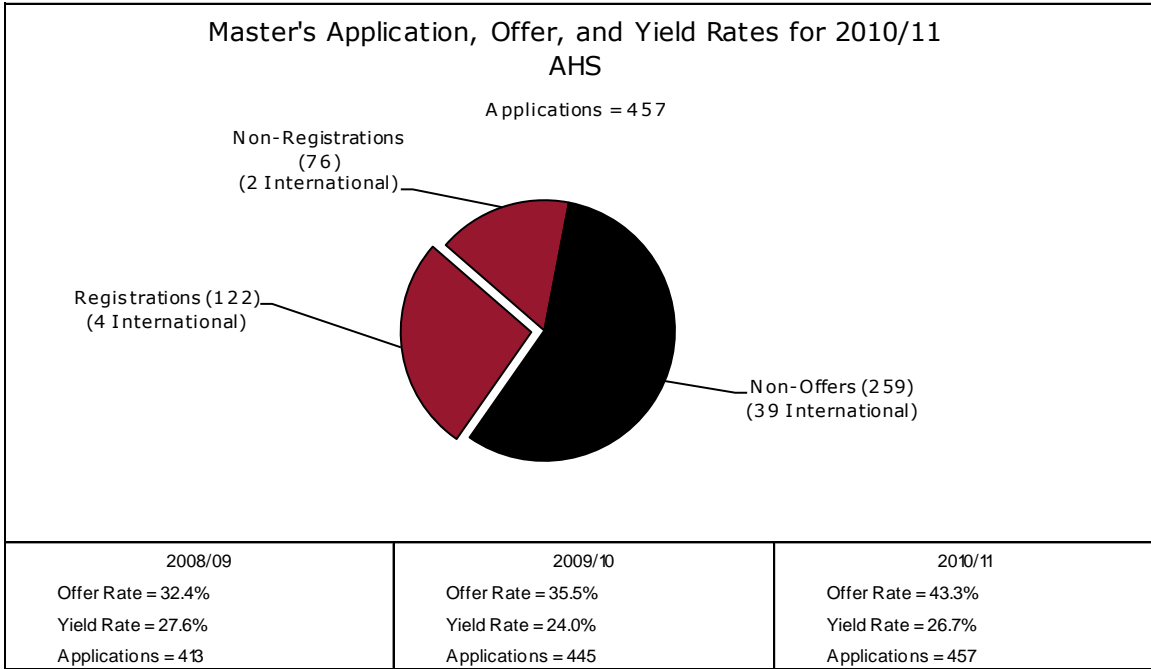


Figure 2.5.B

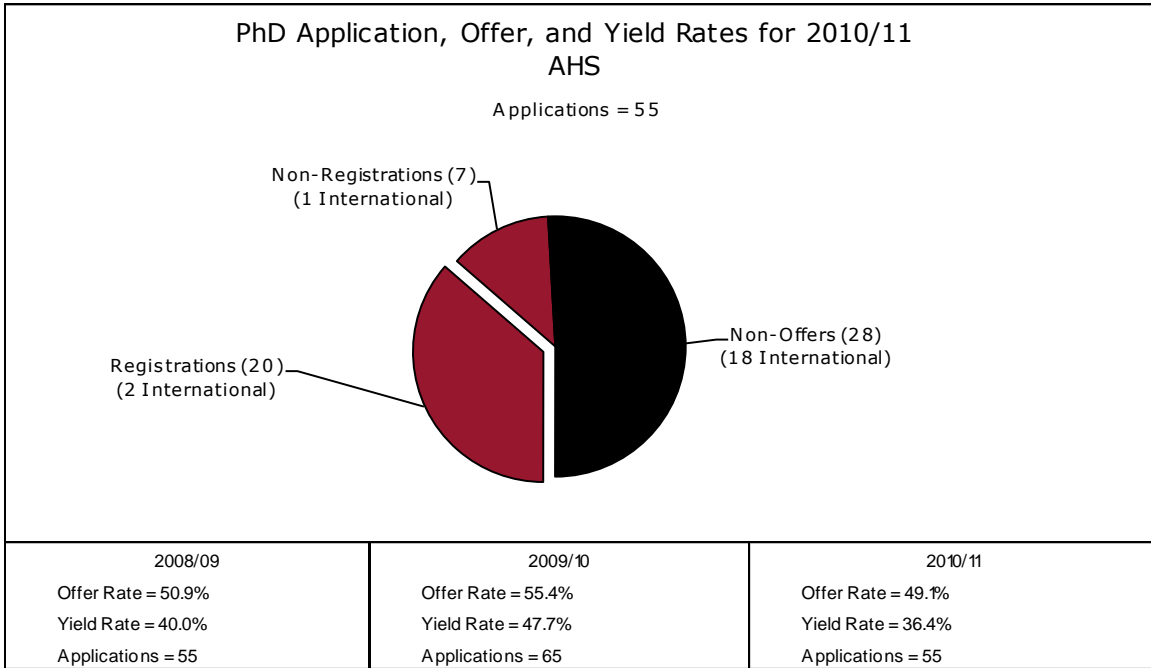


Figure 2.5.C

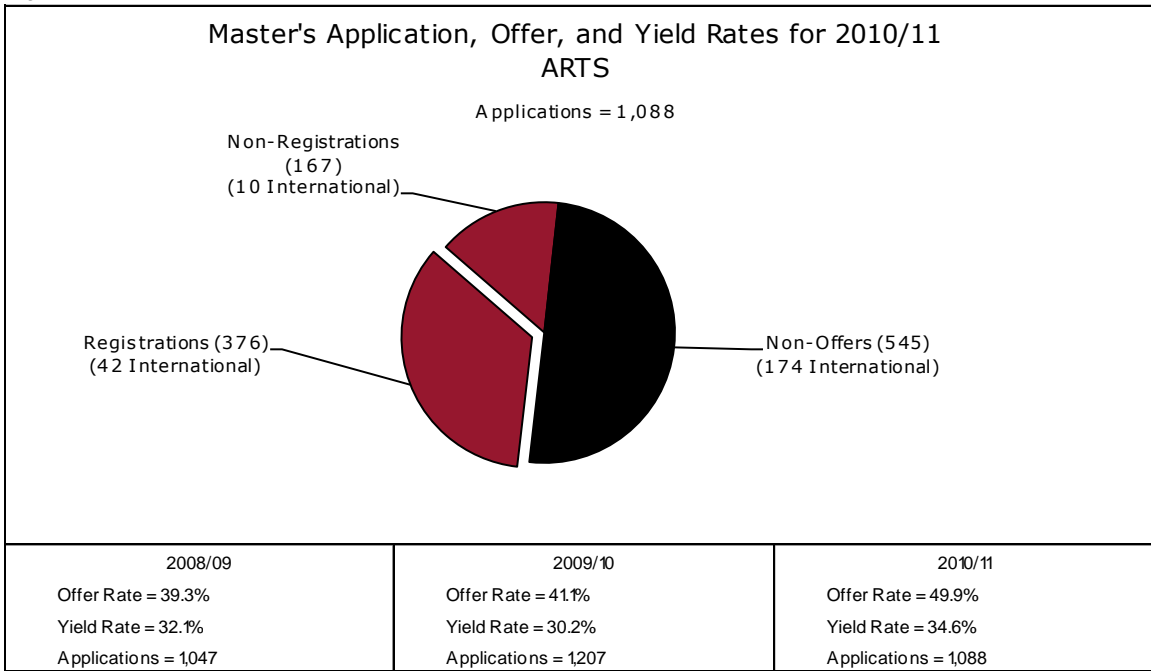


Figure 2.5.D

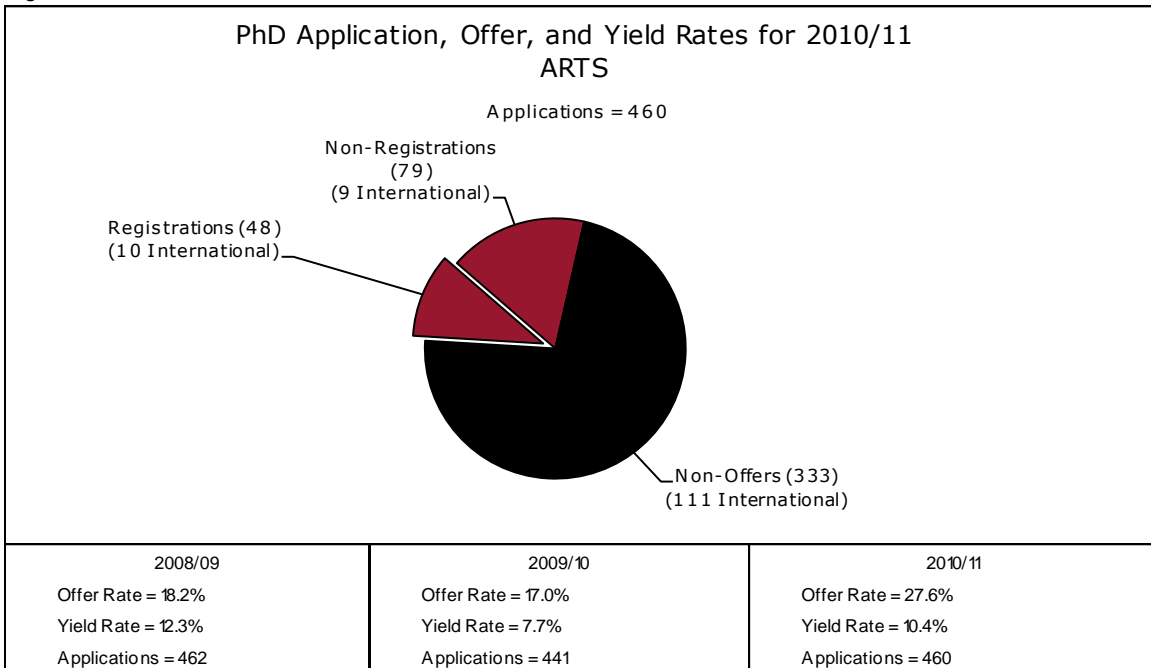


Figure 2.5.E

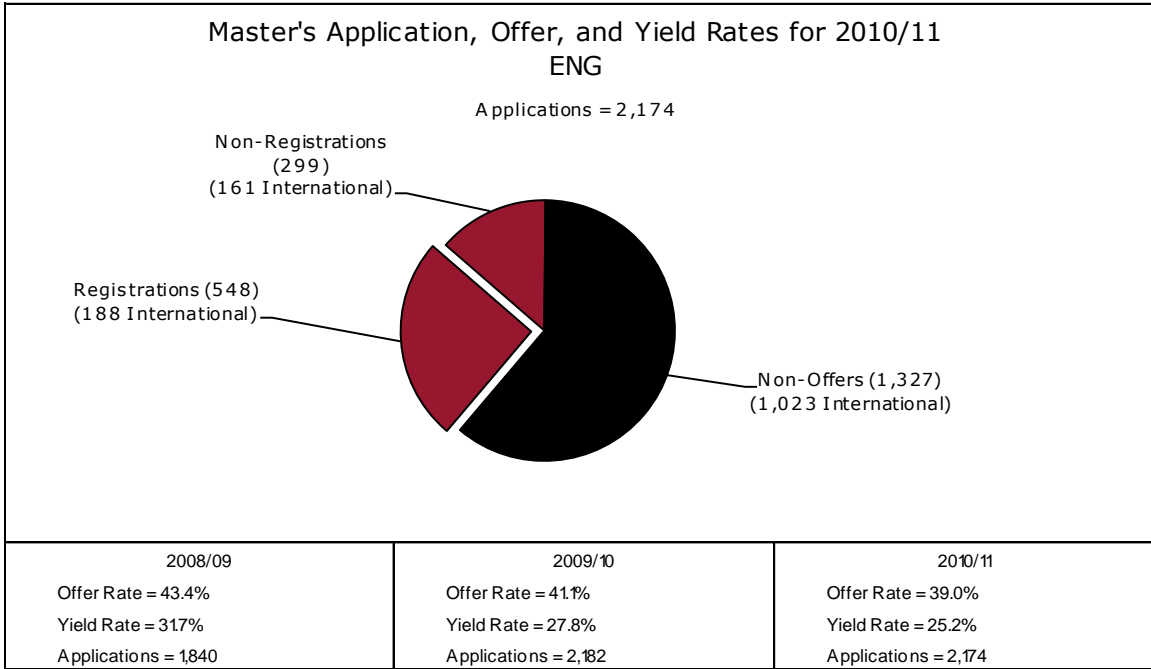


Figure 2.5.F

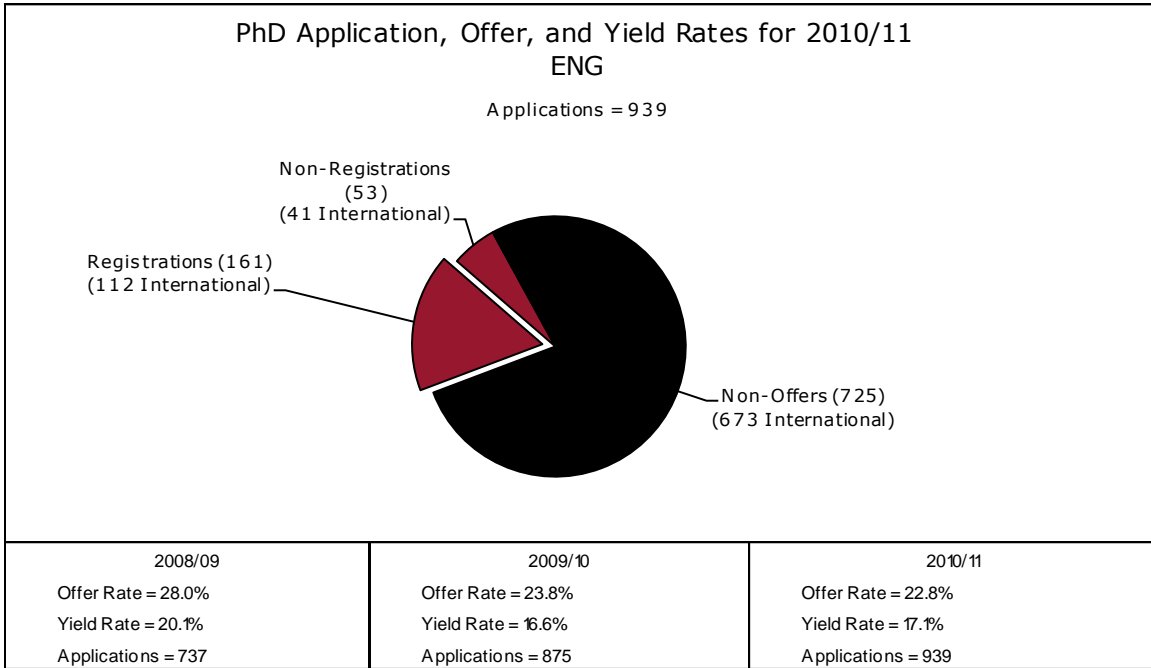


Figure 2.5.G

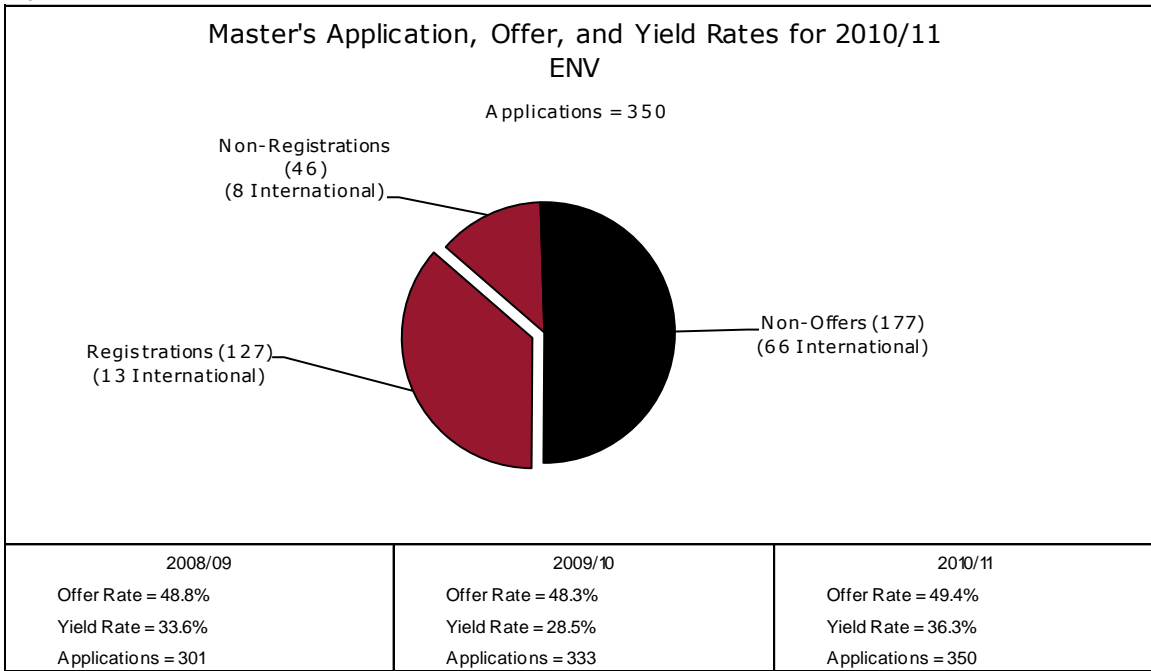


Figure 2.5.H

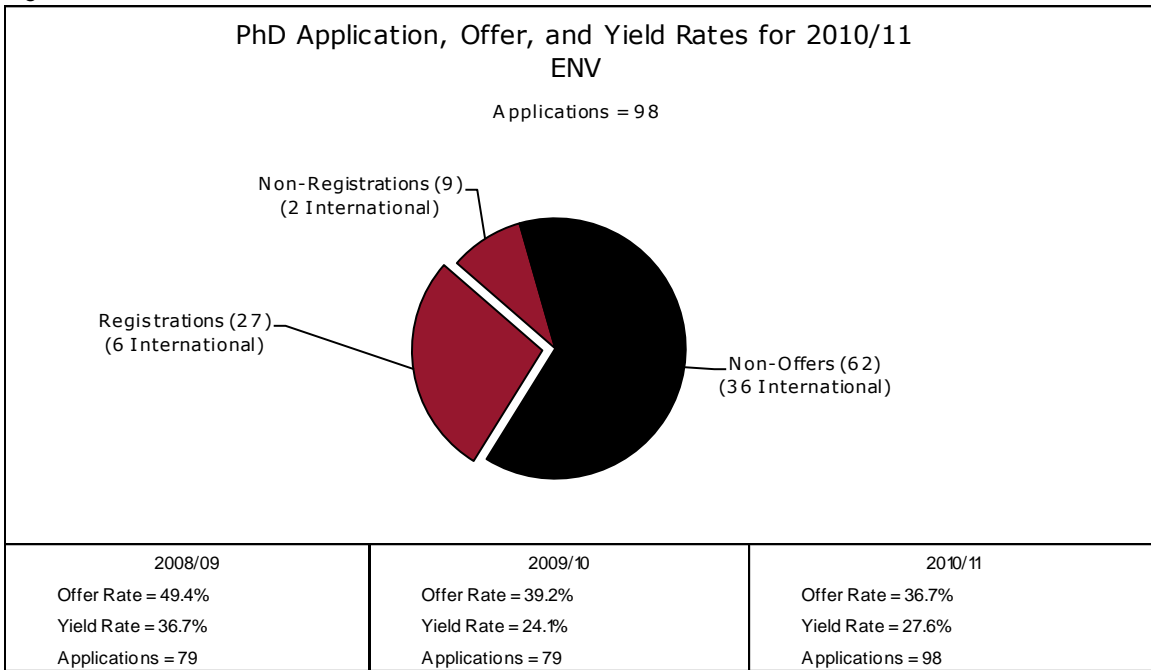


Figure 2.5.I

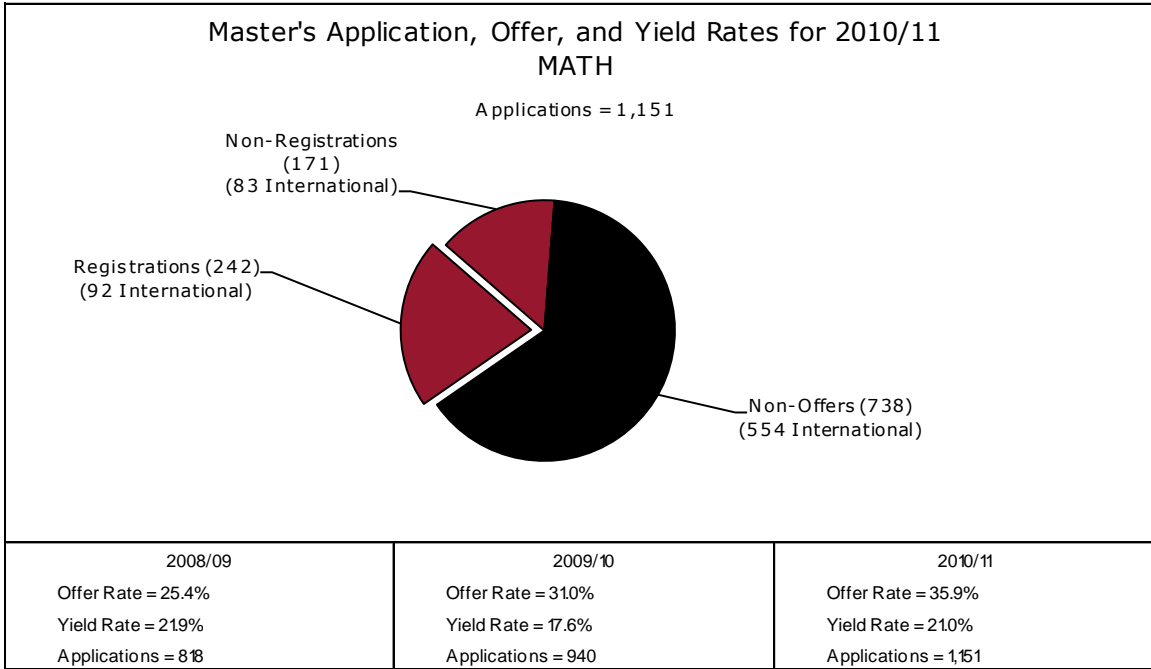


Figure 2.5.J

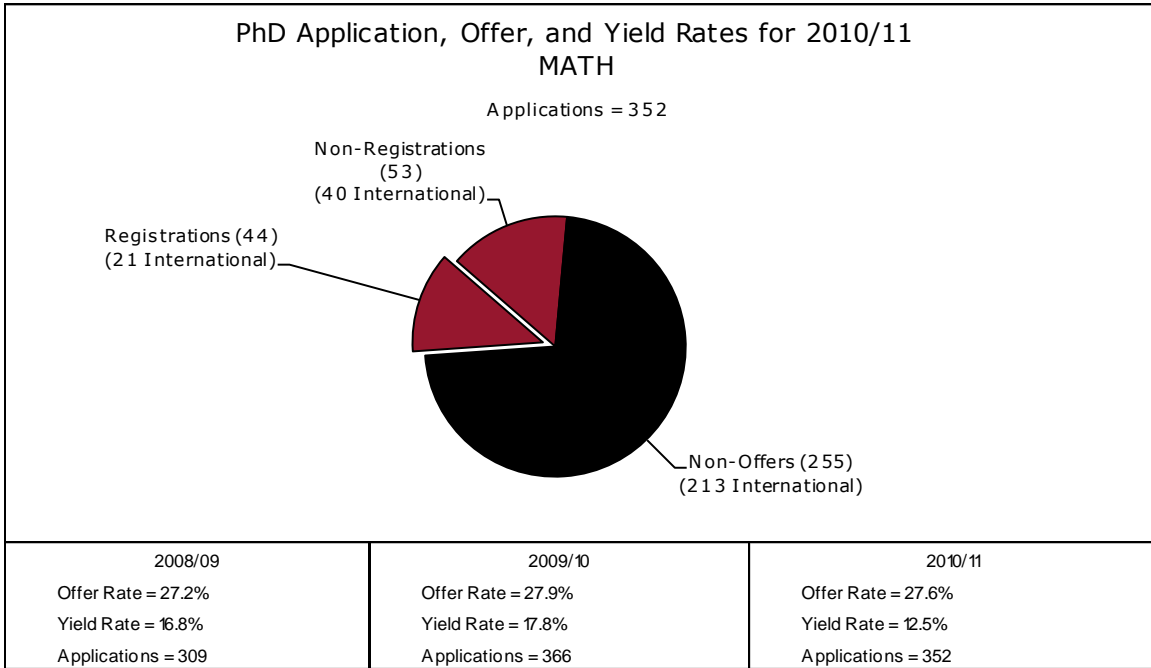


Figure 2.5.K

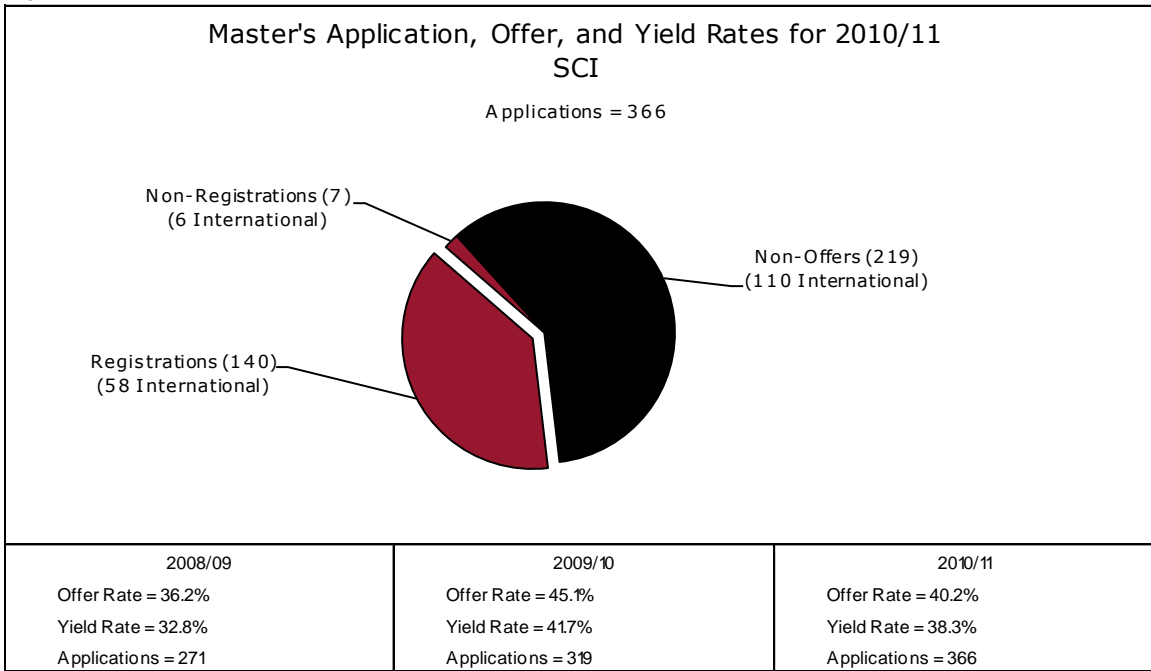
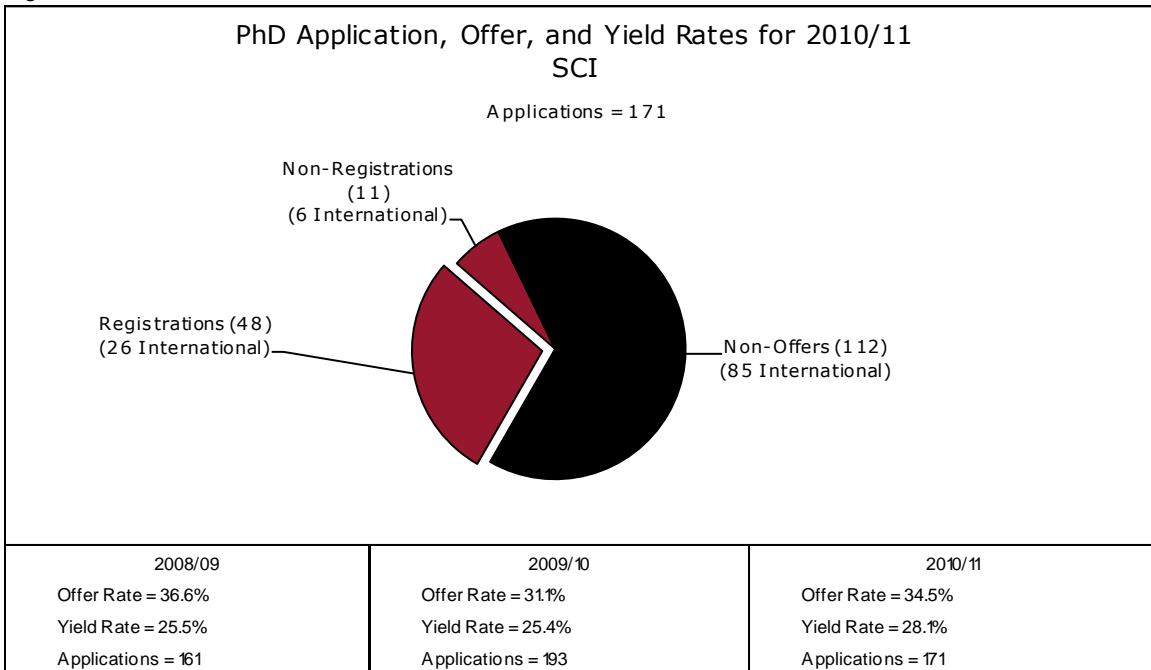


Figure 2.5.L



2.6 STUDENT SUPPORT

Graduate student support is provided in a number of ways, including scholarships (\$38 million), remuneration for work as teaching assistants (\$13 million) and as research assistants (\$2 million) and graduate research studentships (\$23 million). Graduate students are the third-largest pay group at uWaterloo, after faculty and staff.

This indicator shows graduate student support for master's and doctoral students by Faculty and by type including teaching assistantships (TAs), research assistantships (RAs), research studentships (RSs), internal University of Waterloo scholarships, external scholarships, and other sources. Other sources of income include vacation pay from TAs and RAs and needs-based bursaries.

Figure 2.6.A and Figure 2.6.B²⁶ show differences in the levels of graduate student support across Faculties for master's and doctoral candidates. More specifically, they demonstrate whether particular Faculties emphasize particular kinds of student support over others, e.g., research rather than teaching assistantships. As we can see from Figure 2.6.A and Figure 2.6.B, in 2010/11 uWaterloo graduate students received in excess of \$81 million, up from \$79 million in 2009/10.

Figure 2.6.A

Financial Support to Master's Students 2010/11 (thousands)							
	AHS	ARTS	ENG	ENV	MATH	SCI	Total
External Scholarships	\$517	\$505	\$2,462	\$379	\$847	\$1,021	\$5,731
Internal Scholarships	\$580	\$1,160	\$1,339	\$652	\$1,898	\$1,729	\$7,358
Teaching Assistantships	\$434	\$949	\$1,513	\$784	\$1,514	\$711	\$5,905
Research Assistantships	\$234	\$86	\$27	\$221	\$285	\$146	\$998
Research Studentships	\$209	\$33	\$4,445	\$304	\$1,062	\$2,307	\$8,361
Other	\$86	\$939	\$997	\$253	\$244	\$225	\$2,742
Total	\$2,060	\$3,672	\$10,783	\$2,593	\$5,849	\$6,139	\$31,096
Average Support	\$21	\$17	\$22	\$20	\$28	\$28	\$23
% FTEs Supported	54%	65%	58%	70%	83%	93%	67%

Figure 2.6.B

Financial Support to Doctoral Students 2010/11 (thousands)							
	AHS	ARTS	ENG	ENV	MATH	SCI	Total
External Scholarships	\$708	\$2,133	\$4,756	\$885	\$2,039	\$1,882	\$12,402
Internal Scholarships	\$587	\$2,718	\$4,001	\$534	\$2,849	\$1,699	\$12,387
Teaching Assistantships	\$312	\$1,508	\$2,213	\$283	\$1,392	\$914	\$6,621
Research Assistantships	\$280	\$321	\$151	\$101	\$405	\$133	\$1,390
Research Studentships	\$289	\$233	\$8,490	\$236	\$2,231	\$2,913	\$14,392
Other	\$297	\$568	\$1,001	\$277	\$422	\$351	\$2,916
Total	\$2,474	\$7,480	\$20,611	\$2,315	\$9,337	\$7,892	\$50,109
Average Support	\$29	\$32	\$35	\$33	\$36	\$31	\$33
% FTEs Supported	88%	94%	95%	89%	98%	96%	95%

²⁶ Total may not add up due to rounding (to the nearest \$1,000).

2.7 GRADUATE STUDENT SATISFACTION

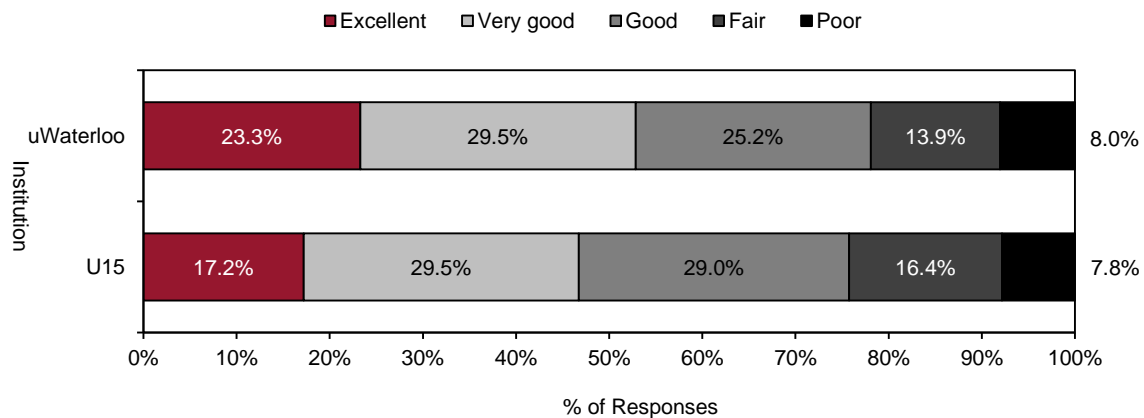
Like the National Survey of Student Engagement (NSSE) for undergraduates, the Canadian Graduate and Professional Student Survey (CGPSS) is designed to gather feedback from our graduate students about their educational experience at uWaterloo. The CGPSS asks students about their satisfaction with their experience at uWaterloo, the degree of support they receive from their program or department, the effectiveness of their supervisor, the financial support they received, as well as university resources and student life.

The University of Waterloo participated in the CGPSS in 2005, 2007, and 2010, with a survey invitation being sent out to every graduate student enrolled at uWaterloo. In 2007 and 2010 a number of peer institutions across Ontario and the majority of U15 Universities from across Canada also participated, allowing us to compare our results with those of our peer institutions, and to identify areas where uWaterloo is excelling as well as issues and concerns for improvement or further investigation. Graduate students are divided into three separate groups when the results are analyzed: master’s students with a thesis component to their program; master’s students with no thesis; and doctoral students.

As in the NSSE survey the CGPSS contains a number of general assessment questions where students are asked to rate the quality and effectiveness of different aspects of their experience. Figure 2.7.A shows the responses of doctoral students when asked to rate the quality of academic advising and guidance they have received in their program. Overall the University of Waterloo seems to have a slight advantage over our peer institutions in the U15 with 52.8 per cent of our doctoral students responding with “Excellent” or “Very Good” as compared to 46.7 per cent of doctoral students across the U15. At the other end of the spectrum both groups have very similar proportions of students responding with only “Fair” or “Poor”.

Figure 2.7.A

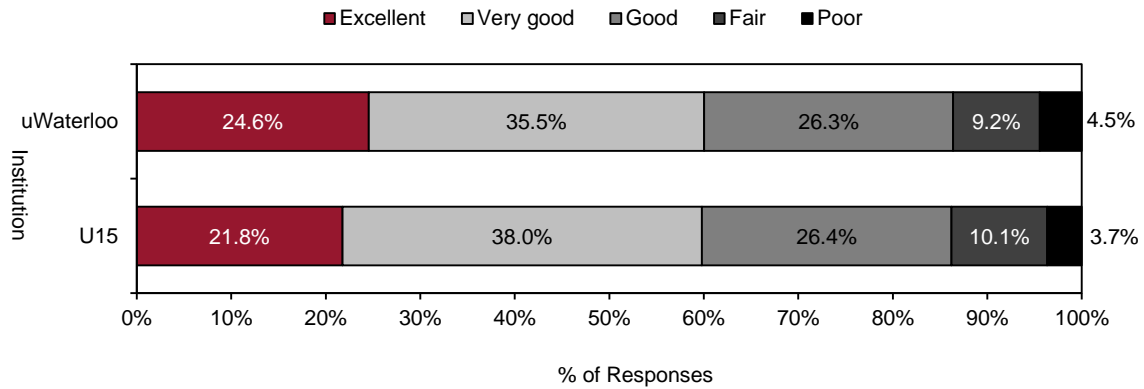
2010 CGPSS: Please rate the following dimensions of your program - quality of academic advising and guidance. (Doctoral Students)



When asked to evaluate their overall experience at uWaterloo, as shown in Figure 2.7.B, uWaterloo’s results mirror those of the U15 very closely with 24.6 per cent responding with “Excellent”, and 35.5 per cent with “Good”, compared to 21.8 per cent and 38.0 per cent respectively from students at the U15 institutions.

Figure 2.7.B

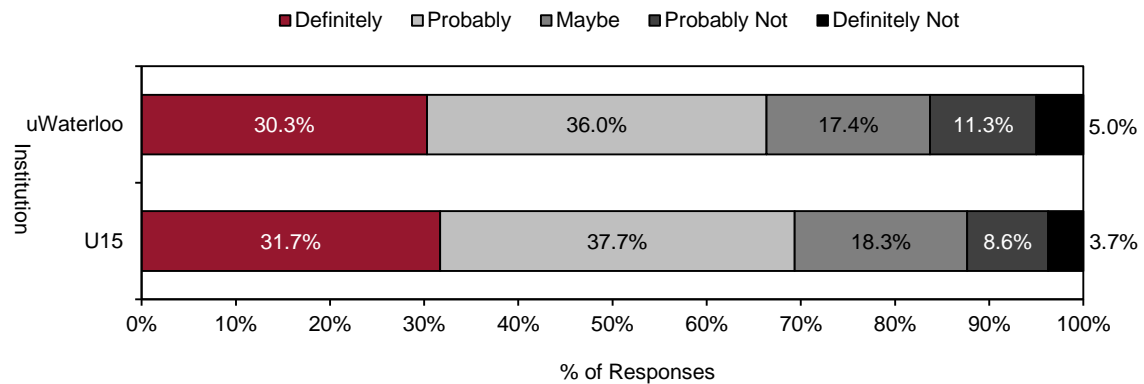
2010 CGPSS: Overall how would you rate the quality of your overall experience at this university? (Doctoral Students)



Our results continue to correspond very closely to those of the U15 in Figure 2.7.C when students were asked if given the opportunity to begin their graduate career again whether or not they would choose the same institution. 30.3 per cent of our Doctoral students responded with “Definitely” and 36.0 per cent responded “Probably”, but 16.3 per cent responded that they would “Probably Not” or “Definitely Not” choose uWaterloo again.

Figure 2.7.C

2010 GPSS: If you were to start your graduate career again, would you select this same university? (Doctoral Students)



Further work to isolate factors that contribute to student satisfaction and dissatisfaction with their experience at uWaterloo by analyzing the survey responses may help us to improve the graduate student experience for future uWaterloo students.

2.8 COMPLETION RATES AND DEGREES GRANTED

This indicator shows the 2000 and 2004 cohort completion rates of uWaterloo graduate students as compared to the other universities in the U15. Specifically, Figure 2.8.A through Figure 2.8.F show the size and progress of the 2004 starting master's and 2000 doctoral cohorts including the length of time it took students to graduate, the number of students who had either completed their studies or were still studying as of the winter 2008 term, and the number of study terms for those who withdrew.

Figure 2.8.A

2004 Master's Cohort U15 Universities all Disciplines % Graduated or Promoted to PhD as of Sep-09

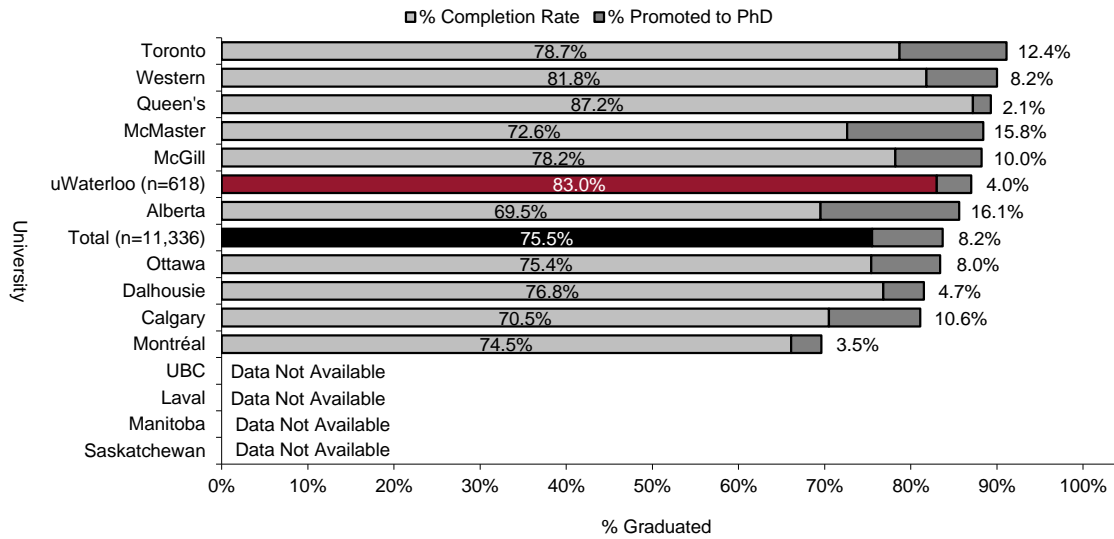


Figure 2.8.B

2000 Doctoral Cohort U15 Universities all Disciplines % Graduated as of Sep-09 Term

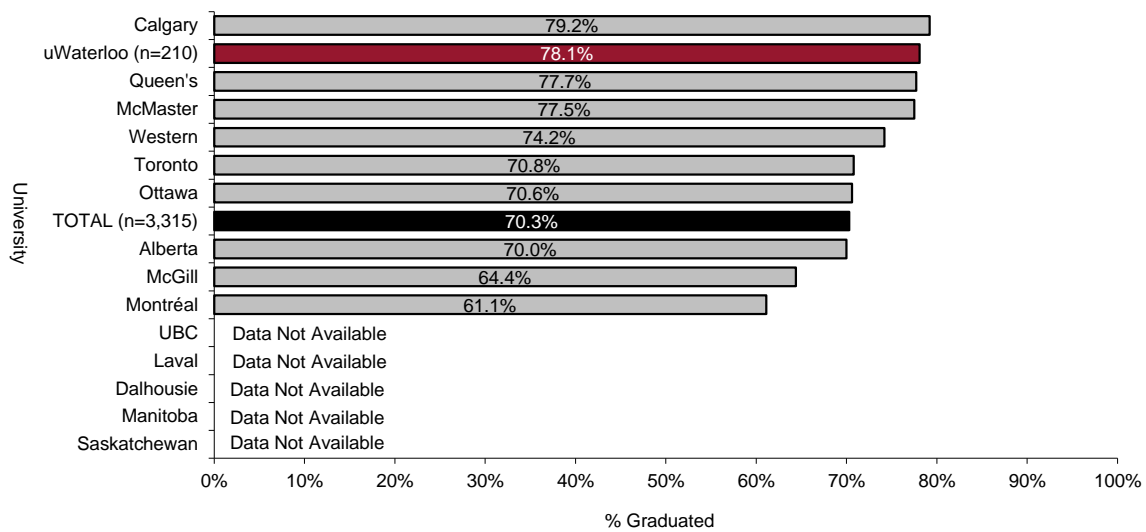


Figure 2.8.C

2004 Master's Cohort U15 Universities all Disciplines Median Number of Terms Registered to Degree Completion

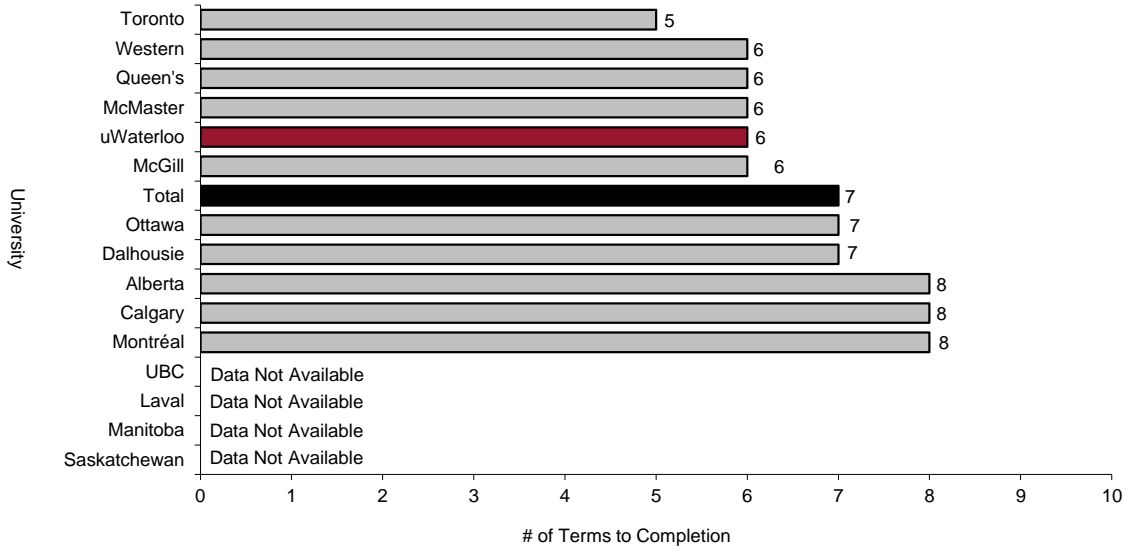


Figure 2.8.D

2000 Doctoral Cohort U15 Universities all Disciplines Median Number of Terms Registered to Degree Completion

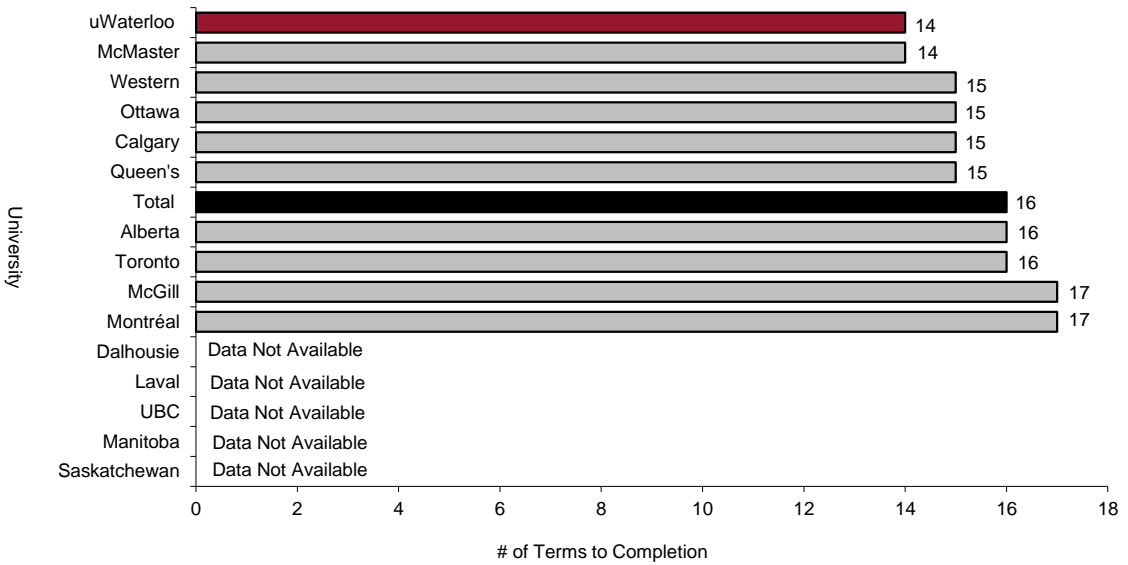


Figure 2.8.E

2004 Master's Cohort U15 Universities all Disciplines Median Number of Terms Registered for Withdrawn Students

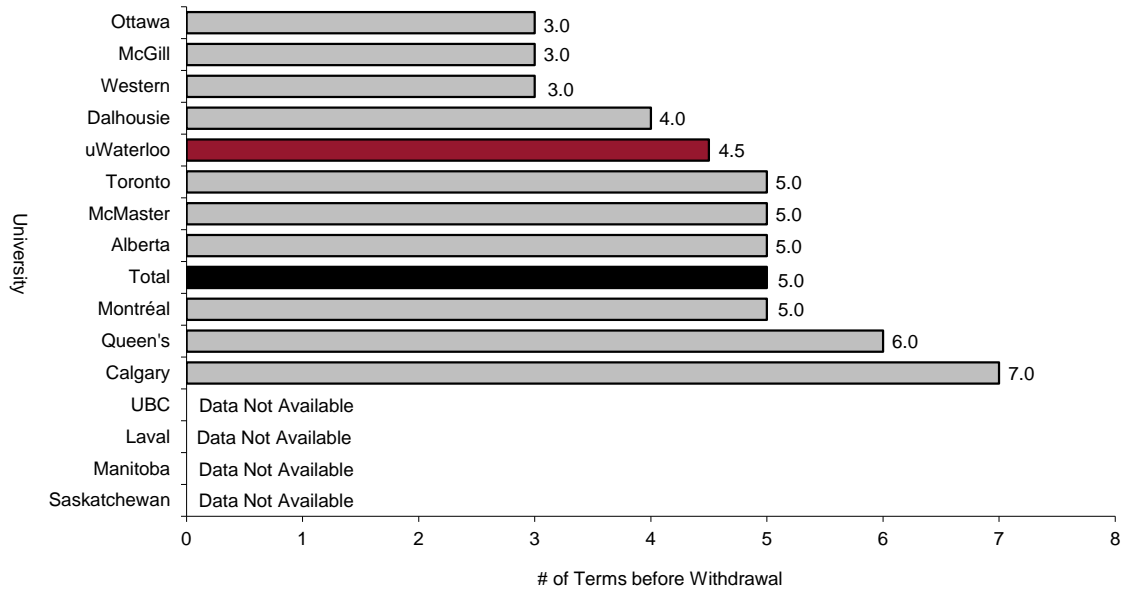
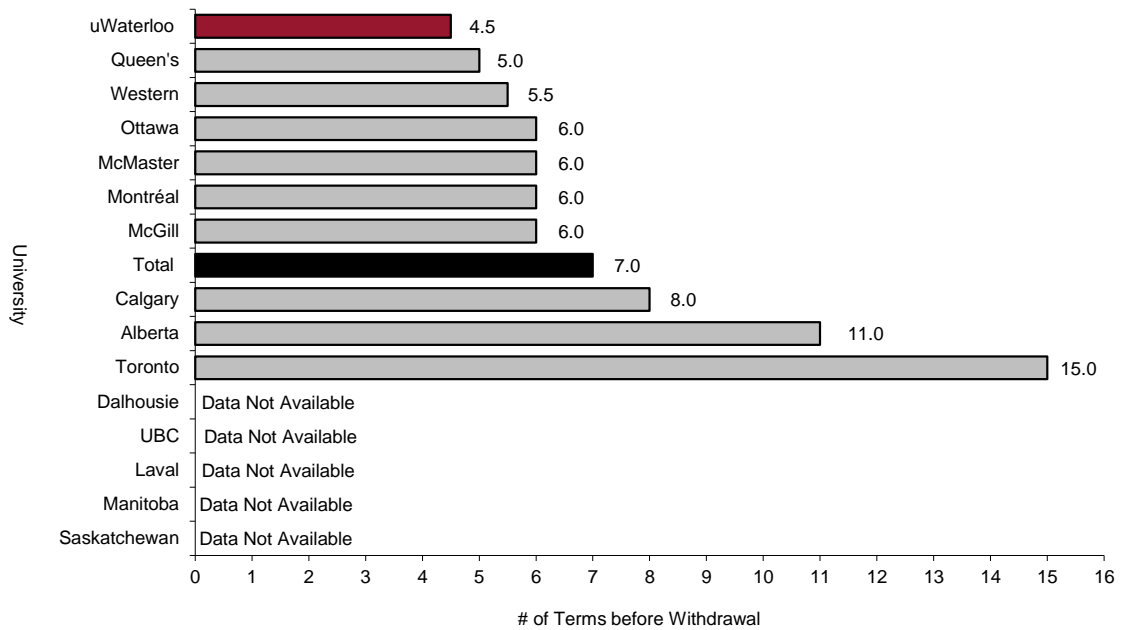


Figure 2.8.F

2000 Doctoral Cohort U15 Universities all Disciplines Median Number of Terms Registered for Withdrawn Students



The next two figures show the average time to completion for those students who earned their degree between 2008 and 2010, distinct from the cohort analyses above.

Figure 2.8.G

Master's Degrees 2008 to 2010 - Average Time to Completion

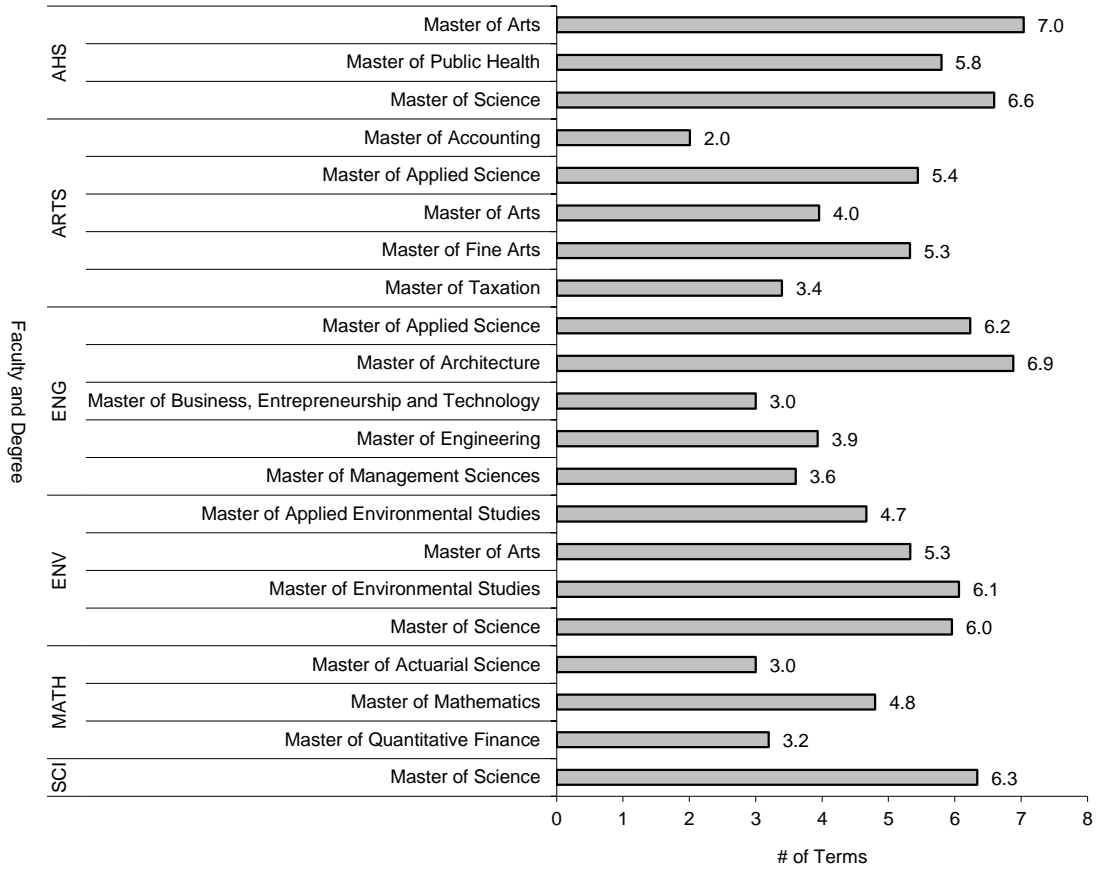
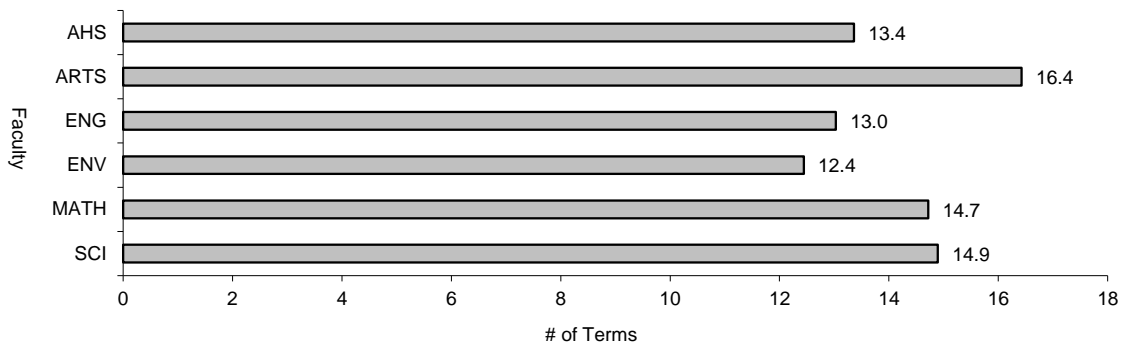


Figure 2.8.H

PhD Degrees 2008 to 2010 - Average Time to Completion



In 2010 there were 1,276 master's degrees and 237 doctoral degrees granted.

Figure 2.8.1

Master's Degrees Granted

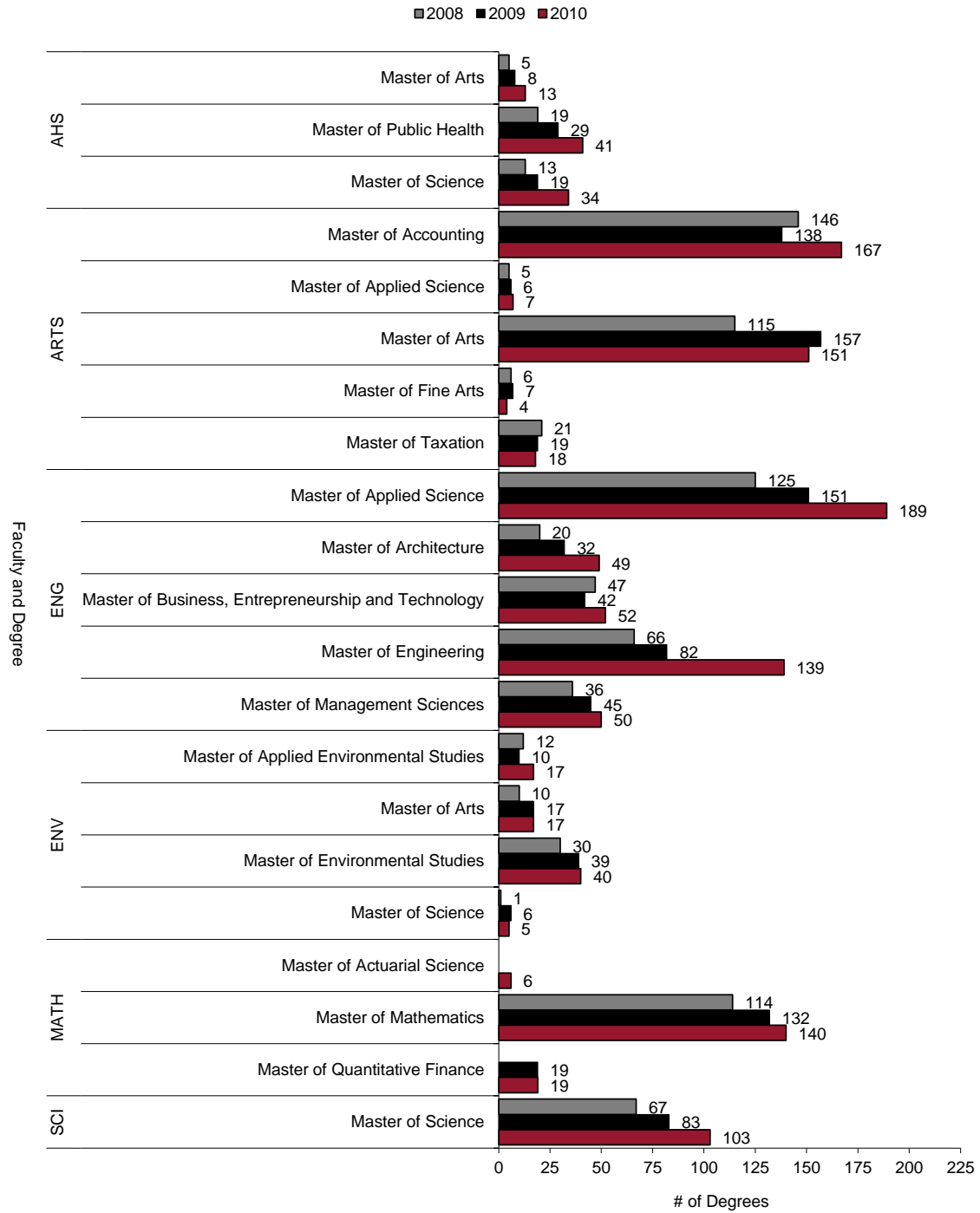
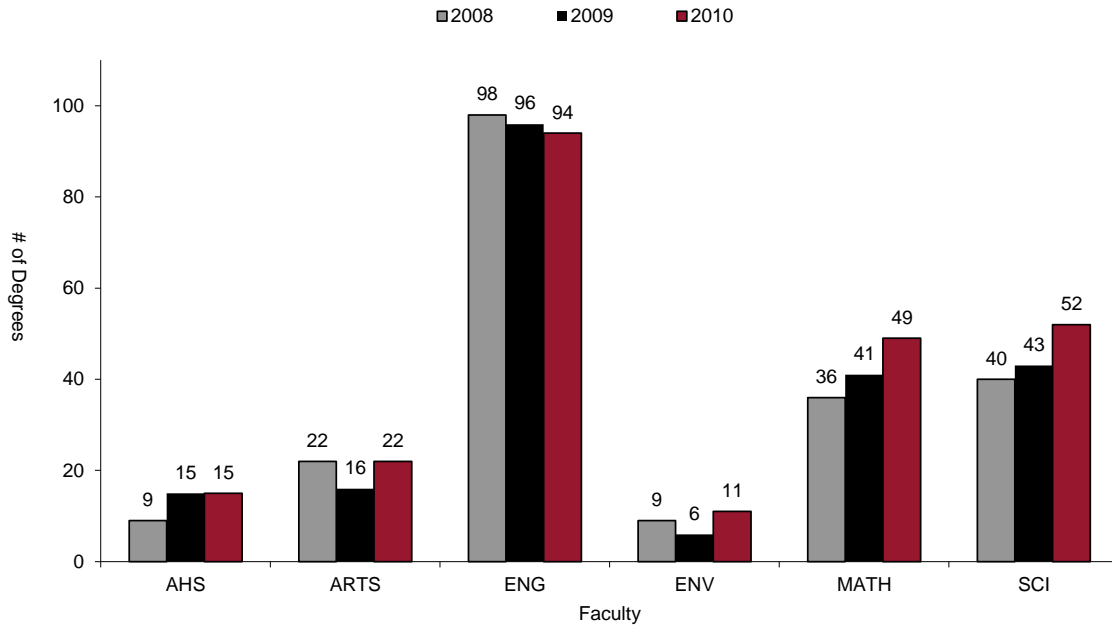


Figure 2.8.J

PhD Degrees Granted



The University of Waterloo recognizes our responsibility to ensure access to a range of graduate education opportunities in a range of disciplines. The professional communities we serve with our undergraduate students—accountancy, arts, engineering, environment, health, mathematics, planning, pharmacy, optometry, architecture—demand graduate degrees in their disciplines. Our goal is to meet that demand.

3. Research

The University of Waterloo is a research-intensive university, and our faculty members are actively involved in research, scholarship, and creative work in a wide variety of departments, centres, and institutes. Their teaching is enhanced by current discoveries, and their public service is informed by current knowledge. The University of Waterloo is committed to both basic research, which is essential to the discovery of new knowledge, and applied research, which seeks novel ways to use that knowledge for the benefit of society and the world around us.

A distinguishing feature of uWaterloo's research profile is its outstanding record of contract research with both private and public sectors. The University has an unparalleled record of spawning new companies and otherwise capitalizing on its many research accomplishments for the benefit of society. Research at uWaterloo encompasses a full spectrum of work in the arts, social and behavioural sciences, humanities, engineering, environment, health, physical and life sciences, and mathematics.

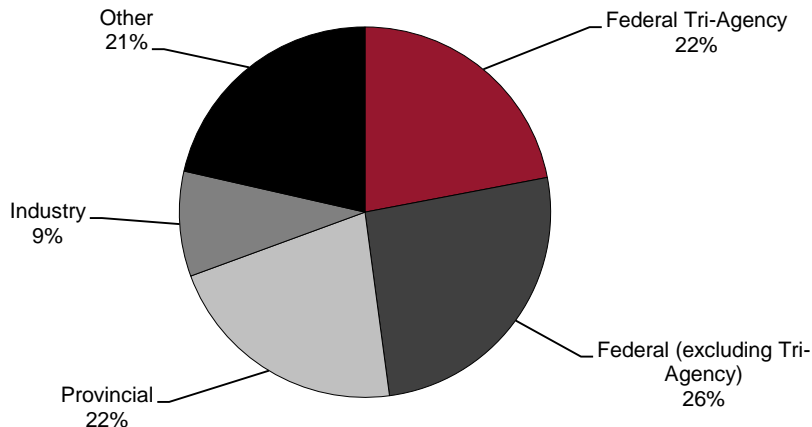
In this section, we examine total research awards, including those from international sources, awards from the Tri-Agencies and the government of Ontario.

3.1 RESEARCH AWARDS

Research awards for the 2010/11 year were up by 12 per cent from 2009/10, totalling over \$190 million. Funding from Federal government agencies made up roughly half of all funding with 50 per cent of federal funding coming from the Tri-Agency.

Figure 3.1.A²⁷

Total Sponsored Research Awards by Source 2010/11 - \$190,416,804



²⁷ "Other" includes, for example, funding from inter-university sub-awards, internal matching of institutional awards, foundations, private agencies and other governmental bodies.

Figure 3.1.B

Total Sponsored Research Awards by Source

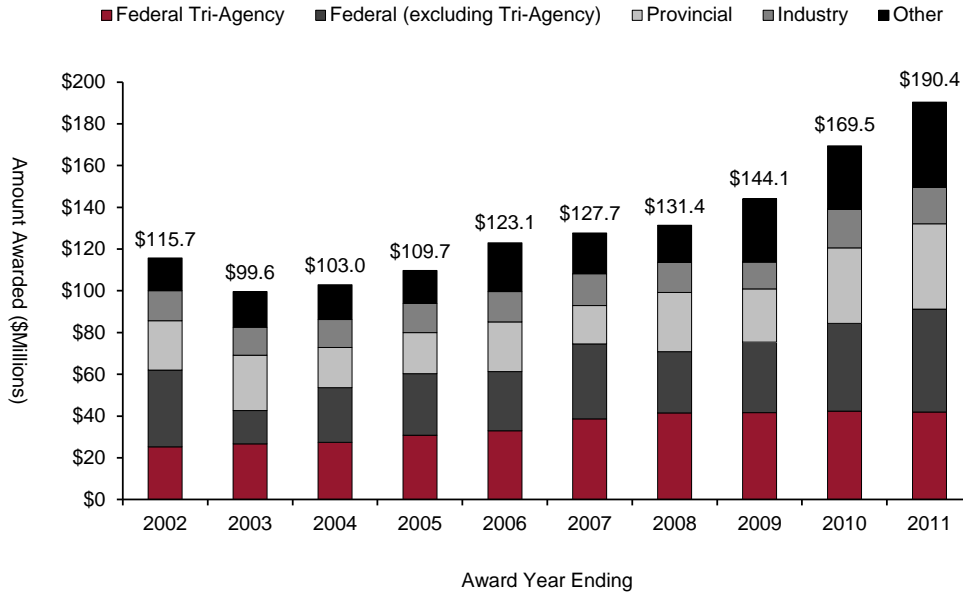


Figure 3.1.C excludes about \$18 million in awards to the federated and affiliated colleges and universities and/or non-academic units at uWaterloo.

Figure 3.1.C

Total Sponsored Research Awards by Faculty

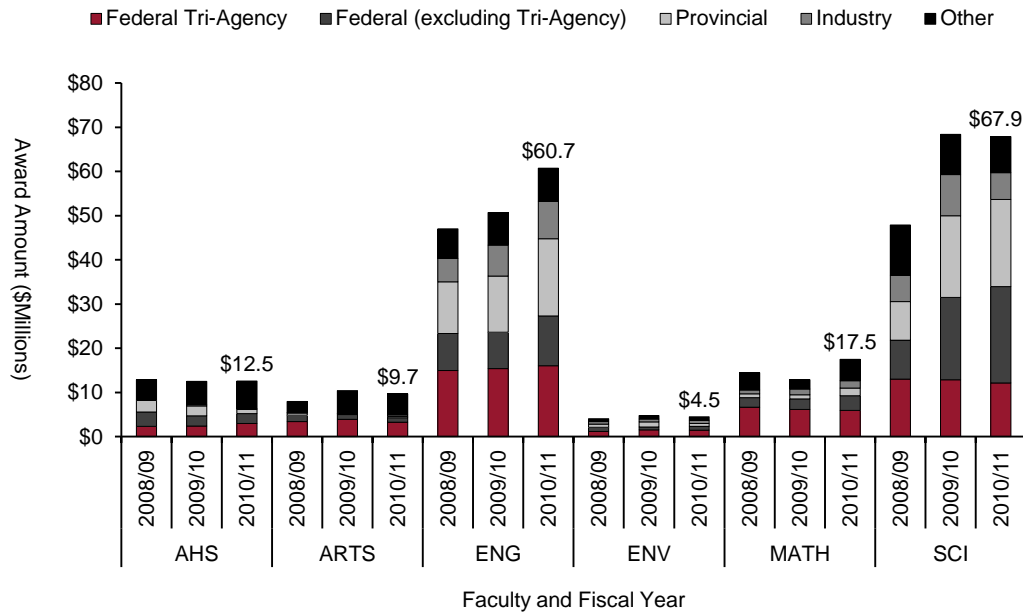


Figure 3.1.D

Total Sponsored Research Awards by Faculty per Tenure and Tenure-Stream Faculty Member

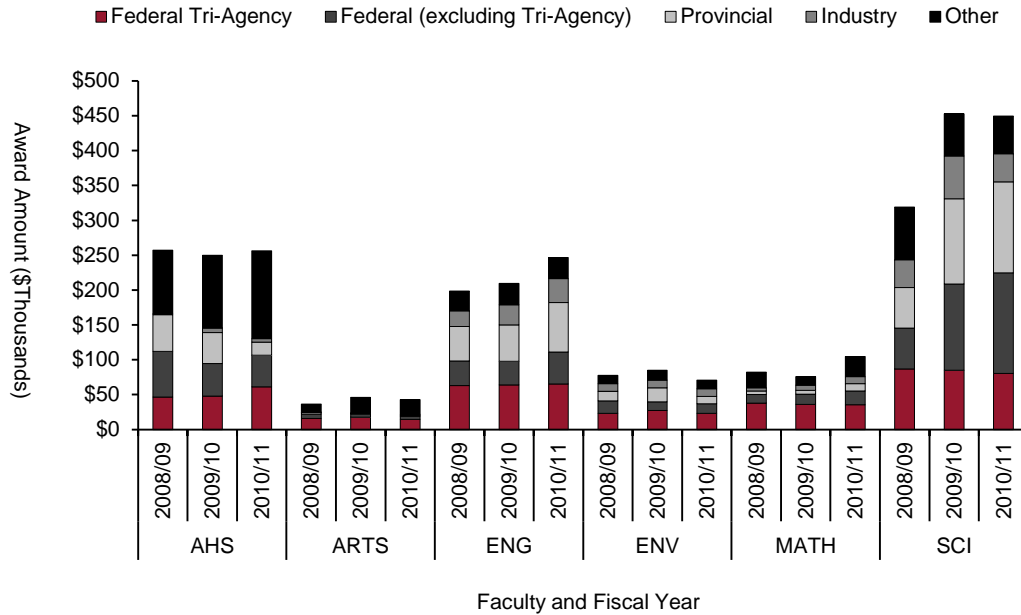
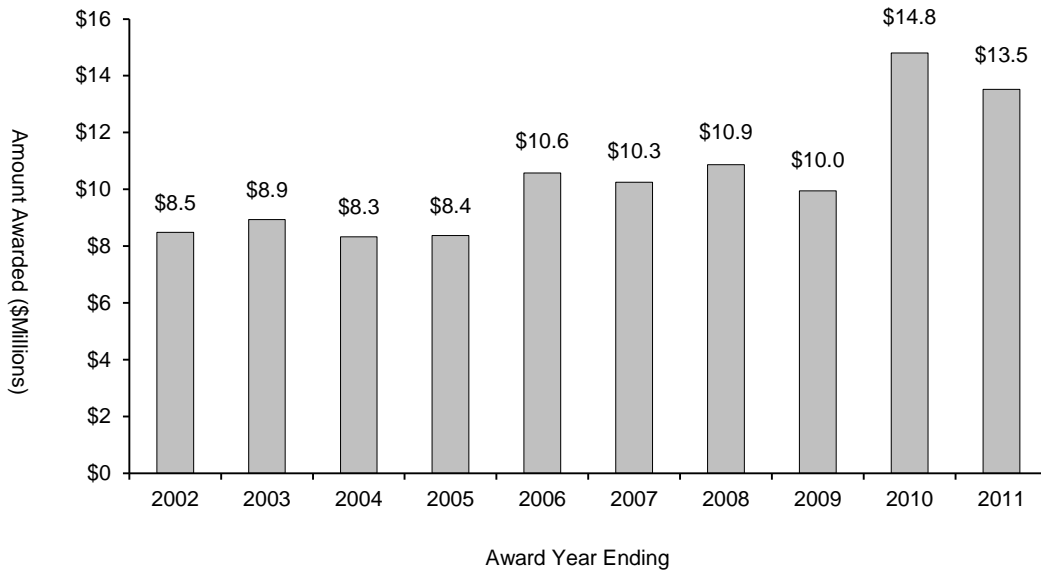


Figure 3.1.E²⁸

International Awards 2002-2011



²⁸ In 2010/11, 83 per cent of international awards were from sponsors in the United States, the majority of which came from industry. The Canadian International Development Agency (CIDA) sponsors research in other countries but is not included in these figures.

3.2 FEDERAL TRI-AGENCY

Research awards from the three major granting agencies—the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes for Health Research (CIHR), and the Social Sciences and Humanities Research Council (SSHRC)—are presented for the past 10 years.

Figure 3.2.A

Federal Tri-Agency Research Awards 2002-2011

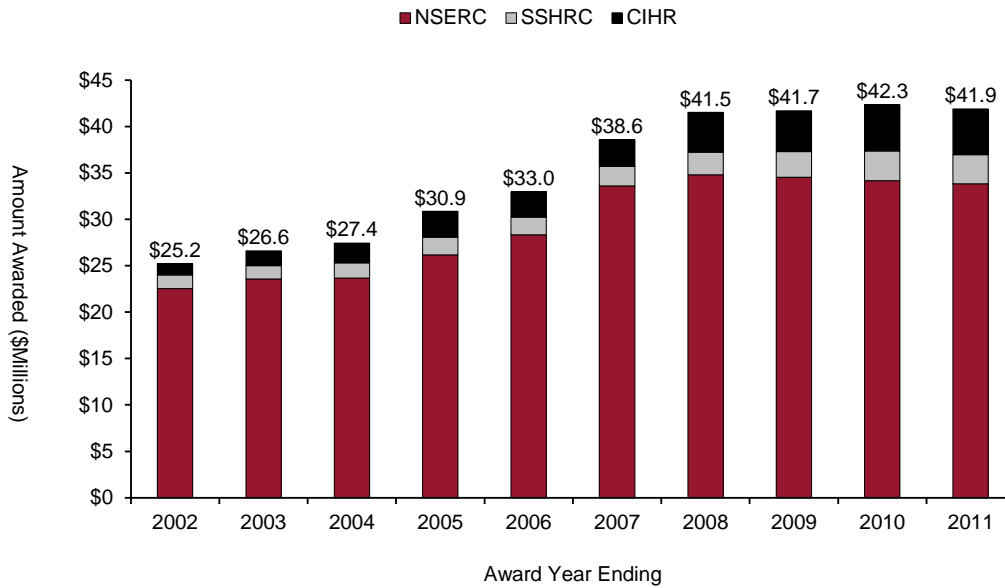
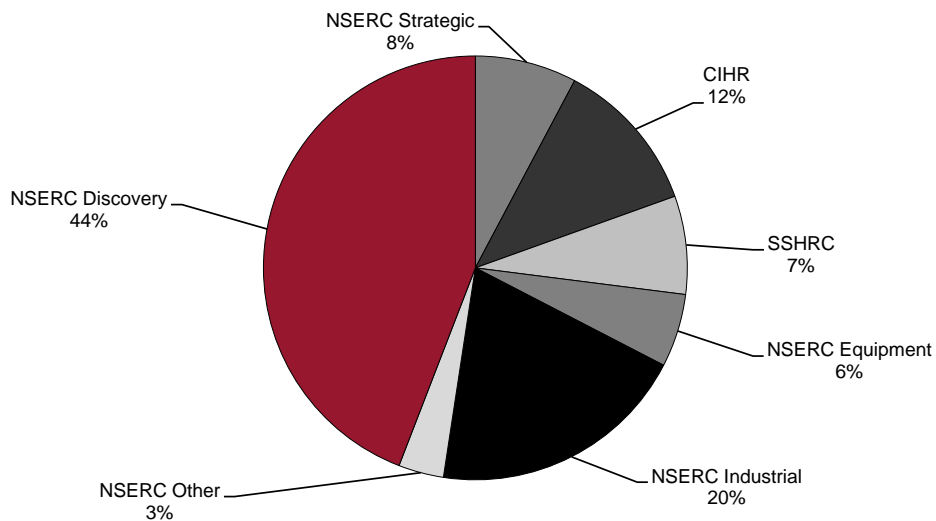


Figure 3.2.B

Breakout of Federal Tri-Agency Research Awards 2010/11 - \$41,887,085



Once again, uWaterloo’s tri-agency success rates were significantly higher than the national average:

- NSERC’s Discovery program – 69.9% (compared to the national average of 57.5%)
- SSHRC’s standard grant – 46% (compared to the national average of 37%)
- CIHR fall open competition – 26.7% (compared to the national average of 21.4%).

Figure 3.2.C

Federal Tri-Agency Research Awards by Faculty

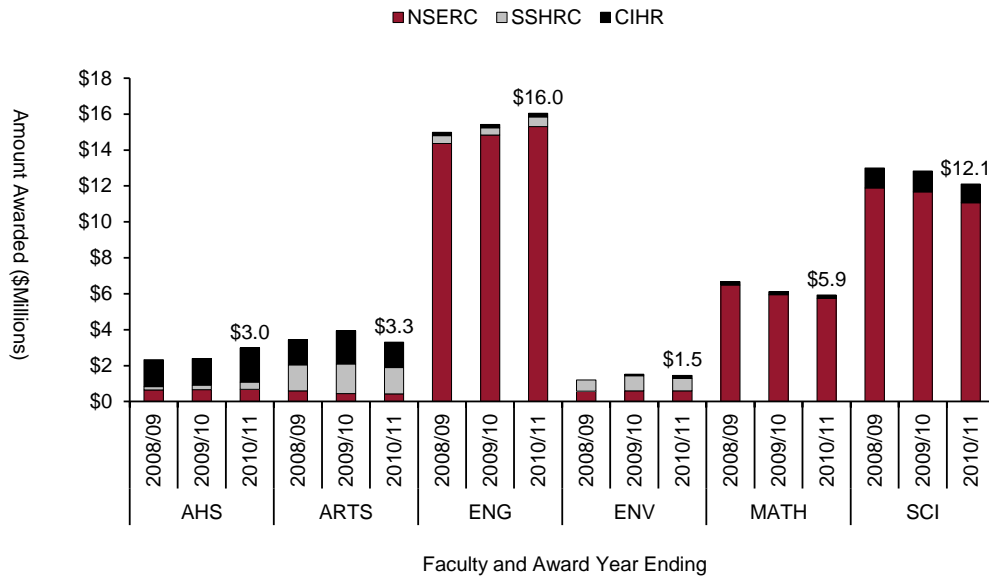


Figure 3.2.D

Average Federal Tri-Agency Research Amount Awarded per Tenure and Tenure-Stream Faculty Member

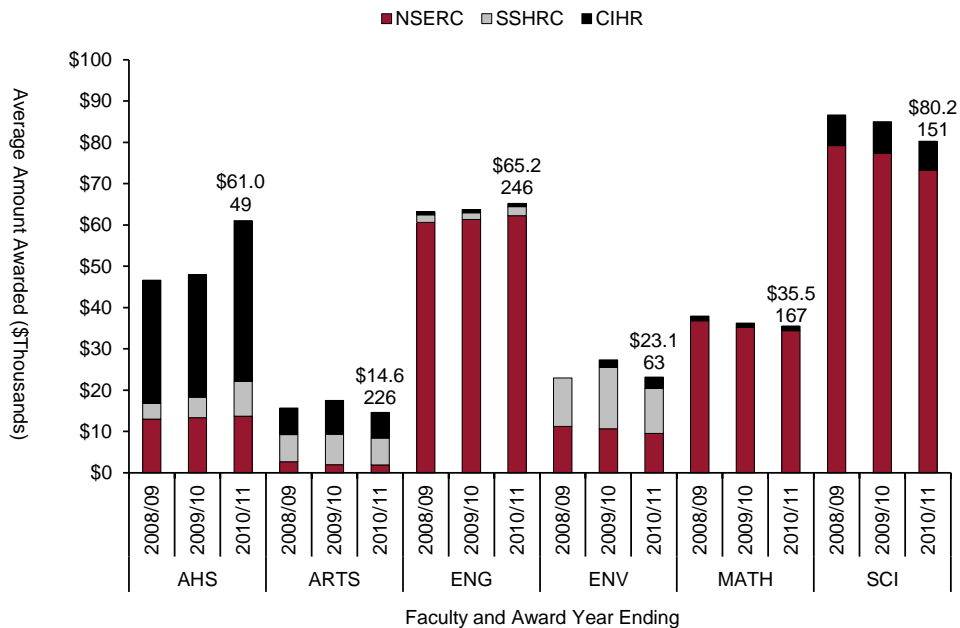
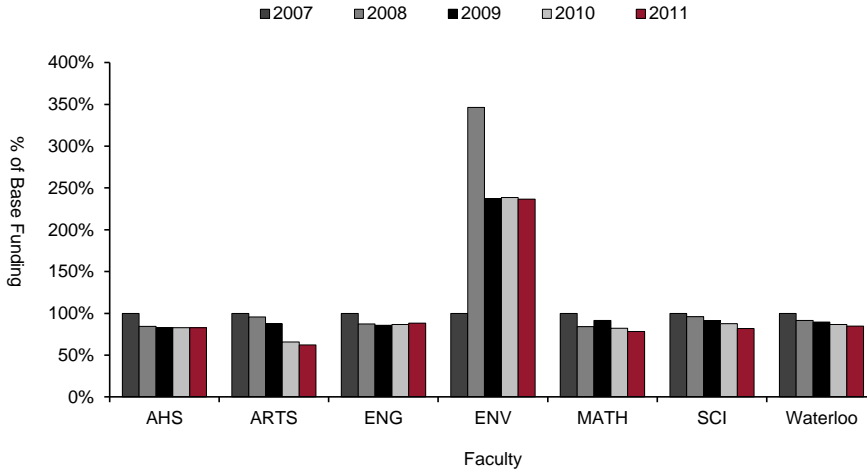


Figure 3.2.5 through Figure 3.2.7 illustrate the change in funding, relative to the base year²⁹, from each of the Tri-Agencies. For example, if the funds available from NSERC in 2008 increased by five per cent from 2007 and AHS's 2008 funding remained at the 2007 level, then AHS's 2008 funding would be 95.2 per cent of the 2007 level. If AHS's 2008 level increased by five per cent then it would be at 100 per cent funding relative to its 2007 base year.

Figure 3.2.E

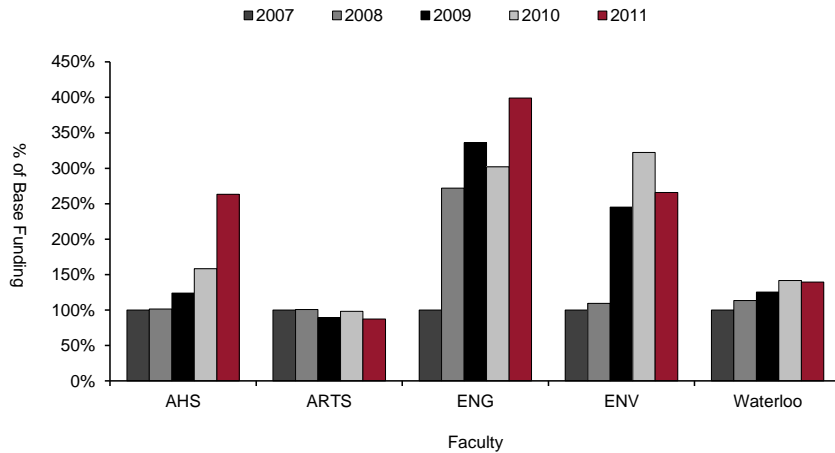
% NSERC Annual Funding Compared to Base Year 2007 Adjusted by Annual Agency Growth



Caution needs to be exercised when interpreting Figure 3.2.F since the overall numbers of grants are low and the gain or loss of one research award could substantially change the results.

Figure 3.2.F

% SSHRC Annual Funding Compared to Base Year 2007 Adjusted by Annual Agency Growth



²⁹ The base year is 2007.

Figure 3.2.G

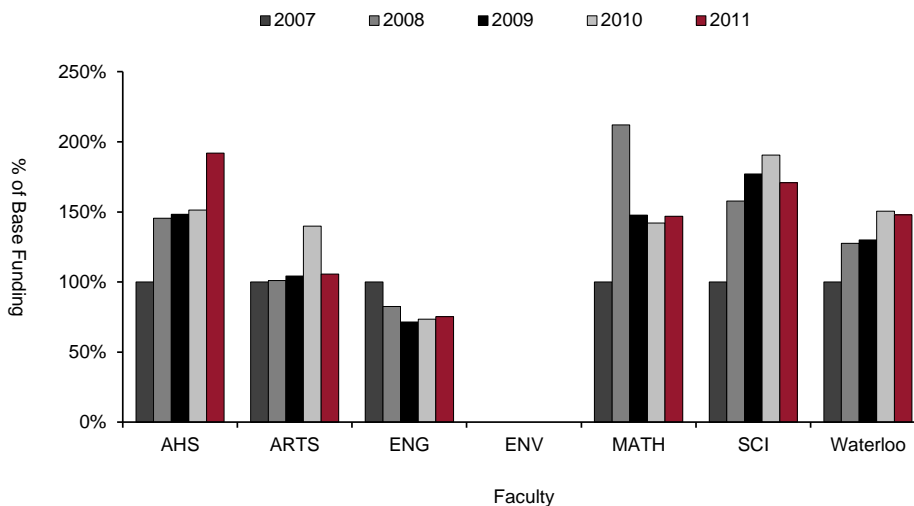
% CIHR Annual Funding Compared to Base Year 2007 Adjusted by Annual Agency Growth

Figure 3.2.H through Figure 3.2.J show the total dollars allocated by the Tri-Agencies to the U15 universities in fiscal year 2005/06 and 2010/11 for NSERC, SSHRC, and CIHR, and the percentage change for each institution. The data in these tables have been taken from the Agency databases.

Figure 3.2.H

NSERC - % Change in \$ to U15 2006-2011					
	U15 University	2005/06 \$ x 000s	2010/11 \$ x 000s	Change \$ x 000s	Change %
1	University of Ottawa	19,921	30,579	10,658	53.5%
2	Queen's University	24,999	35,100	10,101	40.4%
3	University of British Columbia	61,839	84,237	22,398	36.2%
4	University of Calgary	26,883	36,364	9,481	35.3%
5	University of Saskatchewan	27,107	35,568	8,461	31.2%
6	McGill University	45,107	54,311	9,203	20.4%
7	University of Waterloo	42,421	50,813	8,392	19.8%
8	University of Western Ontario	22,679	26,793	4,115	18.1%
9	University of Toronto	70,080	81,000	10,921	15.6%
10	Dalhousie University	18,788	21,011	2,223	11.8%
11	University of Alberta	47,850	53,097	5,247	11.0%
12	McMaster University	29,515	32,358	2,843	9.6%
13	Université Laval	44,681	48,198	3,517	7.9%
14	Université de Montréal	27,034	28,876	1,842	6.8%
15	University of Manitoba	19,137	19,022	-115	-0.6%
	U15 Total	528,042	637,327	109,285	20.7%
	Total/all Institutions	820,640	1,015,583	194,943	23.8%

Figure 3.2.I

SSHRC - % Change in \$ to U15 2006-2011					
	U15 University	2005/06 \$ x 000s	2010/11 \$ x 000s	Change \$ x 000s	Change %
1	University of Waterloo	4,653	7,095	2,442	52.5%
2	Queen's University	7,515	9,203	1,688	22.5%
3	University of British Columbia	20,030	23,952	3,922	19.6%
4	Dalhousie University	3,605	4,250	645	17.9%
5	University of Ottawa	11,953	14,031	2,078	17.4%
6	Université Laval	12,277	14,033	1,756	14.3%
7	Université de Montréal	14,990	16,872	1,881	12.6%
8	McGill University	14,355	15,970	1,615	11.2%
9	University of Toronto	28,839	30,528	1,689	5.9%
10	University of Saskatchewan	3,196	3,353	157	4.9%
11	University of Calgary	6,979	7,203	224	3.2%
12	McMaster University	7,258	7,382	124	1.7%
13	University of Manitoba	5,223	5,297	73	1.4%
14	University of Western Ontario	11,097	10,630	-466	-4.2%
15	University of Alberta	13,777	12,568	-1,209	-8.8%
	U15 Total	165,749	182,367	16,618	10.0%
	Total/all Institutions	268,500	301,597	33,096	12.3%

Figure 3.2.J below, shows a 109 per cent change in funding to uWaterloo from 2005/06. In 2000, the Medical Research Council (MRC) was replaced by the Canada Institutes for Health Research (CIHR) which provided research awards to a much wider spectrum of research fields. CIHR not only included funding for Biomedical and Clinical research, but also the areas of Health Services and Policy, and Public and Population Health. The change to CIHR has made available a wider range of grants for which uWaterloo researchers are eligible.

Figure 3.2.J

CIHR - % Change in \$ to U15 2006-2011					
	U15 University	2005/06 \$ x 000s	2010/11 \$ x 000s	Change \$ x 000s	Change %
1	University of Waterloo	2,768	5,783	3,014	108.9%
2	Dalhousie University	14,561	20,827	6,266	43.0%
3	McMaster University	33,764	44,414	10,650	31.5%
4	University of British Columbia	59,039	74,668	15,629	26.5%
5	University of Ottawa	21,196	25,099	3,904	18.4%
6	University of Toronto	65,811	76,773	10,962	16.7%
7	McGill University	52,319	54,301	1,982	3.8%
8	Université Laval	19,086	19,782	696	3.6%
9	Queen's University	16,601	16,882	281	1.7%
10	University of Alberta	41,452	41,591	139	0.3%
11	Université de Montréal	31,387	30,759	-628	-2.0%
12	University of Calgary	32,792	31,811	-980	-3.0%
13	University of Western Ontario	24,565	23,521	-1,044	-4.3%
14	University of Manitoba	19,047	17,997	-1,050	-5.5%
15	University of Saskatchewan	9,250	7,791	-1,459	-15.8%
	U15 Total	443,638	492,000	48,362	10.9%
	Total/all Institutions	742,891	900,672	157,780	21.2%

Figure 3.2.K through Figure 3.2.M show the distribution of the total awards by the Tri-Agencies to the U15 universities in 2010/11, and the percentage of those awards for each institution.

Figure 3.2.K

NSERC - Distribution of \$ to U15				
	U15 University	2010/11\$ x 000s	% of Total U15 \$	% of Total \$
1	University of British Columbia	84,237	13.22%	8.29%
2	University of Toronto	81,000	12.71%	7.98%
3	McGill University	54,311	8.52%	5.35%
4	University of Alberta	53,097	8.33%	5.23%
5	University of Waterloo	50,813	7.97%	5.00%
6	Université Laval	48,198	7.56%	4.75%
7	University of Calgary	36,364	5.71%	3.58%
8	University of Saskatchewan	35,568	5.58%	3.50%
9	Queen's University	35,100	5.51%	3.46%
10	McMaster University	32,358	5.08%	3.19%
11	University of Ottawa	30,579	4.80%	3.01%
12	Université de Montréal	28,876	4.53%	2.84%
13	University of Western Ontario	26,793	4.20%	2.64%
14	Dalhousie University	21,011	3.30%	2.07%
15	University of Manitoba	19,022	2.98%	1.87%
	U15 Total	637,327	100.00%	62.75%
	Total/all Institutions	1,015,583		

Figure 3.2.L

SSHRC - Distribution of \$ to U15				
	U15 University	2010/11\$ x 000s	% of Total U15 \$	% of Total \$
1	University of Toronto	30,528	16.74%	10.12%
2	University of British Columbia	23,952	13.13%	7.94%
3	Université de Montréal	16,872	9.25%	5.59%
4	McGill University	15,970	8.76%	5.30%
5	Université Laval	14,033	7.70%	4.65%
6	University of Ottawa	14,031	7.69%	4.65%
7	University of Alberta	12,568	6.89%	4.17%
8	University of Western Ontario	10,630	5.83%	3.52%
9	Queen's University	9,203	5.05%	3.05%
10	McMaster University	7,382	4.05%	2.45%
11	University of Calgary	7,203	3.95%	2.39%
12	University of Waterloo	7,095	3.89%	2.35%
13	University of Manitoba	5,297	2.90%	1.76%
14	Dalhousie University	4,250	2.33%	1.41%
15	University of Saskatchewan	3,353	1.84%	1.11%
	U15 Total	182,367	100.00%	60.47%
	Total/all Institutions	301,597		

Figure 3.2.M

CIHR - Distribution of \$ to U15				
	U15 University	2010/11\$ x 000s	% of Total U15 \$	% of Total \$
1	University of Toronto	76,773	15.60%	8.52%
2	University of British Columbia	74,668	15.18%	8.29%
3	McGill University	54,301	11.04%	6.03%
4	McMaster University	44,414	9.03%	4.93%
5	University of Alberta	41,591	8.45%	4.62%
6	University of Calgary	31,811	6.47%	3.53%
7	Université de Montréal	30,759	6.25%	3.42%
8	University of Ottawa	25,099	5.10%	2.79%
9	University of Western Ontario	23,521	4.78%	2.61%
10	Dalhousie University	20,827	4.23%	2.31%
11	Université Laval	19,782	4.02%	2.20%
12	University of Manitoba	17,997	3.66%	2.00%
13	Queen's University	16,882	3.43%	1.87%
14	University of Saskatchewan	7,791	1.58%	0.87%
15	University of Waterloo	5,783	1.18%	0.64%
	U15 Total	492,000	100.00%	54.63%
	Total/all Institutions	900,672		

Figure 3.2.N

NSERC Awards – 10 Year History

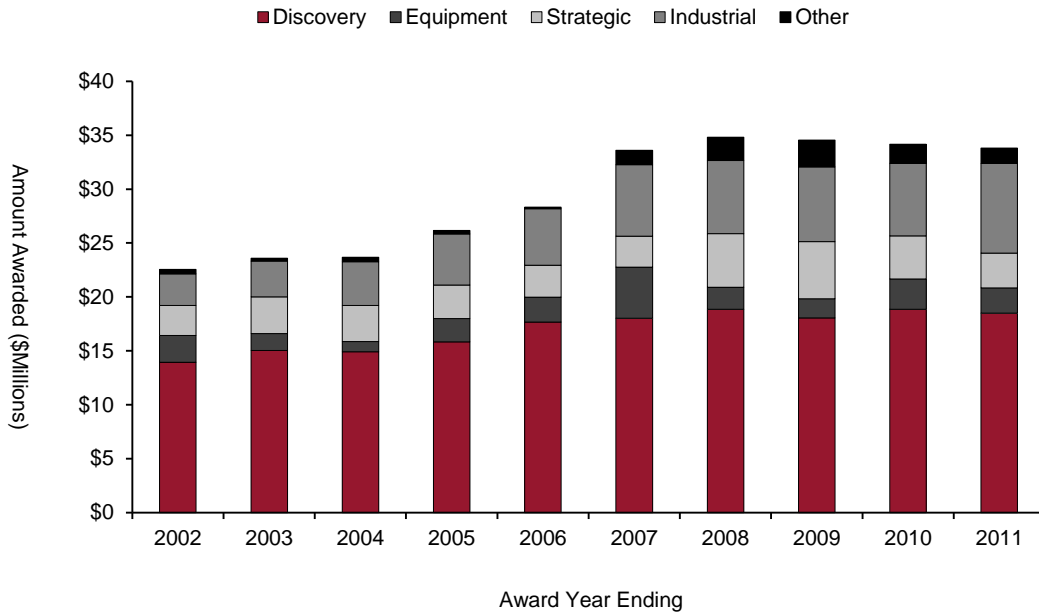


Figure 3.2.O

NSERC Discovery Grants 2010/11					
U15 University	Number		Amount		Average Award (\$)
	N	%	\$	%	
University of Toronto	729	7.51%	\$28,116,059	9.15%	\$38,568
University of British Columbia	652	6.72%	\$23,540,769	7.66%	\$36,105
University of Alberta	581	5.98%	\$19,961,169	6.50%	\$34,357
McGill University	515	5.30%	\$17,783,398	5.79%	\$34,531
University of Waterloo	542	5.58%	\$16,914,795	5.51%	\$31,208
University of Calgary	383	3.94%	\$12,179,738	3.97%	\$31,801
University of Western Ontario	374	3.85%	\$11,443,183	3.73%	\$30,597
McMaster University	332	3.42%	\$11,193,114	3.64%	\$33,714
Université Laval	341	3.51%	\$11,004,422	3.58%	\$32,271
Université de Montréal	294	3.03%	\$10,870,972	3.54%	\$36,976
Queen's University	280	2.88%	\$10,273,553	3.34%	\$36,691
University of Ottawa	295	3.04%	\$9,372,093	3.05%	\$31,770
Dalhousie University	270	2.78%	\$8,594,298	2.80%	\$31,831
University of Saskatchewan	241	2.48%	\$7,132,166	2.32%	\$29,594
University of Manitoba	249	2.56%	\$7,073,191	2.30%	\$28,406
U15 Total	6,078	62.58%	\$205,452,920	66.88%	\$33,803
Total Awarded	9,709	100.00%	\$307,161,877	100.00%	\$31,637

3.3 ONTARIO

The next indicators show research awards from the Ontario Research Fund – Research Excellence (ORF-RE), the Ontario Research Fund – Research Infrastructure (ORF-RI), Early Researcher Award (ERA), the Ontario Centres of Excellence (OCE), Ministry of Health (MOH), and other sources for each Faculty.

Figure 3.3.A

Ontario Government Research Funding 2010/11

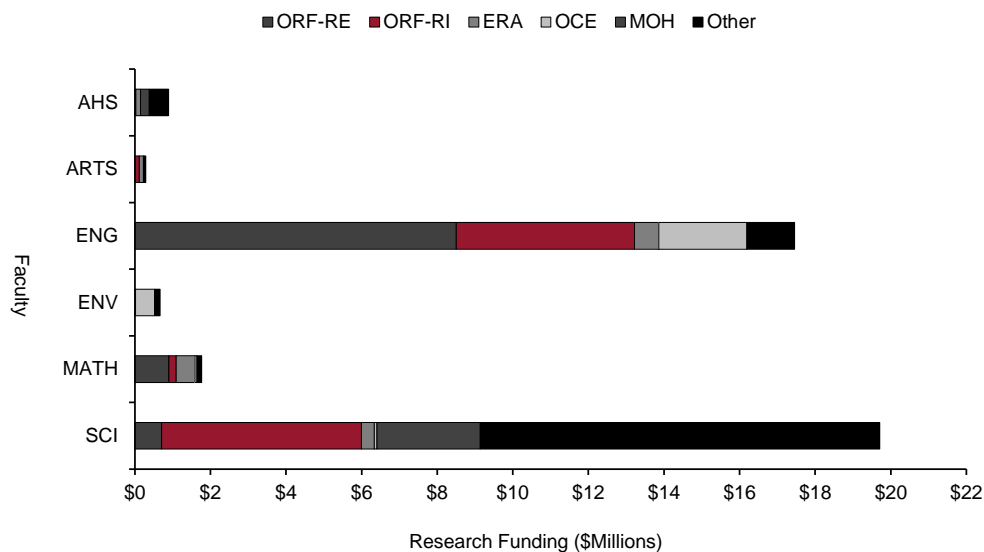
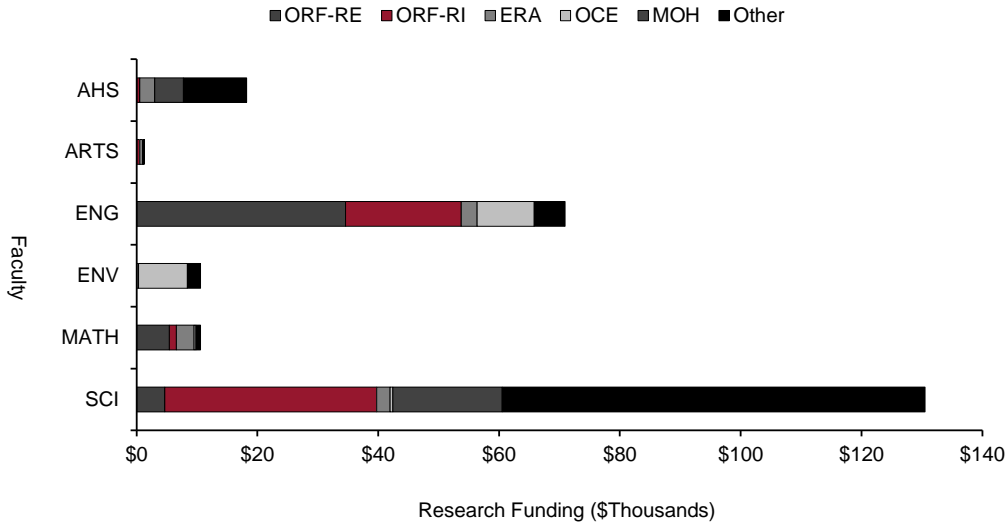


Figure 3.3.B

Ontario Government Research Funding 2010/11 per Tenure and Tenure-Stream Faculty



From its beginning, uWaterloo has been a leader in conducting research in partnership with the private sector and transferring new knowledge and advances in technology to society for the benefit of all. In 2010/11, we had 11 active industrially-sponsored NSERC Research Chairs, and our Intellectual Property Management Group helps researchers commercialize the results of their research. The University of Waterloo’s inventor-owned intellectual property policy provides a stimulus for attracting faculty members and offers great incentive for the entrepreneurial graduate student who may want to create a spin-off company.

The University of Waterloo’s Sixth Decade Plan is dedicated to achieving increased research intensity and the vigorous promotion and encouragement of frontier and reflective research.

4. Faculty

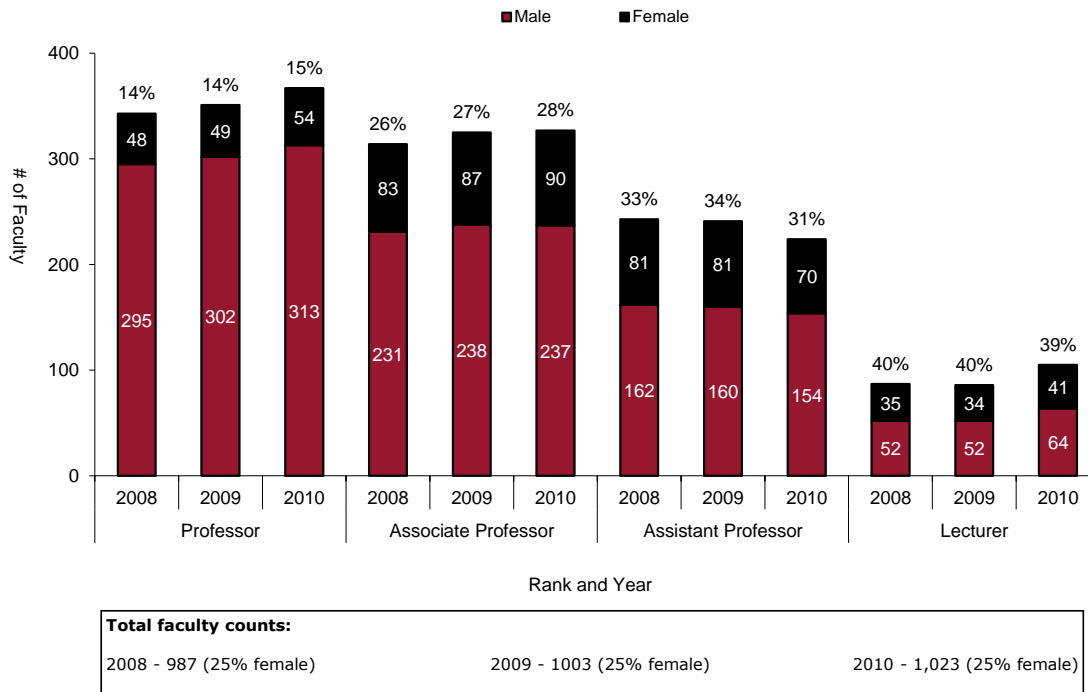
The University of Waterloo recognizes the importance of our innovative, collaborative, and committed leaders—our academic faculty who teach, engage in research, and serve our students and our community. In this section we highlight our faculty appointments and our hiring practices; and we monitor the age distribution of our professoriate, ever mindful of the need to revitalize the pool of individuals who share our vision of continuous improvement and innovation.

4.1 FACULTY COUNTS BY GENDER

To support our goal to achieve the highest-quality learning environment for our students, we actively seek out and hire the best and the brightest in their fields of study. We are committed to improving the gender balance in our faculty complement by hiring highly qualified female faculty. In this section we look at faculty counts³⁰ by rank and gender for uWaterloo, excluding faculty at our affiliated and federated colleges and universities, and compared to our U15 peers.

Figure 4.1.A

Count of Full-time Faculty by Rank and Gender



³⁰ Source: Statistics Canada UCASS (University and College Academic Staff System) and UW Human Resources.

Figure 4.1.B³¹

Gender Distribution of Full-time Regular Appointments by Faculty

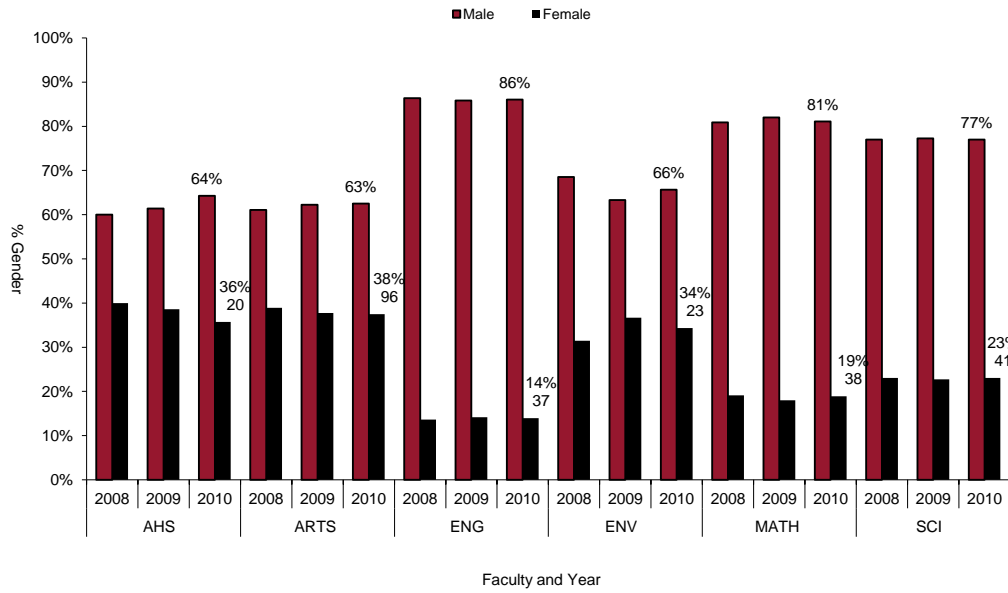
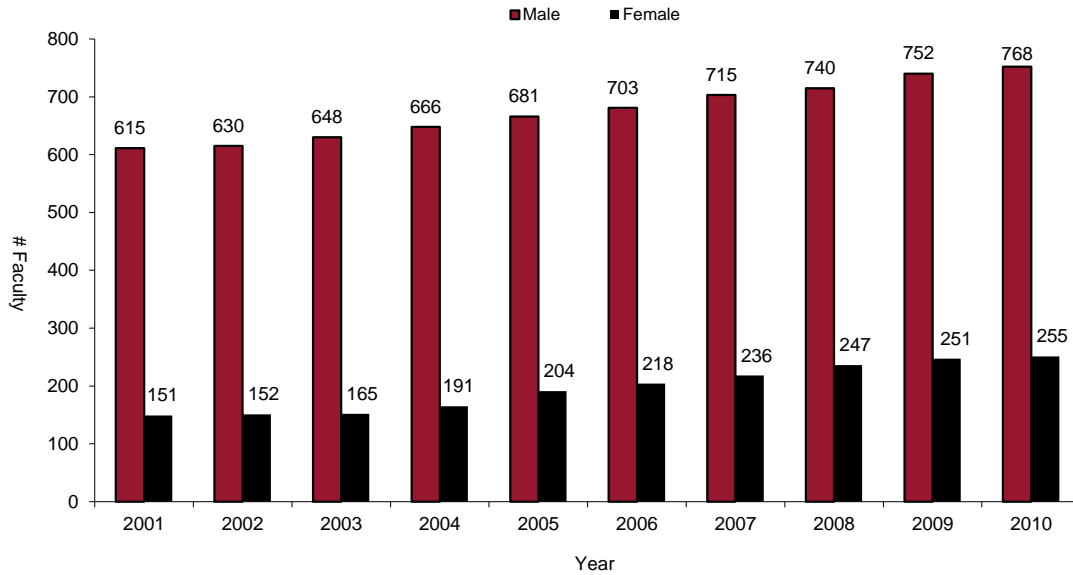


Figure 4.1.C³²

Full-time Regular Faculty Appointments by Gender - 10 Year History

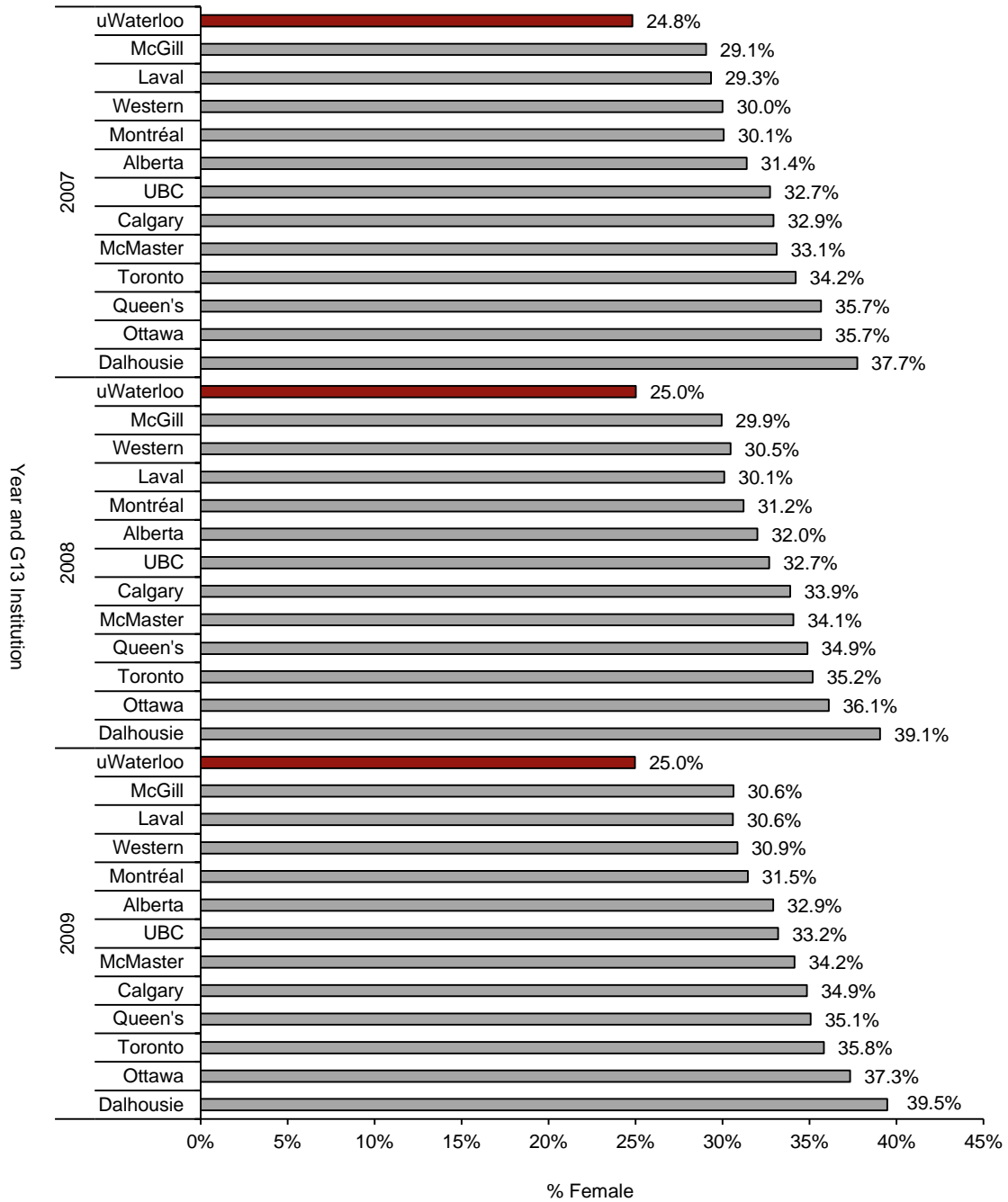


³¹ Source: Statistics Canada UCASS, as of October 1st of each survey year.

³² Source: Statistics Canada UCASS, as of October 1st of each survey year.

Figure 4.1.D³³

Faculty Appointments by % Female - Three Year History as Compared to U15 Universities



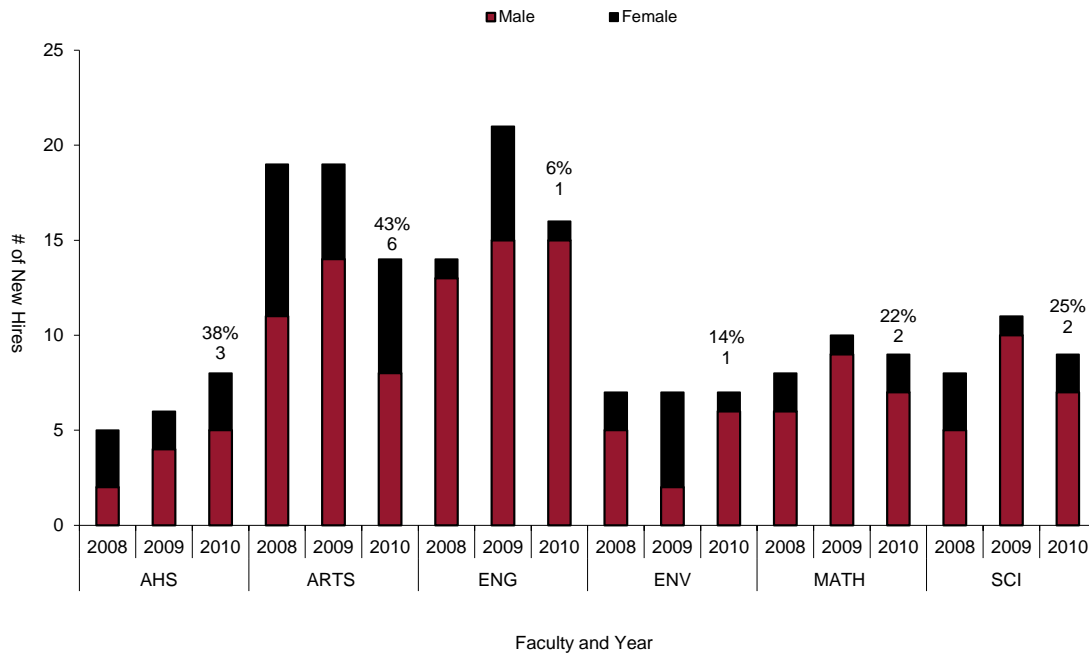
³³ Source: Statistics Canada UCASS, as of October 1st of each survey year. The University of Saskatchewan and University of Manitoba data was not available at time of publication.

4.2 NEW HIRES BY GENDER

Figure 4.2.A shows new hires by Faculty and gender and highlights the count and percentage of female hires. In 2010, there were 63 new faculty hires. Of these, 24% (15) were female. Across the Faculties, new female hires ranged from only 6% in Engineering to 43% in Arts. Looking at citizenship status of the new hires, in 2010, 73% of the female hires were Canadian. In 2009, 35% were Canadian and in 2008, 84% of the female hires were Canadian.

Figure 4.2.A³⁴

New Hires by Faculty and Gender



Total new faculty hires:		
2008- 61 (31% female)	2009- 73 (27% female)	2010 - 63 (24% female)

Figure 4.2.B shows the count of faculty members by Faculty and gender and the percentage of female PhDs who were enrolled in Canadian institutions over a five year period from 2001 to 2005 (total female enrolment in this time period was more than 60,000). The latter is shown as a proxy for the potential pool of female candidates from which universities could hire. We mapped the various disciplines to uWaterloo Faculties to illustrate how we are doing in our hiring of female faculty relative to the size of the pool available.

³⁴ Source: Statistics Canada UCASS, as of October 1st of each survey year. Count and percentage of female faculty hires displayed.

Figure 4.2.B

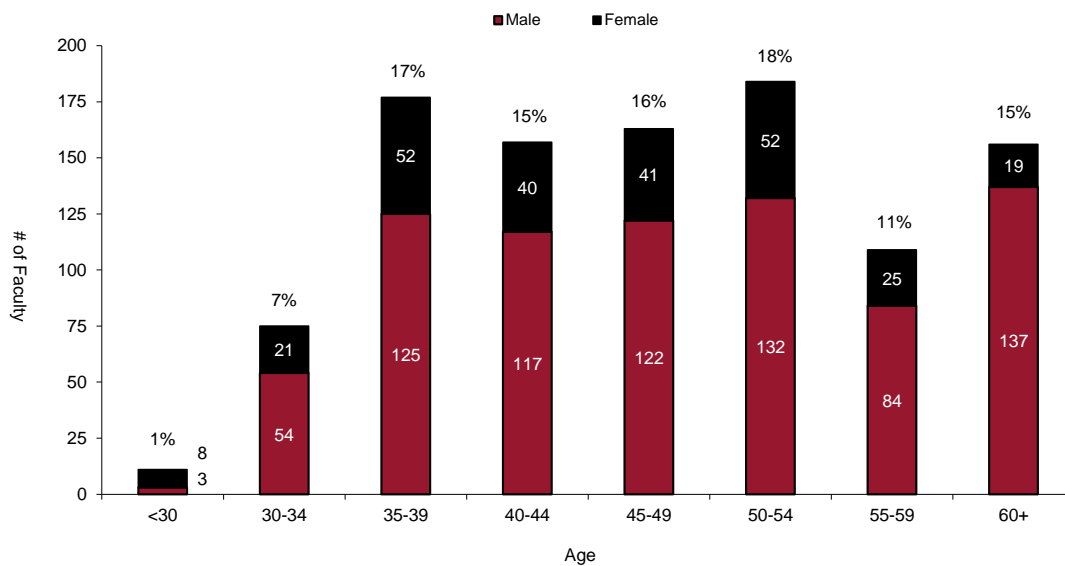
Total Faculty Count by Gender - October 1, 2010					
Faculty	Male	Female	Total	% Female	Canadian % Female PhD Enrolment
Applied Health Sciences	36	20	56	36%	63%
Arts	160	96	256	38%	58%
Engineering	228	37	265	14%	21%
Environment	44	23	67	34%	40%
Mathematics	163	38	201	19%	45%
Science	137	41	178	23%	26%
Colleges	40	36	76	47%	NA
Total	808	291	1,099	26%	45%

4.3 AGE DISTRIBUTION

As of May 2011, 44 per cent of Waterloo's faculty population was age 50 years or older. We also display the count of each gender within each age band. For example: 17% of the total faculty population is between the ages of 35-39 (125 are male and 52 are female).

Figure 4.3.A³⁵

Age Distribution by Gender (as of May 1/2010)



Additional indicators that could be considered for future additions include age distribution of our faculty members by rank and Faculty; and the distribution of women among senior academic administrators.

³⁵ Source: Human Resource Management System.

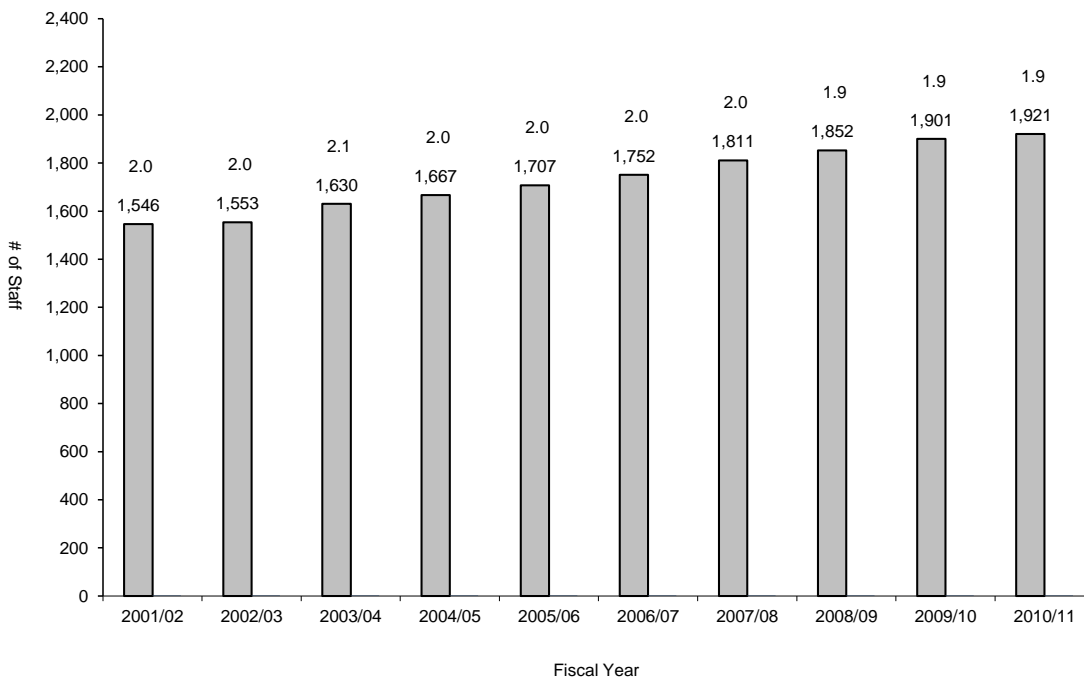
5. Staff

A world-leading university needs highly competent staff. The University of Waterloo promotes the recruitment of staff of the highest quality and recognizes the importance of staff involvement in, and contribution to, the educational process. The University of Waterloo seeks to engage staff in all aspects of our student and campus life. In this section, we highlight our staff complement³⁶, over time, and monitor the age distribution recognizing the need to revitalize the pool of individuals so important to our overall operations. As seen in chart 5.1.A our staff to faculty ratio has remained relatively constant over the last 10 years at around 2.0.

5.1 OPERATING STAFF COMPLEMENT

Figure 5.1.A

Academic Support Staff in Operating Complement and Staff-Faculty Ratio



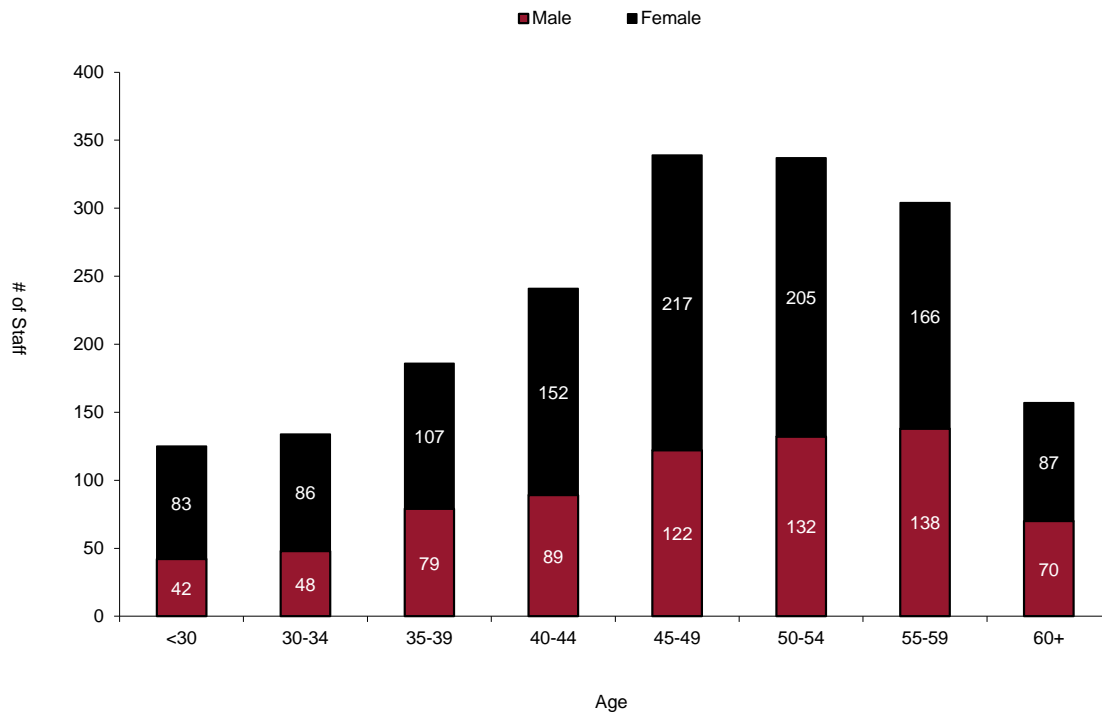
³⁶ Source: Finance. Staff complement positions are ongoing positions—filled and open—supported by operating funds, for which the University has made a budgetary commitment. A position may have two incumbents sharing the responsibilities.

5.2 STAFF AGE DISTRIBUTION

We monitor the age distribution of staff to anticipate hiring demands. Although monitoring is essential at the departmental level, a good spread of ages at the university level is a measure of institutional stability. From the age distribution chart we can see that—as with faculty—we face a significant challenge managing retirements.

Figure 5.2.A

Age Distribution of Academic Support Staff



6. Co-operative Education

From its inception in 1957, the University of Waterloo has committed to the model of co-operative education. Waterloo has continued to invest in co-operative education since the very beginning when Engineering was the only Faculty with co-operative programs (in fact, 100 per cent of Engineering is co-op). In fall 2010 over 61 per cent of full-time students were registered in over 120 co-operative education programs across six academic Faculties. Waterloo maintains over 28,000 active employer contacts, and has had 5,000 to 6,100 students looking for employment each term. The overall number of students has steadily increased each year. In the winter term of 2011, a milestone of close to 6,000 students were seeking employment. The first university to use the co-op model in Canada, uWaterloo has the largest public university-based co-operative education program in the world.

A comprehensive review of co-operative education and career services completed in 2005 and a review of the employment process done in 2006 led the Department of Co-operative Education and Career Services (CECS) to create a strategic framework for renewal encompassing the recommendations of both reviews. The framework was further enhanced in 2008, following the development of an employer relations and marketing strategy.

There has been significant progress in all areas of the framework, notably:

- Implementation of a new marketing and business development strategy to develop and harvest opportunities with employers new to uWaterloo co-op.
- The addition of 20 new or amended academic programs to the employment requirement portfolio.
- Achieving the status of delivery agent for Industry Canada's Small Business Internship Program. This program has been an unqualified success for both employers and students.
- The development of performance metrics to measure the effectiveness of the renewal strategies focussing on student employment.

6.1 EMPLOYMENT SUMMARY

Co-op employment measures help us understand the percentage of students employed at different points in time. Figure 6.1.A shows employment rates at the beginning of the work term and the final employment rate by for the term by Faculty. The overall employment rate at the beginning of the term was 83 per cent. The overall final employment rate in 2010/11 grew to 96 per cent. This is roughly equivalent to the rates achieved in 2009/10 of 96 per cent, and 2008/09 of 97 per cent.

Figure 6.1.A

Co-op Employment Summary 2010/11

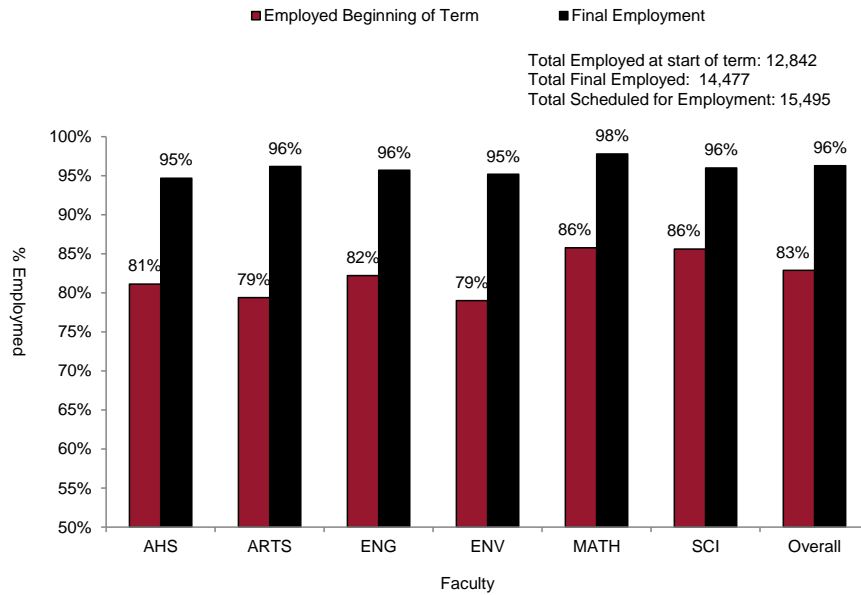
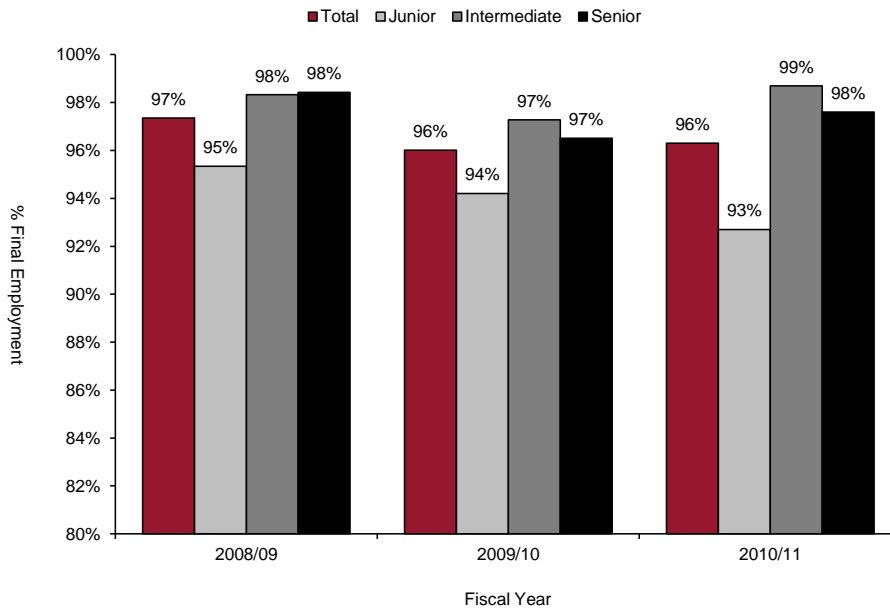


Figure 6.1.B shows final employment rates by level. CECS tracks employment rates as early as the middle of the academic term preceding the work term. We have identified junior students (first or second work term) as being hired later in the process and are working to understand how to help them gain employment earlier in the process.

Figure 6.1.B

Co-op Final Employment by Student Level



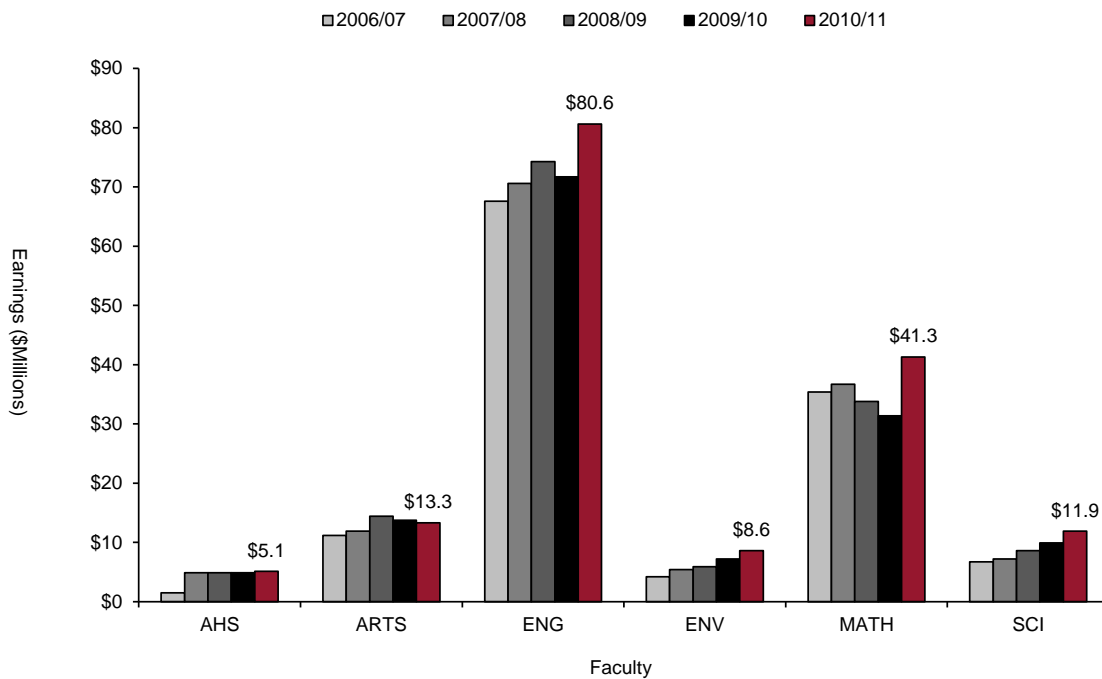
6.2 EARNINGS BY CO-OP STUDENTS

Total earnings by co-op students indicate the economic impact of the co-operative program in the workforce. In support of the benefits that co-operative education brings, the government of Ontario increased the Co-operative Education Tax Credit³⁷, providing a refundable tax credit of \$3,000 up from \$1,000 per student for each four month period of employment.

Total earnings of our co-op students in 2010/11 are estimated to be approximately \$161 million³⁸.

Figure 6.2.A

Total Earnings by Co-op Students by Faculty



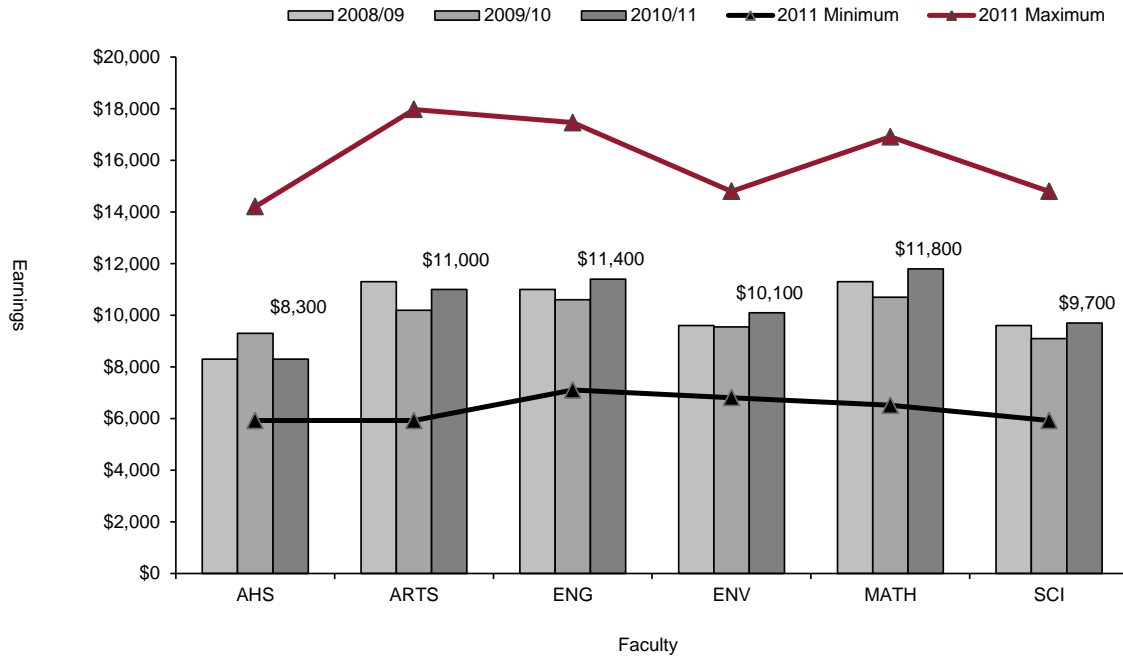
Co-operative work term income is an important measure for students, letting them know what to expect from the co-operative employment experience. Figure 6.2.B shows the average work term salary by Faculty over the past four years. On average a student would earn \$10,395 during the work term.

³⁷ <http://www.rev.gov.on.ca/en/credit/cetc/>

³⁸ Total student earnings are estimated using average salaries.

Figure 6.2.B

Average Co-op Earnings per Work Term by Faculty 2010/11



In addition to a salary premium two years after graduation of approximately 12 per cent³⁹, students who studied in the co-operative education system gain valuable work experience, a network of workplace contacts, and practical knowledge of the employment climate and culture. Most importantly, they gain personal and professional growth that will enhance their prospects for meaningful employment and their contribution to the workforce.

³⁹ 2002 Waterloo study Co-operative Education: Greater Benefits, Greater Costs.

7. Resources

Financial stability and the flexibility to respond to new initiatives and opportunities are paramount to uWaterloo’s success. Over the last decade and a half, reduced per-student government operating grants have resulted in higher student to faculty ratios. At the same time, students are paying more for their education. As a result, students and parents expect better programs and services, and a greater voice in decisions that affect them. The University of Waterloo continues to explore other revenue sources and partnership arrangements to ensure high quality and access to learning and research.

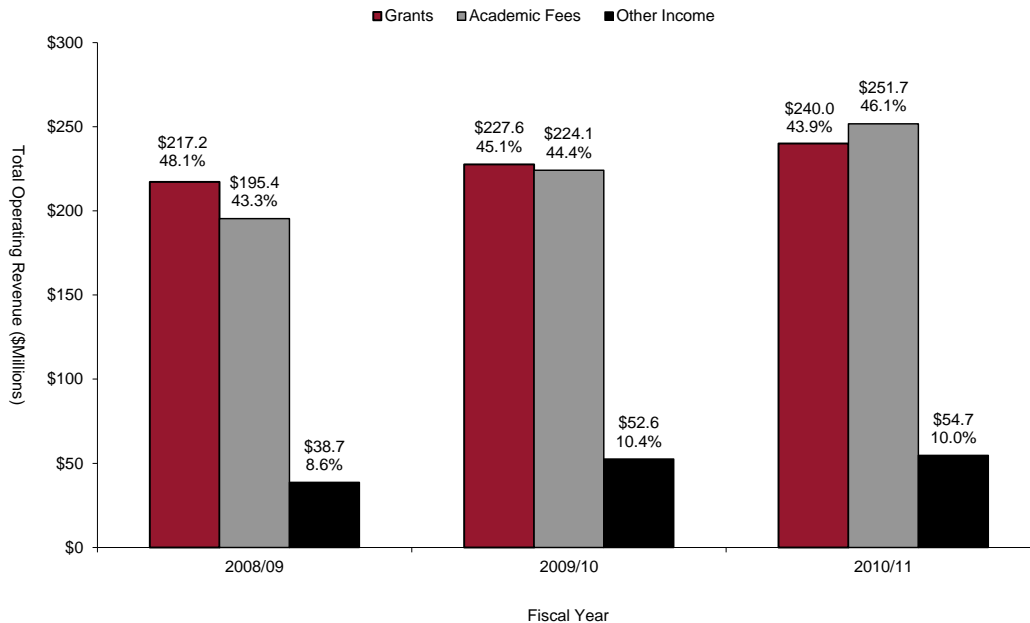
7.1 OPERATING REVENUE BY SOURCE

The sources of the University’s operating revenue are presented in actual dollars and as percentages of the total. The two largest sources are grants—mainly Ministry of Training, Colleges and Universities (MTCU) operating grants—and tuition fees. These two comprise more than 90 per cent of the whole. Other income includes items such as external sales of goods and services (by academic and academic support units), investment income, and corporate income sources such as application fees.

Figure 7.1.A illustrates that government grants continue to be less than half of the University’s total funding and that the majority of revenue comes from tuition fees and other income sources. Tuition, as a percentage of operating revenue, has risen dramatically in the past 10 years as government grants have not kept pace with inflationary pressures.

Figure 7.1.A

Operating Revenue by Source



Scholarships and bursaries as a percentage of operating expenses have increased dramatically over the past 15 years, from about three per cent in 1994/95 to 18 per cent in 2010/11 due, in most part, to uWaterloo’s response to the increased financial demands placed on students.

Figure 7.1.B

Scholarships and Bursaries as % of Operating Expenses

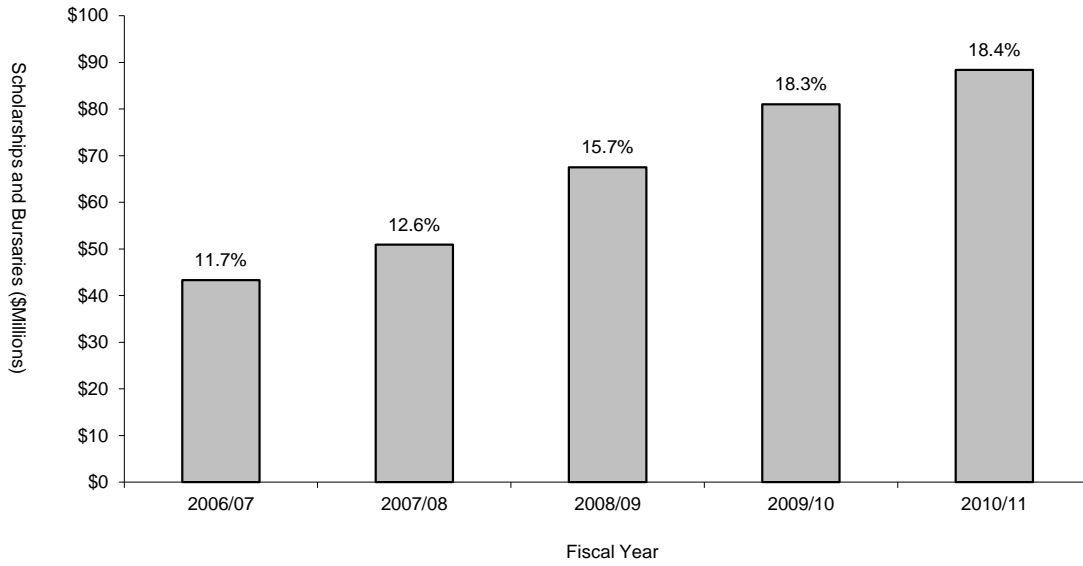
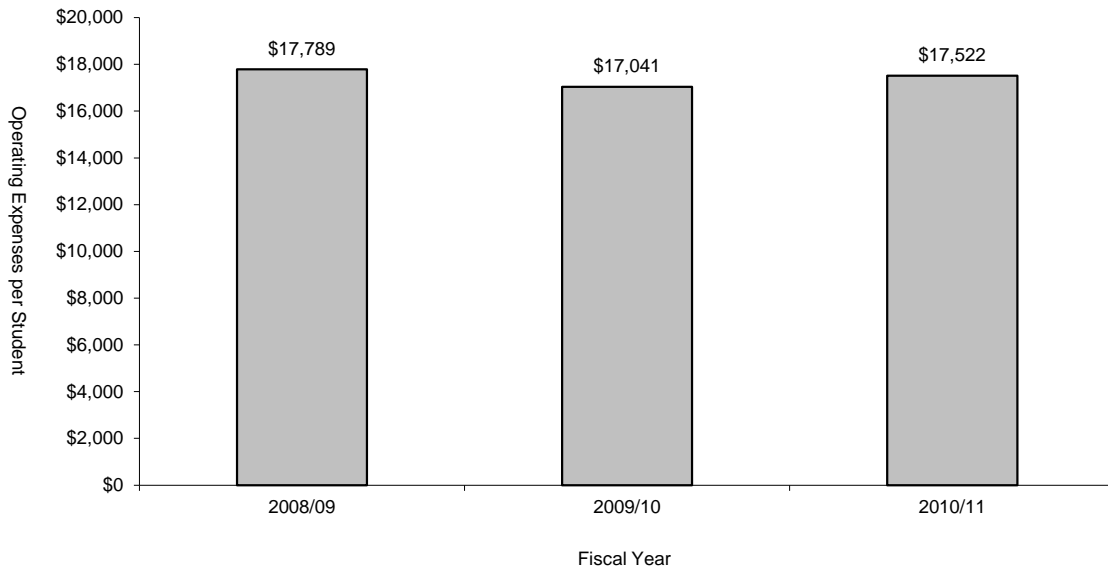


Figure 7.1.C

Operating Expenses per FTE Student



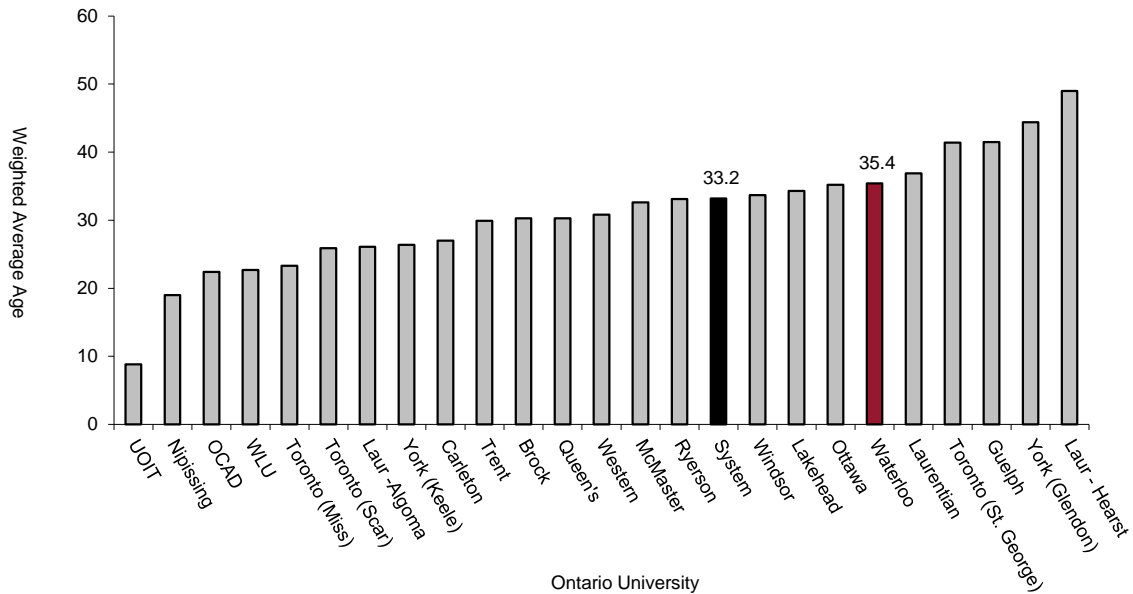
7.2 AGE OF FACILITIES PROFILE

Every three years, the Council of Ontario Universities (COU) gathers information to calculate the average age of the province’s university facilities. The weighted average age⁴⁰ of an institution is a better measure of the age of physical facilities than the age of the campus taken by itself, since the weighted age includes recently added building space. When a university constructs a large new building, for example, the weighted average age of the campus will decline—that is, the campus will “grow younger”—in proportion to the ratio of the new space to the existing space. The most recent survey year was 2010 but the 2011 report was not available as of the publication of this document.

Figure 7.2.A presents the weighted average ages of 24 Ontario universities. In 2007, our physical facilities had a weighted average age of 35.4, up from 31.6 in 2004⁴¹.

Figure 7.2.A

Age Profile of Ontario University Space



⁴⁰ Calculated by multiplying the space in a building by the age of the building, summing these products for all buildings on campus and then dividing by the institutional space.

⁴¹ The 2007 figures are based on the Council of Ontario Universities space survey.

7.3 SPACE INVENTORY

Every three years, the COU also generates a “space entitlement” for each Ontario university; how much space it needs, based on space standards developed by COU and on the numbers of faculty, staff, and students, as well as research grants and other measures of activity at each university. This formula number is compared to the actual inventory of space and a ratio of “inventory to formula” is produced.

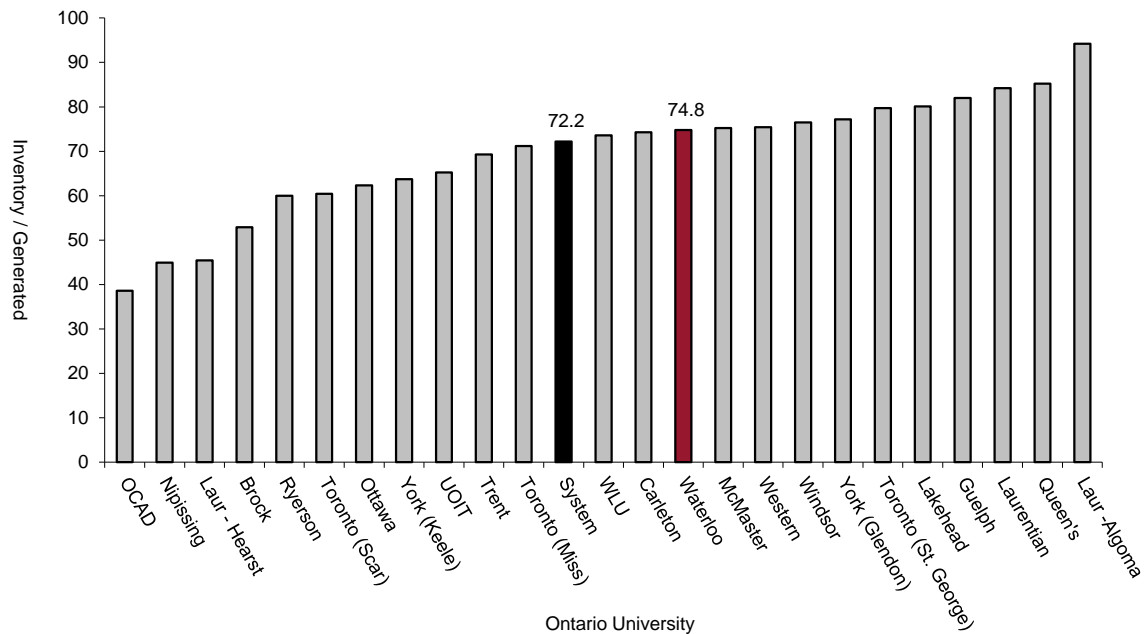
If a university’s inventory of space matches its formula space, then that university is said to have 100 per cent of the generated amount. If the percentage is less than 100, then the university has less space than it needs, according to the formula.

Co-operative education programs allow for a more efficient use of the University of Waterloo’s physical plant, by shifting enrolment from fall and winter terms to the spring term. At uWaterloo, average full-time enrolment is distributed over the three terms as follows: 18 per cent in spring, 43 per cent in fall, and 39 per cent in winter. A “non-co-op” institution’s ideal enrolment is split 50/50 in fall and winter. Because the space formula measures only fall enrolment, our space entitlement generates only 43/50 or 86 per cent of a regular institution with the same annual enrolment.

As of November 2007, uWaterloo was slightly better off than the system as a whole: we had 74.8 per cent of the space we needed, compared to an average figure of 73 per cent. If we adjust our entitlement to account for the difference resulting from our co-operative education programs, uWaterloo’s ratio of inventory to formula space drops from 74.8 per cent to 63.8 per cent, less than the system average.

Figure 7.3.A

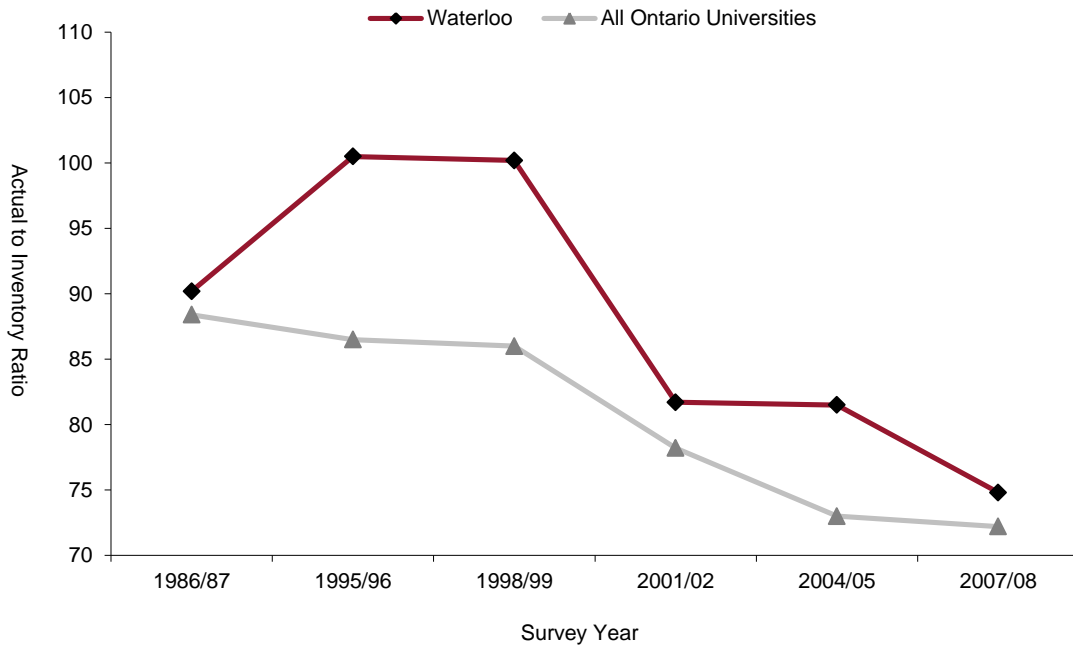
Ratio of Inventory to Formula Space



Physical space to house students, locate classrooms, conduct research and accommodate staff is critical to the effective delivery of higher education. Between 1995 and 1999, UW had adequate space to conduct university business, according to the formula shown in the next chart. Despite Ontario's recent investments through SuperBuild and other funds, the ratio of actual space available has declined sharply, due in large part to the arrival of the double cohort students.

Figure 7.3.B⁴²

Ratio of Actual Space to Formula Space



⁴² Table 37 - COU Inventory of Physical Facilities of Ontario Universities, various years.

8. University Advancement & Fundraising

2010/11 was a year of transformation and change at uWaterloo, specifically in the fundraising arena. To coincide with President David Johnston's departure, we closed Campaign Waterloo, the second largest university campaign in Canadian history, reaching a total of more than \$613 million in private-sector gifts. The campaign helped transform uWaterloo into a top comprehensive, research-intensive university. Significant changes were also announced among the university leadership team, including the president, provost, secretary, vice president, external relations, three faculty deans, and a school director, as well as within the faculty advancement teams. Coinciding with campaign close, fundraising has moved into a new phase. The faculty teams now report directly to their deans, fundraising priorities and activities have become almost exclusively faculty-driven and annual reporting will now capture university-wide activity, as well as faculty and school-driven initiatives. This was facilitated with the full implementation of Raiser's Edge across the University.

We have now shifted our reporting to reflect the timing and priorities of the University's sixth decade to advance our vision of being a global leader and research-intensive university. Following institutional conventions across higher education institutions in North America, within the next year, uWaterloo will report on dollars received as well as dollars raised (new cash and pledges) to more accurately illustrate activity.

In 2010/11, total funds raised were \$65.3 million and funds received (cash-in) totalled \$46.3 million.

8.1 ALUMNI DONATIONS

Alumni donors play a significant role in supporting uWaterloo's goal to become one of the top 100 universities in the world. We measure our success in building and maintaining alumni relationships by the number of alumni with valid contact information and the number of alumni donors.

From these two figures we can calculate the percentage of alumni who make gifts to uWaterloo – approximately 15 per cent. This percentage may be seen as an indicator of how well the university served alumni while they were students, the depth of their continuing affinity for uWaterloo and a measure of their support for higher education. Our success in earning and retaining the loyalty of alumni may be measured over time by monitoring this indicator.

uWaterloo has experienced a modest decline in alumni participation rates over the past four years, which is in line with North American trends. Generally, this is attributed to the fact institutions are graduating a significantly larger number of students than ever before, expanding their alumni base. This group of young alumni have not yet become donors to the institution, which results in an overall alumni participation decrease.

Figure 8.1.A

Alumni Donation Statistics	
	2006-2011
Alumni with valid contact information (cumulative five-year total)	439,807
Alumni donors (cumulative five-year total)	64,132
Participation	15%
Percentage of known alumni with valid contact information: 65%	

8.2 FUNDRAISING FINANCIAL PERFORMANCE

Fundraising financial performance measures the effectiveness of advancement activities across the entire university by total dollars received and is an important indicator of how well we are doing to raise private-sector gifts. Results published annually in our Stakeholder Report show donors total dollars raised, dollars raised by constituency, fund designation and the impact of donations on uWaterloo’s programs, scholarships, buildings, and research.

In addition to private sector gifts, uWaterloo continues to perform well compared to other Canadian top-tier, research-intensive universities. We secure support from all levels of government in the form of matching funds, special grants, and partnerships. Our private sector fundraising efforts in 2010/11 were augmented by securing funding from the Knowledge Infrastructure Program (KIP) in which we were able to support capital expansion priorities in Mathematics, Engineering and Environment, with \$50 million in support from our provincial and federal governments. These three buildings will open later this year and will complement the new facilities of the Stratford Campus and the research space in Huntsville, Ontario. We were once again successful in maximizing the Ontario Trust for Student Support (OTSS) program, obtaining a \$1.31 - \$1 match on fundraised dollars. This represents an additional \$1.9 million in external revenue directed to our endowments.

The central, faculty, and federated university and affiliated colleges (FUAC) fundraising objectives continue toward our goal to sustain fundraising at the \$100-million level annually, by 2017.

It is important to view dollars received over several years, as fundraising is prone to peaks and valleys as a result of transformational gifts received, and is affected by the Canadian and global economy, leadership staffing changes and government priorities.

A summary of funds received from the private sector is shown, year-by-year, from 2007/08 to 2010/11 to reflect the sixth decade period. This includes cash gifts, private sector research grants and sponsorship to the University and FUAC from all sources, including alumni, parents, students, friends, faculty, staff, retirees and organizations. This demonstrates a broad base of private support.

Figure 8.2.A

Sixth Decade Private Sector Contributions

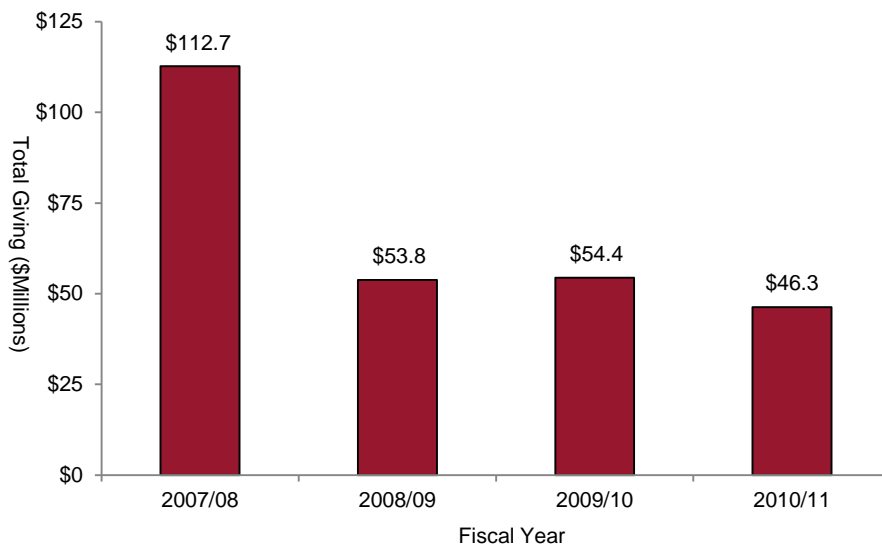


Figure 8.2.A shows 2007/08 was an exceptional year where \$64.6 million of the total cash received came from four generous donors. In 2010/11, we did not meet our goal of \$50 million, in part because of fierce competition, a decline in charitable giving across all sectors, staffing changes and a slower-than-anticipated economic recovery. Sixth decade cumulative dollars received from 2007 to 2011 is \$267.2 million.

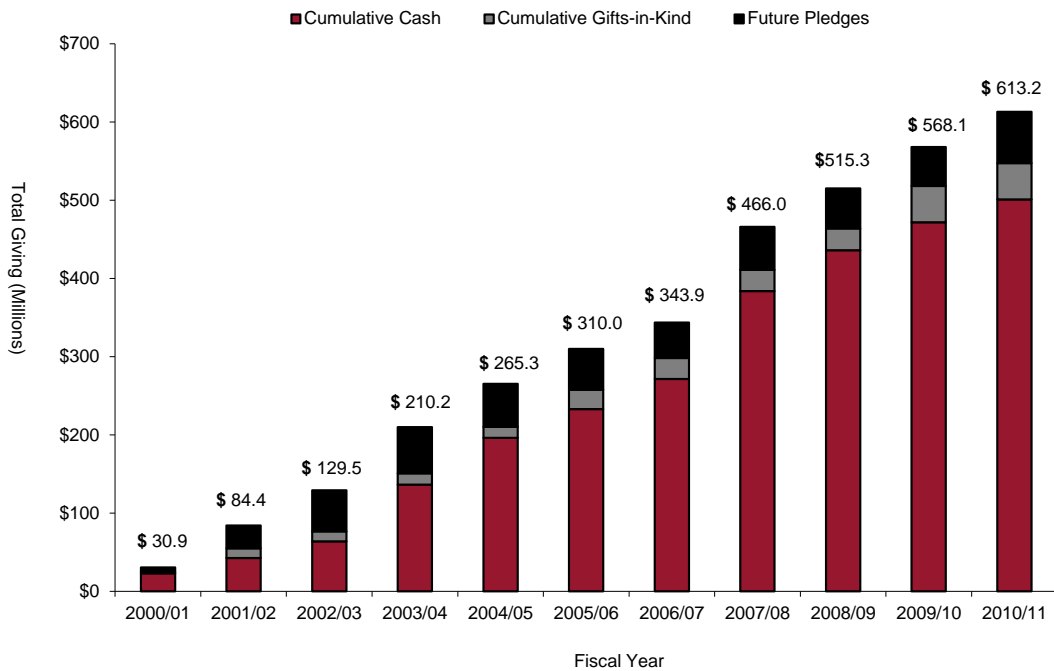
8.3 CUMULATIVE CAMPAIGN RESULTS

Campaign Waterloo final results, classified by cash, gifts-in-kind and pledges are illustrated below. Beginning in 2000, the original campaign goal was \$260 million. This goal was revised in 2007, to \$350 million, and when the campaign closed in September 2010, the total raised was \$613.2 million.

Figure 8.3.A illustrates our cumulative campaign fundraising achievements as of September 30, 2010, representing 162 per cent of the 2007 campaign goal. The funds raised were in support of new buildings (\$106.9 million), chairs and professorships (\$111.1 million), research support (\$146.1 million), the library (\$6.6 million), programs (\$139.0 million) and scholarships (\$102.9 million).

Figure 8.3.A

Final Campaign Waterloo Results from May 1, 2000 - September 30, 2010

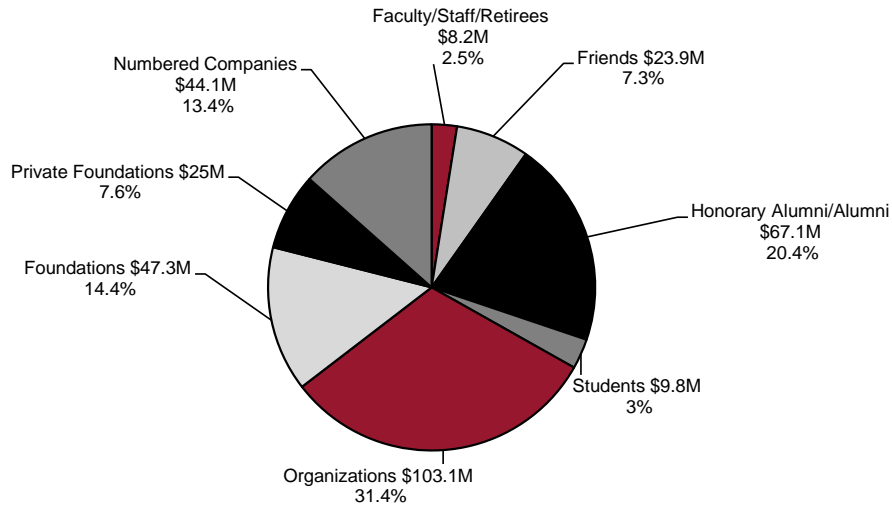


8.4 DONOR CONSTITUENCY

Figure 8.4.A shows dollars received by donor constituency during the sixth decade (2007-2011). This indicator shows trends in giving by various donor groups and will allow us to track the effectiveness of programs aimed at different constituencies over time.

Figure 8.4.A

Sixth Decade Contributions by Donor Constituency (2007 – 2011)



8.5 GIFT DESIGNATION

Another way of interpreting advancement activity is to show cumulative fundraising results (cash and gifts-in-kind) by the Faculty or project area that ultimately receives the funds. Most donors designate their gifts to benefit a specific faculty, college, program or scholarship etc. Internally, this information gives volunteers, administrators and deans an indication of their fundraising progress. Externally, it shows donors where their contributions have made an impact.

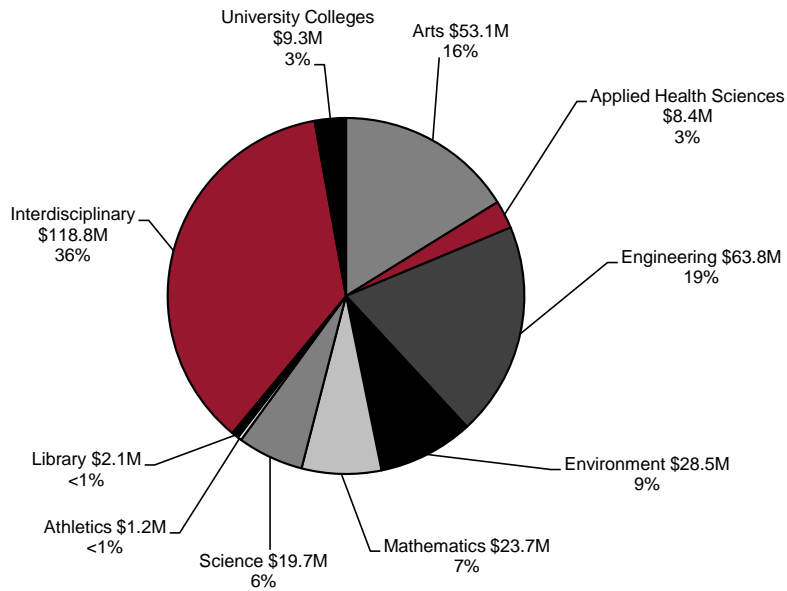
Figure 8.5.A shows sixth decade results by faculty, college, and unit.

Figure 8.5.B shows the sixth decade results by designation.

The “Interdisciplinary” section includes scholarships that are open to students in two or more disciplines, such as the David Johnston International Experience Awards, and centres or programs that span two or more Faculties, such as the Institute for Quantum Computing. Donations to schools have been included within their respective faculties. For example, gifts to the School of Optometry and the School of Pharmacy are included in the Faculty of Science sector.

Figure 8.5.A

Sixth Decade Results by Faculty, College or Unit

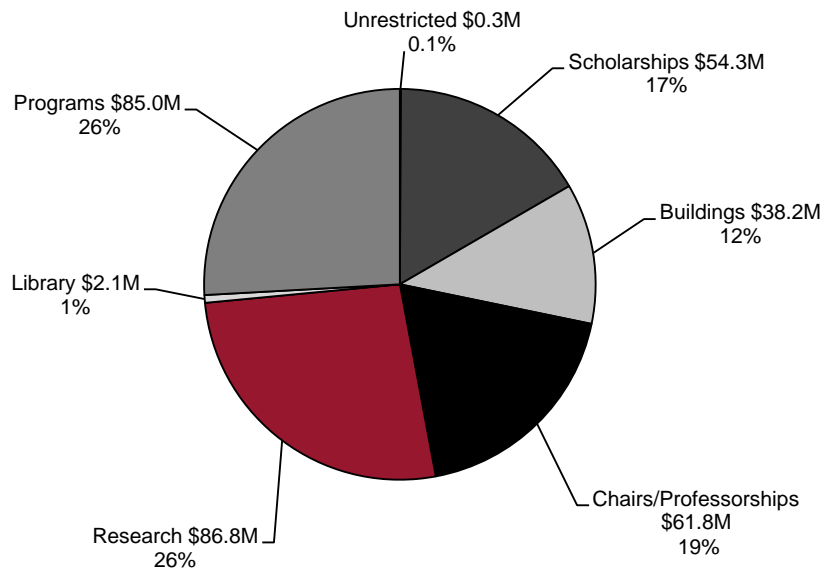


*Interdisciplinary includes the following:

Scholarships	\$14.0 million
Research Grants	\$42.3 million
IQC	\$50.1 million
Miscellaneous	\$12.4 million

Figure 8.5.B

Sixth Decade Results by Gift Designation (2007-2011)



9. Library

The University of Waterloo’s goal is to rank among the top research libraries in Canada. We continue to strengthen our information resources by taking advantage of opportunities through our active participation in the Canadian Research Knowledge Network (CRKN) and the Ontario Council of University Libraries (OCUL). Our electronic monograph holdings have increased notably over the last few years, and the recent round of CKRN negotiations allowed us to enrich and expand our electronic content further by the significant acquisition of even more e-books. We will continue to focus our efforts under three umbrella themes: e-initiatives, enriching the student experience, and space. Striving for a high level of user satisfaction with the services and resources we provide remains an overarching objective.

9.1 LIBRARY EXPENDITURES AS PERCENTAGE OF OPERATING EXPENDITURES

One way of measuring the University’s commitment to maintaining library resources and services is to show the percentage of the University’s budget assigned to the library. By tracing this important indicator over several years we can assess how well we are faring in terms of support for library resources and services compared with other similar institutions, and whether there is a trend in the level of support.

FIGURE 9.1A

Library Expenditures⁴³ as % of University Operating Expenditures, U15 Universities

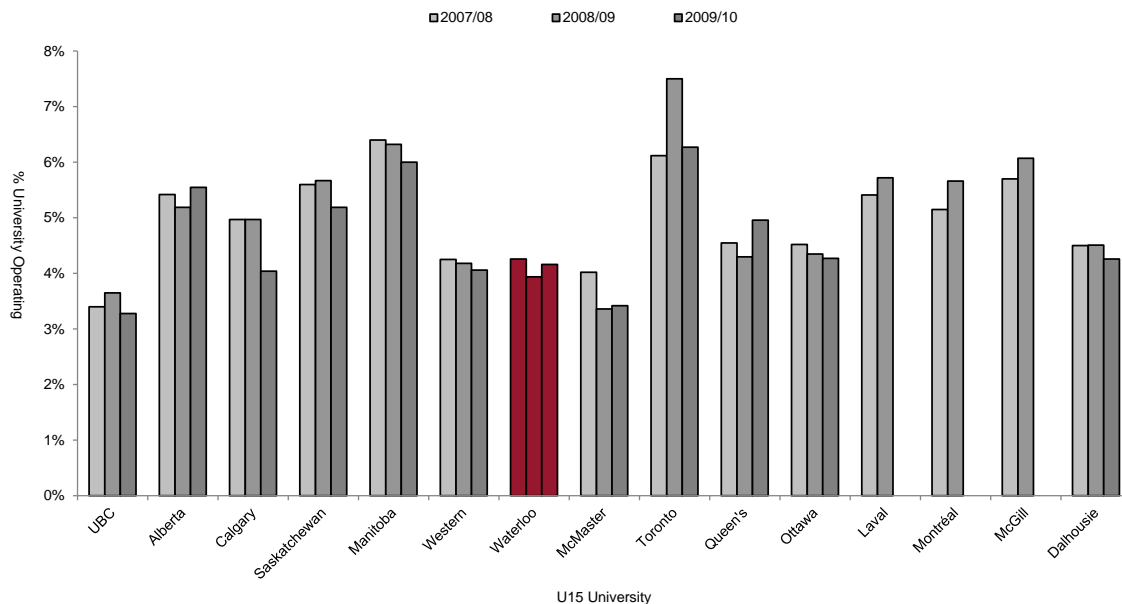


Figure 9.1.A shows library expenditures as a percentage of the University operating budget for each of the U15 universities (CAUBO data for 2009/10 were not available for Quebec universities as of 20 July 2011) for the three latest fiscal years. Waterloo’s library expenditures were 4.26 per cent of university operating expenditures in 2007/08. The next year this percentage dropped to 3.94 per cent. In 2009/10 the

⁴³ Source: Canadian Association of University Business Officers (CAUBO)

percentage increased to 4.16 per cent. Waterloo now ranks eighth in 2009/10 among the 12 reporting U15 universities.

9.2 HOLDINGS: PRINT AND ELECTRONIC

Strong university library collections are essential to support teaching, learning, and research. The size of the collection is sometimes seen as an indicator of how well we are supporting our core functions, as compared to other similar universities. Figure 9.2.A shows total library holdings for each of the U15 universities as well as for the TriUniversity Group (TUG).

While Waterloo ranked low in 2009/10 in total holdings at thirteenth place, the holdings count for the TriUniversity Group shows the benefit of making the collections of our TUG partners (U of Guelph and WLU) readily available to our users through Primo (the online catalogue of the combined collections of the TriUniversity Group of Libraries). When total TUG holdings are taken into account, Waterloo's ranking increased to fourth place.

FIGURE 9.2.A

Total Library Holdings (in Millions), U15 Universities & TriUniversity Group (TUG)

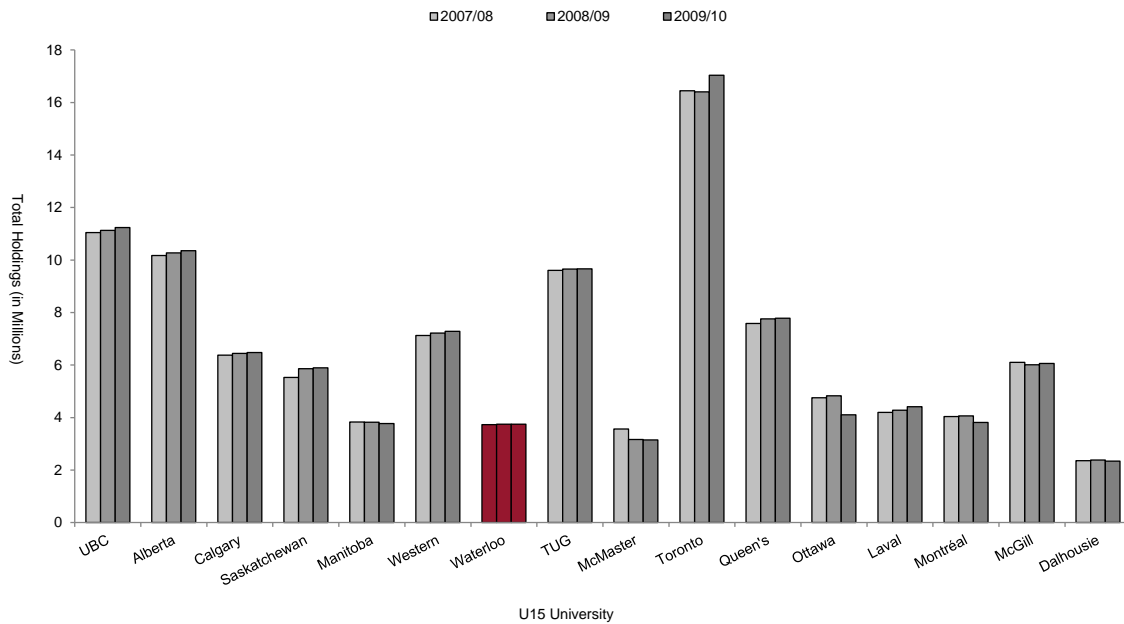


Figure 9.2.B shows the libraries' holdings in terms of items per full-time equivalent student (FTE), which takes into account the level of demand. Waterloo had 161 items per student in 2007/08. This count decreased to 155 in 2008/09. In 2009/10 Waterloo dropped to tenth position among G13 Universities with holdings of 144 items per student. Enrolment data for University of Manitoba and University of Saskatchewan were not available for inclusion in the 2011 Performance Indicators Report.

FIGURE 9.2.B

Total Library Holdings per Student FTE, U15⁴⁴ Universities

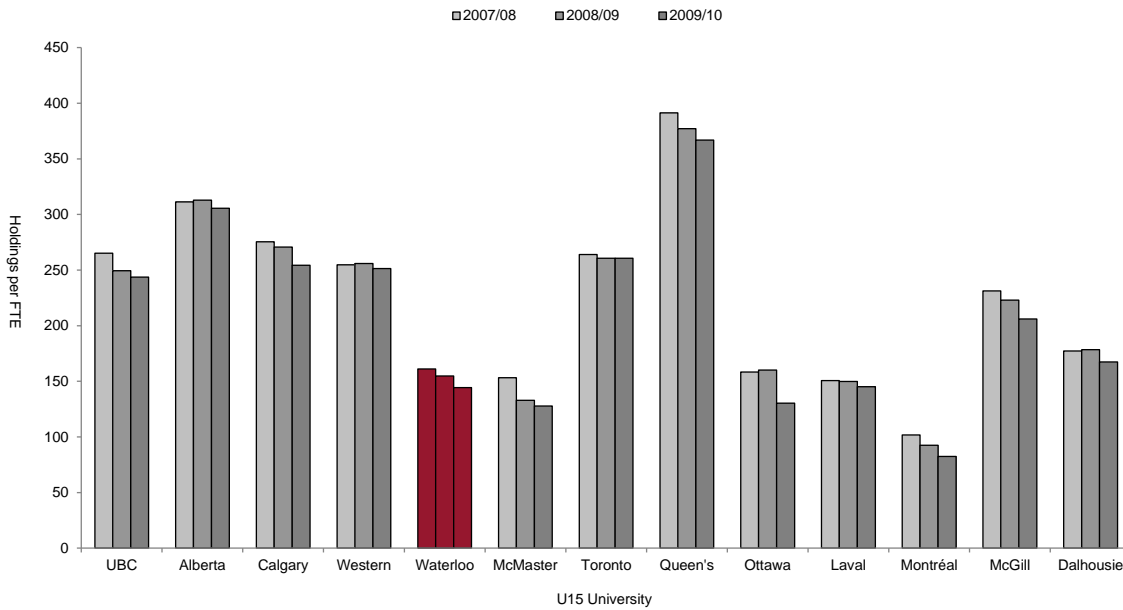


Figure 9.2.A and Figure 9.2.B include counts of printed materials (monographs, bound journal volumes, government documents) and micro-materials, *but not electronic, cartographic, or audio-visual materials*. The counts do not include the holdings of the libraries of Waterloo’s federated university and affiliated colleges.

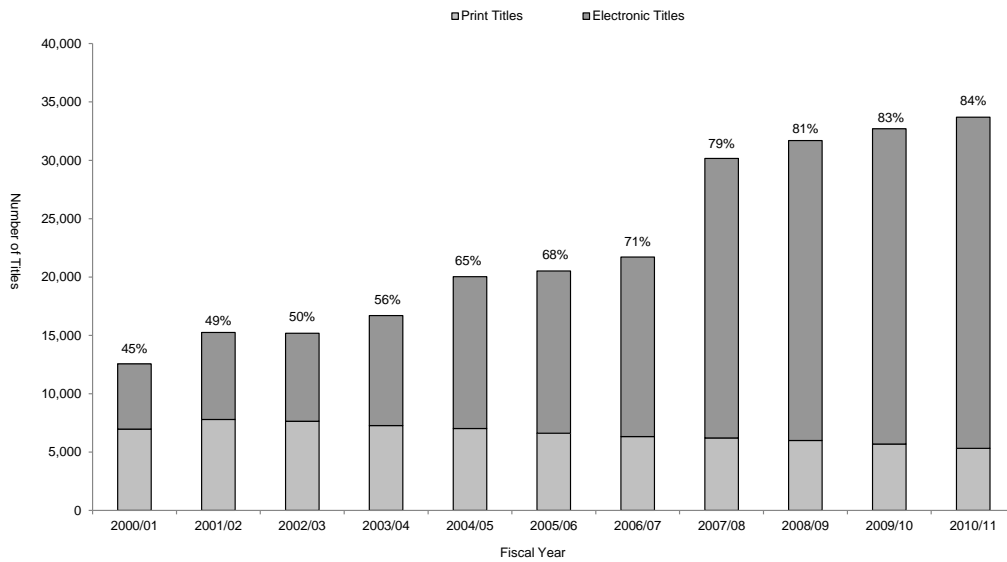
The data in these charts do not take into account the significance of electronic resources, which are playing an increasingly important role at all universities. Electronic monograph holdings at Waterloo have grown from 5,747 titles in 2000/01 to 356,247 titles in 2009/10 and now represent over 19.5 per cent of the total monograph collection.

Figure 9.2.C shows that Waterloo’s electronic serial holdings have also continued to grow substantially. Waterloo received 33,689 current serial titles in 2010/11, of which 28,366 titles (i.e., 84 per cent) are in electronic format.

⁴⁴ University of Saskatchewan and University of Manitoba did not participate in the Student FTE project.

FIGURE 9.2.C

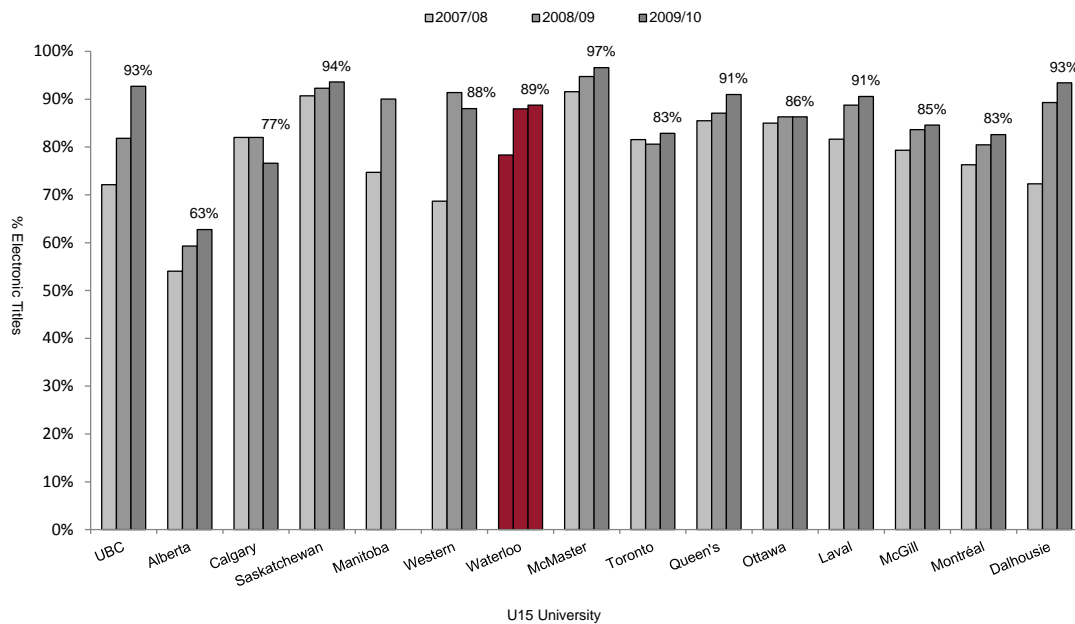
Library Holdings: Print and Electronic Serial Titles



While Waterloo has placed low since 2005/06 among U15 university libraries for total number of serial titles, we rank higher in terms of our percentage of serial titles in electronic format. Figure 9.2.D shows that in 2009/10 Waterloo was in seventh place with 89 per cent of its serial titles in electronic format. Because Manitoba did not accurately report its count of electronic titles for 2009/10, Figure 9.2D does not show Manitoba's percentage serial titles for that year.

FIGURE 9.2.D

% Serial Titles in Electronic Format, U15 Universities



Conclusion

Coordinated by Institutional Analysis & Planning, with support from the Data Working Group and Communications and Public Affairs,

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