

UNIVERSITY OF
Waterloo



Annual Performance Indicators

October 2009

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INTRODUCTION

In today's global economy, there is heightened recognition that a strong domestic R&D system contributes not only to long-term economic growth and national prosperity, but also to education, health, the environment, culture and civil society. R&D is also understood to contribute significantly to policy decisions on a local, regional, national and international scale. Consequently, both in Canada and internationally, R&D has gone from being a component of countries' national competitiveness strategies to a central driver.

--Momentum: the 2008 Report on University Research and Knowledge Mobilization, AUCC

The University of Waterloo has been relatively insulated from some of the critical challenges faced by the Ontario post-secondary system as a result of the economic uncertainty. However, we need to maintain our capacity to respond to opportunities that arise and to seek out income diversification that will reinforce our foundation of sound planning and strategic implementation. The pursuit of excellence in all areas of the academic enterprise, teaching, research, and community development both internal to UW and external, requires the infusion of new resources, even in tough times. We will compete with our peers for the best students, faculty and support staff, adequate scholarships, student support and services, compensation systems, and professional development will be fundamental ingredients for our success. As we look forward our sights will be on research income as a generator of both knowledge and opportunity.

UW has made progress on a number of fronts in support of excellence and innovation in our academic programs. The appointment of UW's first Associate Provost, Graduate Studies, Sue Horton, will bring leadership and increased support to achieve our sixth decade goals. Recently endorsed by Deans' Council, our new career-based masters' program funding model will encourage and support continued growth in graduate studies' programs. We continue to imagine and establish innovative undergraduate and graduate academic programs that address and reflect societal needs. Programs recently approved by the Ministry of Training Colleges and Universities include a PhD in Social and Ecological Sustainability, a Master of Science in Geography, and a Master of Ancient Mediterranean Cultures, both offered jointly with Wilfrid Laurier University, a Master in Quantitative Finance and a Master in Actuarial Finance, an Honours Bachelor of Arts in Sexuality, Marriage and Family, and undergraduate diplomas in both Chinese and Japanese languages.

Internationalization remains high on our priority list. With the appointment of Leo Rothenburg to the post of Associate Vice-President International, UW will be in a position to address the issues related to internationalization and to build on the work that has been done to date. The UW campus in the United Arab Emirates opened in September 2009, offering a unique academic experience for both faculty and students.

Although the economic climate has been bleak, the federal and provincial governments have demonstrated their continued support for post-secondary education. The Knowledge Infrastructure Fund will provide much needed capital monies to improve our campus environment, ensuring an enriched educational experience for our students. We will continue our efforts to secure both private donations and public funds through targeted grants and initiatives.

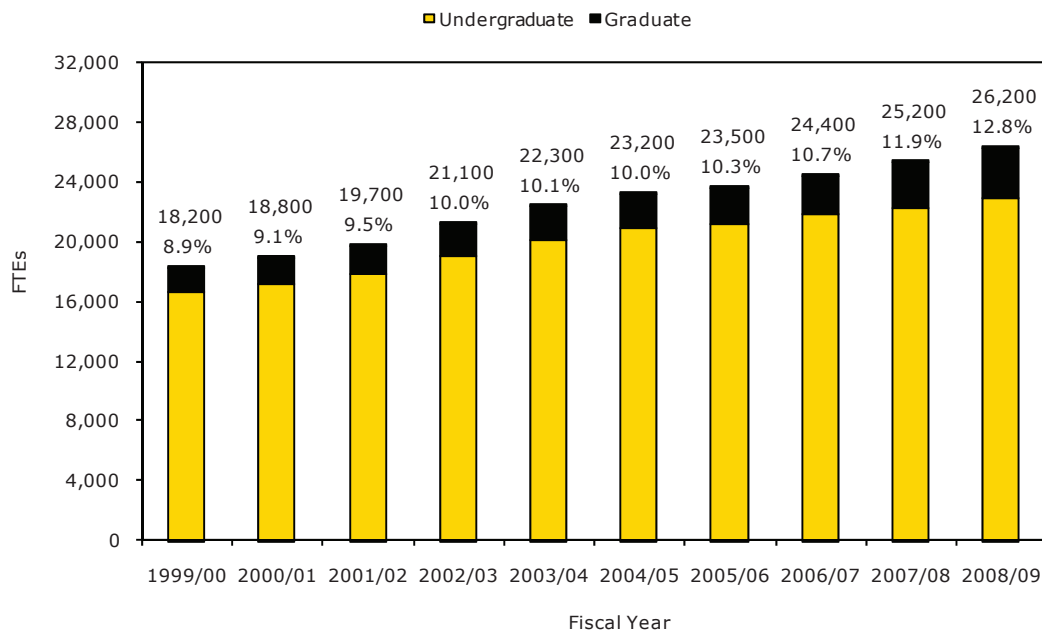
We are pleased to present the fifth publication of the annual University of Waterloo Performance Indicator Report, a vehicle to communicate our strengths, our challenges, and our opportunities to the broader community.

OVERVIEW FOR 2009 REPORT

Now in the second year of our sixth decade (2007/08 – 2016/17) we continue to track our progress using the metrics and indicators in this report. The design and delivery of benchmarks to track our progress requires further investigation and work – this is simply a starting point. The indicators reported in the overview may, in the future, change to better reflect the priorities of the sixth decade plan.

Our Students

FTE¹ Enrolment – Undergraduate and Graduate

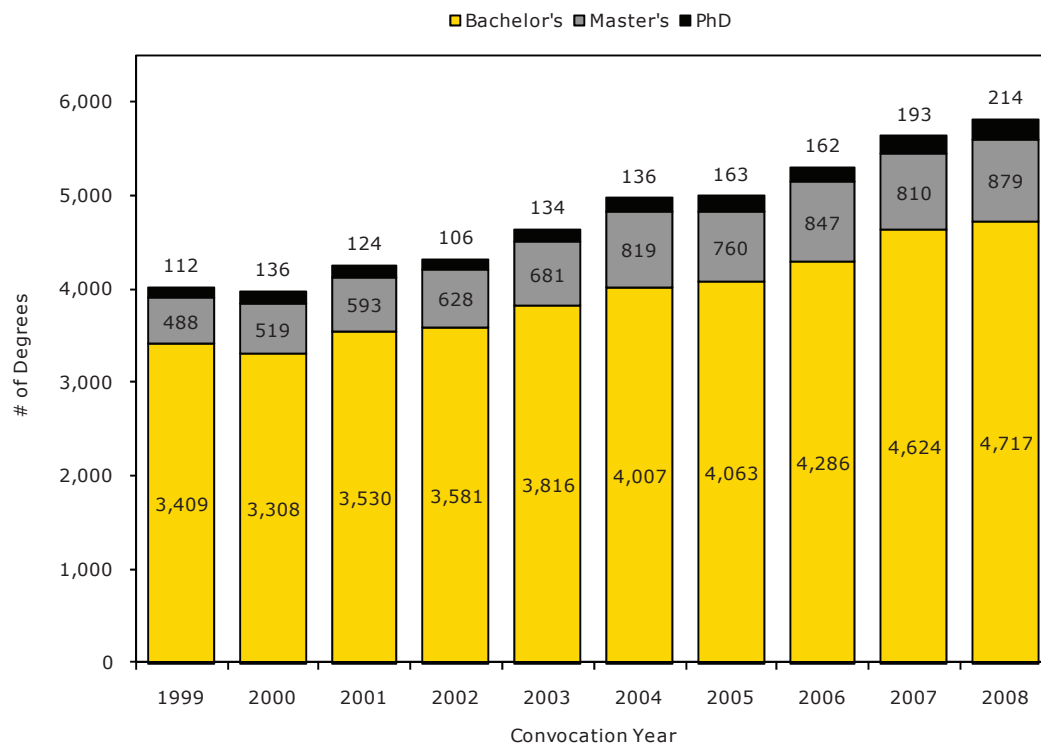


Relevance: Sixth decade goals set a target for graduate student enrolment to be 20 per cent of the total student population.

Performance: In 2008/09, graduate enrolment represented 12.8 per cent of our student population.

¹ FTE = full-time equivalent.

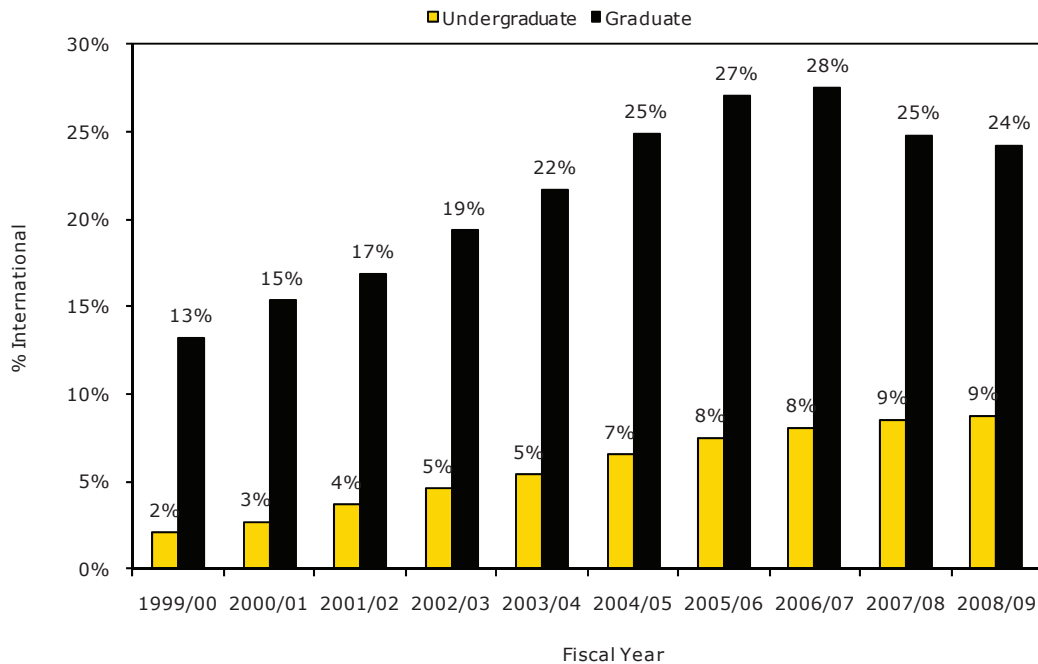
Degrees Granted



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

Performance: We expect to see a steady increase in the number of graduate degrees granted, as we realize our graduate enrolment targets.

International Students as % of their Respective Populations

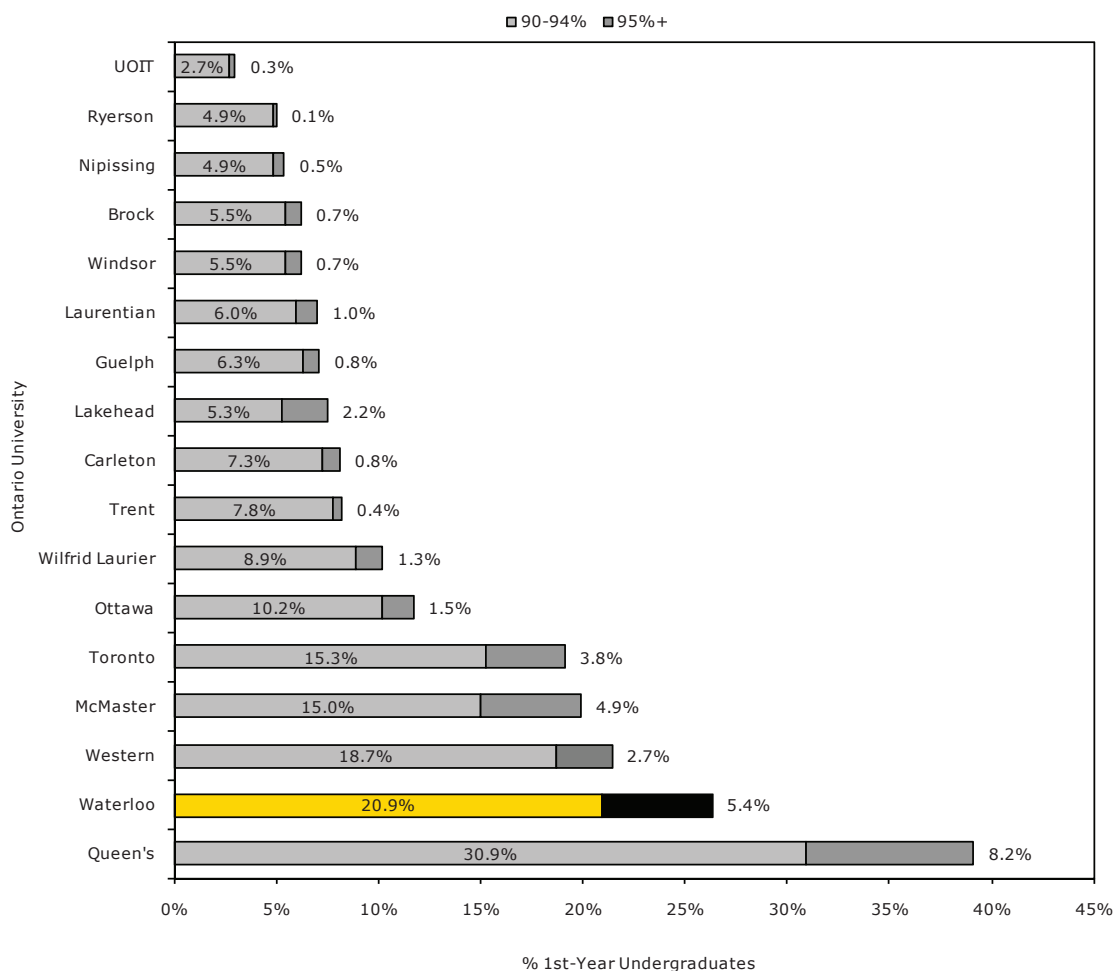


Relevance: Internationalization is a cornerstone of our sixth decade plan. Our goal is that international students will represent 20 per cent of our undergraduate student population and 30 per cent of our graduate student population.

Performance: In 2008/09 the undergraduate international percentage remained steady at nine per cent while graduate dropped slightly to 24 per cent due to a strong increase in domestic graduate enrolment.

Internationalization at UW includes the experience gained through study abroad and exchange opportunities and international co-op work terms. We have met our target of having 200 UW students studying abroad or in exchange programs, a baseline from which to measure our future activity.

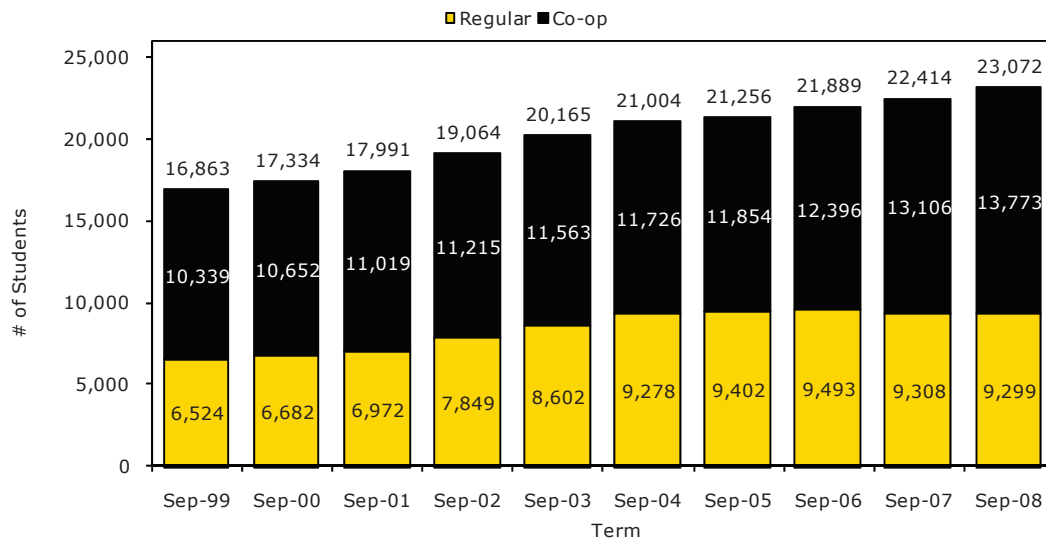
Entering Averages of 90%+ as Compared to Ontario Universities Fall 2006



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 G13 peers. That data source is no longer available for all of our G13 peers. We now present the Ontario system, which shows Waterloo second to Queen's in the percentage of students with entering averages of 90 per cent or higher.

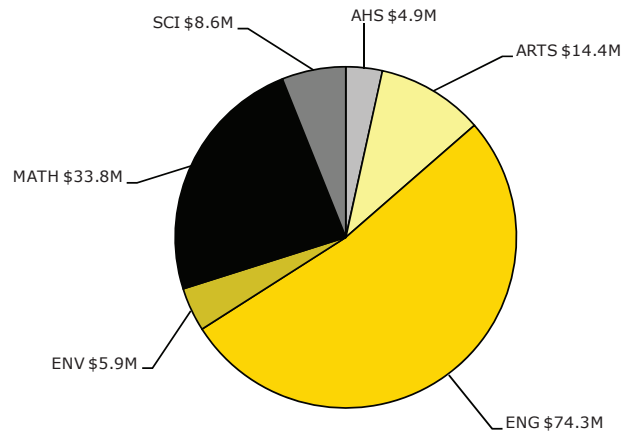
Fall Full-time Count of Undergraduate Students by System of Study (Includes Students on a Work Term)



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 60 per cent in fall 2008 from 58 per cent in fall 2007. In fall 2008, we see a three per cent increase in our total fall full-time count, with little change to our regular stream programs and a five per cent increase in our co-operative programs over fall 2007.

Total Earnings by Students on Co-op Work Term 2007/08²
\$142,000,000



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 2008/09 co-op students earned \$142 million compared to \$137 million in 2007/08, an increase of four per cent overall.

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.

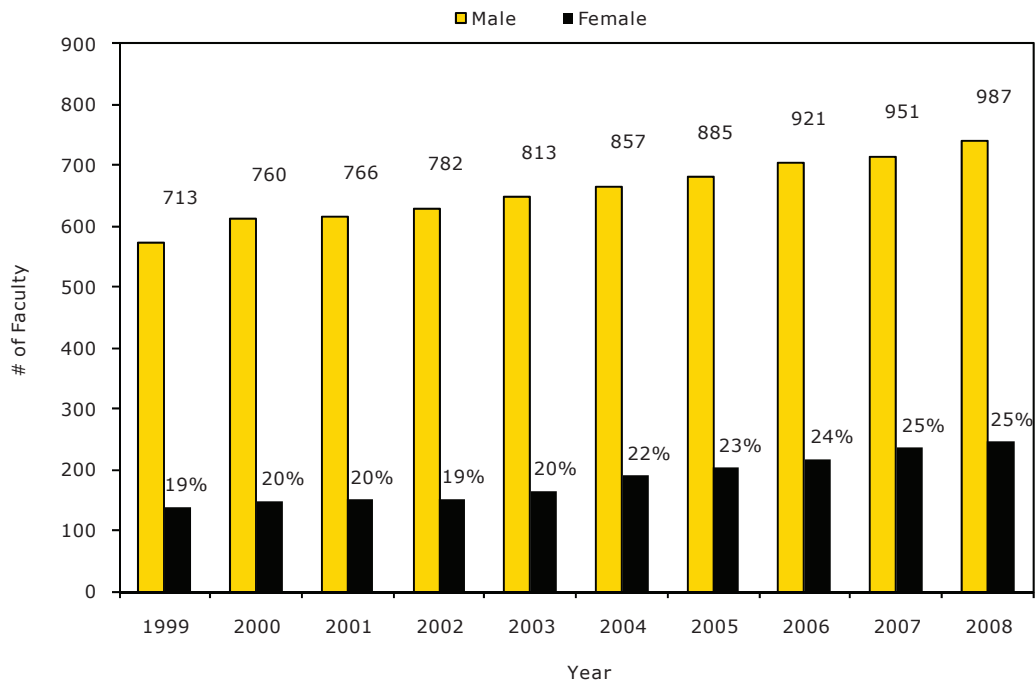
Significant progress has been made in all areas of the framework, notably:

- A mission statement, vision, and business and culture principles.
- An employer relations and marketing strategy.
- Definition of and stabilization of core processes using process management methodology including the core employment process and the unemployed student management process.
- A framework for employment feasibility studies, new programs, and program changes.
- The development of a new information technology system is well underway and on target for fall 2009.
- Increased data analysis and measurement to support projects and business decisions.
- Establishment of an International Working Group to address issues unique to students going on international work terms and incoming visa students, and the development of a risk management framework for the international programs in CECS.

² AHS = Applied Health Sciences; ENG = Engineering; ENV = Environment; SCI = Science.

Our Faculty

Count of Full-Time Faculty by Gender and Percentage Female³

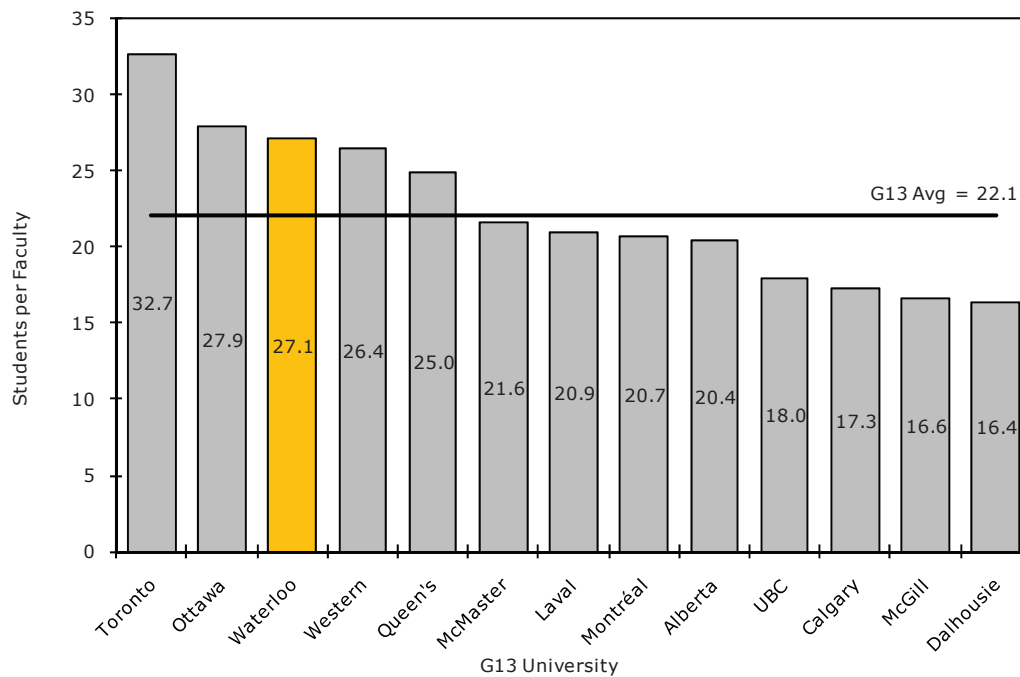


Relevance: Our sixth decade goals include a target of at least 1,000 full-time faculty members by 2017.

Performance: We have experienced a steady increase in the number of full-time faculty over the past several years. With 987 in 2008, we are at 99 per cent of our target for 2017.

³ Source: Stats Canada UCASS – As of October 1st of each survey year.

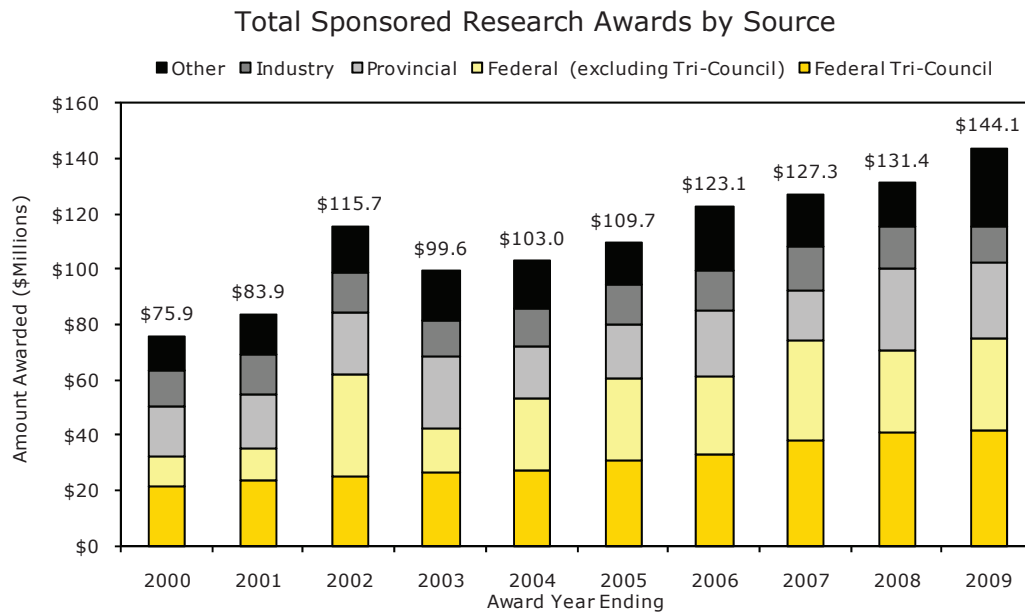
Full-Time Undergraduate Student to Full-Time Tenure and Tenure-Stream Faculty Ratio as Compared to G13 Universities 2007/08



Relevance: Sixth decade goal aims to reduce the student to faculty ratio to 20:1. It is widely held that a lower ratio leads to improved instruction and a better student classroom experience.

Performance: In 2007/08 UW had the third highest ratio of full-time student to full-time tenure and tenure-stream faculty among our G13 Data Exchange peers; this position changed from fourth highest in 2006/07 and 2005/06. Though we have continued to hire full-time faculty, our 2007/08 undergraduate population increased nearly four per cent over 2006/07.

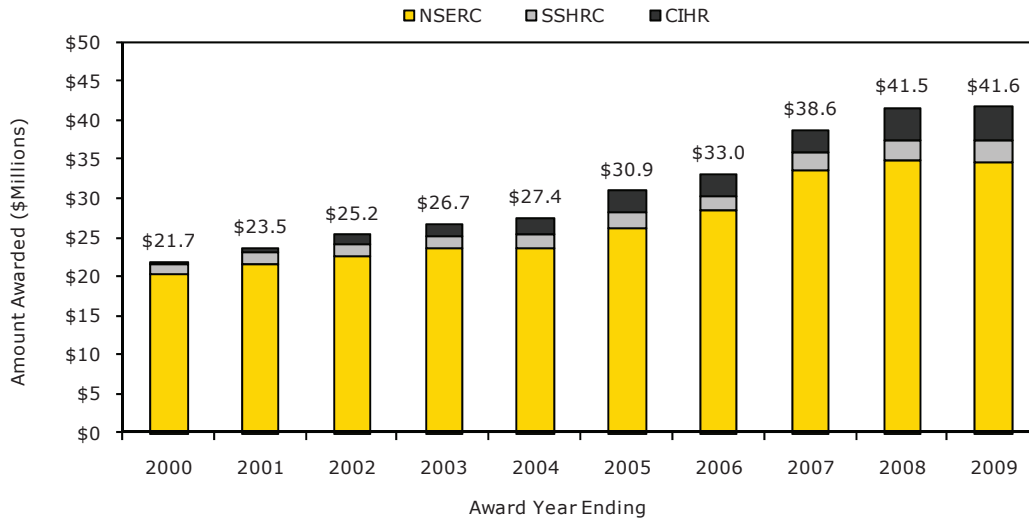
Our Research



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

Performance: Our 2008/09 research awards represents about 31 per cent of our 2008/09 operating revenue.

Federal Tri-Council Research Awards 2000-2009⁴



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 G13, in the period 2005 to 2009, we ranked fourth in percentage increase in research awards from the NSERC granting council. In 2008/09, we ranked fifth in absolute dollars awarded (see Figure 3.2.H and 3.2.K in the research section).

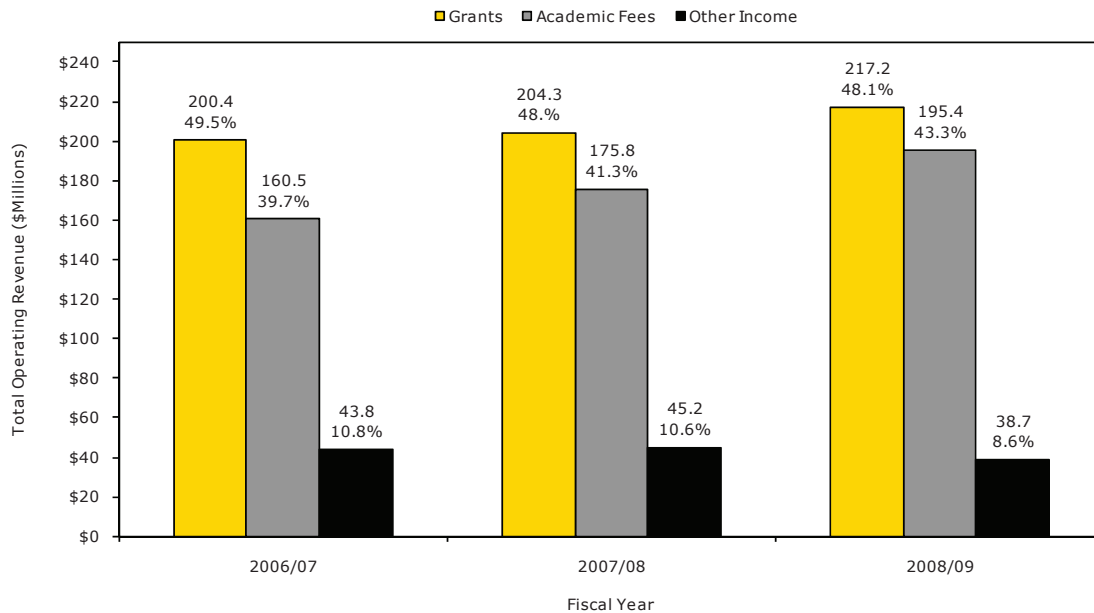
Relative to the G13, in the period 2005 to 2009, we ranked first in percentage increase in research awards from the SSHRC granting council. In 2008/09, we ranked twelfth in absolute dollars awarded (see Figure 3.2.I and 3.2.L in the research section).

Relative to the G13, in the period 2005 to 2009, we ranked first in percentage increase in research awards from the CIHR granting council. In 2008/09 our absolute dollars awarded was \$5.2 million (see Figure 3.2.J and 3.2.M in the research section).

⁴ 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 Source⁵



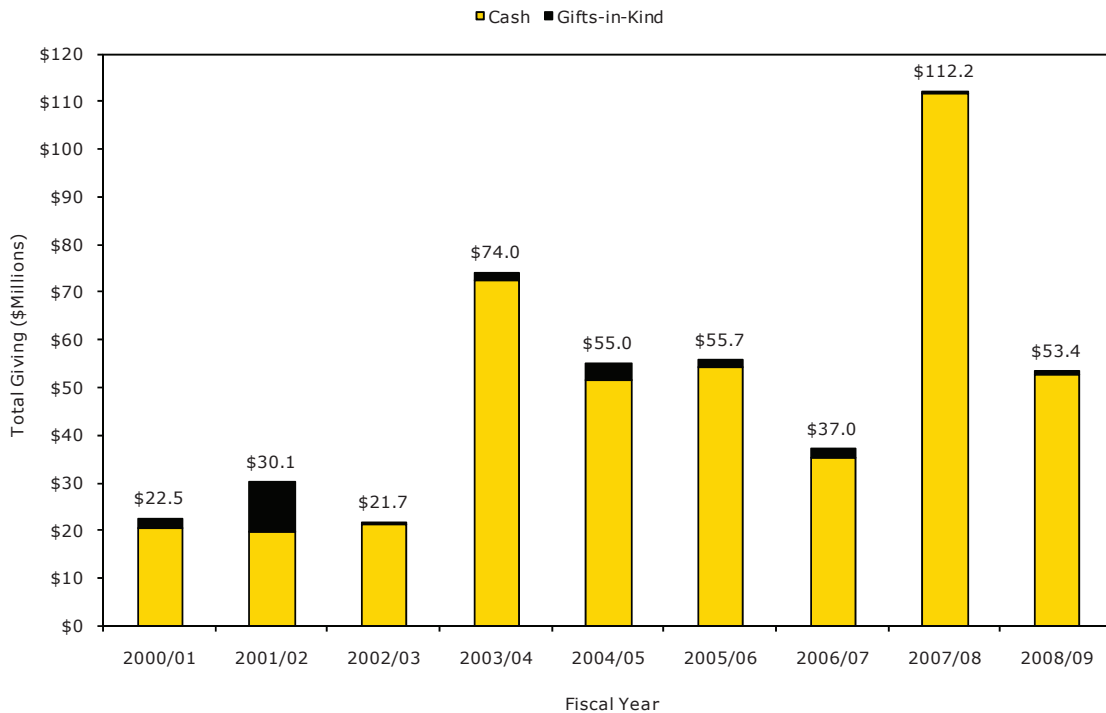
Relevance: UW will have incremental resources to support its pursuit of academic excellence.

Performance: In 2008/09, our operating revenue increased to about \$451 million, up from \$430 million in 2007/08, an increase of approximately five per cent.

In 2008/09, our operating expenses per FTE student increased by two per cent, or about \$400 per student.

⁵ 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. 2008/09 numbers are subject to Board approval.

Annual Fundraising



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 2008/09 amounted to \$53.4 million, representing 12 per cent of the operating revenue. In 2008/09, the cumulative campaign results stood at \$515 million, 147 per cent of the 2007 campaign goal and 52 per cent of the 2017 goal.

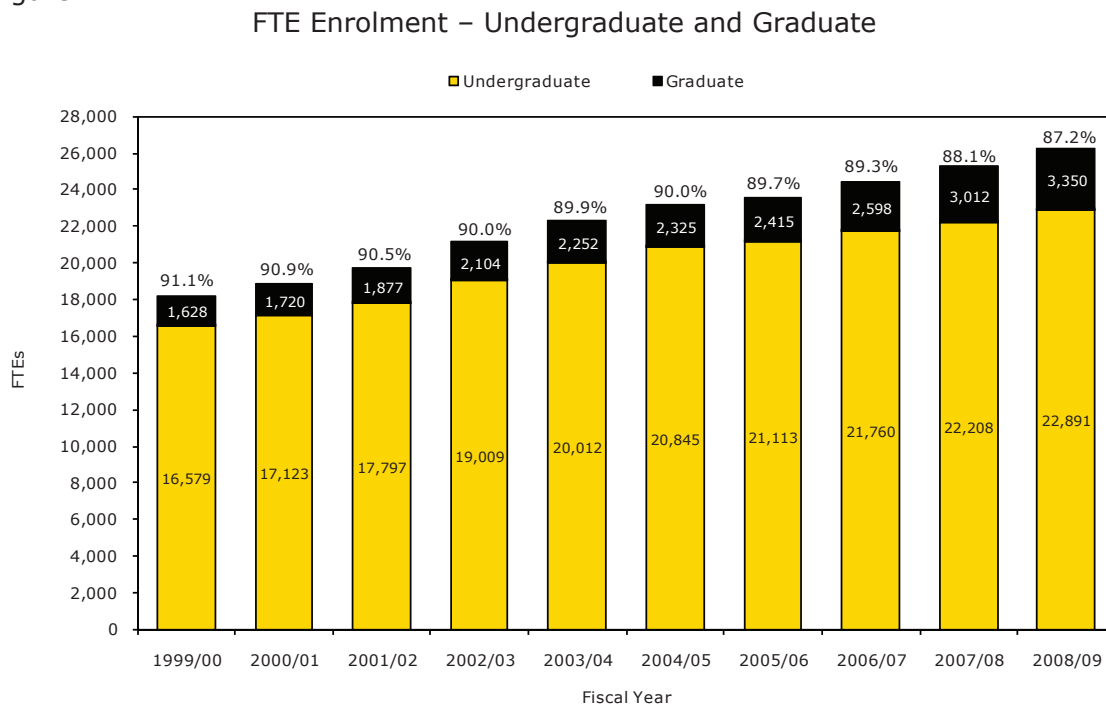
Annual fundraising achievements measure overall performance of advancement activities across the entire University and are important indicators of how well we are doing to raise private-sector gifts. The graph above shows a rise in private-sector giving to the University from 2000/01 to 2008/09, with dramatic leaps in 2003/04 and 2007/08. These leaps can be partially accounted for by several significant pacesetter gifts.

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

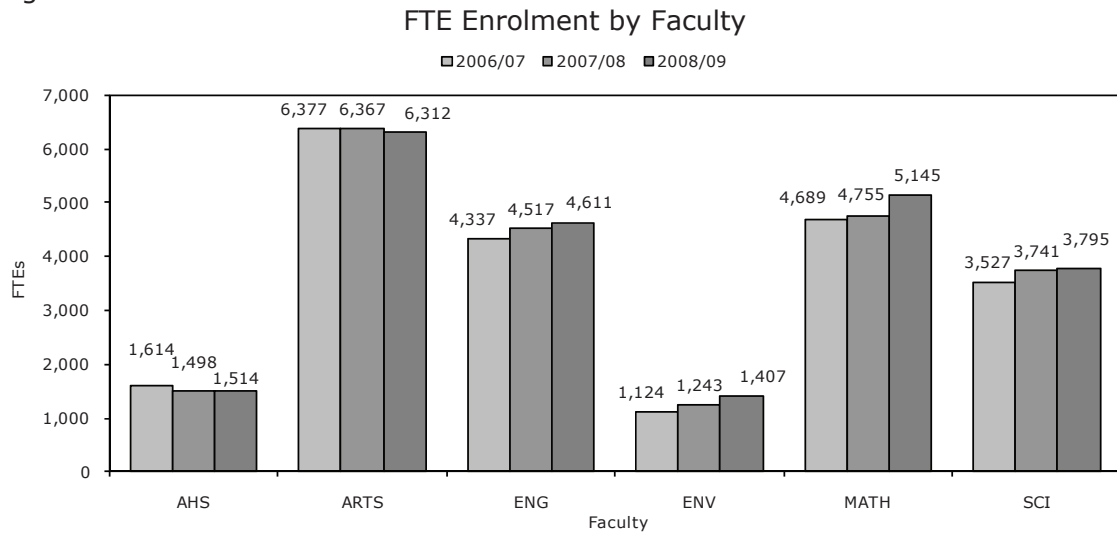
Figure 1.1.A⁶



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 UW, 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. When we count annual FTEs our goal is to measure the size of our on-campus student population and to represent each student once. 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.

⁶ Percentage of undergraduate FTE students displayed.

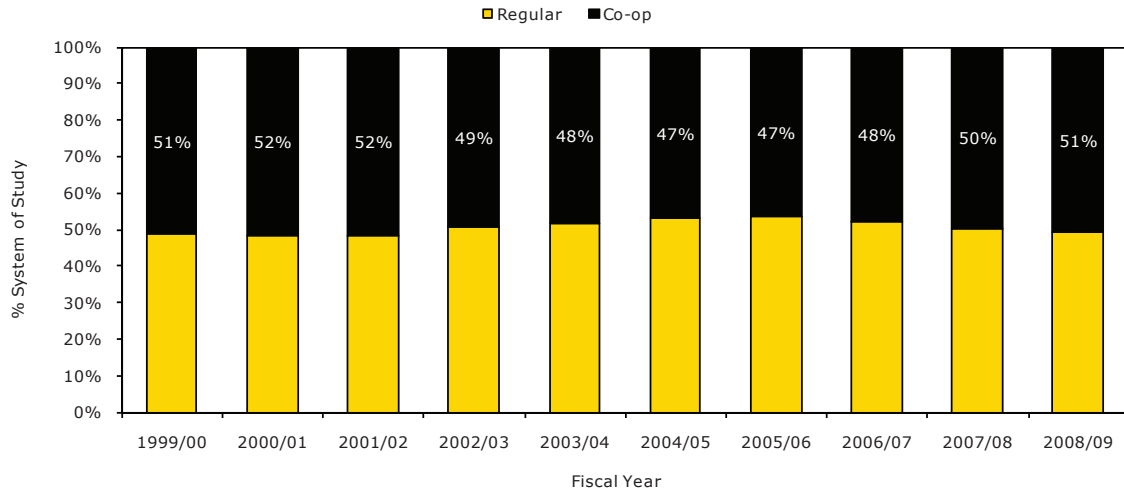
Figure 1.1.B⁷



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. As of 2008⁸, when counting co-op students on a work term, we include those students who were unable to find a job. Figure 1.1.C to Figure 1.1.E show the distribution, over time by Faculty, of co-op and regular students.

Figure 1.1.C

% Undergraduate FTE Students by System of Study

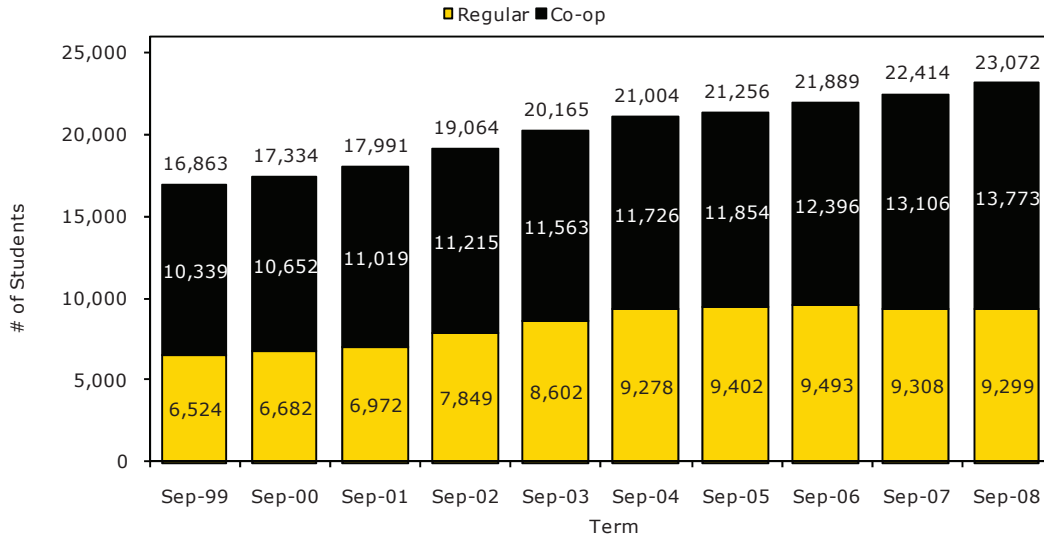


⁷ Software Engineering is offered jointly by the Faculties of Engineering and Mathematics and enrolment is split evenly between these two Faculties. Computing and Financial Management is offered jointly by the Faculties of Arts and Mathematics and enrolment is split between these two Faculties. The Renison BSW program is not shown, which had 92 students in 2006/07, 88 in 2007/08 and 107 in 2008/09.

⁸ Co-op work term information was corrected back to the 2001/02 fiscal year when it was made available using the new PeopleSoft Student Administration (SA) system.

Figure 1.1.D

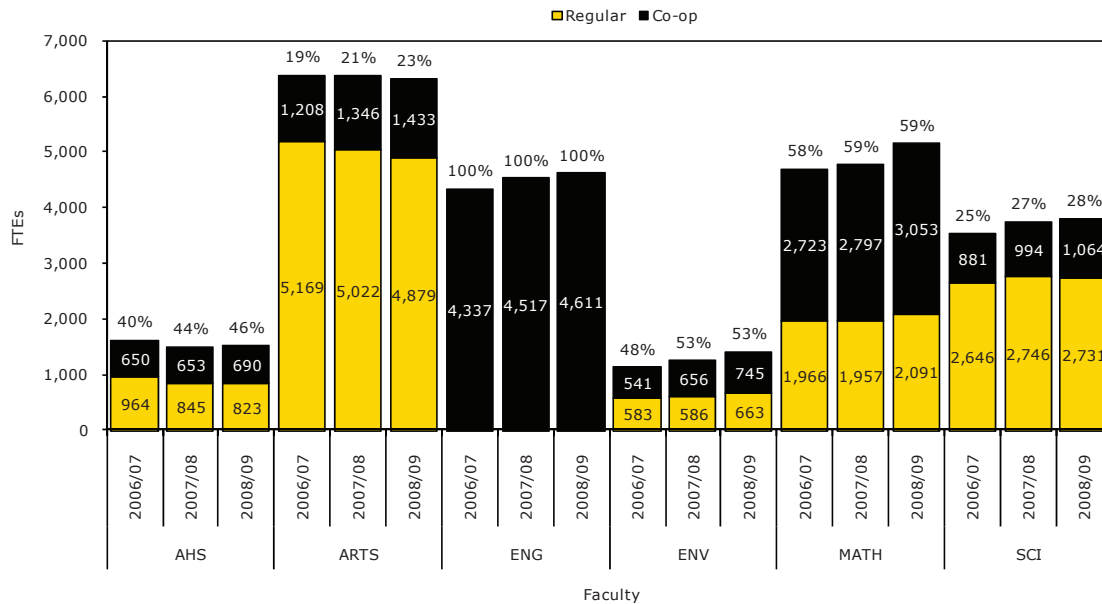
Fall Full-Time Count of Undergraduate Students by System of Study
(Includes Students on a Work Term)



Based on the count of students in the fall term, about 60 per cent of undergraduates were registered in co-operative programs in the fall of 2008.

Figure 1.1.E

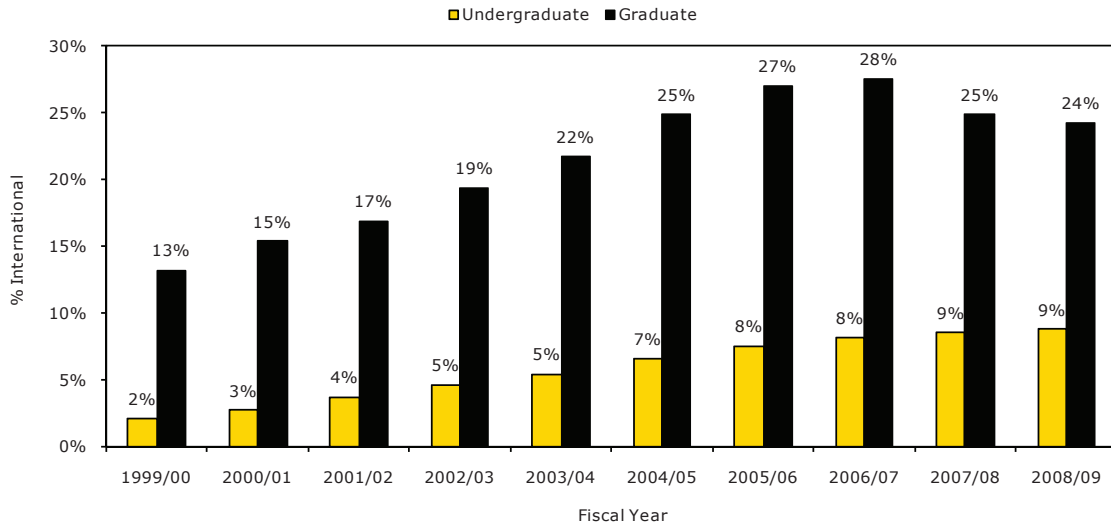
Undergraduate FTE Students by System of Study
(% Co-op Indicated)



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

Figure 1.1.F

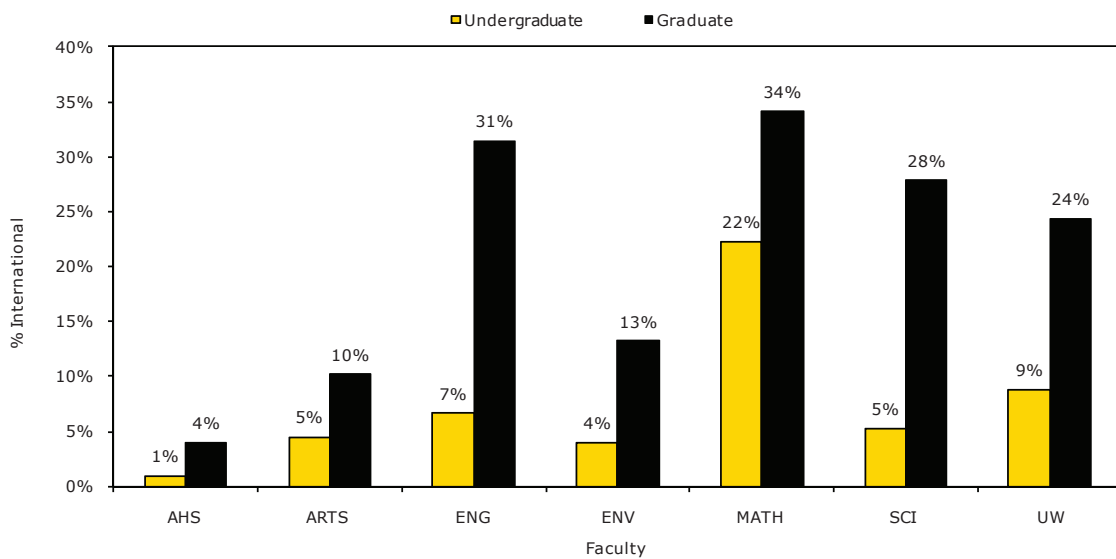
International Students as % of their Respective Populations



We see in the chart below that in Mathematics, international students make up 22 per cent of undergraduate students and 34 per cent of graduate students. At the University level, international students make up nine per cent of undergraduate enrolment and 24 per cent of graduate enrolment.

Figure 1.1.G

International Students as % of their Respective Populations 2008/09



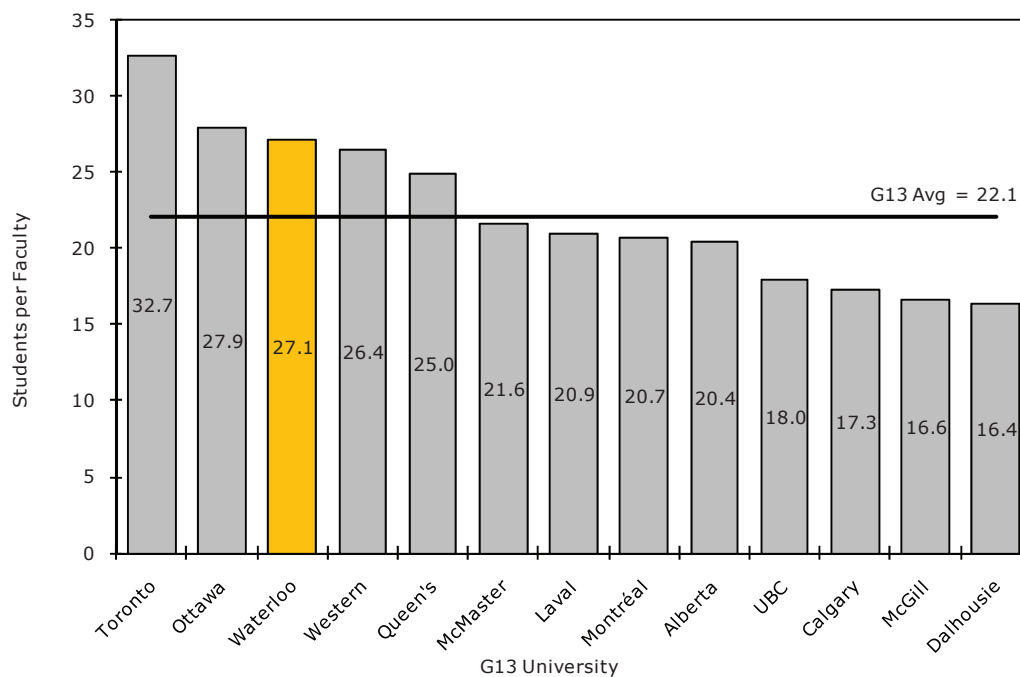
1.2. Student to Faculty Ratio

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 G13 universities.

Figure 1.2.A⁹

FTE Students to Full-Time Tenure and Tenure-Stream Faculty Ratio as Compared to G13 Universities 2007/08



At UW, 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

⁹ Source: G13 Data Exchange.

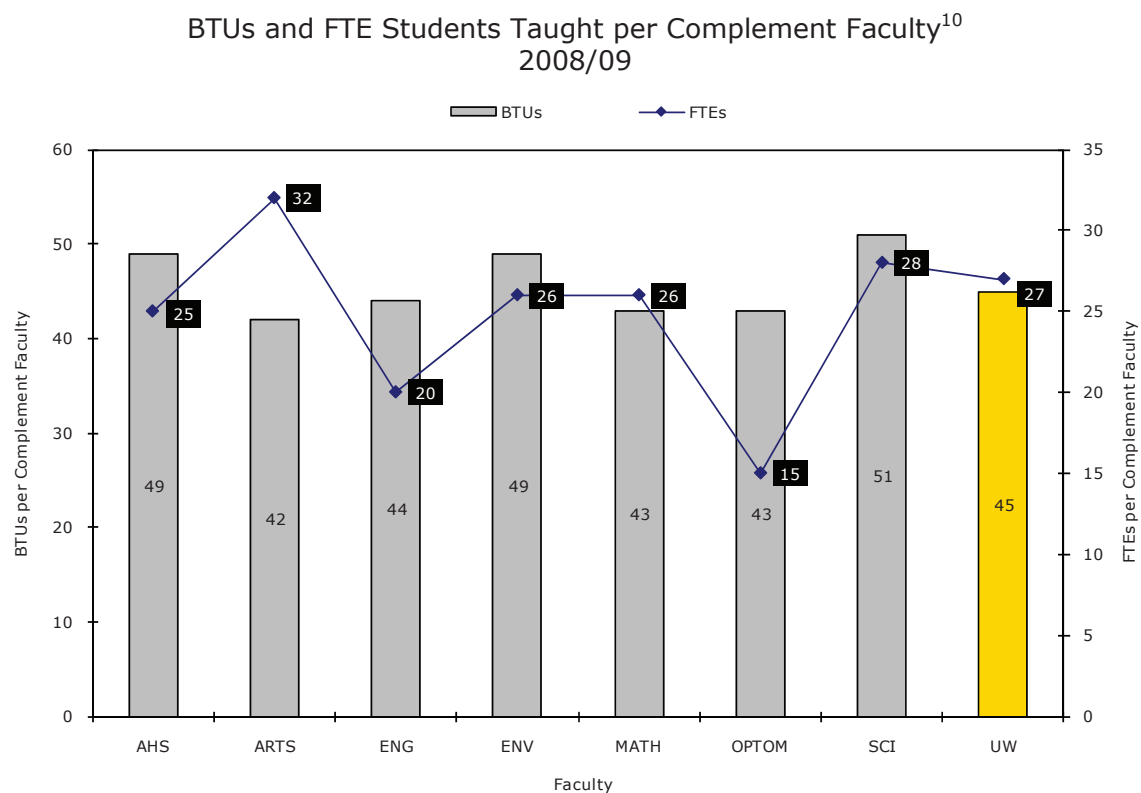
convert courses taught by each faculty to equivalent students taught using a formula that takes into account course weights and the average course load for students in the faculty.

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



¹⁰ 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 average¹¹ is one indicator of the quality of the student. At UW we seek to admit the brightest students possible. In fall 2005, UW 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, UW 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 2008

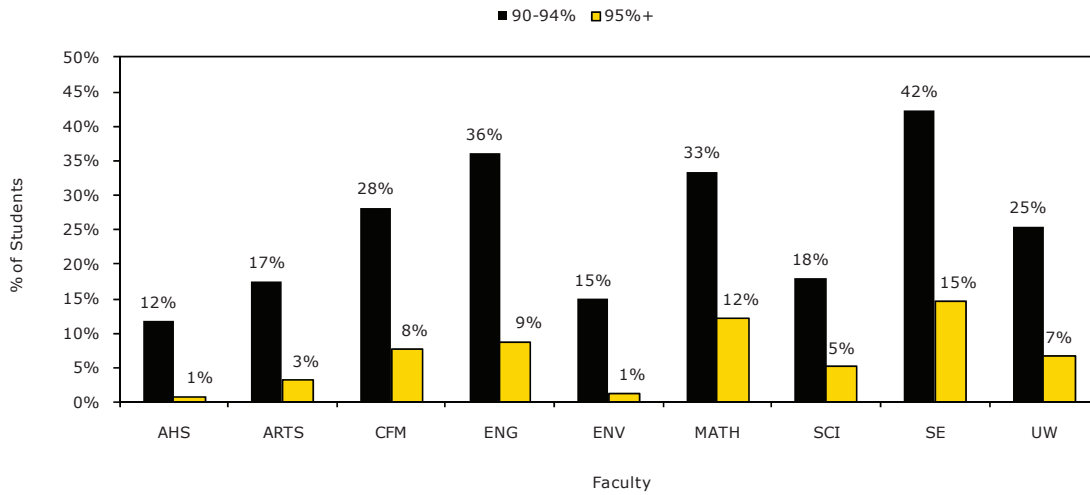
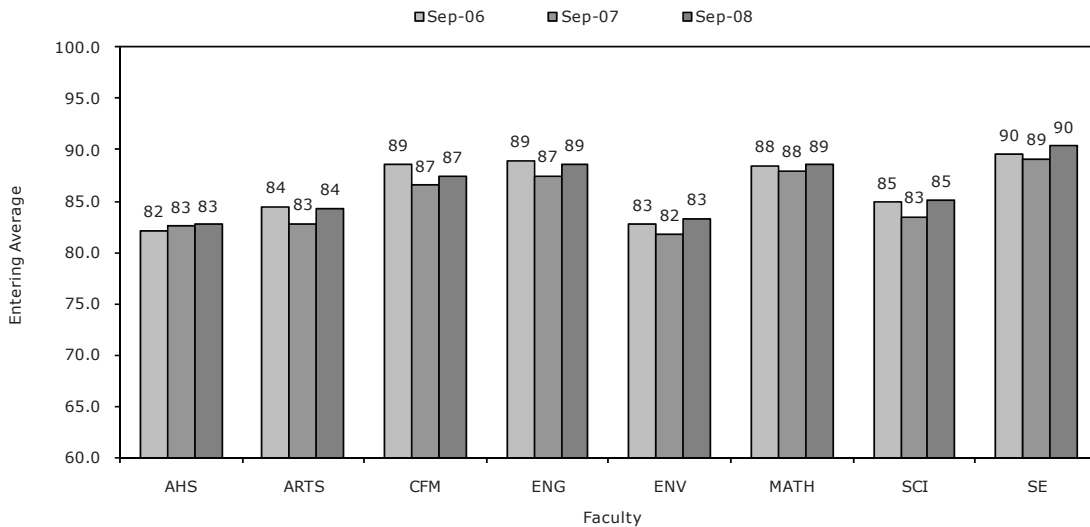


Figure 1.3.B

Entering Grade Averages (Average, Basis of Admission)
Full-Time 1st-Year Undergraduate



¹¹ CFM = Computing and Financial Management; SE = Software Engineering.

To better understand the range of entering averages we present the break out of the 25th and 75th percentiles. For example, in 2008, for the Faculty of Arts, we see that the average entering grade was 84 per cent (Figure 1.3.B); we see the 25th percentile entering grade average was 80 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 2008, 75 per cent had a grade average higher than 80 per cent and 25 per cent had a grade average higher than 89 per cent.

Figure 1.3.C¹²

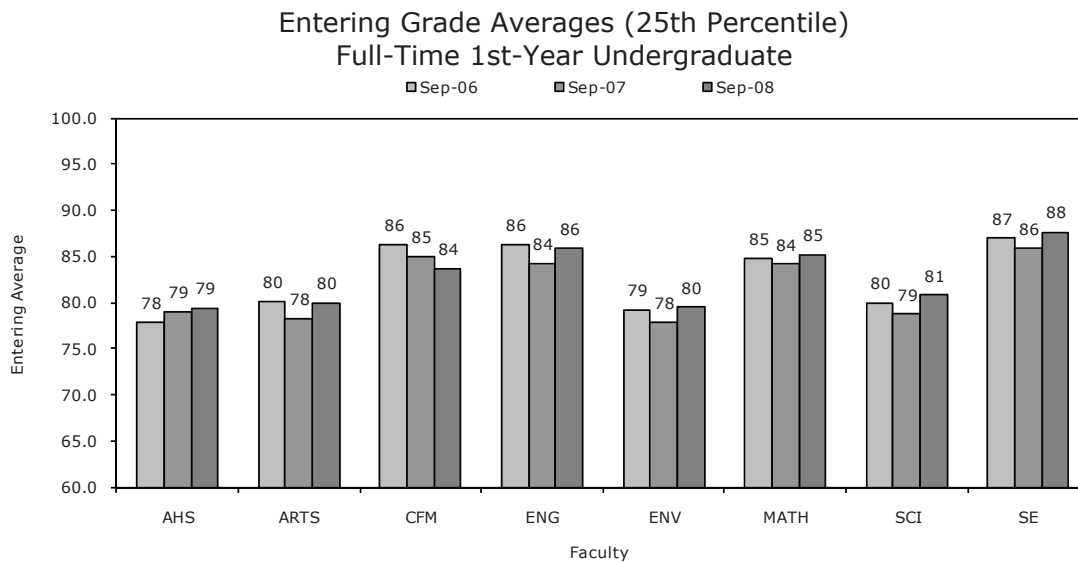
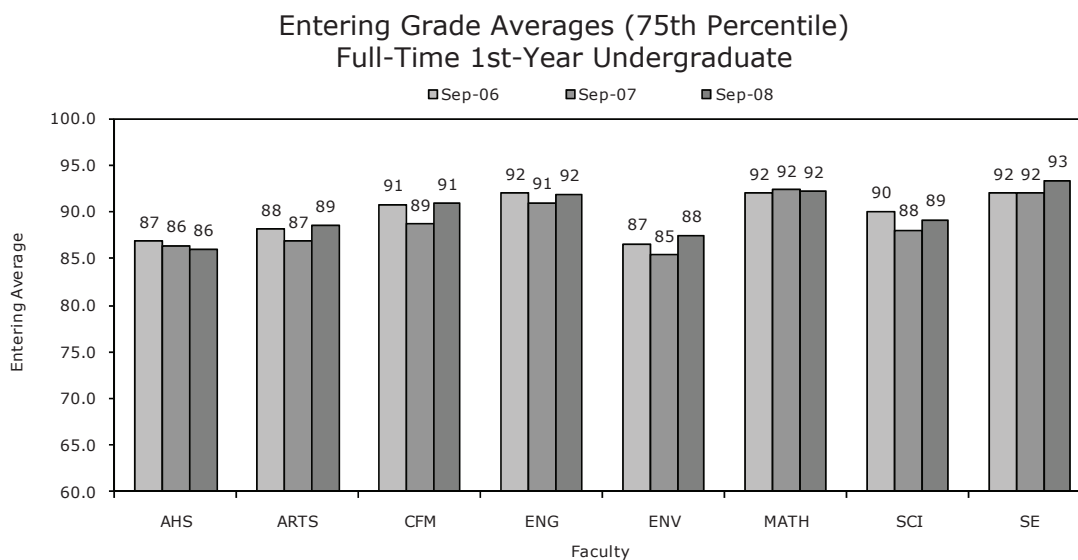


Figure 1.3.D¹³

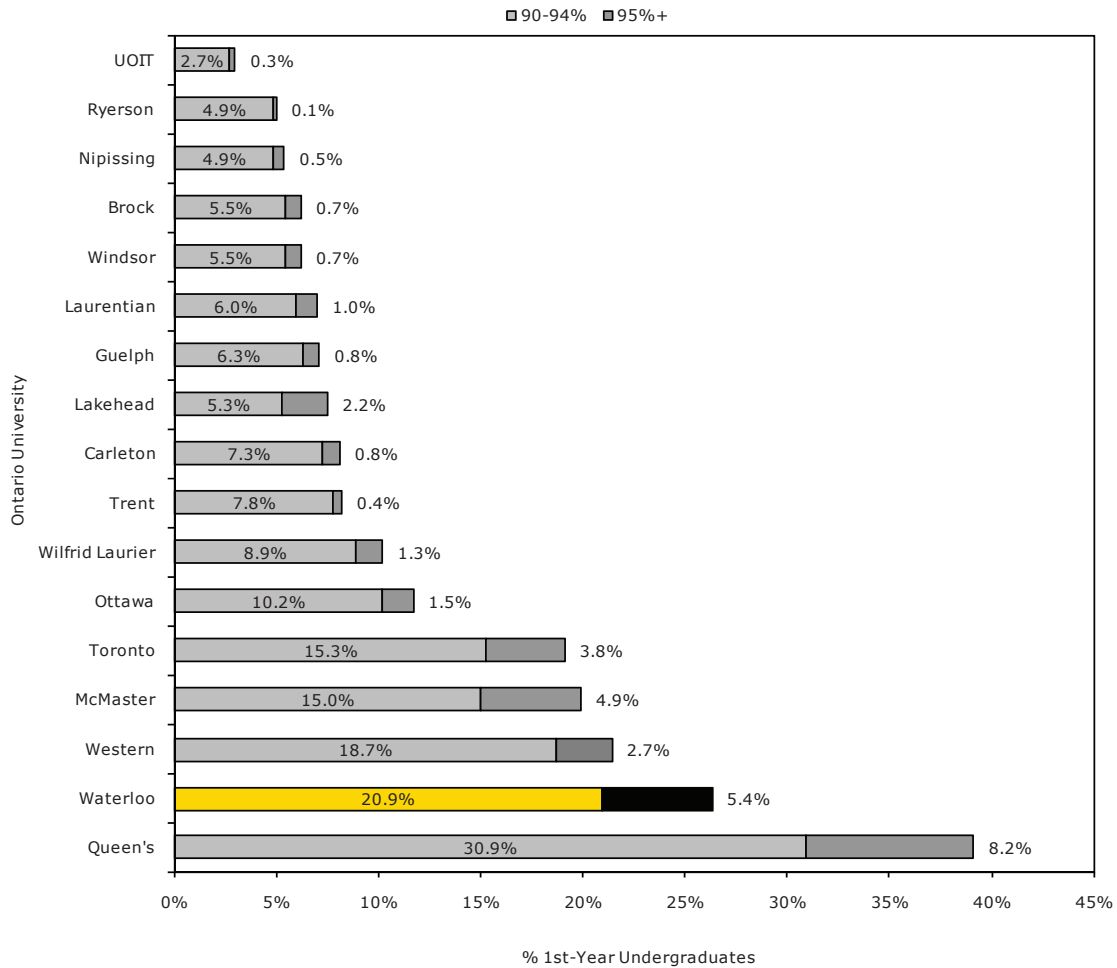


¹² The 25th Percentile means that 75 per cent of students entered with grade averages higher than the mark indicated.

¹³ 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%+ as Compared to Ontario Universities
Fall 2007



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 G13 peers. That data source is no longer available for all of our G13 peers. We now present the Ontario system¹⁴ which shows Waterloo second to Queen’s in the percentage of students with entering averages of 90 per cent or higher.

¹⁴ Source: CUDO (Common University Data Ontario). York University not included as the data is not available.

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

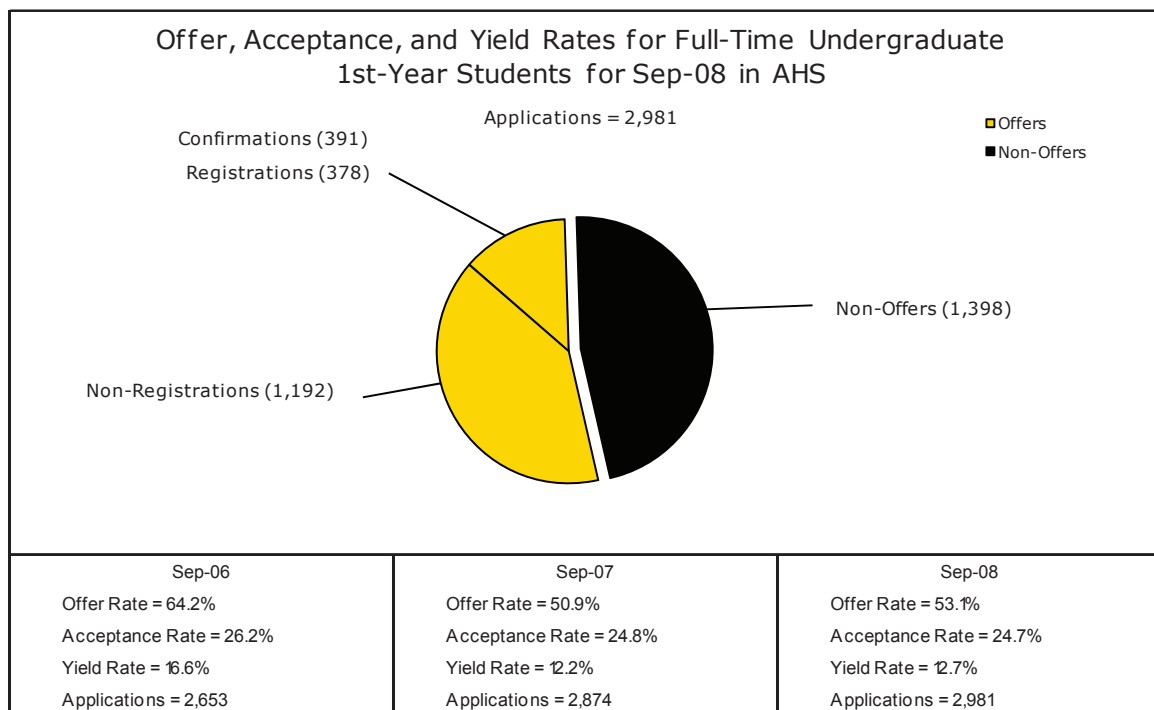


Figure 1.4.B

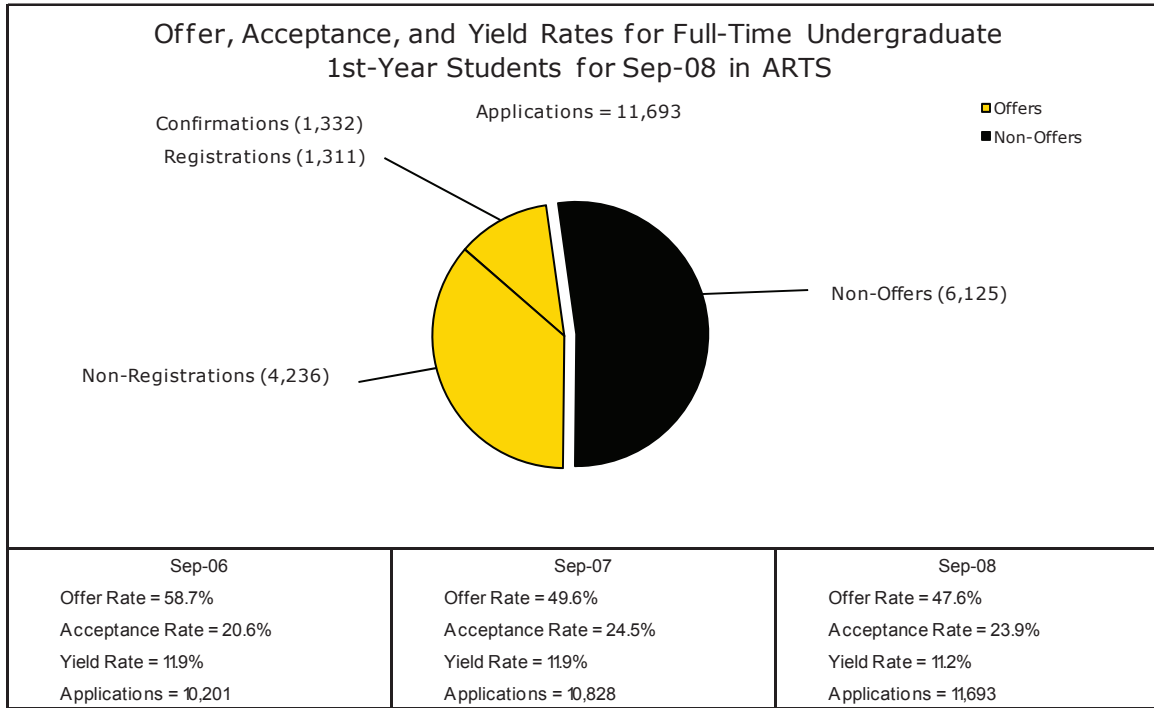


Figure 1.4.C

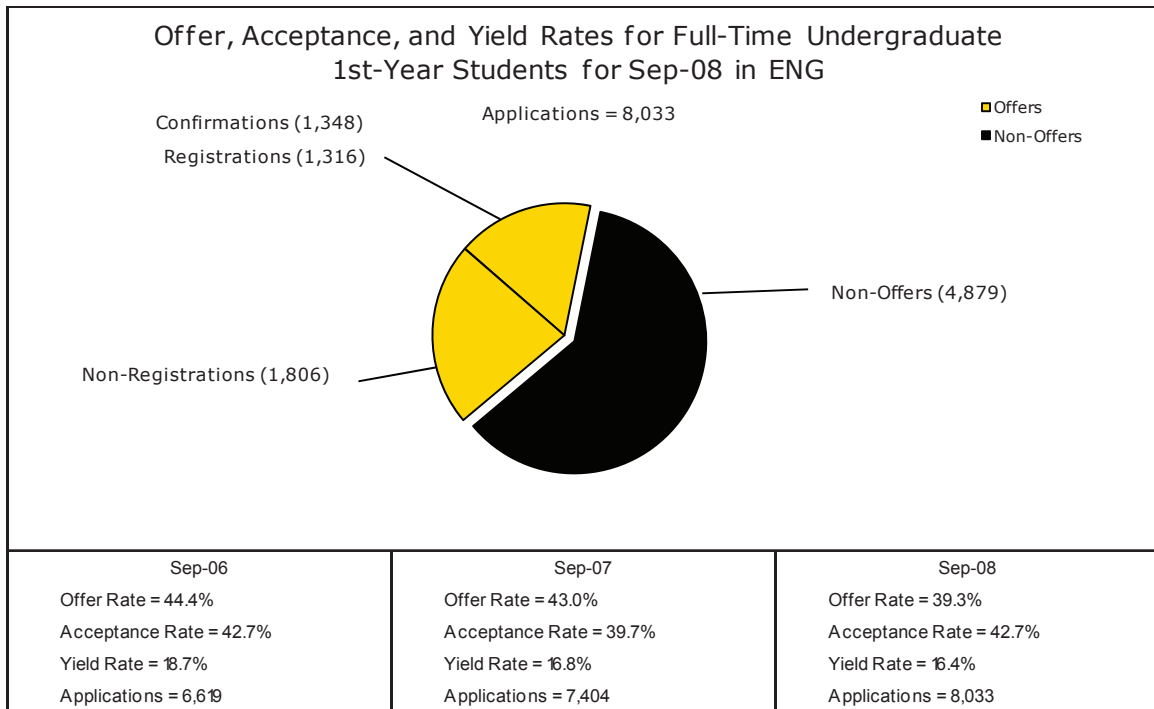


Figure 1.4.D

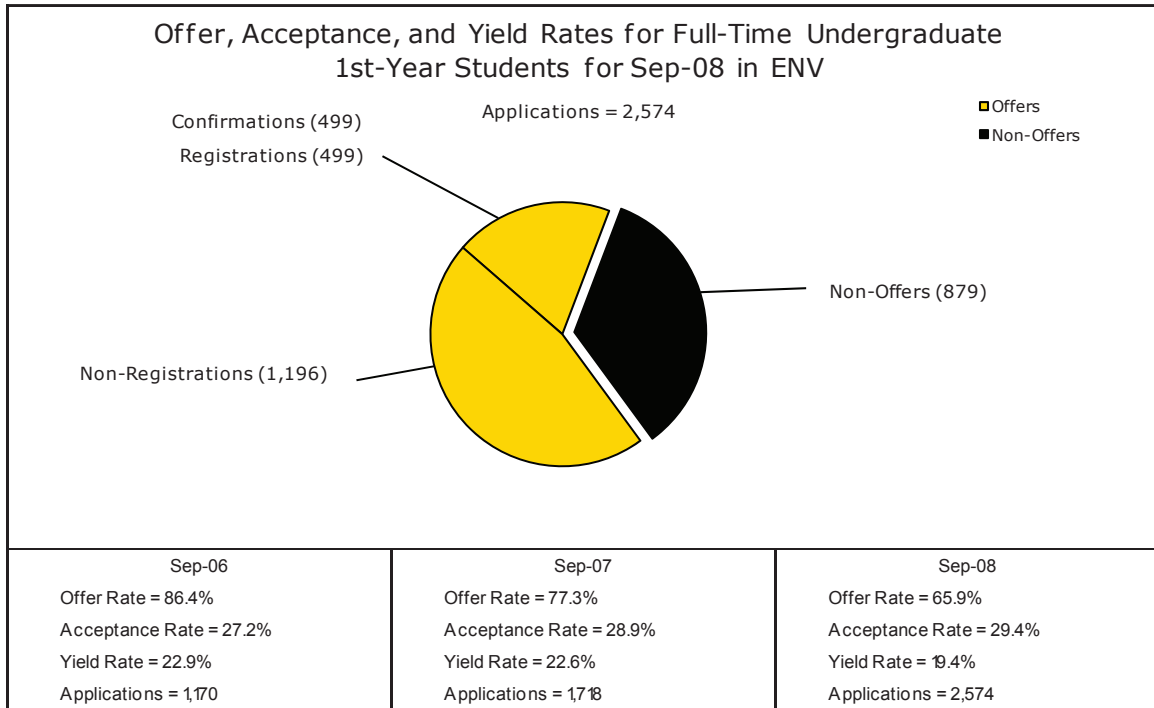


Figure 1.4.E

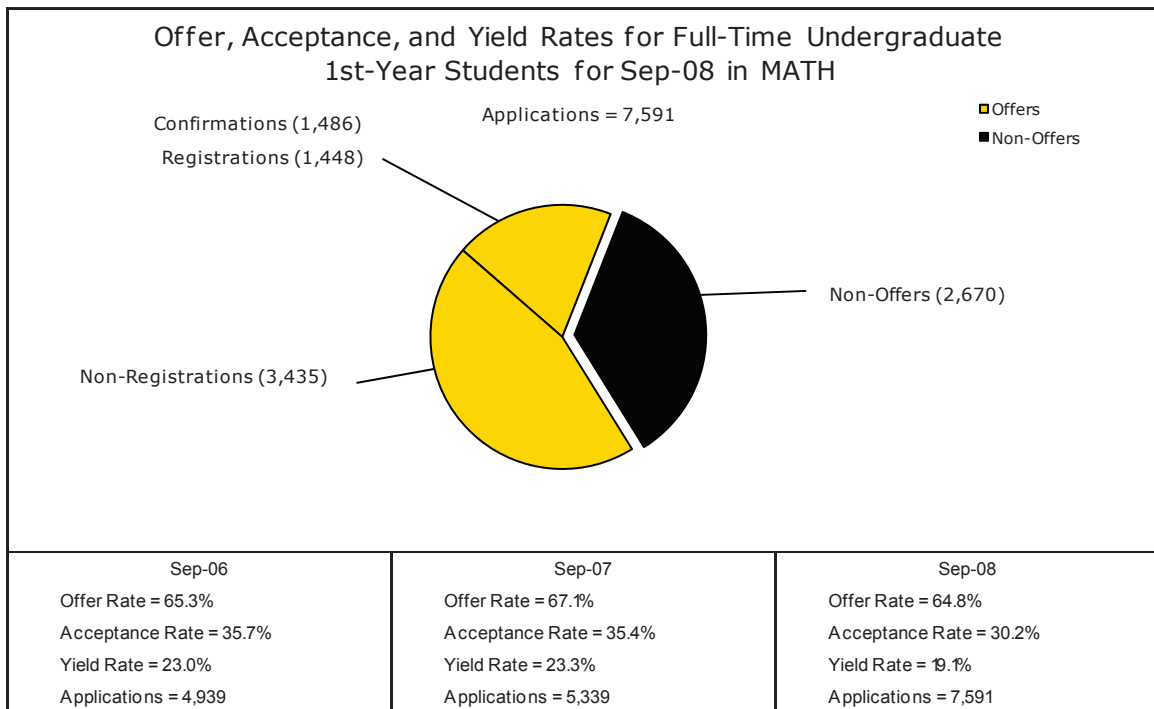


Figure 1.4.F

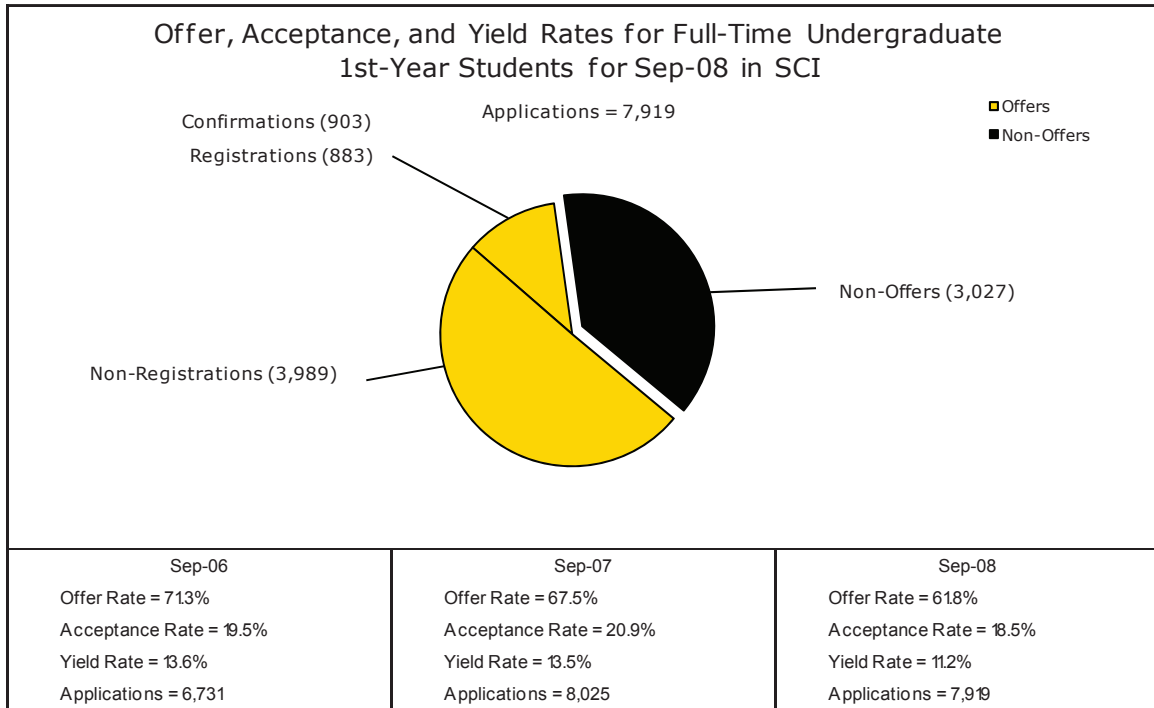


Figure 1.4.G

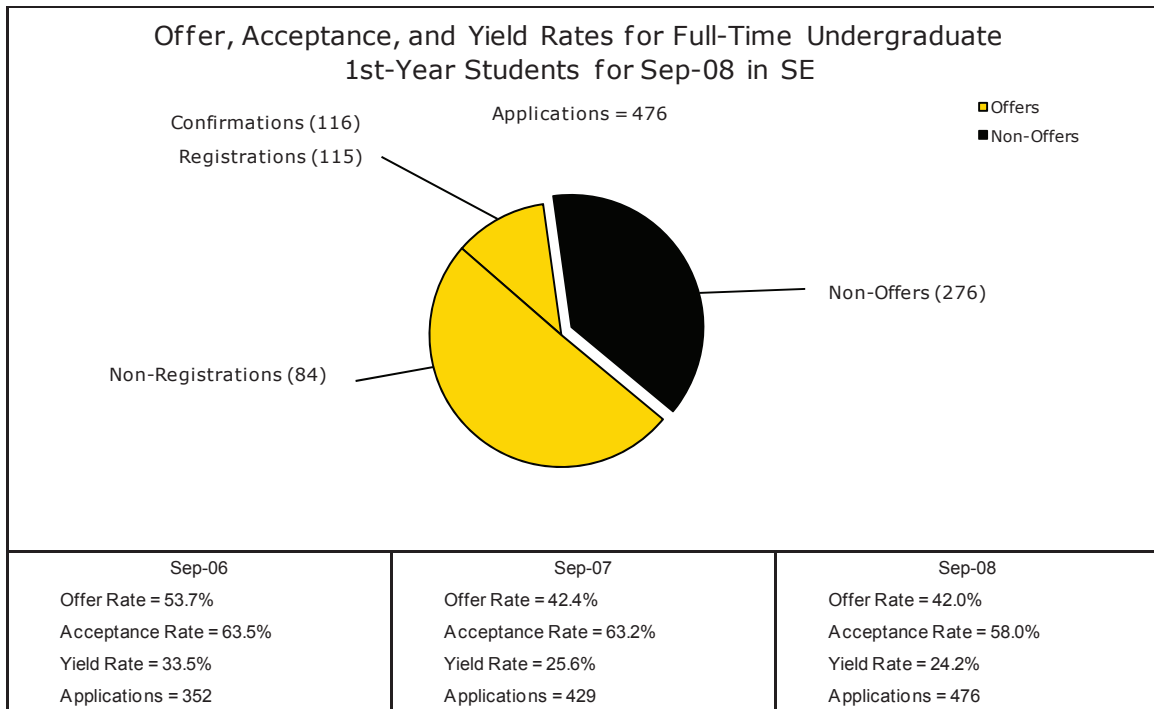
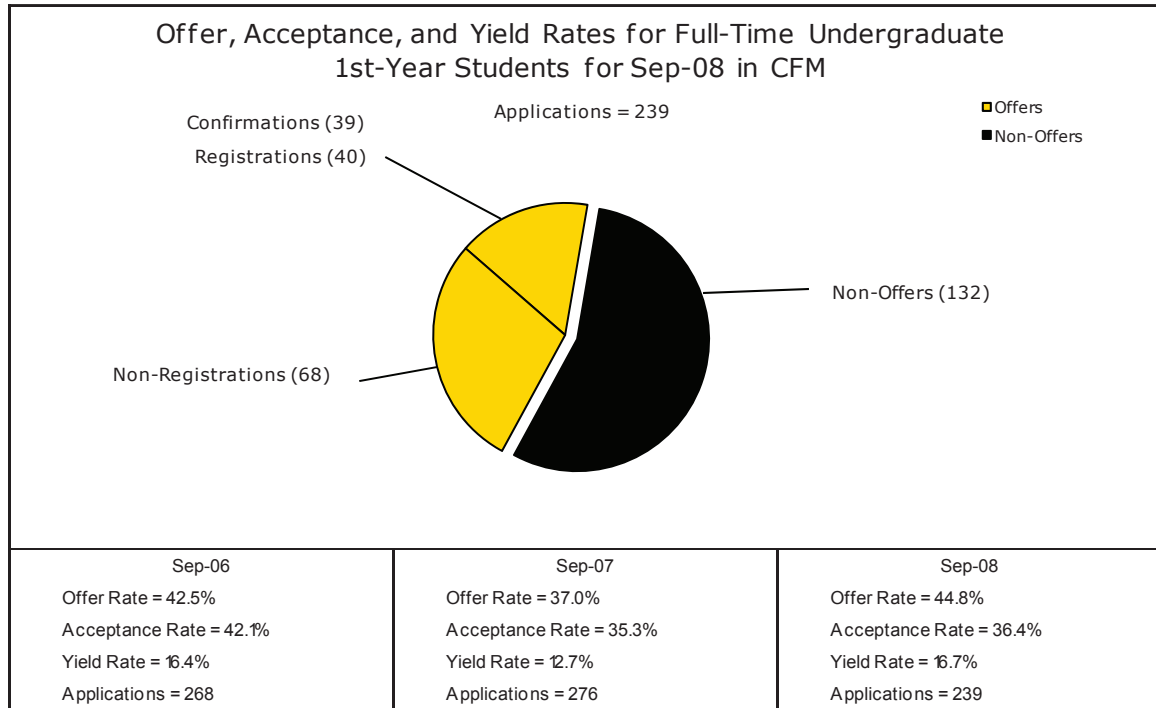


Figure 1.4.H¹⁵



¹⁵ Computing and Financial Management program started in 2006.

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 1st-Year Registrants as Reported by City of School Last Attended Sep-08

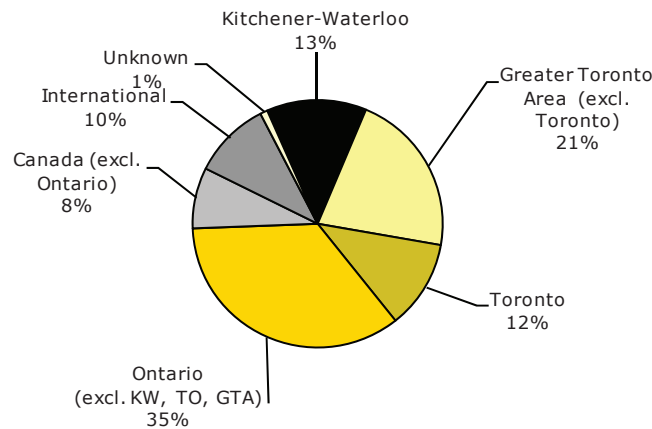
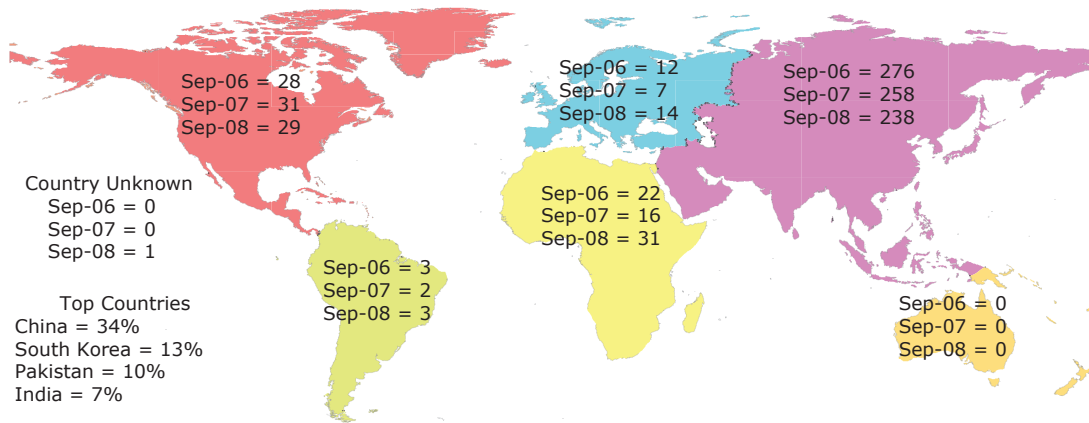


Figure 1.5.B¹⁷

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



¹⁶ Visa students are placed into the "international" category first, then for the remaining students, the country, and city of last school attended is examined.

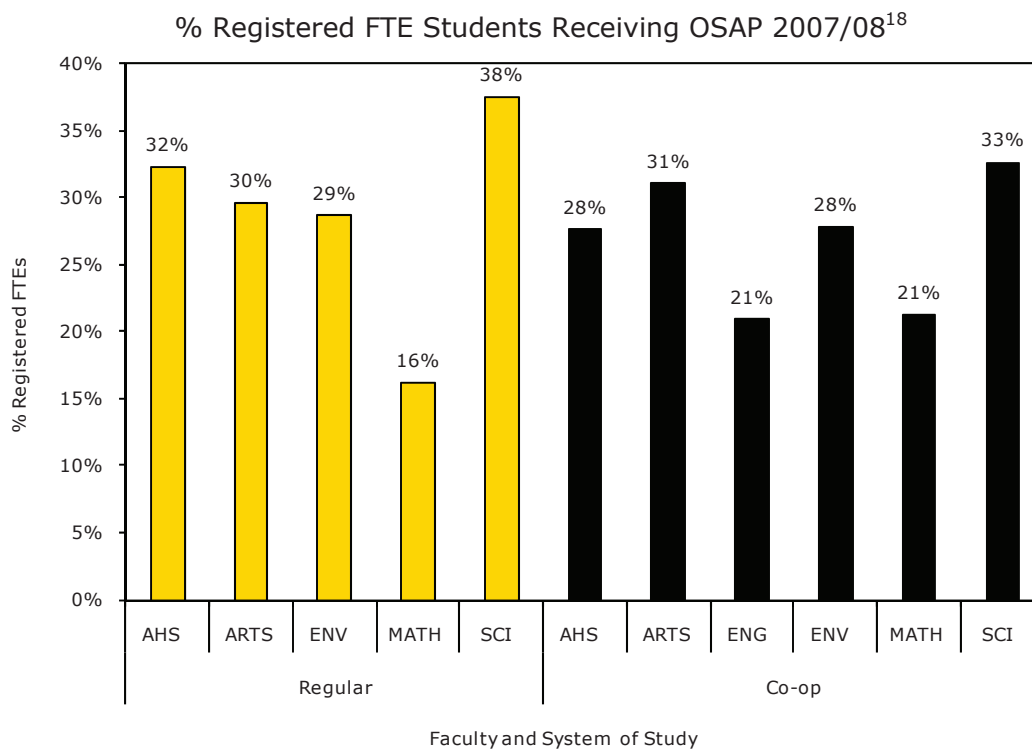
¹⁷ Permanent Residents are not included because UW's definition of international involvement focuses more on students who have recently come from another country than those students who have been in Canada for a number of years and have become Permanent Residents. Continental North America excludes Canada. Source: 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 ensures 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



Participation rates from co-op students increased in all areas in 2007/08 compared to 2005/06.

¹⁸ 2007/08 includes Fall 2007, Winter 2008, and Spring 2008

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.

Figure 1.6.B

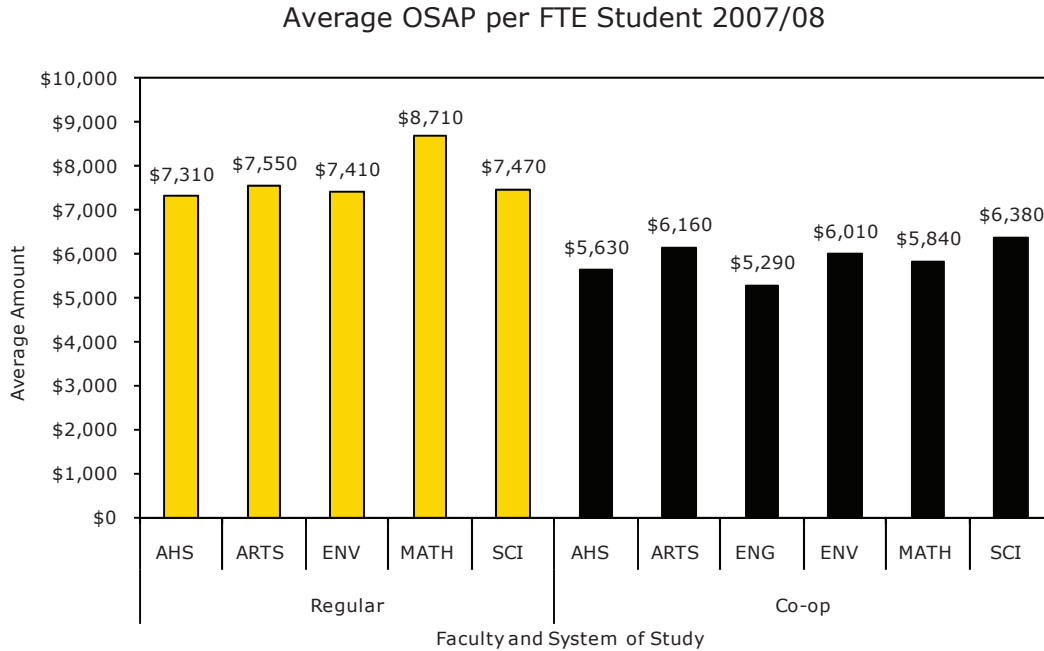


Figure 1.6.C¹⁹

Financial Support to Undergraduate Regular FTE Students 2007/08								
Faculty	OSAP	Grants	Scholarships	Bursaries	Other (Non-UW)	Total Support	Average Support	% Supported
AHS	\$2,033,097	\$384,049	\$69,450	\$262,100	\$100,921	\$2,849,617	\$8,822	38%
ARTS	\$1,125,835	\$1,947,515	\$618,607	\$1,421,550	\$563,397	\$5,801,904	\$9,081	35%
ENV	\$1,247,122	\$259,313	\$72,444	\$145,400	\$91,439	\$1,815,718	\$9,226	34%
MATH	\$3,046,741	\$567,806	\$711,625	\$573,850	\$192,385	\$5,092,407	\$9,664	24%
SCI	\$7,733,485	\$1,639,444	\$524,350	\$889,200	\$494,067	\$11,280,547	\$9,334	44%

Figure 1.6.D

Financial Support to Undergraduate Co-op FTE Students 2007/08								
Faculty	OSAP	Grants	Scholarships	Bursaries	Other (Non-UW)	Total Support	Average Support	% Supported
AHS	\$1,027,955	\$222,416	\$260,050	\$240,400	\$230,638	\$1,981,460	\$7,339	41%
ARTS	\$2,622,532	\$578,606	\$799,104	\$822,230	\$637,701	\$5,460,172	\$8,490	47%
ENG	\$4,783,588	\$1,108,933	\$3,345,660	\$2,280,323	\$1,544,157	\$13,062,661	\$7,675	39%
ENV	\$1,135,954	\$217,677	\$256,093	\$227,700	\$186,528	\$2,023,952	\$7,333	41%
MATH	\$3,500,757	\$781,341	\$2,128,364	\$1,099,783	\$1,208,710	\$8,718,954	\$7,677	40%
SCI	\$2,215,365	\$412,324	\$492,150	\$650,550	\$373,176	\$4,143,565	\$8,369	47%

¹⁹ New this year, we include government grants such as the Canadian access grants, Ontario access grants, and Canadian study grants. Inclusion will impact the average support for 07/08.

1.7. Student Engagement

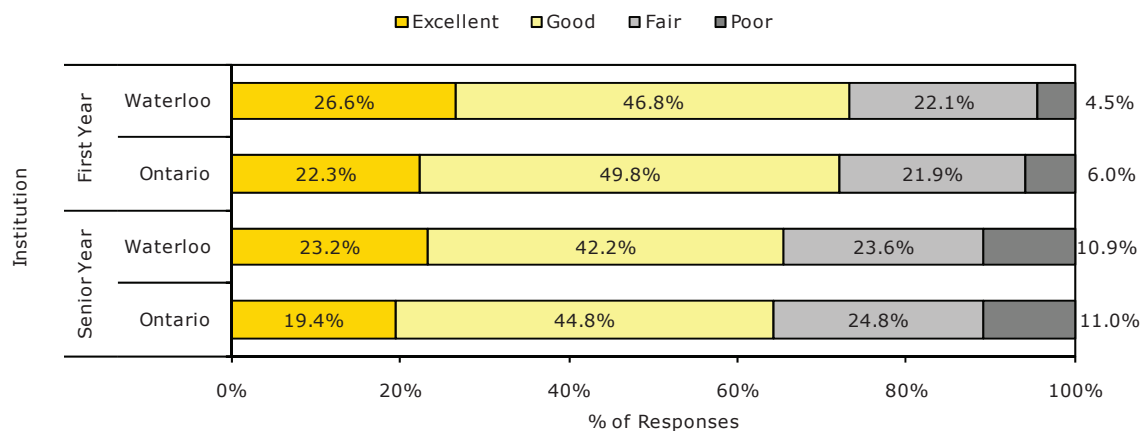
The National Survey of Student Engagement (NSSE) was launched in 1999 by the Indiana University Centre for Postsecondary Research with a mandate to investigate the relationship between student behaviour and educational success. Through hundreds of thousands of survey responses collected since 1999, at 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 2006, the University of Waterloo had an overall participation rate of 49.5 per cent, collecting responses from 4,448 students. In the 2008 survey University of Waterloo had an overall participation rate of 41 per cent, with 4,170 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 UW 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.A²⁰

2008 NSSE: Overall, how would you evaluate the quality of academic advising you have received at your institution?

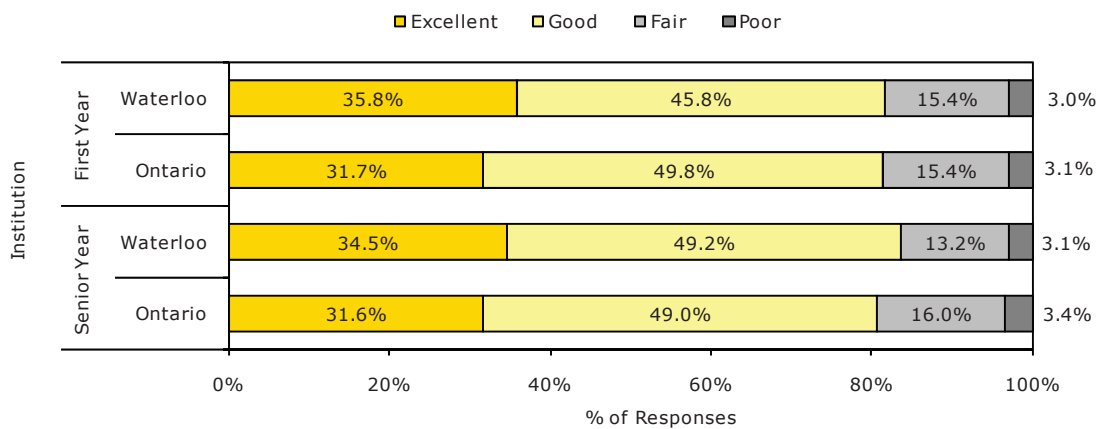


²⁰ Source: The National Survey of Student Engagement.

When asked to evaluate their entire educational experience at UW as shown in Figure 1.7.B, UW 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 35.8 per cent of first-year students and 34.5 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.

Figure 1.7.B²¹

2008 NSSE: How would you evaluate your entire educational experience at this institution?

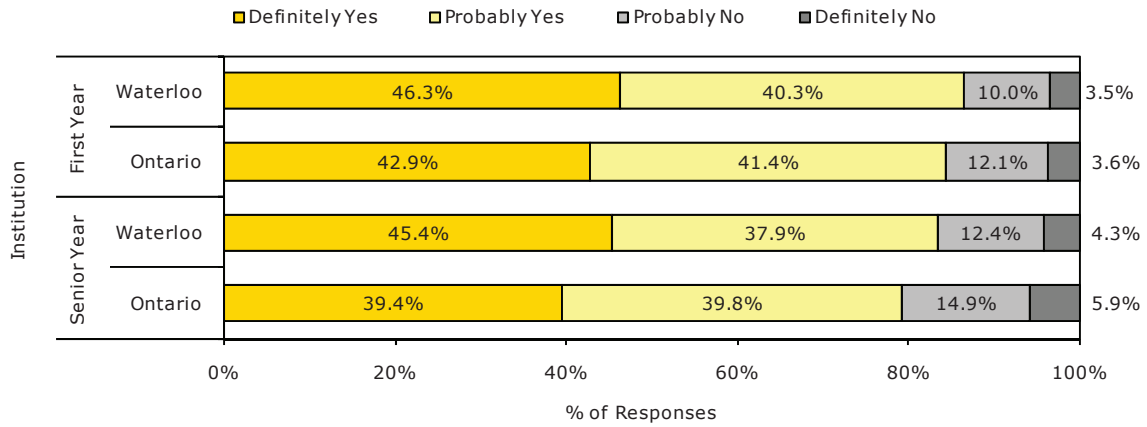


The choice of which institution to attend for their post-secondary education is one of the most important decisions many of our students have ever had to make. Numerous factors weigh heavily when making that decision and Figure 1.7.C shows their response when asked if given the opportunity to start over again whether they would choose the same institution. Overall 86.6 per cent of our first-year students and 83.3 per cent of our graduating-year students responded that they would “Definitely” or “Probably” choose UW again, as compared to 84.3 per cent of first-year students and 79.2 per cent of graduating-year students across Ontario. While it is encouraging to know that so many of our students express satisfaction with their decision, there are 63 first-year students and 75 graduating students that responded that they would “Definitely Not” choose UW again. A better understanding of the reasons why these students express such dissatisfaction with their choice, and investigation of what can be done to address those concerns is only one of the many ways in which our NSSE results are being used to help us improve as an institution.

²¹ Source: The National Survey of Student Engagement.

Figure 1.7.C²²

2008 NSSE: If you could start over again, would you go to the same institution you are now attending?



²² 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 87.9 per cent of UW’s full-time, first-year students who entered into a first-entry undergraduate program in 2007 continued their studies in 2008. This is compared to an 87.8 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 2007 Full-Time 1st-Year Cohort Continuing in their Studies in 2008

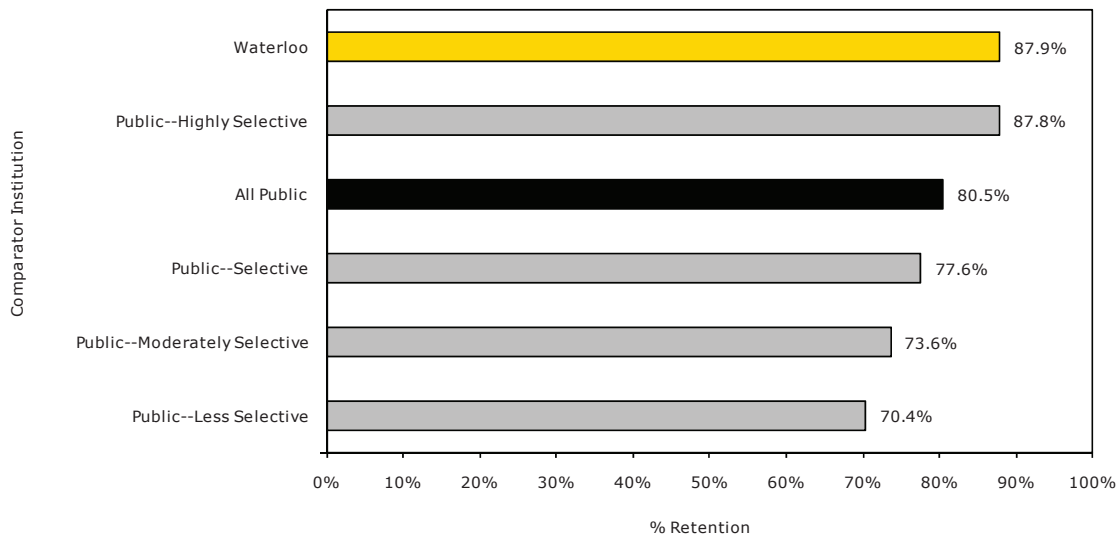


Figure 1.8.B

Six-Year Graduation Rate Waterloo vs Other North American Public Institutions by Selectivity of the 2002 Full-Time 1st-Time 1st-Year Cohort Graduating by 2007

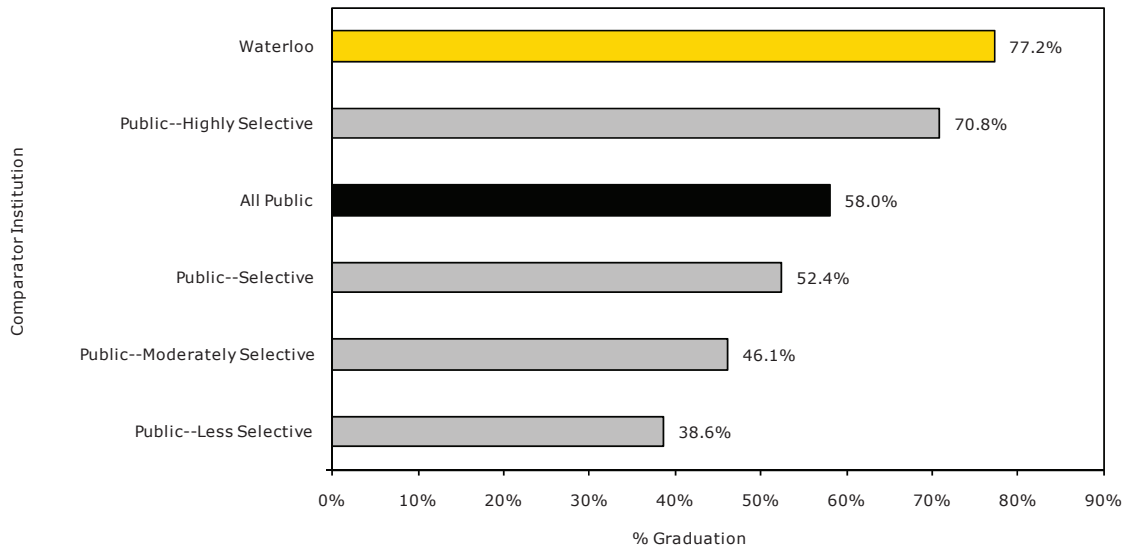
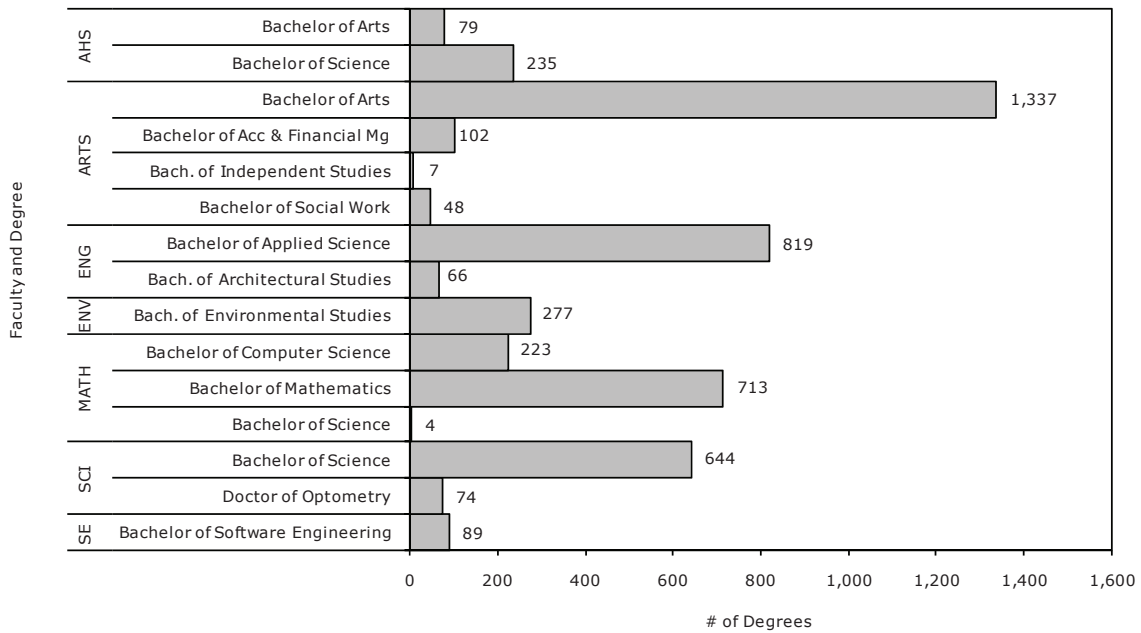


Figure 1.8.C shows the number of undergraduate degrees conferred in 2008 by Faculty and the type of degree granted. In total, 4,717 undergraduate degrees were conferred in 2008.

Figure 1.8.C

Undergraduate Degrees Granted
2008



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 UW 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, in the next series of charts, we begin with the 2000/01 cohort.

Figure 1.8.D

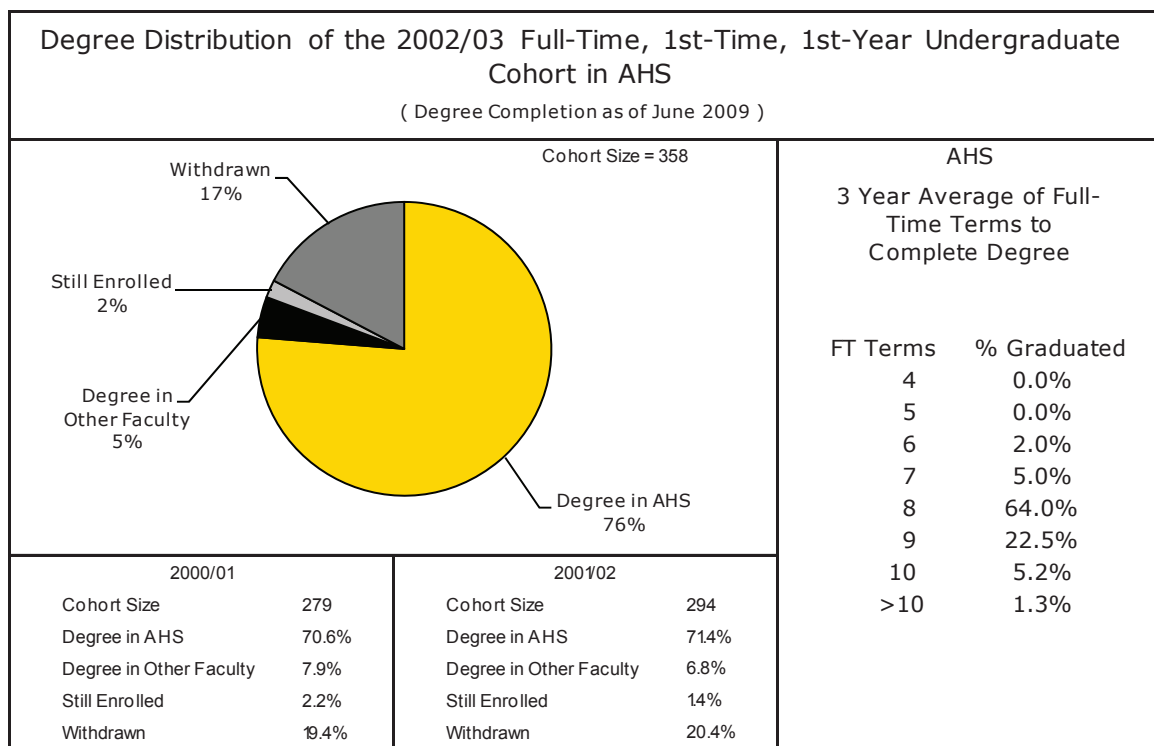


Figure 1.8.E

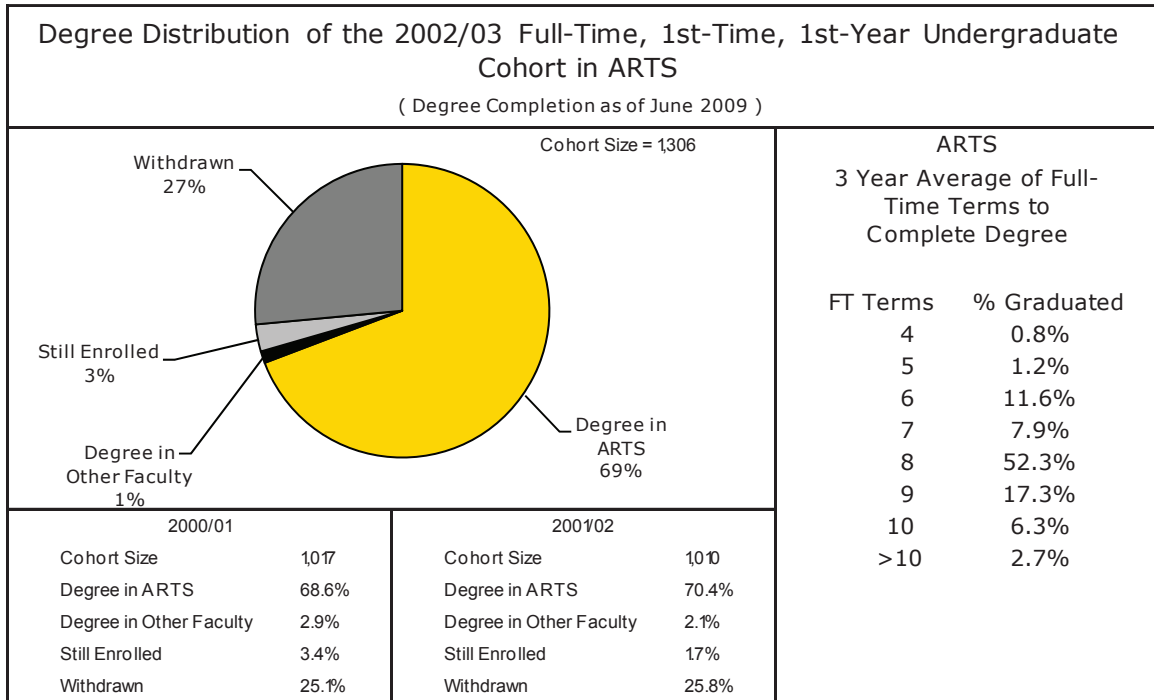


Figure 1.8.F

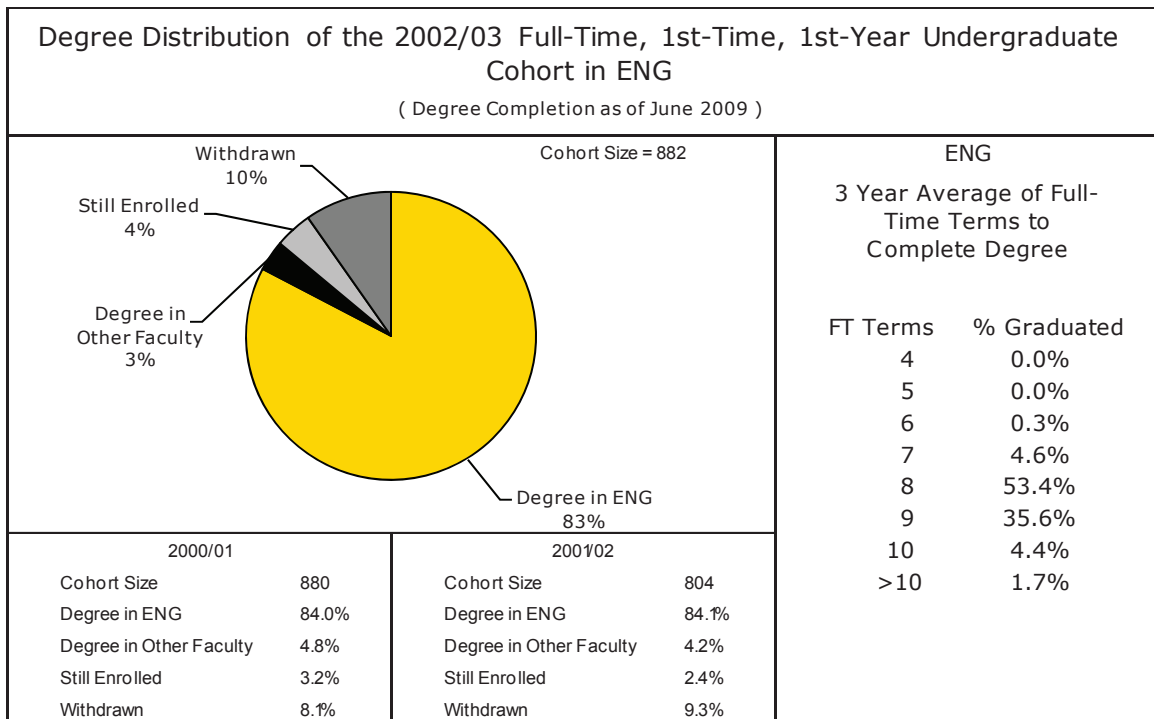


Figure 1.8.G

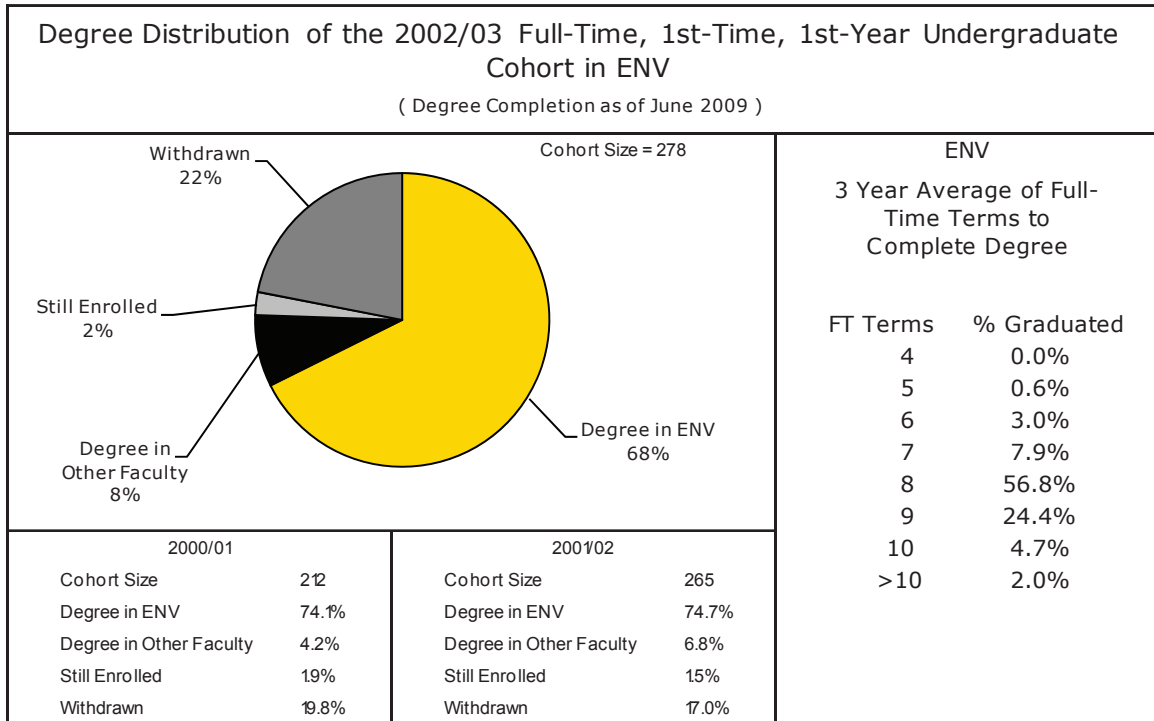


Figure 1.8.H

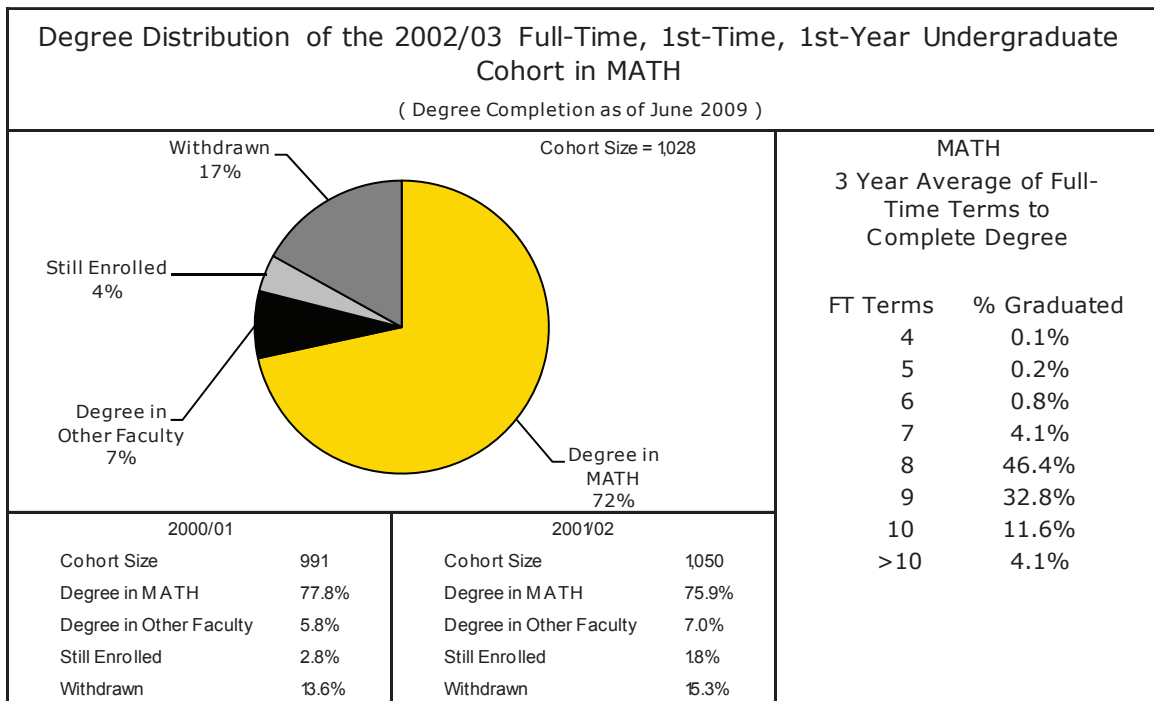


Figure 1.8.I

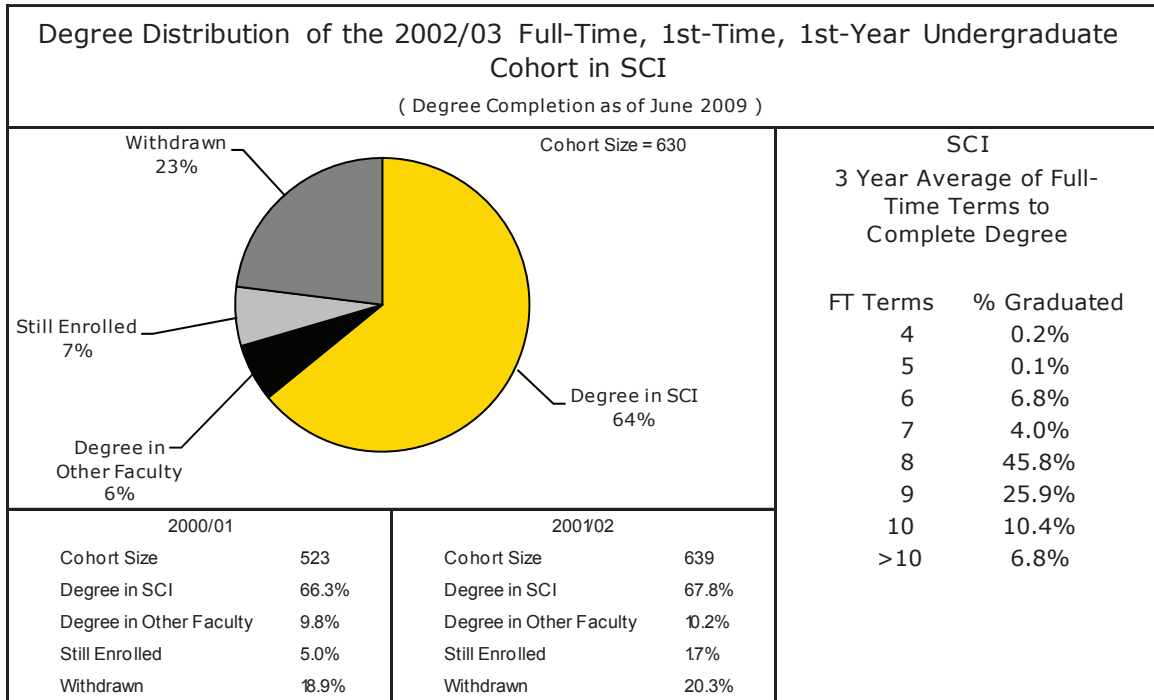
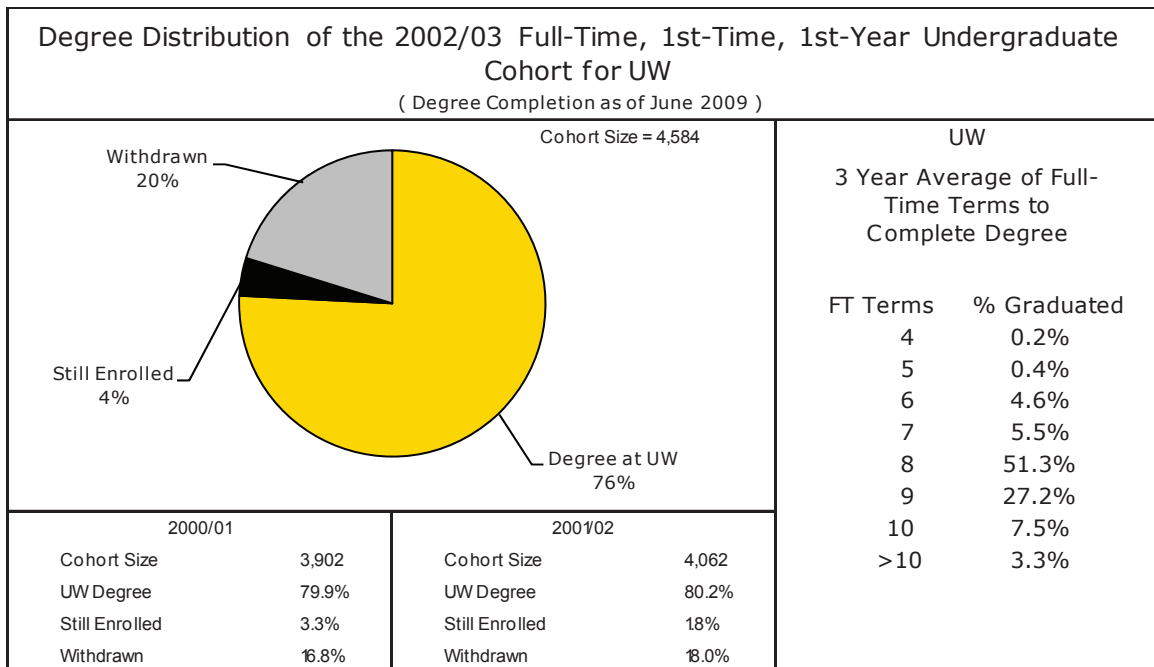


Figure 1.8.J²³



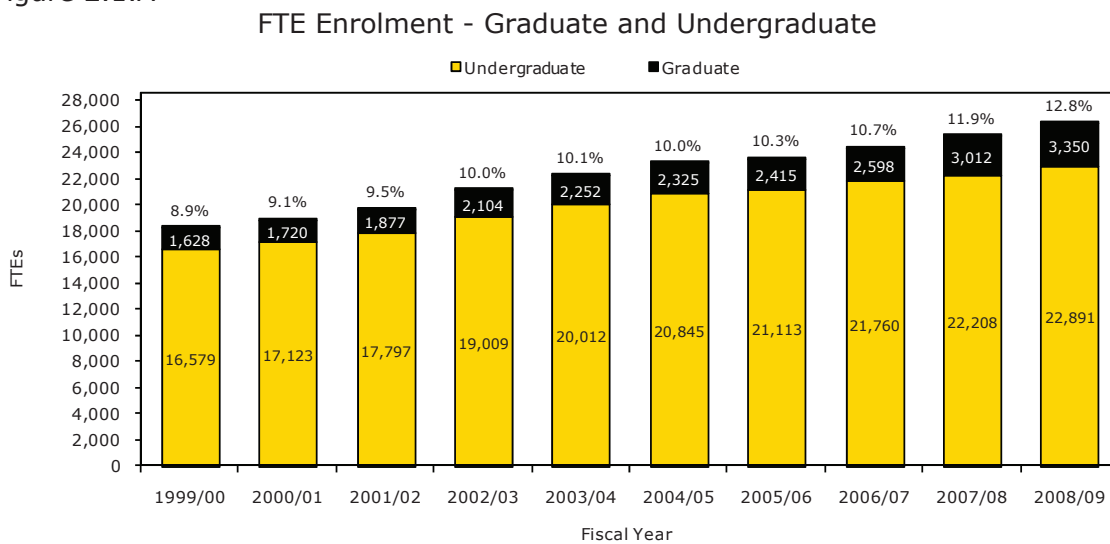
²³ The degree completion rate here differs from that in the CSRDE chart due to a difference in methodology and timing.

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



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

Figure 2.1.B

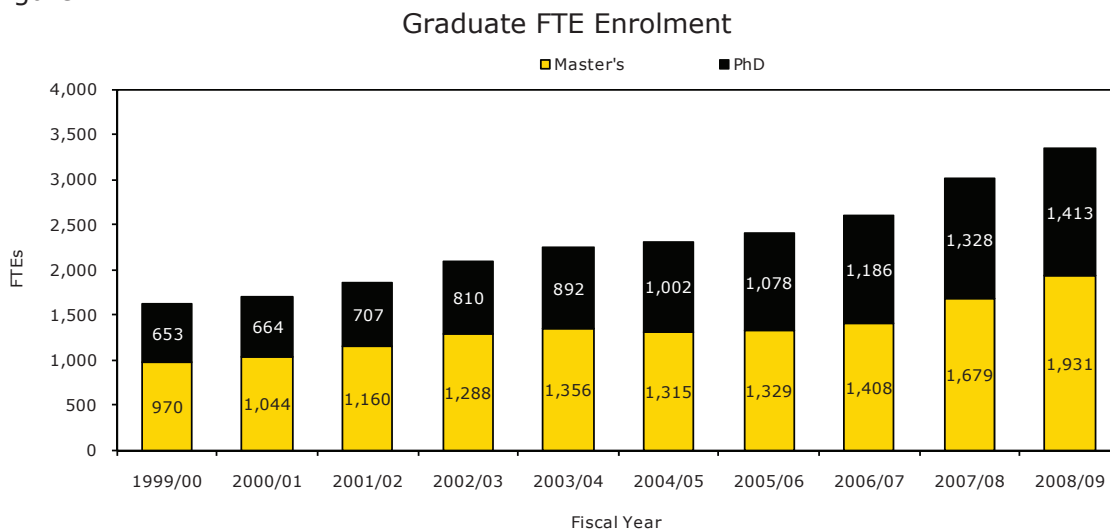


Figure 2.1.C²⁴

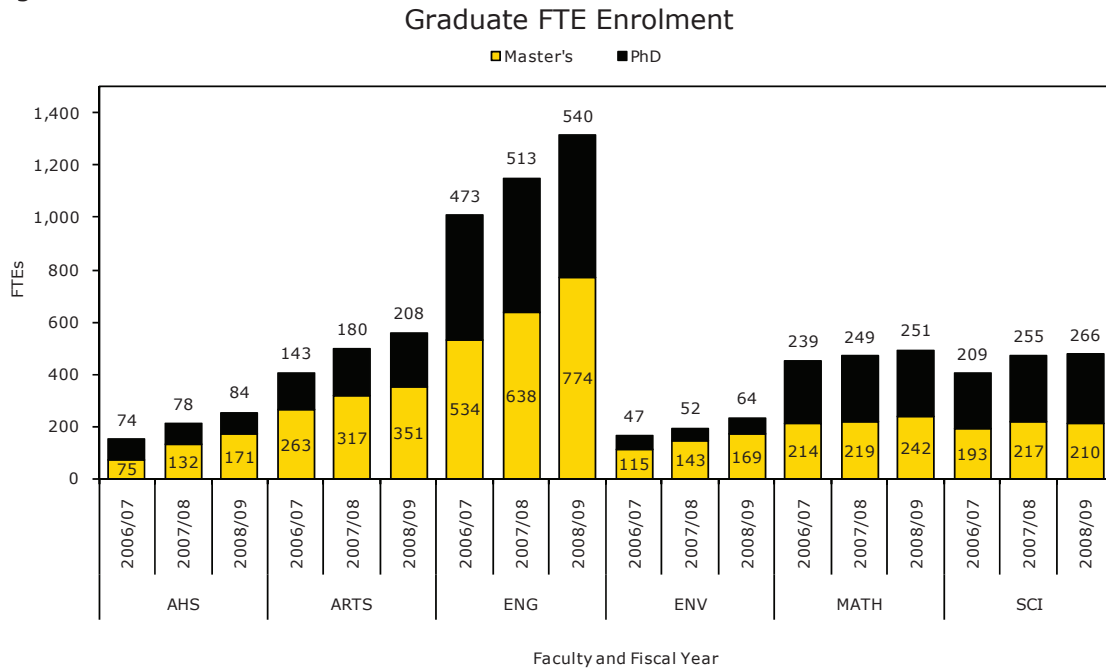
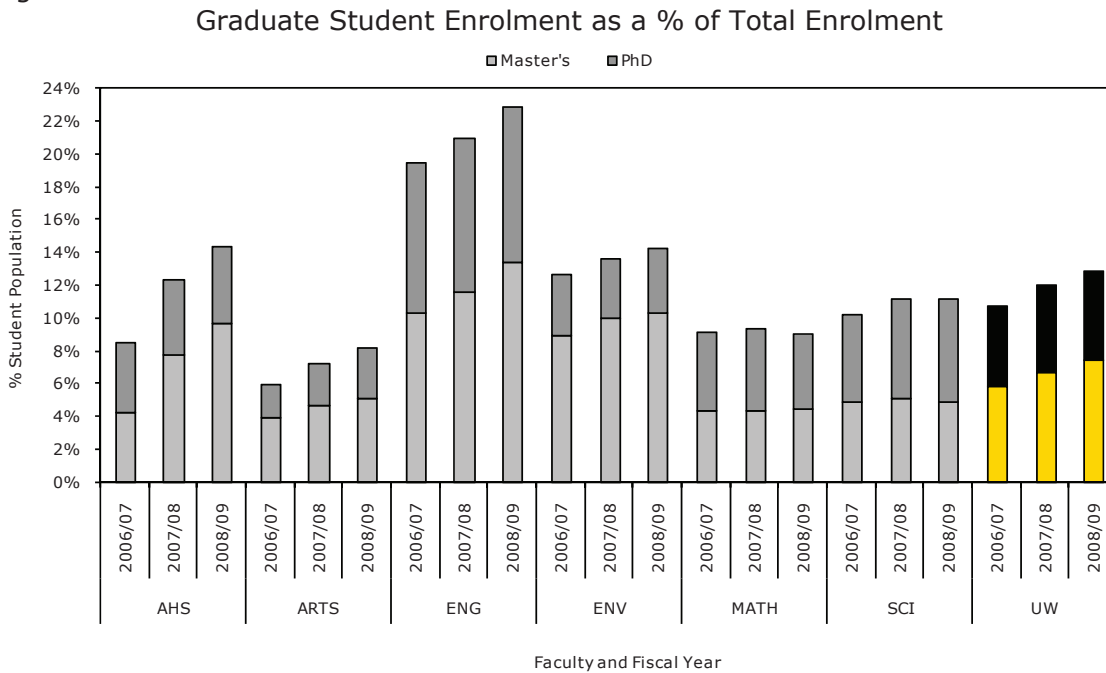


Figure 2.1.D

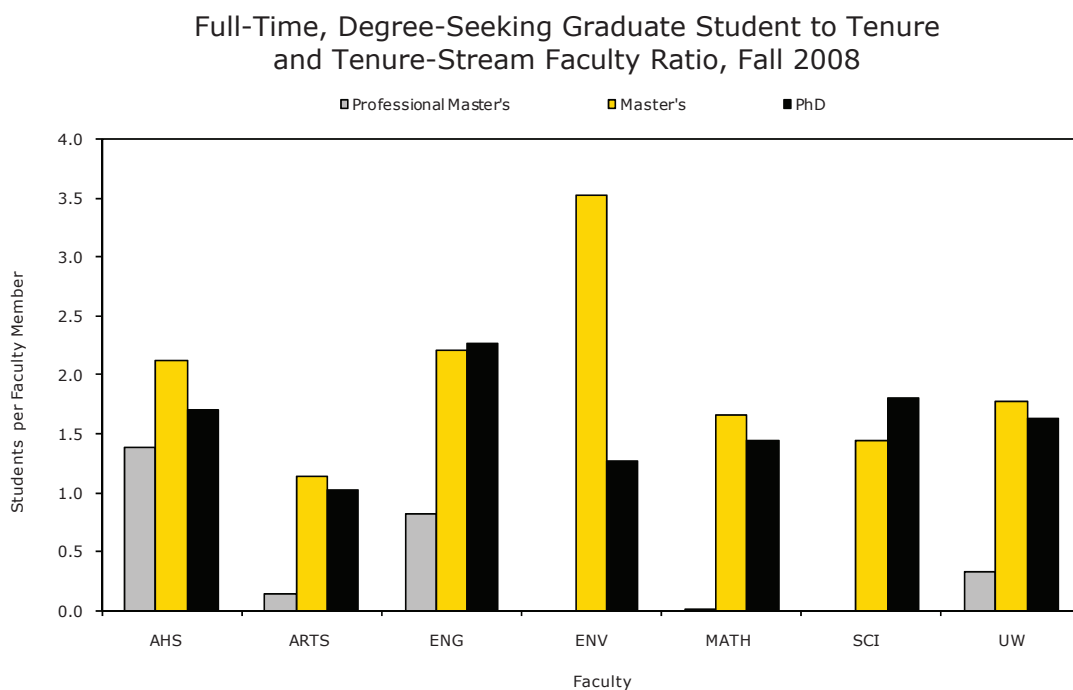


²⁴ In 2008/09, there were 15.4 FTEs enrolled in Theology that are not represented in the graph.

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.A²⁵



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 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.

²⁵ Professional master's programs at UW are defined by the Graduate Studies Office and include Accounting, Architecture, Business, Entrepreneurship & Technology, Master of Engineering programs, 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. The downward trend, seen in Figure 2.3.A and Figure 2.3.B, may be a result of several factors. Over the past three years there has been an increase in both master's and doctoral level enrolment. Faculties with the most significant enrolment increases show the most significant downward trend in percentage of domestic students holding external awards as only a limited number of awards are available from Canada-wide sources to domestic students attending Canadian universities. Other factors include growth in new professional programs and increases to established professional programs, many of which are part-time or are not eligible/funded by provincial or federal award programs. However, it is important to note that the total number of domestic awards held at UW did increase.

Figure 2.3.A

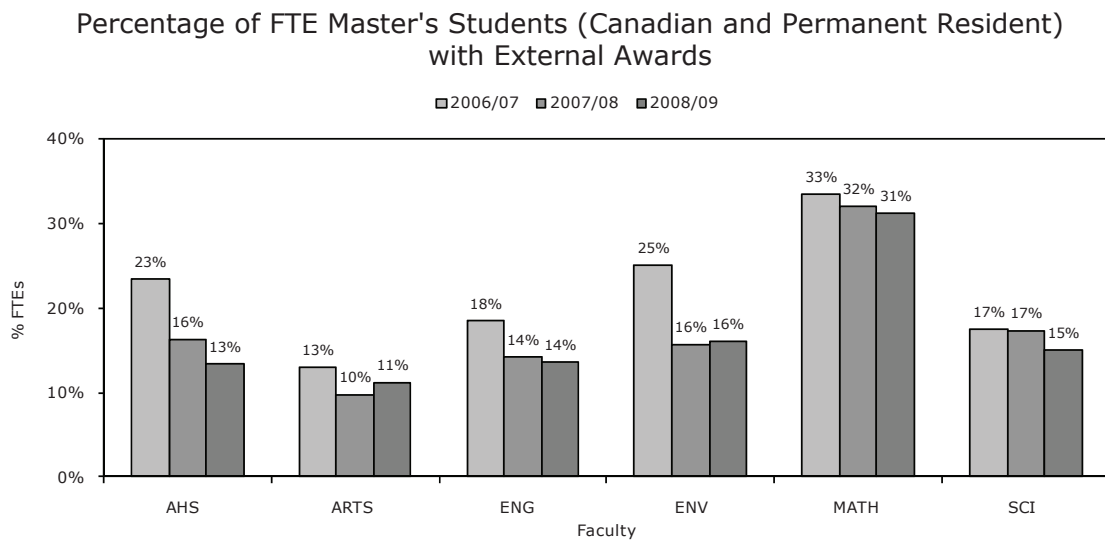


Figure 2.3.B

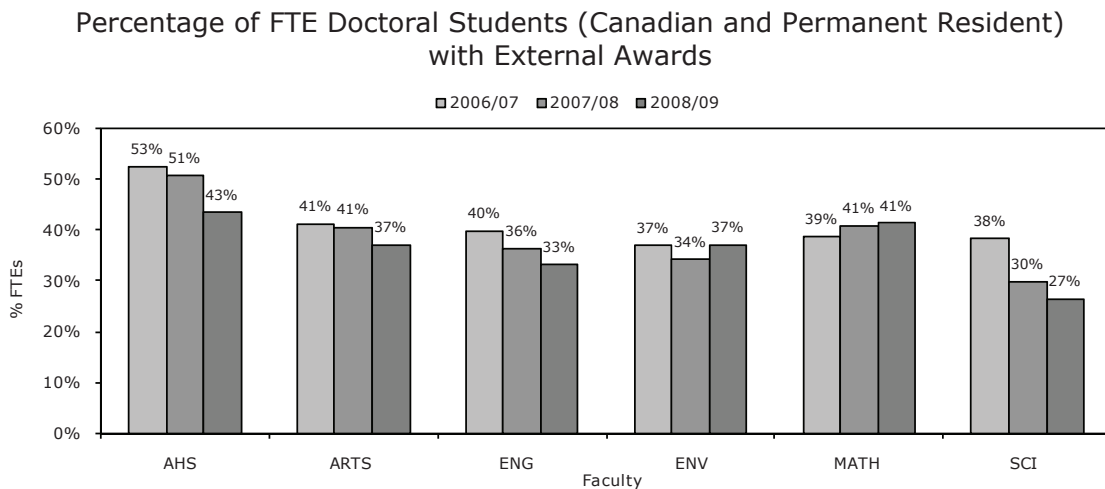
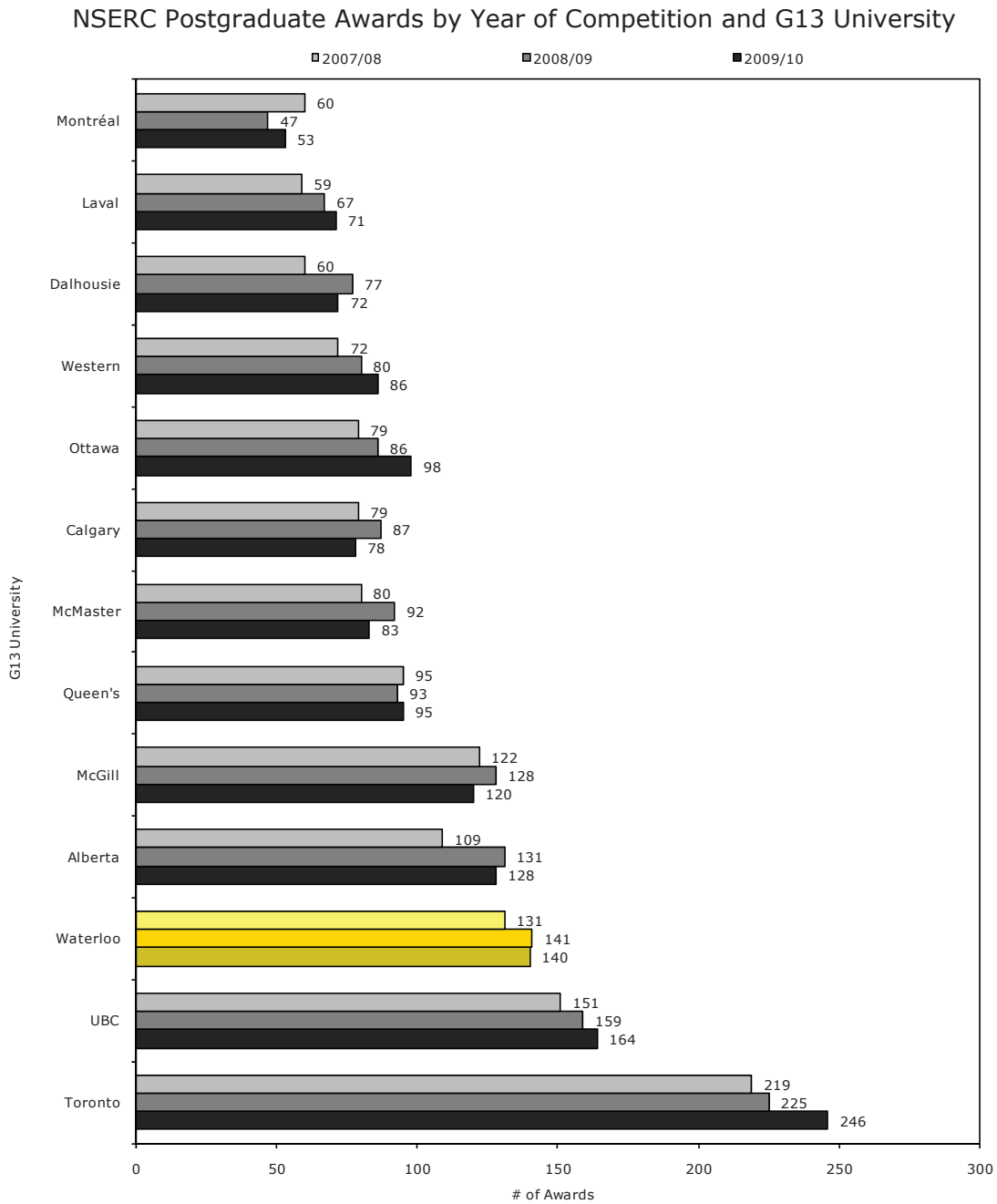


Figure 2.3.C, below, shows Natural Sciences and Engineering Research Council (NSERC) postgraduate awards to UW students, including those who may have attended graduate studies at other institutions, and similar data for those institutions in the G13.

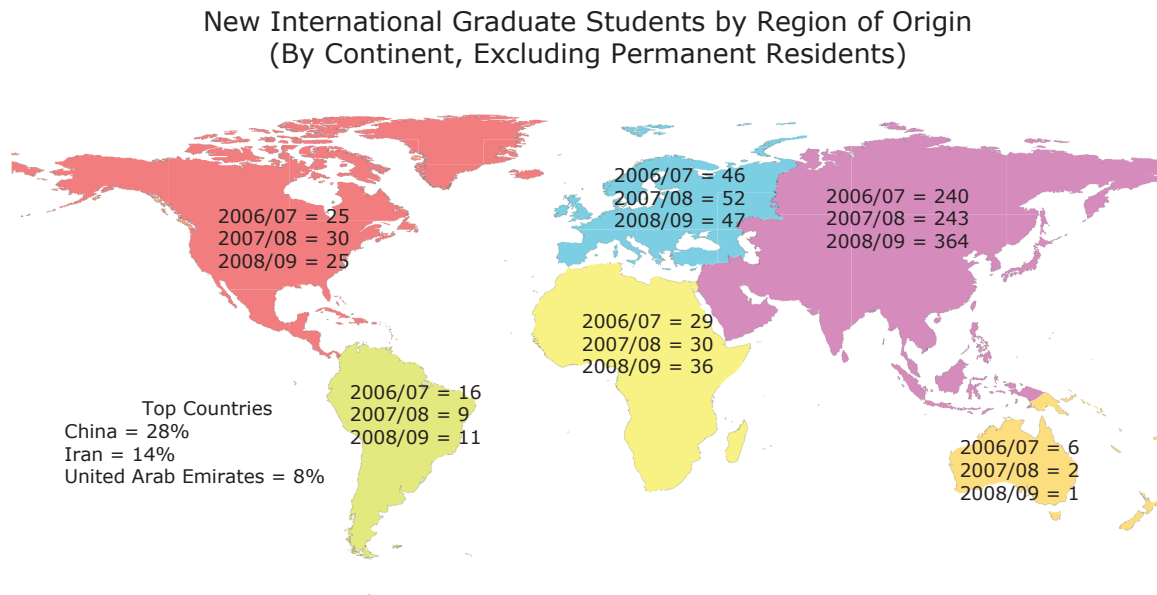
Figure 2.3.C



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.A²⁶



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.

²⁶ Permanent Residents are not included in this chart because UW'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: USIS Country of Citizenship, Visa Students only, fall terms only.

Figure 2.5.A

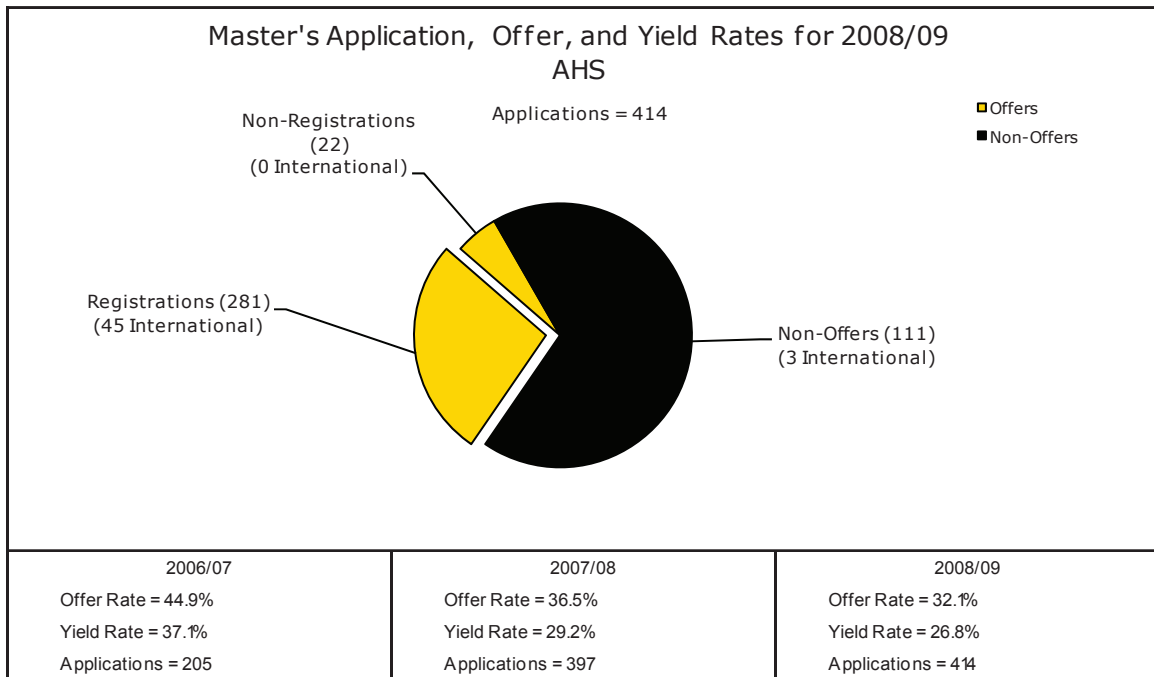


Figure 2.5.B

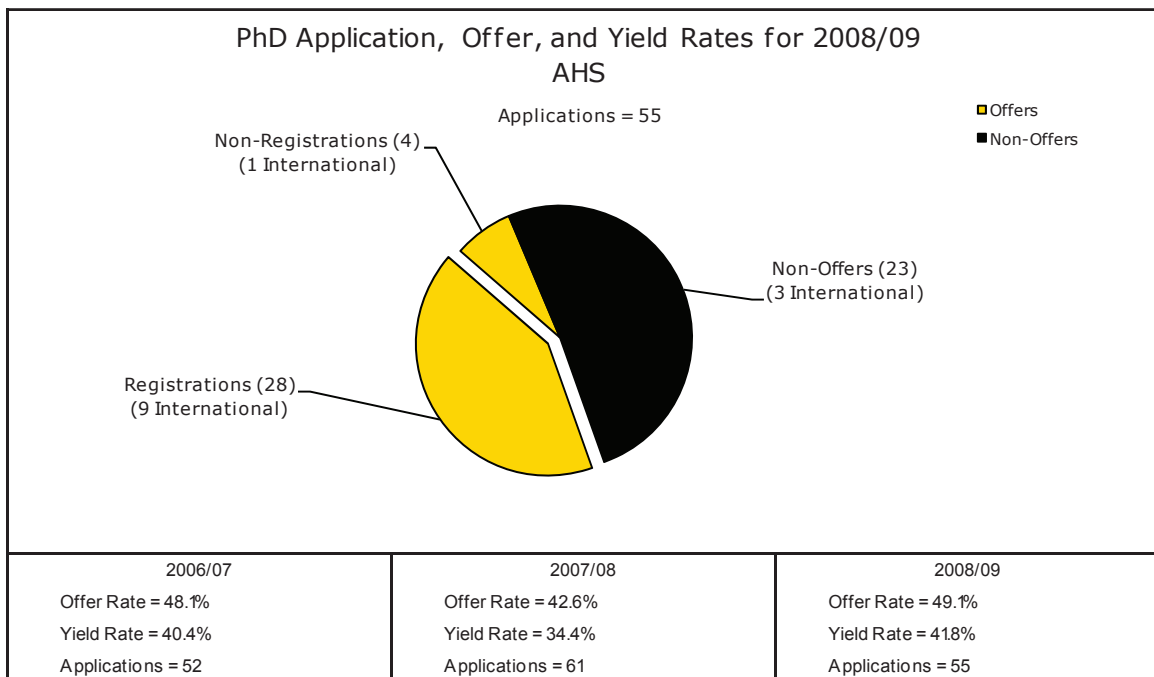


Figure 2.5.C

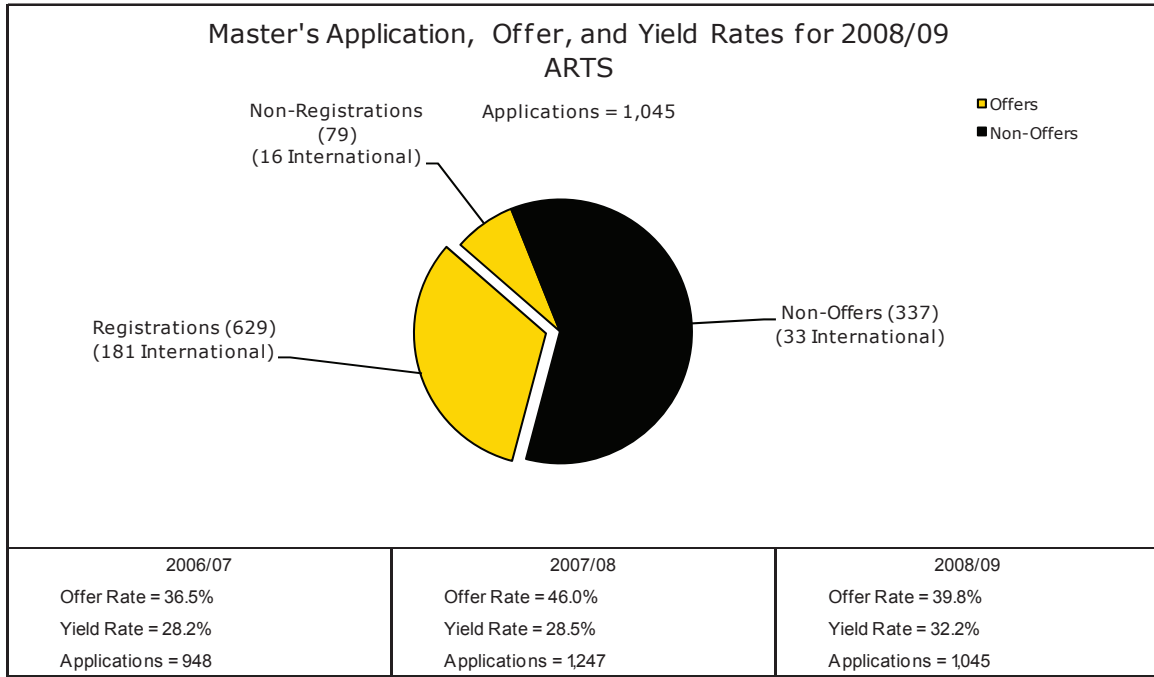


Figure 2.5.D

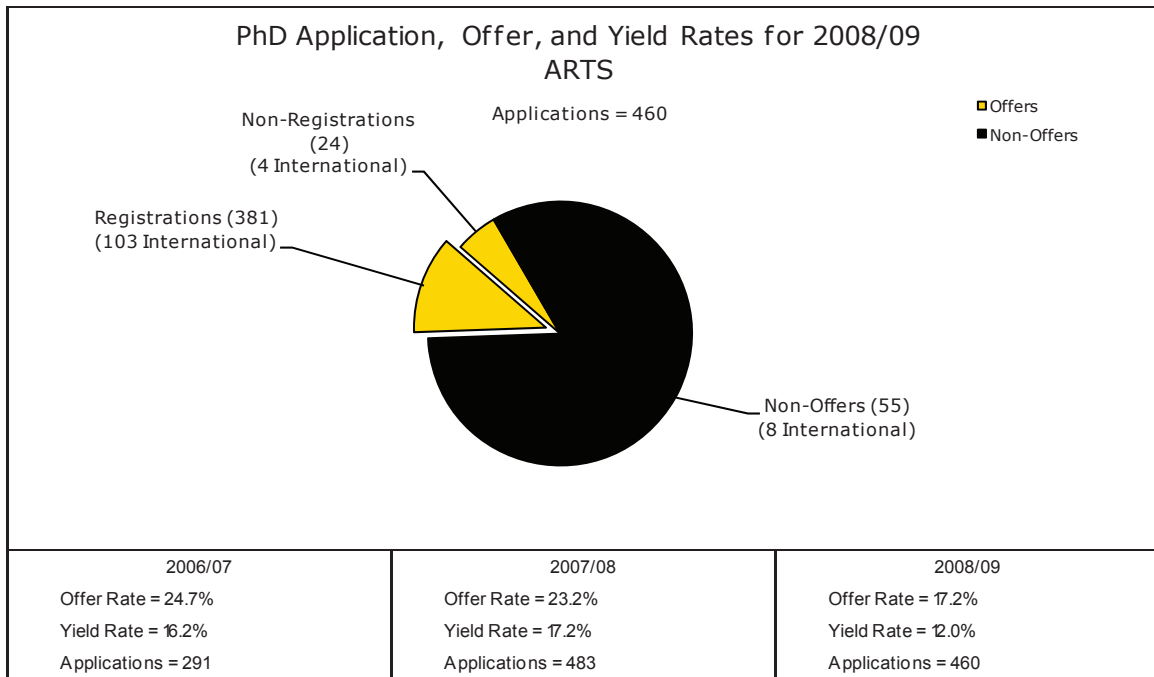


Figure 2.5.E

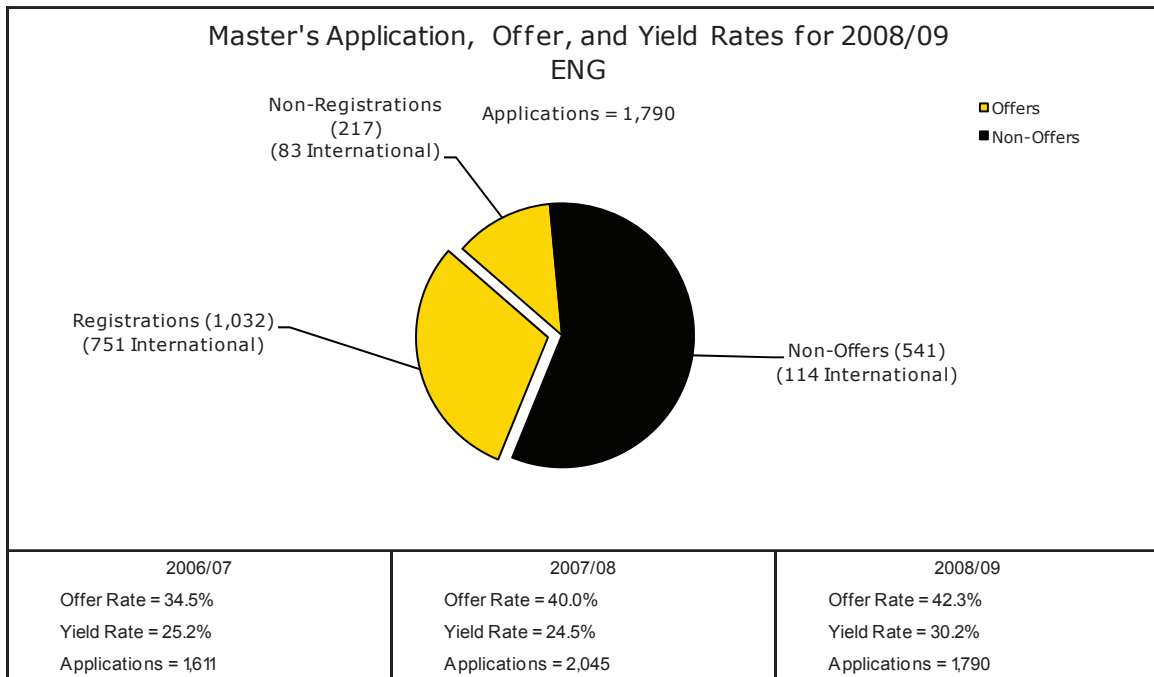


Figure 2.5.F

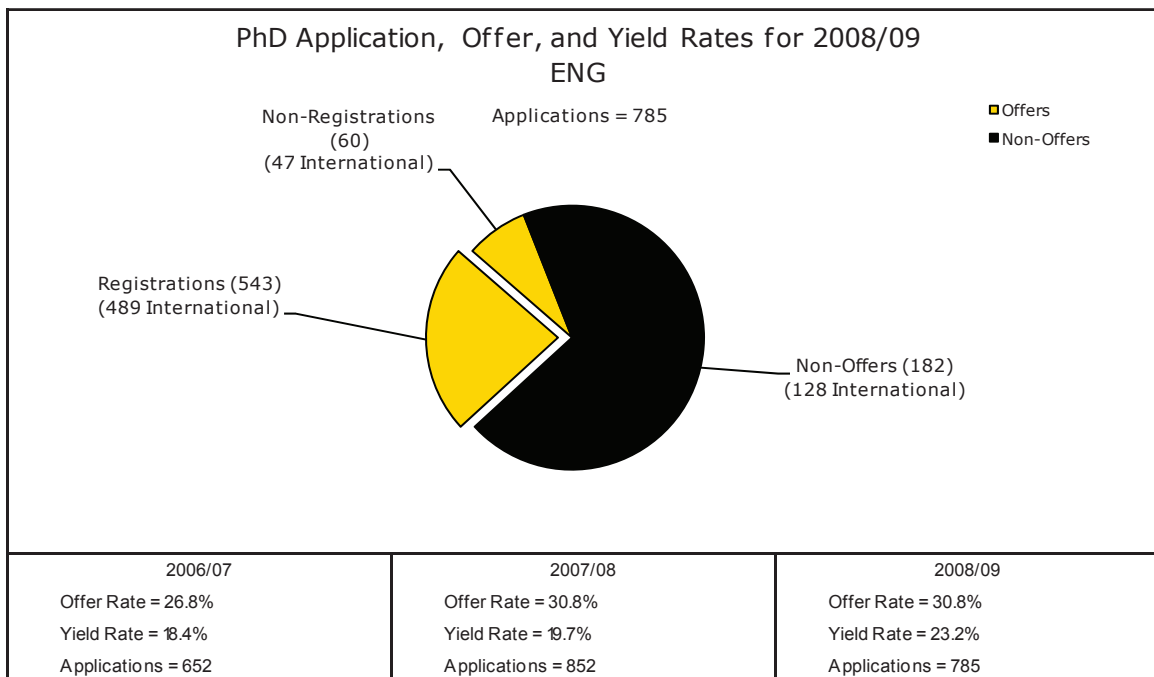


Figure 2.5.G

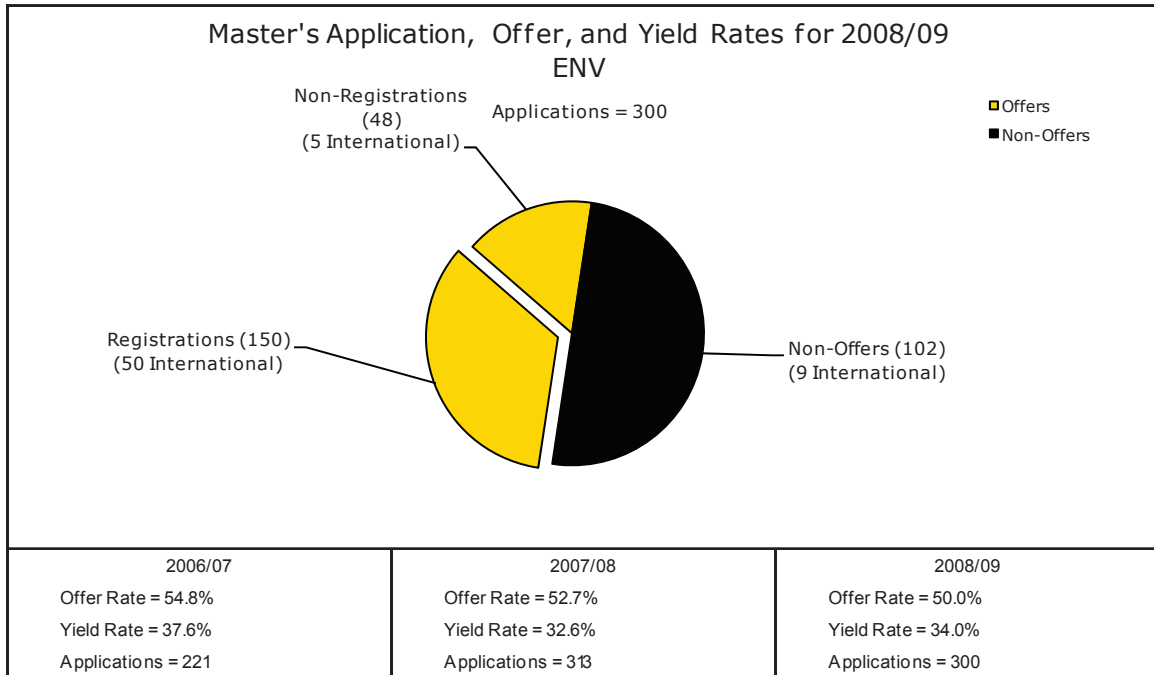


Figure 2.5.H

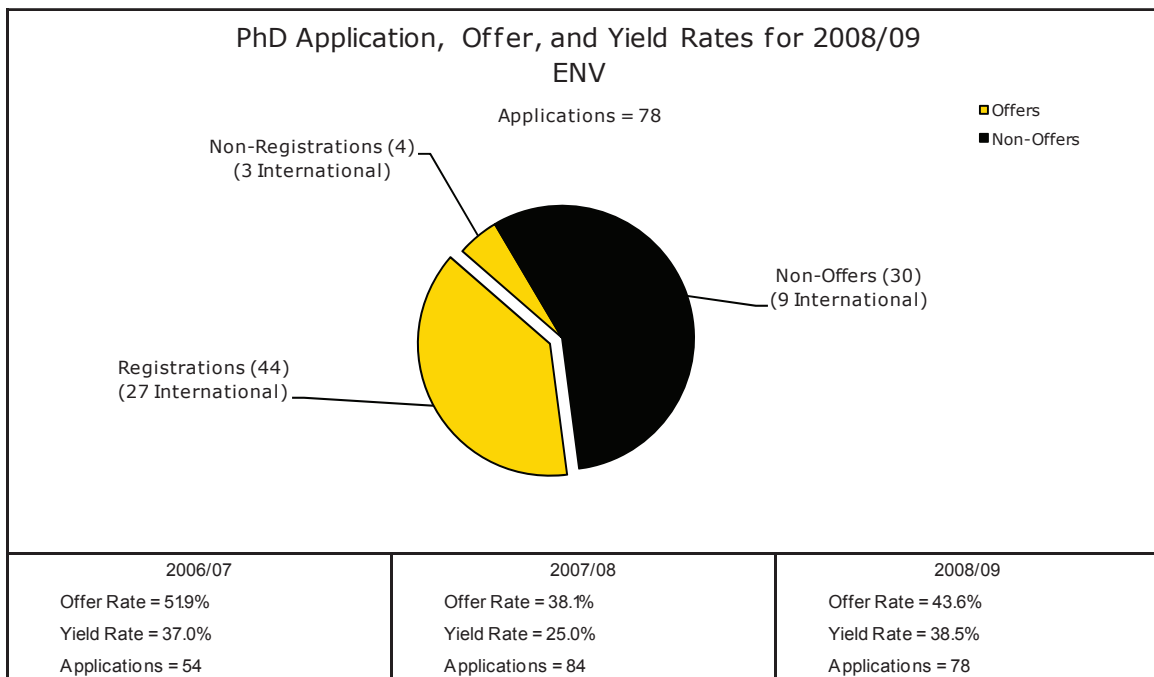


Figure 2.5.I

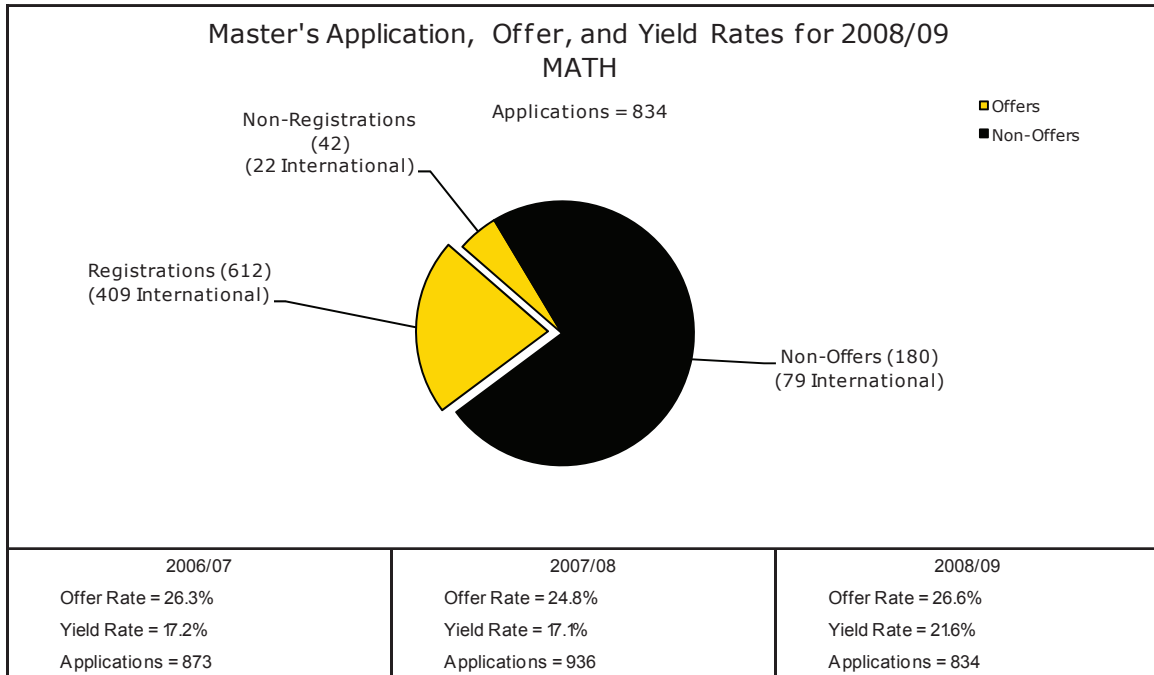


Figure 2.5.J

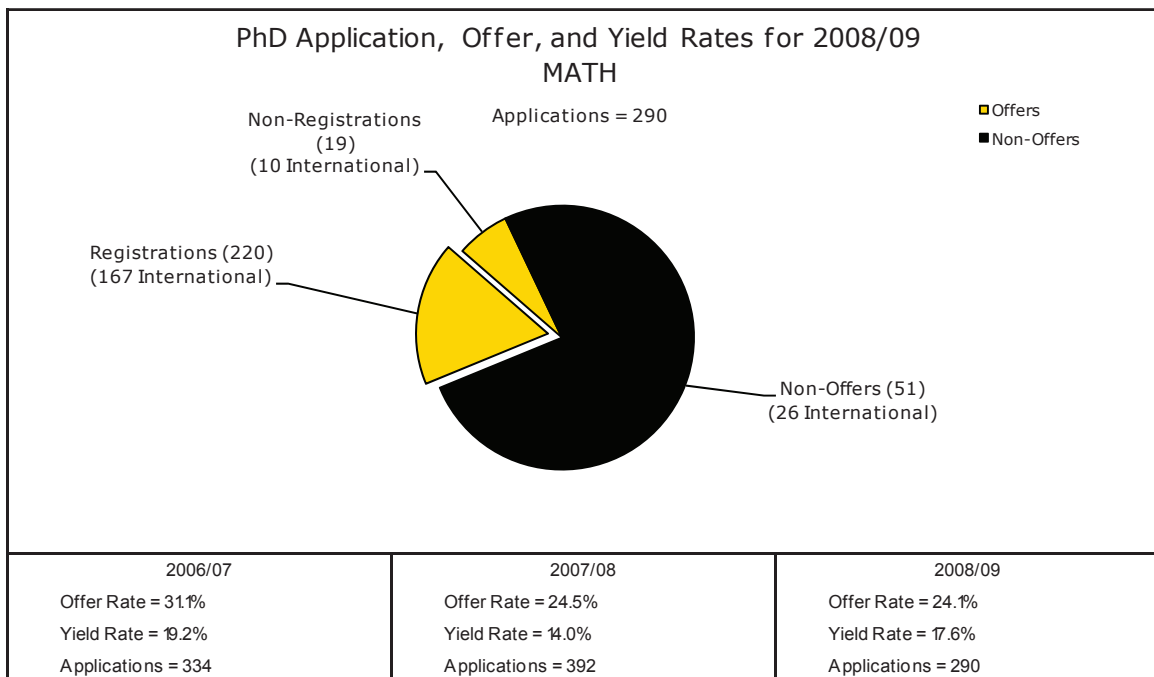


Figure 2.5.K

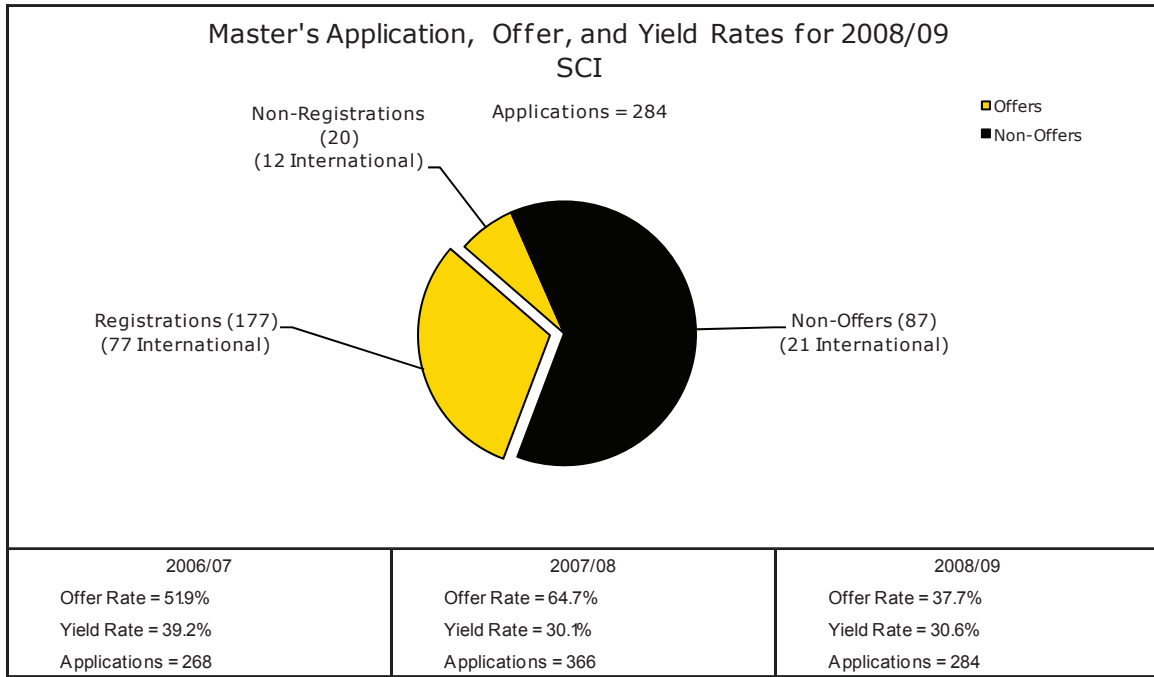
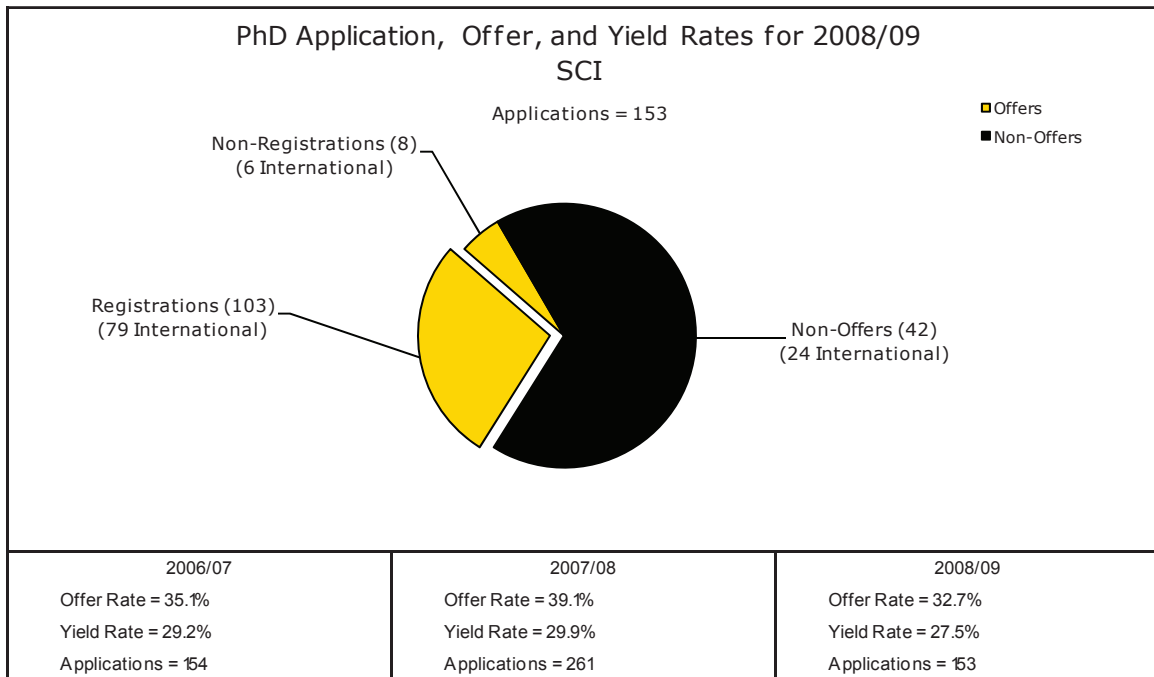


Figure 2.5.L



2.6. Student Support

Graduate student support is provided in a number of ways, including scholarships (\$35 million), remuneration for work as teaching assistants (\$11 million) and as research assistants (\$16 million) and graduate research studentships (\$7 million). Graduate students are the third-largest pay group at UW, 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), 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.B²⁷ 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 2008/09 UW graduate students received in excess of \$74 million, up from \$70 million in 2007/08.

Figure 2.6.A

Financial Support to Master's Students 2008/09 (thousands)							
	AHS	ARTS	ENG	ENV	MATH	SCI	Total
External Scholarship	\$340	\$604	\$2,200	\$477	\$993	\$545	\$5,159
Internal Scholarship	\$864	\$1,763	\$1,543	\$745	\$2,008	\$875	\$7,798
Teaching Assistantships	\$451	\$1,180	\$1,386	\$766	\$1,440	\$735	\$5,958
Research Assistantships	\$508	\$165	\$3,025	\$448	\$1,170	\$1,659	\$6,975
Research Scholarship	\$102	\$10	\$1,583	\$39	\$344	\$732	\$2,810
Other	\$144	\$298	\$834	\$229	\$263	\$432	\$2,200
Total	\$2,409	\$4,021	\$10,571	\$2,704	\$6,218	\$4,978	\$30,900
Average Support	\$17	\$19	\$22	\$21	\$27	\$24	\$22
% Supported	82%	60%	62%	77%	95%	97%	73%

Figure 2.6.B

Financial Support to Doctoral Students 2008/09 (thousands)							
	AHS	ARTS	ENG	ENV	MATH	SCI	Total
External Scholarship	\$812	\$1,763	\$4,922	\$536	\$1,675	\$1,443	\$11,150
Internal Scholarship	\$528	\$2,231	\$3,153	\$431	\$2,601	\$1,637	\$10,581
Teaching Assistantships	\$218	\$1,252	\$1,550	\$203	\$1,136	\$800	\$5,159
Research Assistantships	\$325	\$442	\$4,233	\$150	\$1,892	\$2,231	\$9,272
Research Scholarship	\$132	\$78	\$2,393	\$26	\$606	\$990	\$4,226
Other	\$262	\$485	\$1,164	\$130	\$571	\$558	\$3,170
Total	\$2,278	\$6,251	\$17,415	\$1,475	\$8,481	\$7,660	\$43,559
Average Support	\$29	\$32	\$33	\$28	\$34	\$29	\$32
% Supported	92%	94%	98%	81%	99%	98%	96%

²⁷ Total may not add up due to rounding (to the nearest \$1,000).

2.7. Graduate Student Satisfaction

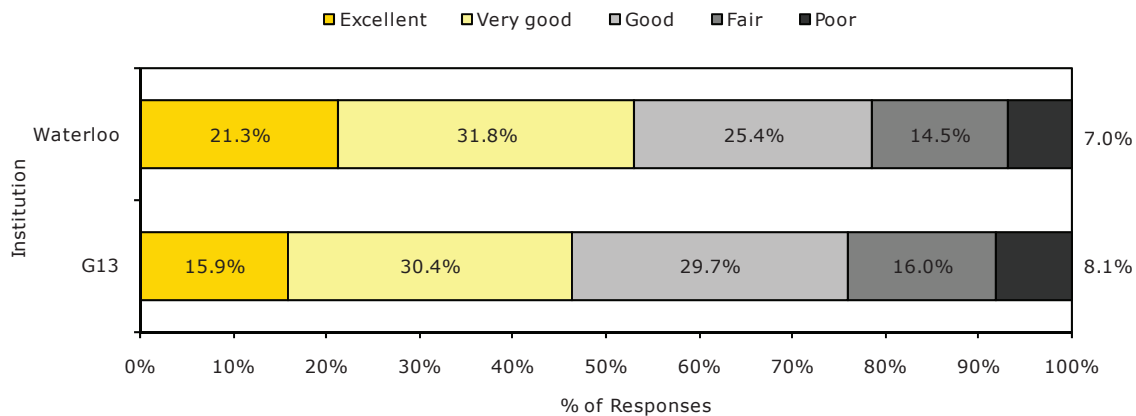
Like the National Survey of Student Engagement (NSSE) for undergraduates, the Graduate and Professional Student Survey (GPSS) is designed to gather feedback from our graduate students about their educational experience at UW. The GPSS asks students about their satisfaction with their experience at UW, 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 GPSS in 2005 and 2007 with a survey invitation being sent out to every graduate student enrolled at UW. In 2007 a number of peer institutions across Ontario and all G13 Universities from across Canada also participated, allowing us to compare our results with those received by our peer institutions, and to identify areas where UW is excelling as well as issues and concerns for improvement or further investigation. The next survey is planned for 2009. In future years we plan to display data from two consecutive surveys and compare the results. 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 GPSS 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 G13 with 53.1 per cent of our Doctoral students responding with "Excellent" or "Very Good" as compared to 46.3 per cent of Doctoral students across the G13. 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

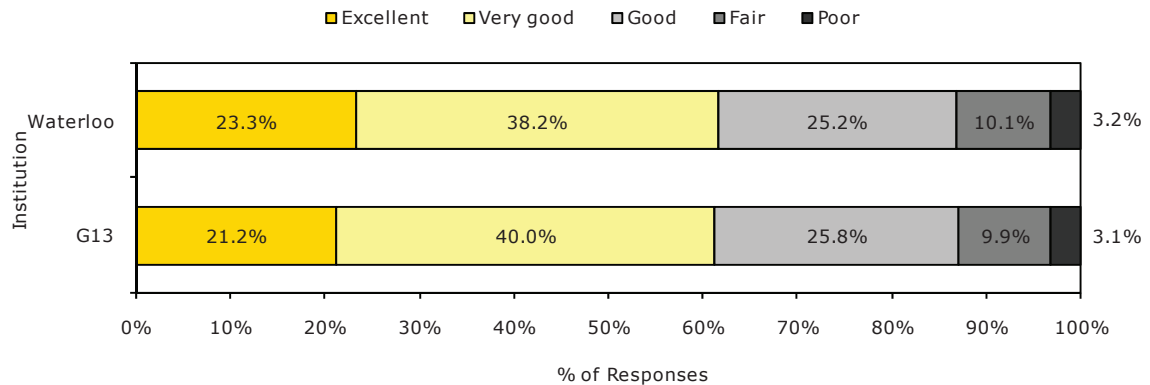
2007 GPSS: Please rate the following dimensions of your program - quality of academic advising and guidance. (Doctoral Students)



When asked to evaluate their overall experience at UW as shown in Figure 2.7.B UW’s results mirror those of the G13 very closely with 23.3 per cent responding with “Excellent”, and 38.2 per cent with “Good”, compared to 21.2 per cent and 40.0 per cent respectively from students at the G13 institutions.

Figure 2.7.B

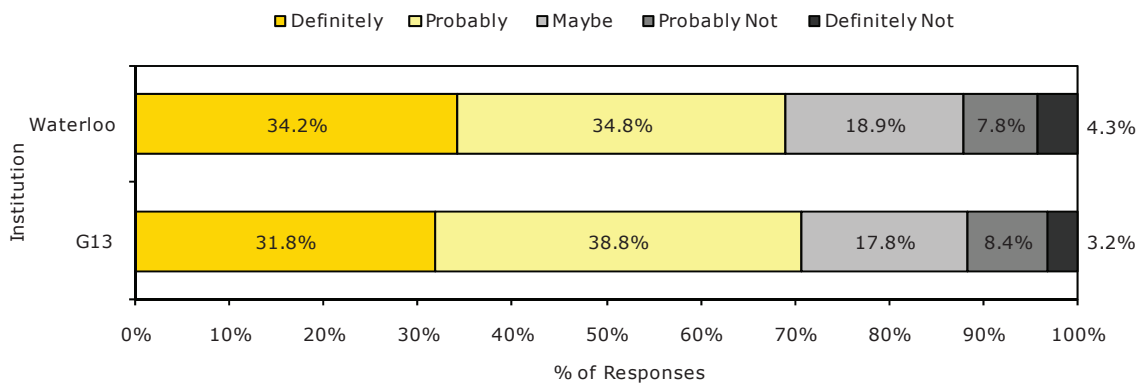
2007 GPSS: Overall how would you rate the quality of your overall experience at this university? (Doctoral Students)



Our results continue to correspond very closely to those of the G13 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. 34.2 per cent of our Doctoral students responded with “Definitely” and 34.8 per cent responded “Probably”, but 12.1 per cent responded that they would “Probably Not” or “Definitely Not” choose UW again.

Figure 2.7.C

2007 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 UW by analyzing the survey responses may help us to improve the graduate student experience for future UW students.

2.8. Completion Rates and Degrees Granted

This indicator shows the 1998 cohort completion rates of UW graduate students as compared to the other universities in the G13. Specifically, Figure 2.8.A through Figure 2.8.F show the size and progress of the 1998 starting master's and doctoral cohorts including the length of time it took students to graduate, the number of those who had either completed their studies or were still studying as of the winter 2007 term, and the number of study terms for those who withdrew.

Figure 2.8.A

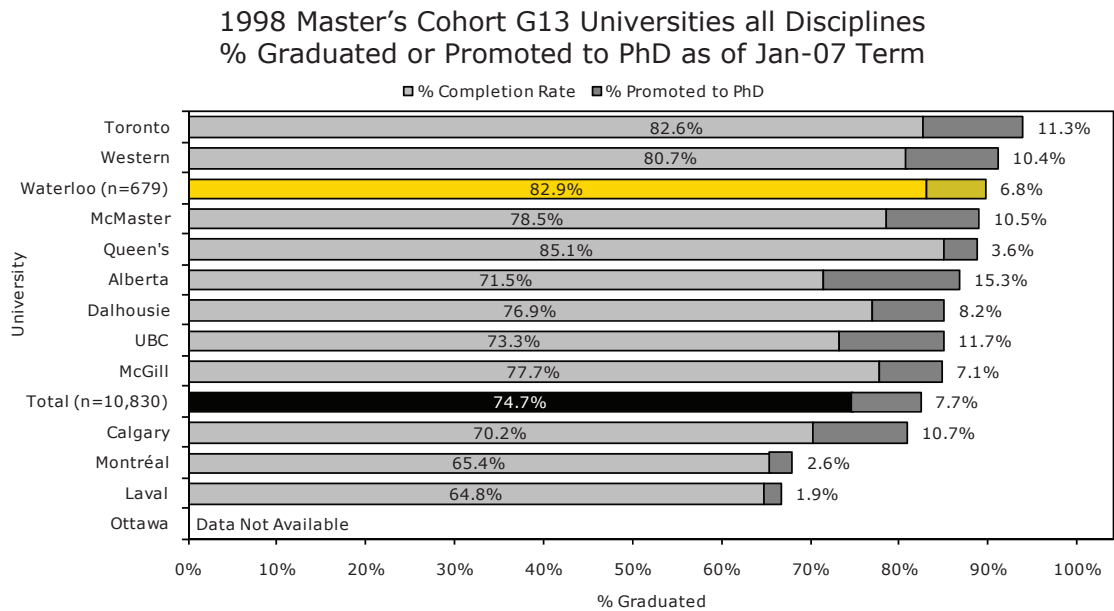


Figure 2.8.B

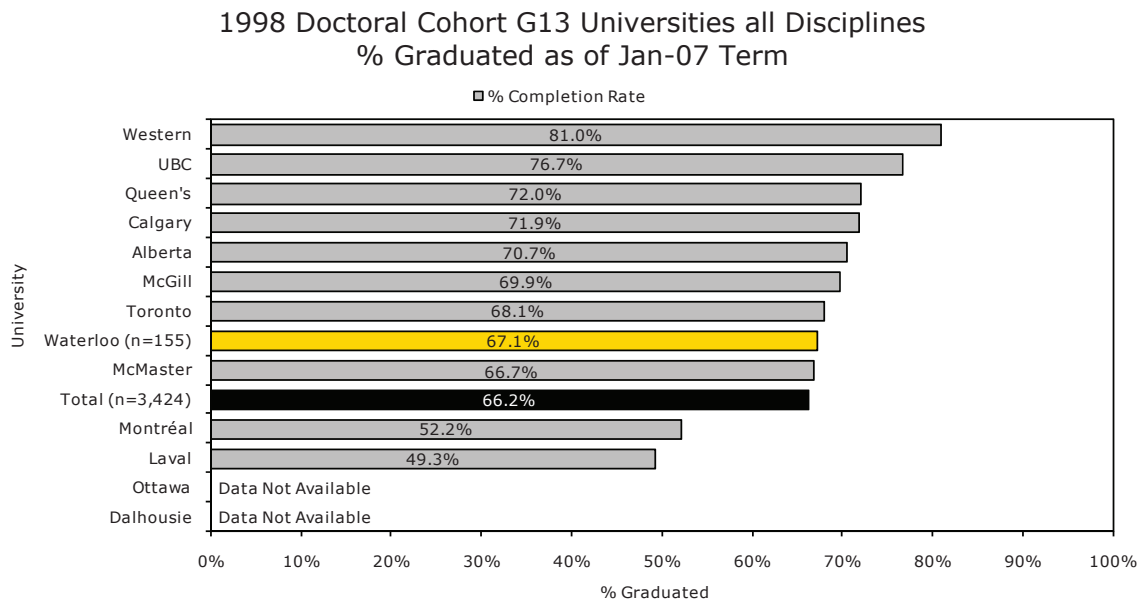


Figure 2.8.C

1998 Master's Cohort G13 Universities all Disciplines
Median Number of Terms Registered to Degree Completion

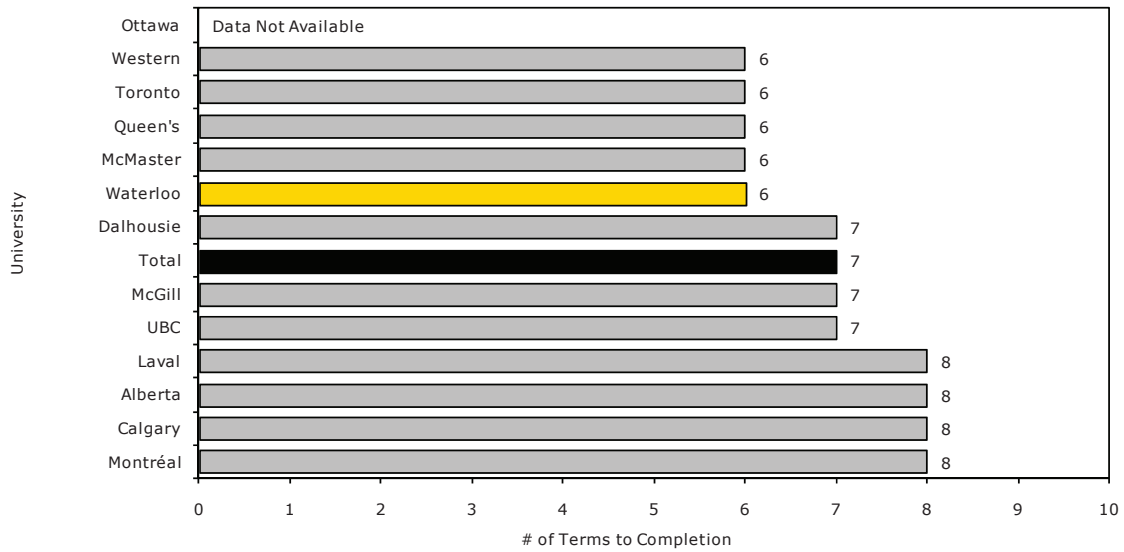


Figure 2.8.D

1998 Doctoral Cohort G13 Universities all Disciplines
Median Number of Terms Registered to Degree Completion

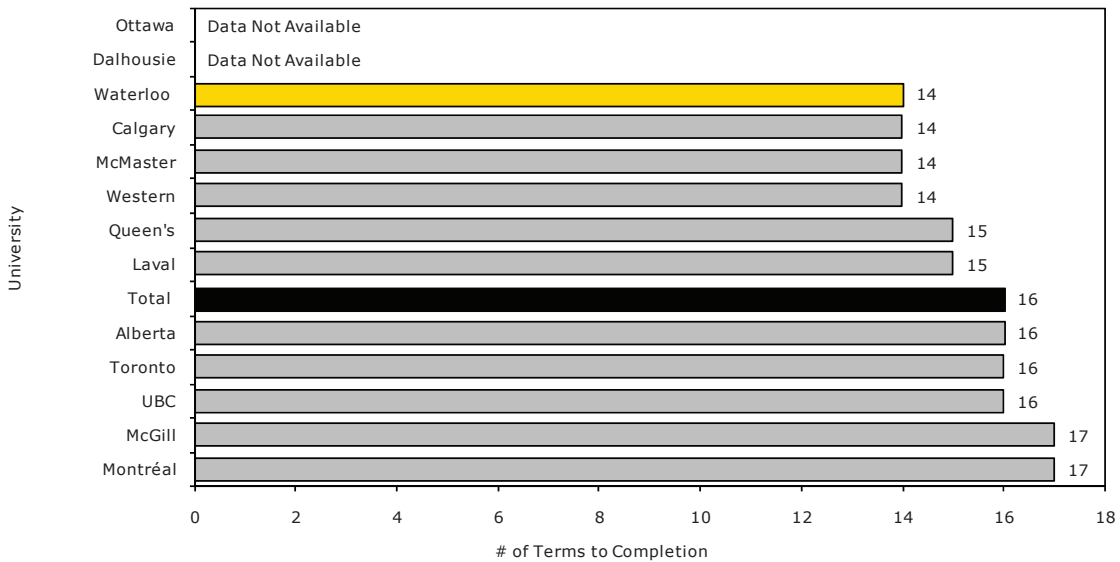


Figure 2.8.E

1998 Master's Cohort G13 Universities all Disciplines
Median Number of Terms Registered for Withdrawn Students

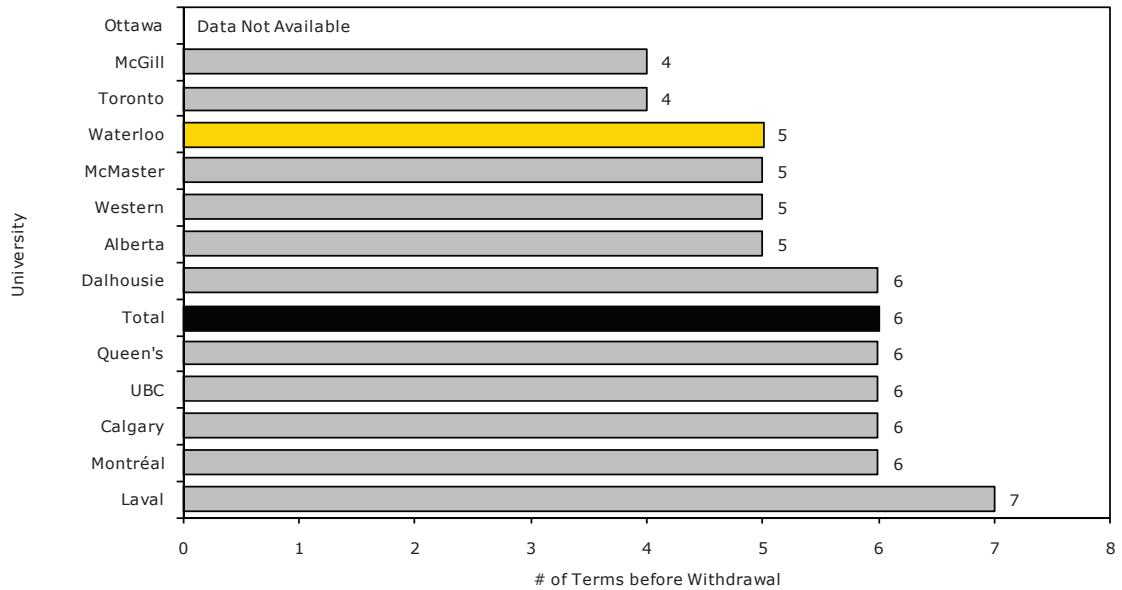
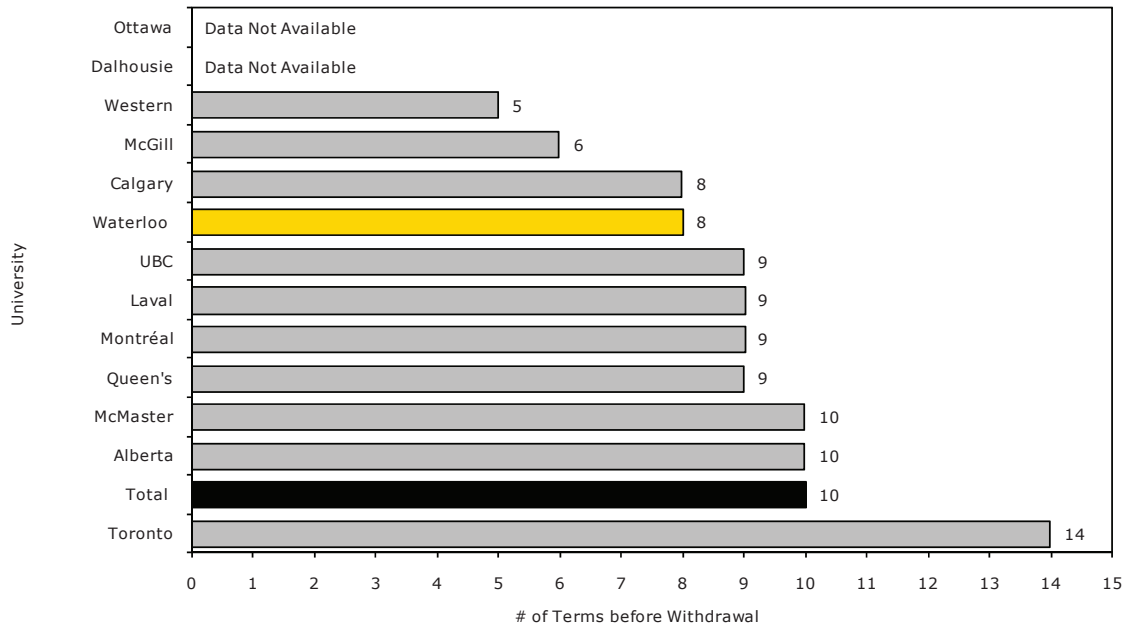


Figure 2.8.F

1998 Doctoral Cohort G13 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 2006 and 2008, distinct from the cohort analyses above.

Figure 2.8.G

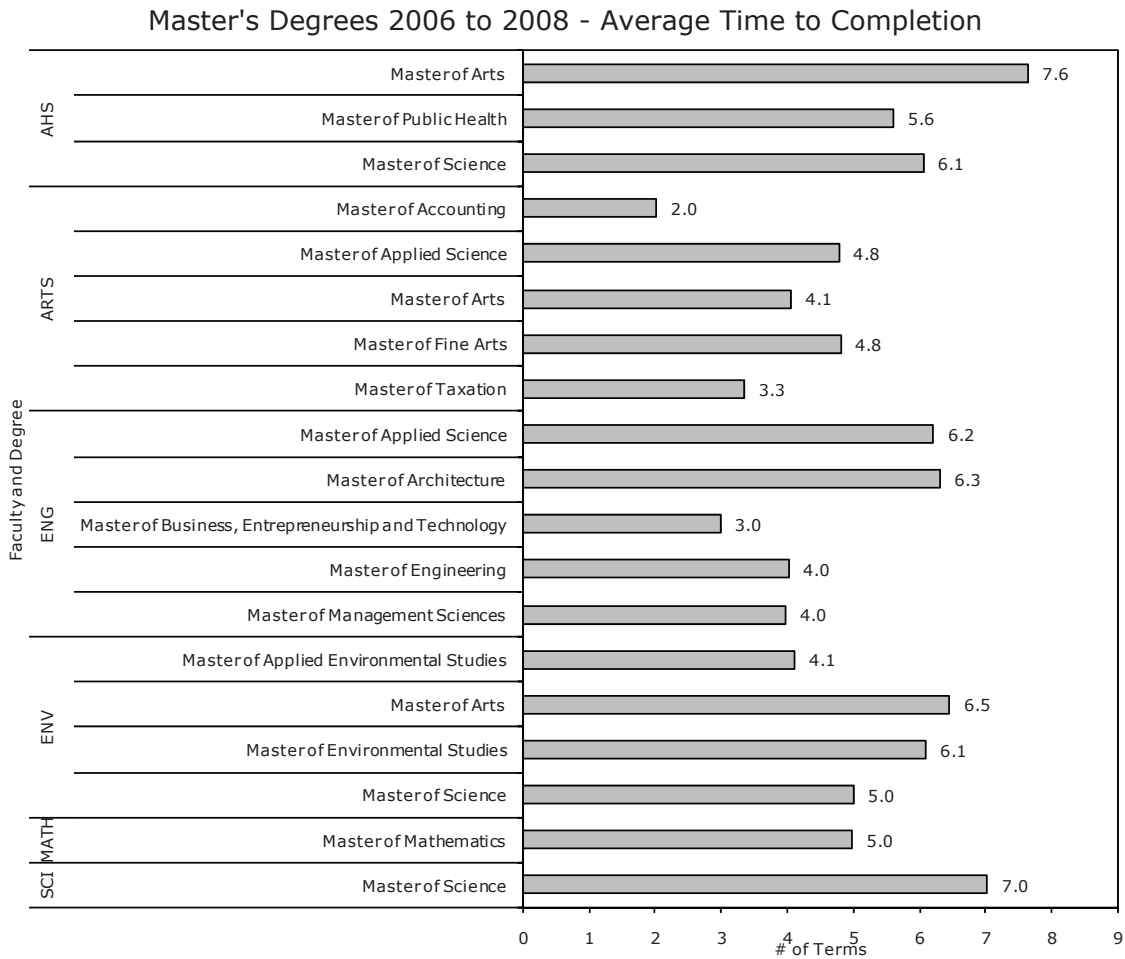
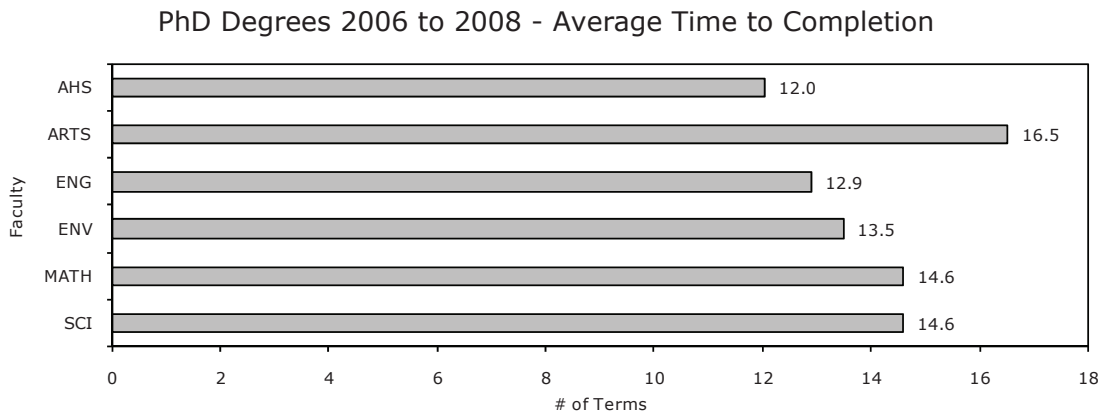


Figure 2.8.H



In 2007 there were 810 master's degrees and 193 doctoral degrees granted.

Figure 2.8.I

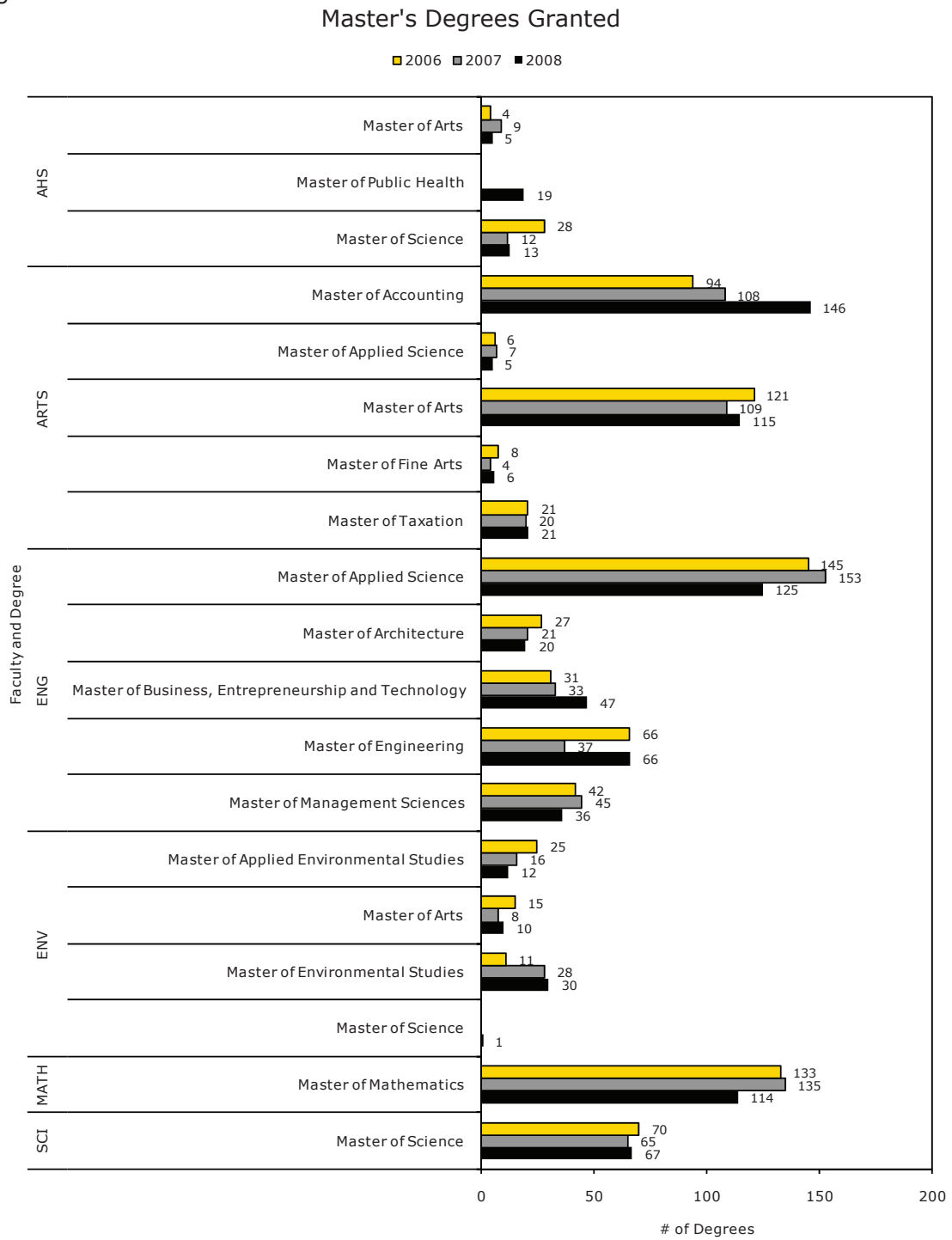
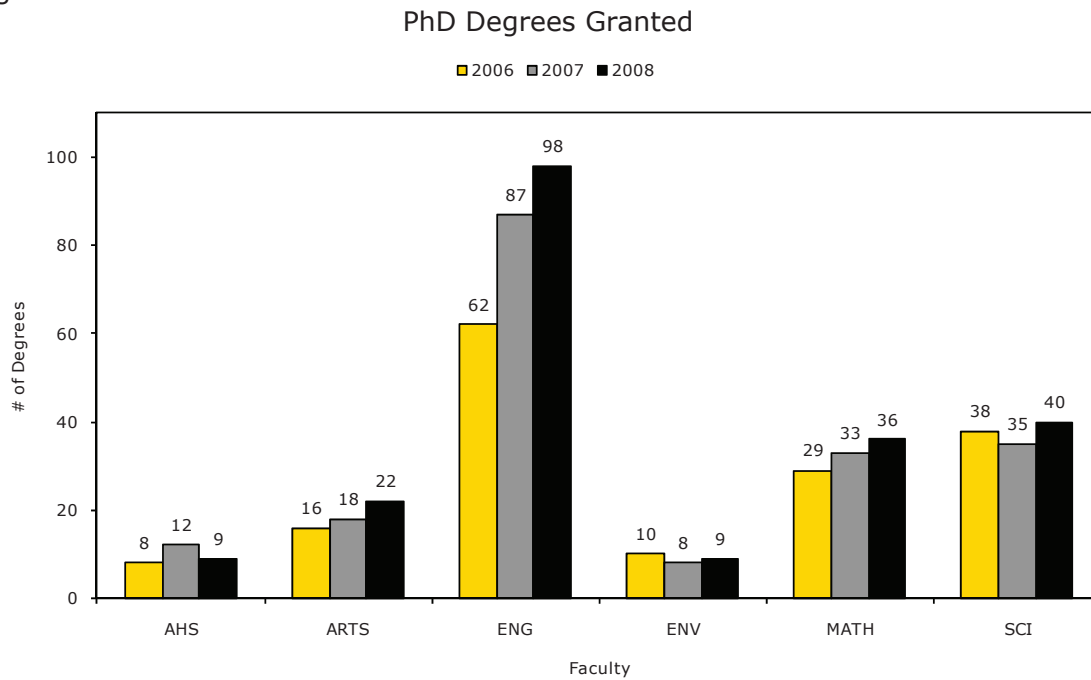


Figure 2.8.J



As our double-cohort students complete their undergraduate education, UW 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, engineering, 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 UW'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 UW encompasses a full spectrum of work in the arts, social and behavioural sciences, humanities, engineering, environmental studies, health, physical and life sciences, and mathematics.

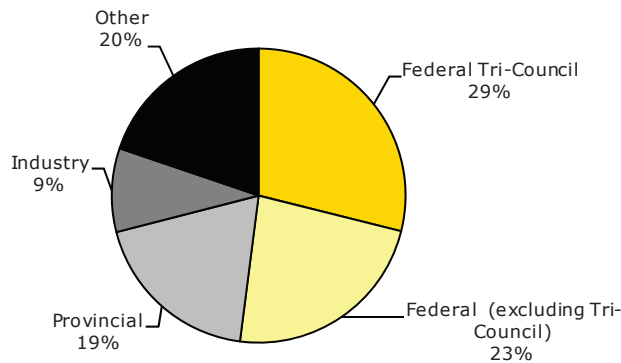
In this section, we examine total research awards, including those from international sources, awards from the Tri-Council agencies and the government of Ontario.

3.1. Research Awards

Research awards for the 2008/09 year were up by 10 per cent from 2007/08, totalling \$144 million. Funding from Federal government agencies made up roughly half of all funding with 56 per cent of federal funding coming from the Tri-Council.

Figure 3.1.A²⁸

Total Sponsored Research Awards by Source 2008/09
\$144,089,000



²⁸ "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.B²⁹

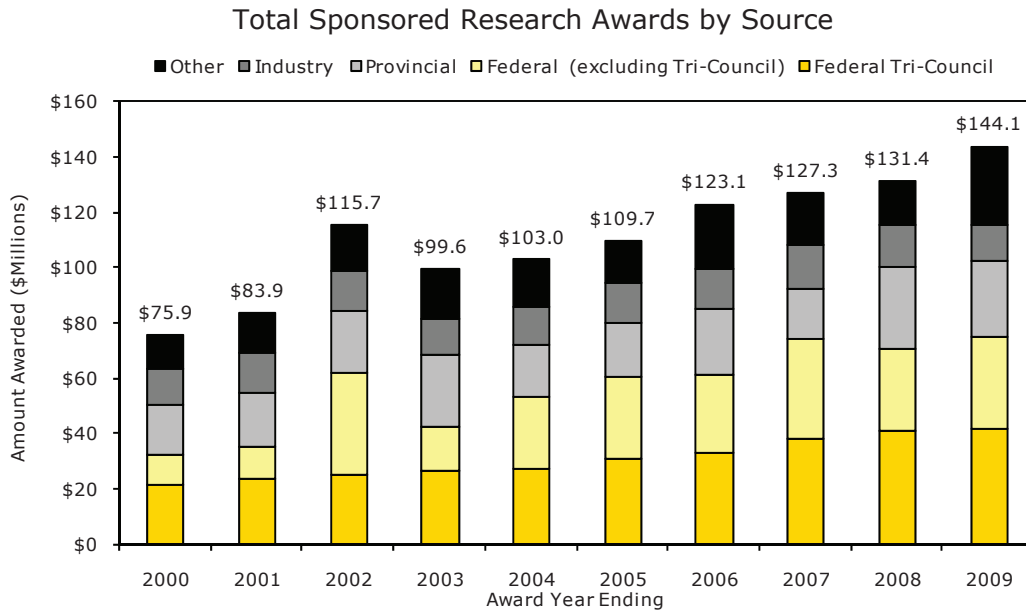
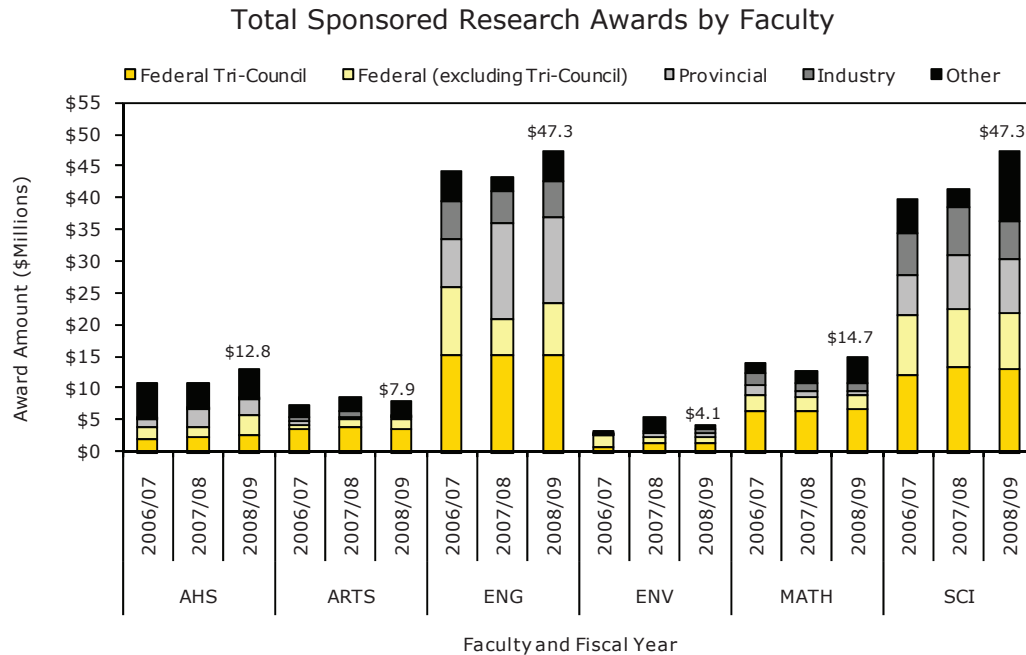


Figure 3.1.C excludes about \$10 million in awards to the federated and affiliated university colleges, and/or non-academic units at UW.

Figure 3.1.C



²⁹ 2002 was an unusual year in Federal (excluding Tri-Council) funding due to a large number of Canada Foundation for Innovation awards.

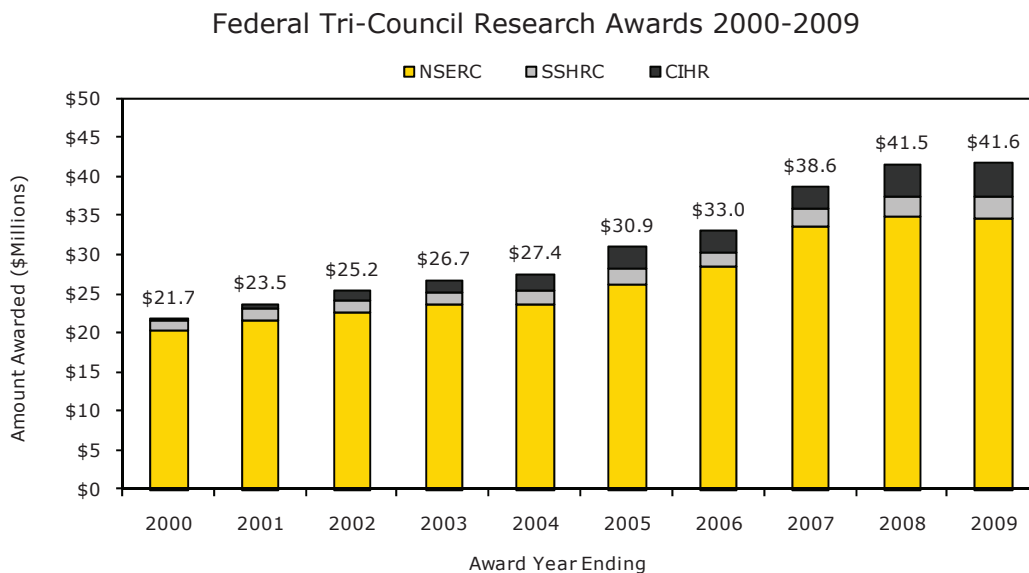
Figure 3.1.D³⁰



3.2. Federal Tri-Council

Research awards from the three major granting councils – 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



³⁰ In 2008/09, 81 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.

Figure 3.2.B

Breakout of Federal Tri-Council Research Awards 2008/09
\$ 41,629,000

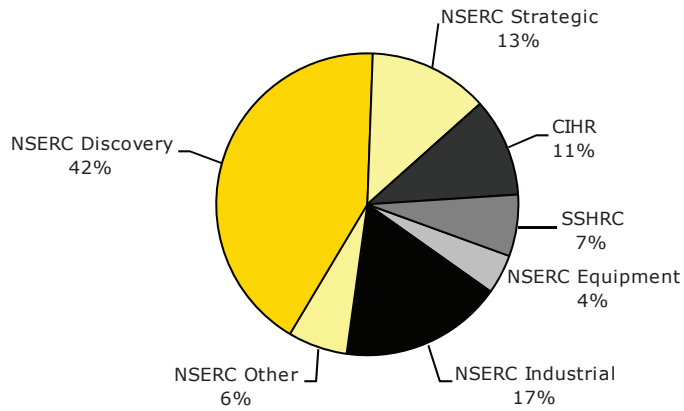


Figure 3.2.C

Federal Tri-Council Research Awards by Faculty

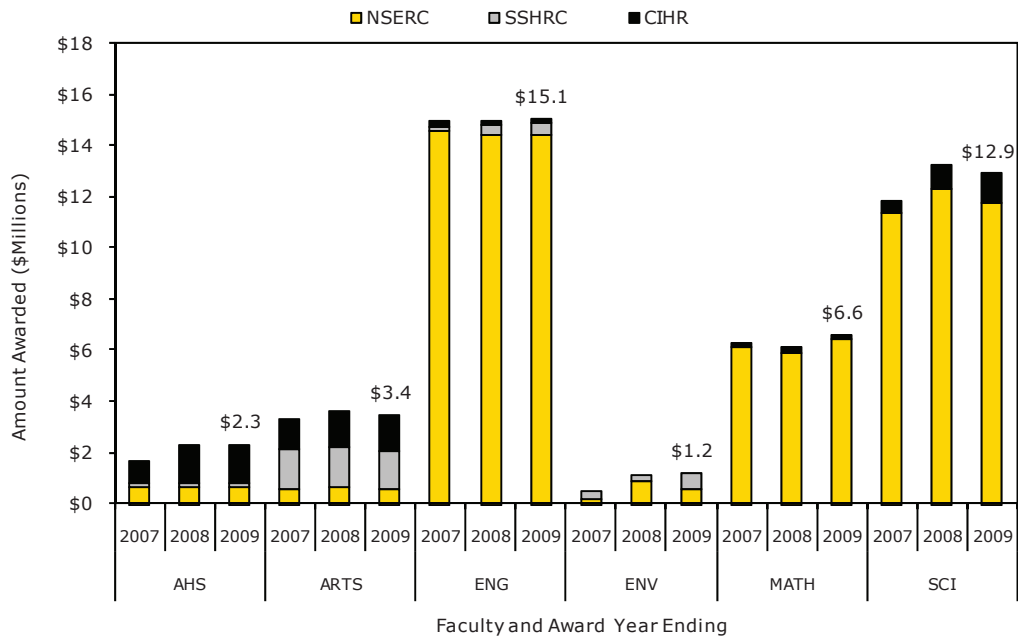


Figure 3.2.D

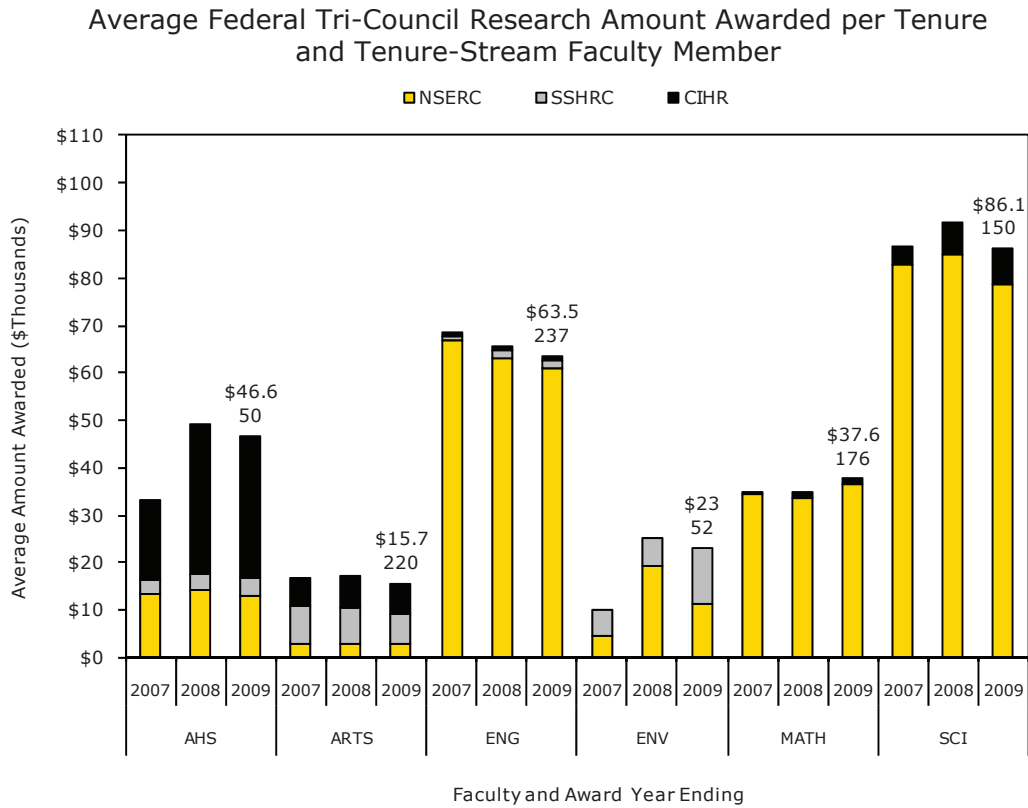
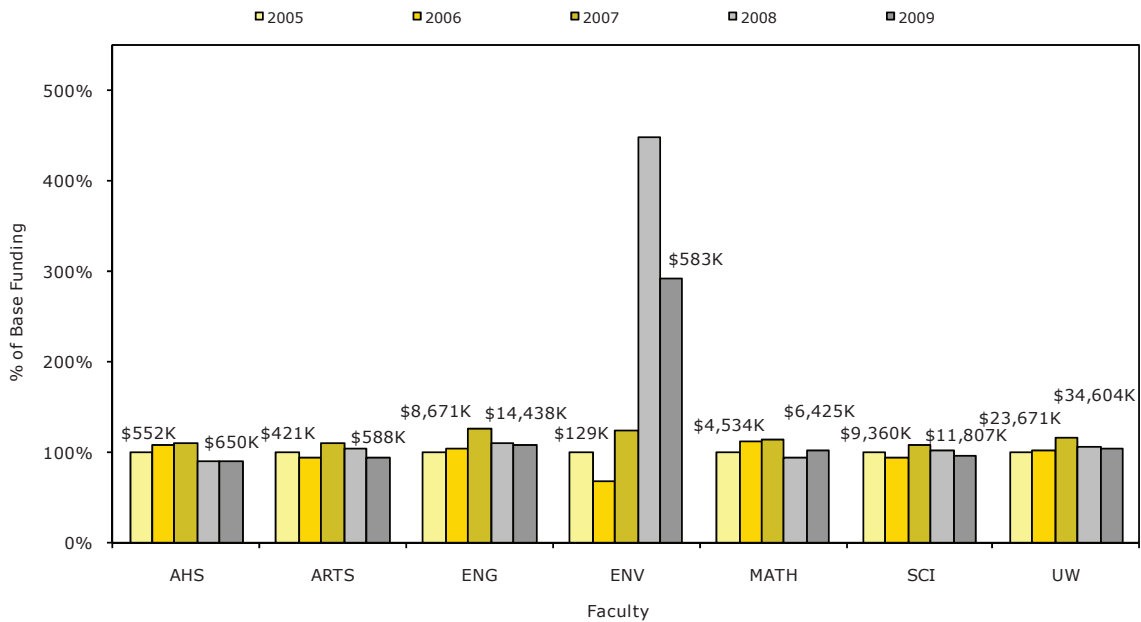


Figure 3.2.E through Figure 3.2.G illustrate the change in funding, relative to the base year³¹, from each of the Tri-Council agencies. For example, if the funds available from NSERC in 2008 increased by five per cent from 2007 and AHS's 2008 funding remained at the 2007 level, then AHS's 2008 funding 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.

³¹ The base year is 2005.

Figure 3.2.E

% NSERC Annual Funding Compared to Base Year 2005 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 2005 Adjusted by Annual Agency Growth

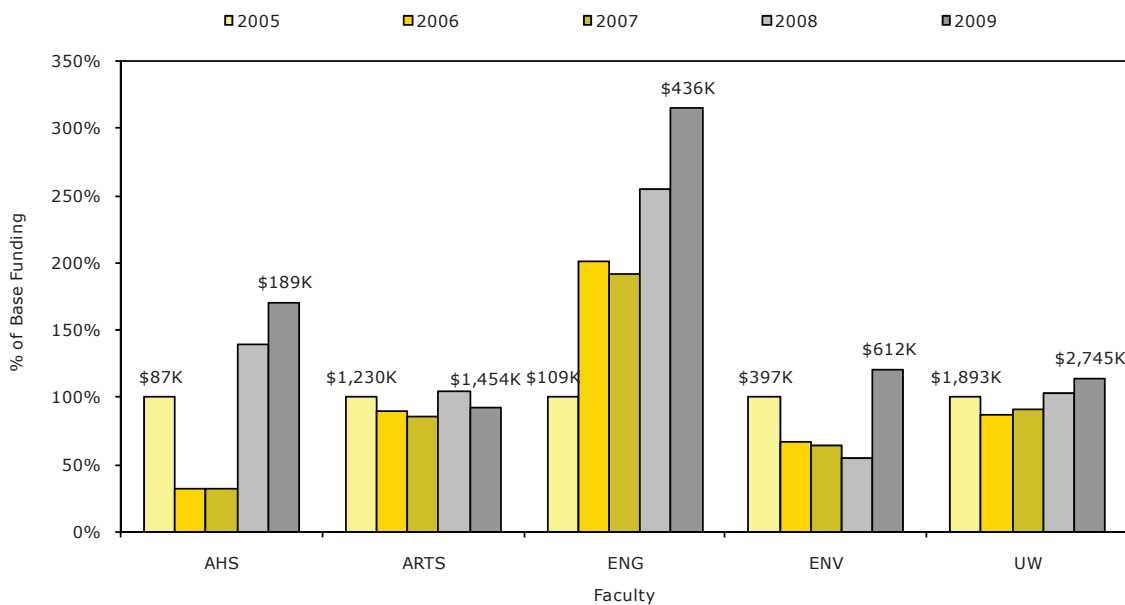


Figure 3.2.G

% CIHR Annual Funding Compared to Base Year 2005
Adjusted by Annual Agency Growth

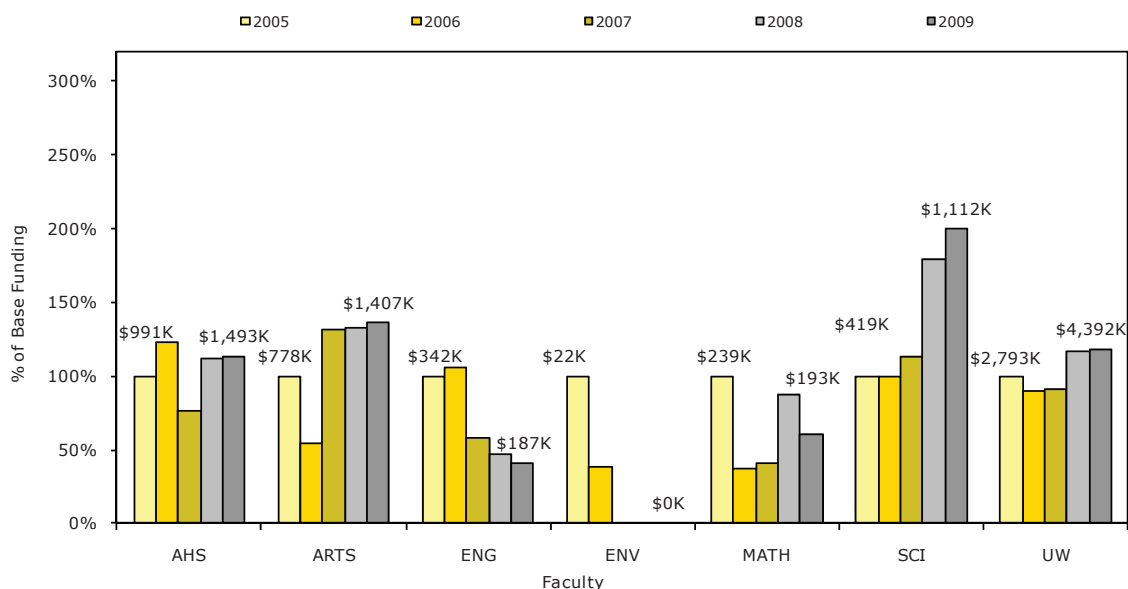


Figure 3.2.H through Figure 3.2.J show the total dollars allocated by the tri-councils to the G13 universities in 2003 and 2008 for NSERC, SSHRC, and CIHR, and the percentage change for each institution. The data in these tables have been taken from the council databases.

Figure 3.2.H

NSERC - % Change in \$ to G13 2004-2009					
	G13 University	2003/04 \$ x 000s	2008/09 \$ x 000s	Change \$ x 000s	Change %
1	Queen's	21,571	33,723	12,152	56.3%
2	Ottawa	14,127	21,977	7,850	55.6%
3	UBC	43,004	66,667	23,663	55.0%
4	Waterloo	32,128	42,869	10,741	33.4%
5	McMaster	20,719	26,696	5,977	28.8%
6	McGill	34,889	44,825	9,936	28.5%
7	Calgary	21,517	27,333	5,816	27.0%
8	Dalhousie	14,839	18,664	3,825	25.8%
9	Toronto	54,079	67,665	13,586	25.1%
10	Western	18,379	22,895	4,516	24.6%
11	Laval	34,719	41,233	6,514	18.8%
12	Alberta	40,673	48,048	7,375	18.1%
13	Montréal	22,934	23,045	111	0.5%
	G13 Total	373,578	485,640	112,062	30.0%
	Total/all Institutions	629,114	862,875	233,761	37.2%

Figure 3.2.I

SSHRC - % Change in \$ to G13 2004-2009					
	G13 University	2003/04 \$ x 000s	2008/09 \$ x 000s	Change \$ x 000s	Change %
1	Waterloo	3,049	6,297	3,248	106.5%
2	McGill	8,937	15,891	6,954	77.8%
3	Dalhousie	2,566	4,405	1,839	71.7%
4	Calgary	5,035	7,929	2,894	57.5%
5	Queen's	5,652	8,769	3,117	55.1%
6	McMaster	4,749	7,318	2,569	54.1%
7	Ottawa	8,475	12,907	4,432	52.3%
8	Toronto	20,760	30,189	9,429	45.4%
9	Laval	10,010	14,313	4,303	43.0%
10	UBC	14,514	20,639	6,125	42.2%
11	Montréal	11,748	15,927	4,179	35.6%
12	Western	8,300	10,982	2,682	32.3%
13	Alberta	12,112	13,022	910	7.5%
	G13 Total	115,907	168,588	52,681	45.5%
	Total/all Institutions	193,104	292,879	99,775	51.7%

Figure 3.2.J below, shows a 146 per cent change in funding to UW from 2003/04. 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. This explains the large increase in funding from 2003/04 – 2008/09. Unlike the other G13 universities, UW has no medical school, limiting the funds that were available through MRC. The change to CIHR has made available a wider range of grants for which UW researchers are eligible.

Figure 3.2.J

CIHR - % Change in \$ to G13 2004-2009					
	G13 University	2003/04 \$ x 000s	2008/09 \$ x 000s	Change \$ x 000s	Change %
1	Waterloo	2,122	5,218	3,096	145.9%
2	McMaster	25,203	48,581	23,378	92.8%
3	UBC	60,745	95,108	34,363	56.6%
4	Ottawa	33,090	50,672	17,582	53.1%
5	Toronto	130,974	190,912	59,938	45.8%
6	Montréal	58,737	83,796	25,059	42.7%
7	McGill	80,622	109,135	28,513	35.4%
8	Laval	30,744	40,927	10,183	33.1%
9	Dalhousie	14,971	19,297	4,326	28.9%
10	Alberta	41,671	50,332	8,661	20.8%
11	Queen's	14,995	17,859	2,864	19.1%
12	Western	29,590	34,199	4,609	15.6%
13	Calgary	32,434	36,387	3,953	12.2%
	G13 Total	555,898	782,423	226,525	40.7%
	Total/all Institutions	586,826	936,876	350,050	59.7%

Figure 3.2.K through Figure 3.2.M show the distribution of the total awards by the tri-councils to the G13 universities in 2008/09, and the percentage of those awards for each institution.

Figure 3.2.K

NSERC - Distribution of \$ to G13				
	G13 University	2008/09\$ x 000s	% of Total G13 \$	% of Total \$
1	Toronto	67,665	13.93%	7.84%
2	UBC	66,667	13.73%	7.73%
3	Alberta	48,048	9.89%	5.57%
4	McGill	44,825	9.23%	5.19%
5	Waterloo	42,869	8.83%	4.97%
6	Laval	41,233	8.49%	4.78%
7	Queen's	33,723	6.94%	3.91%
8	Calgary	27,333	5.63%	3.17%
9	McMaster	26,696	5.50%	3.09%
10	Montréal	23,045	4.75%	2.67%
11	Western	22,895	4.71%	2.65%
12	Ottawa	21,978	4.53%	2.55%
13	Dalhousie	18,664	3.84%	2.16%
	G13 Total	485,641	100.00%	56.28%
	Total/all Institutions	862,875		

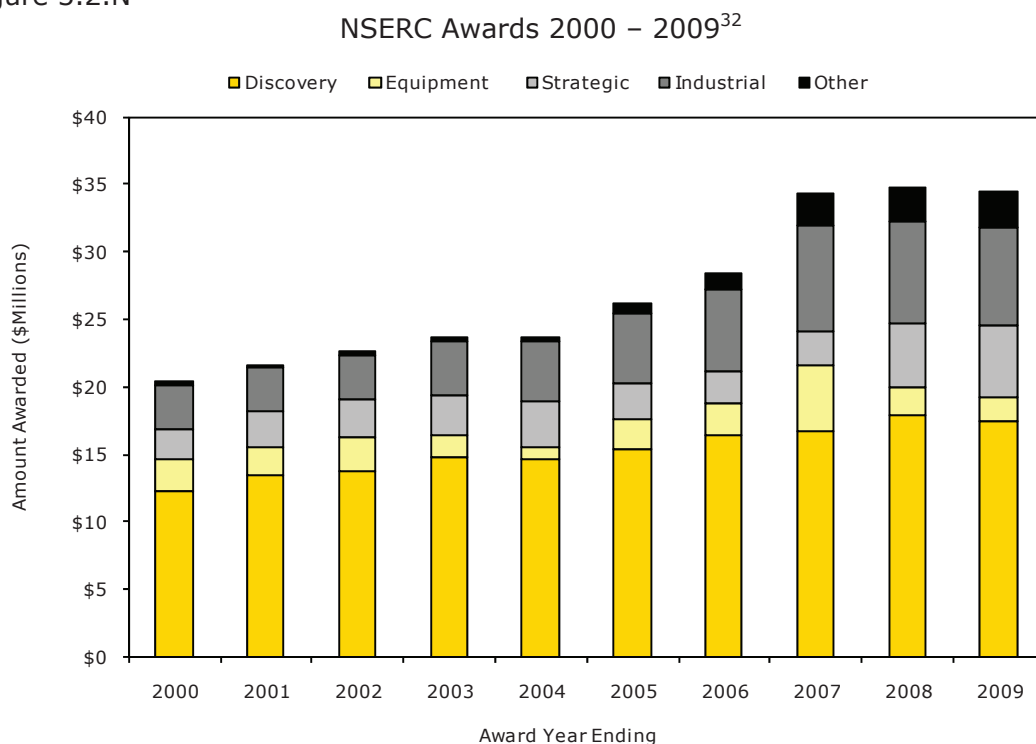
Figure 3.2.L

SSHRC - Distribution of \$ to G13				
	G13 University	2008/09 \$ x 000s	% of Total G13 \$	% of Total \$
1	Toronto	30,189	17.91%	10.31%
2	UBC	20,639	12.24%	7.05%
3	Montréal	15,927	9.45%	5.44%
4	McGill	15,891	9.43%	5.43%
5	Laval	14,313	8.49%	4.89%
6	Alberta	13,022	7.72%	4.45%
7	Ottawa	12,907	7.66%	4.41%
8	Western	10,982	6.51%	3.75%
9	Queen's	8,769	5.20%	2.99%
10	Calgary	7,929	4.70%	2.71%
11	McMaster	7,318	4.34%	2.50%
12	Waterloo	6,297	3.74%	2.15%
13	Dalhousie	4,405	2.61%	1.50%
	G13 Total	168,588	100.00%	57.56%
	Total/all Institutions	292,879		

Figure 3.2.M

CIHR - Distribution of \$ to G13				
	G13 University	2008/09 \$ x 000s	% of Total G13 \$	% of Total \$
1	Toronto	190,912	24.40%	20.38%
2	McGill	109,135	13.95%	11.65%
3	UBC	95,108	12.16%	10.15%
4	Montréal	83,796	10.71%	8.94%
5	Ottawa	50,672	6.48%	5.41%
6	Alberta	50,332	6.43%	5.37%
7	McMaster	48,581	6.21%	5.19%
8	Laval	40,927	5.23%	4.37%
9	Calgary	36,387	4.65%	3.88%
10	Western	34,199	4.37%	3.65%
11	Dalhousie	19,297	2.47%	2.06%
12	Queen's	17,859	2.28%	1.91%
13	Waterloo	5,218	0.67%	0.56%
	G13 Total	782,423	100.00%	83.51%
	Total/all Institutions	936,876		

Figure 3.2.N



³² Funds available for the NSERC equipment (Research Tools and Instruments) grants fluctuate significantly on an annual basis. In 2009 UW awards declined by one per cent over the previous year.

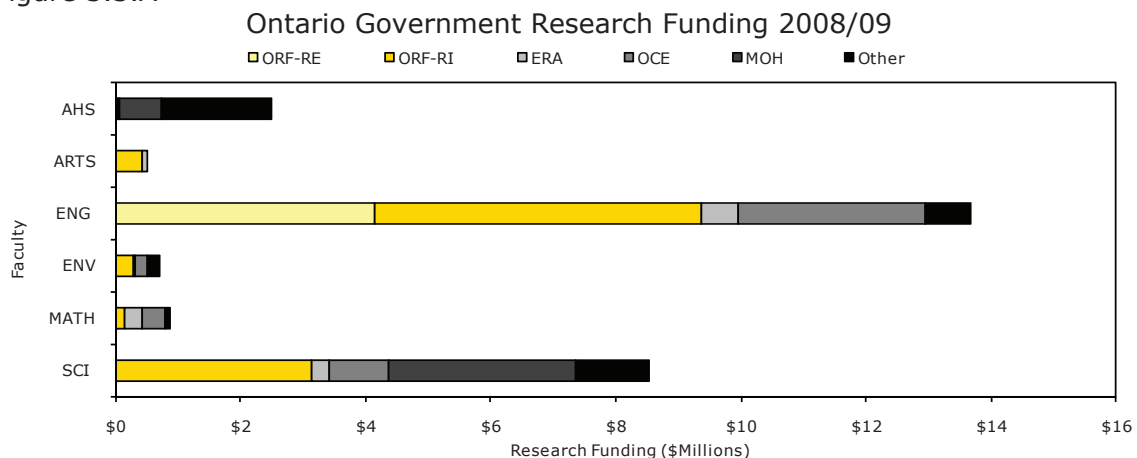
Figure 3.2.O

NSERC Discovery Grants 2008/09					
G3 University	Number		Amount		Average Award (\$)
	N	%	\$	%	
Toronto	740	7.30%	\$27,048,157	8.88%	\$36,552
UBC	666	6.57%	\$23,098,815	7.59%	\$34,683
Alberta	563	5.55%	\$18,924,727	6.22%	\$33,614
McGill	532	5.25%	\$17,734,666	5.82%	\$33,336
Waterloo	543	5.36%	\$16,558,136	5.44%	\$30,494
Calgary	400	3.95%	\$11,878,670	3.90%	\$29,697
Western	387	3.82%	\$11,334,232	3.72%	\$29,287
McMaster	351	3.46%	\$11,169,402	3.67%	\$31,822
Laval	360	3.55%	\$10,852,041	3.56%	\$30,145
Montréal	296	2.92%	\$10,279,603	3.38%	\$34,728
Queen's	290	2.86%	\$10,063,607	3.31%	\$34,702
Dalhousie	291	2.87%	\$8,923,219	2.93%	\$30,664
Ottawa	299	2.95%	\$8,954,964	2.94%	\$29,950
G3 Total	5,718	56.41%	\$166,820,239	61.36%	\$32,283
Total Awarded	10,137	100.00%	\$304,466,356	100.00%	\$30,035

3.3. Ontario

The next indicators³³ show research awards from the Ontario Research Fund³⁴ – 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.

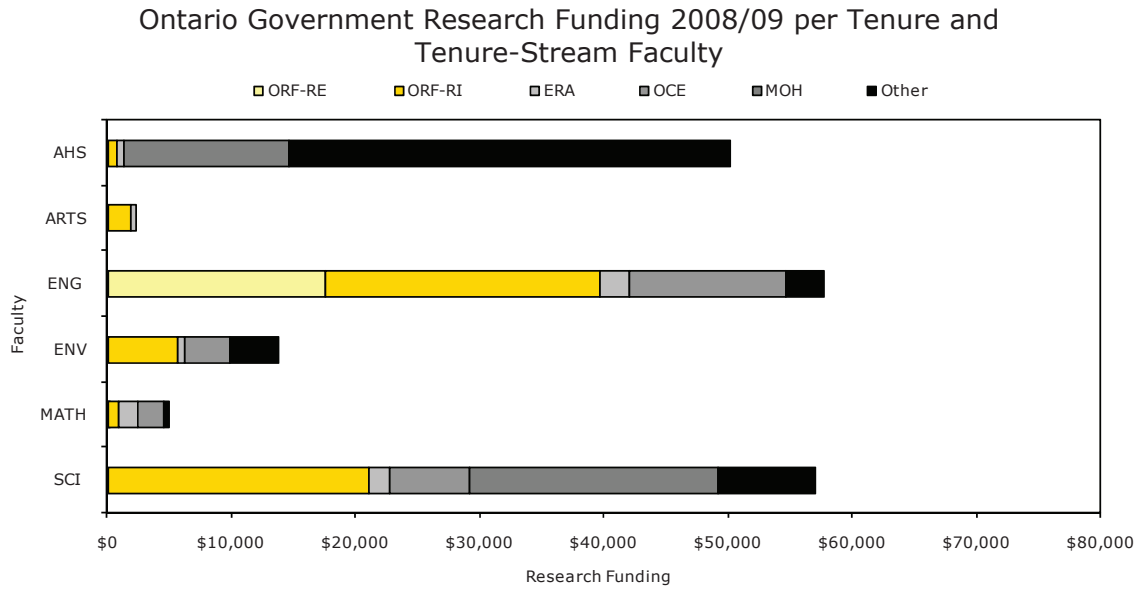
Figure 3.3.A



³³ Excludes funds received for overhead expenses through the Research Performance Fund.

³⁴ The Ontario Research and Development Challenge Fund (ORDCF), the Ontario Innovation Trust (OIT) and the Premier's Research Excellence Awards (PREA) funding programs have been cancelled, and were superseded by ORF-RE, ORF-RI and ERA, respectively. Any residual award balances from the cancelled programs have been combined and listed with the current programs.

Figure 3.3.B



From its beginning, UW 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 2008/09, we had 13 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.

The table below shows our faculty count by gender and Faculty. This year we have added 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). This percentage constitutes the potential pool of female candidates from which universities could hire. We mapped the various disciplines to UW Faculties to illustrate how well we are doing in our hiring of female faculty relative to the size of the pool available. For example, in those disciplines mapped to the Faculty of Engineering, 21 per cent of PhD candidates, our potential hiring pool, were female. As of October 1, 2009, 14 per cent of the Faculty of Engineering faculty were female.

Total Faculty Count by Gender - October 1, 2008					
Faculty	Male	Female	Total	%Female	Canadian % Female PhD Enrolment
Applied Health Sciences	33	22	55	40%	63%
Arts	146	93	239	39%	58%
Engineering	222	35	257	14%	21%
Environment	37	17	54	31%	40%
Mathematics	165	39	204	19%	45%
Science	137	41	178	23%	26%
Colleges	42	33	75	44%	NA
Total	782	280	1,062	26%	45%

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 counts by rank and gender for Waterloo, excluding faculty at our affiliated and federated colleges and universities, and compared to our G13 peers.

Figure 4.1.A³⁵

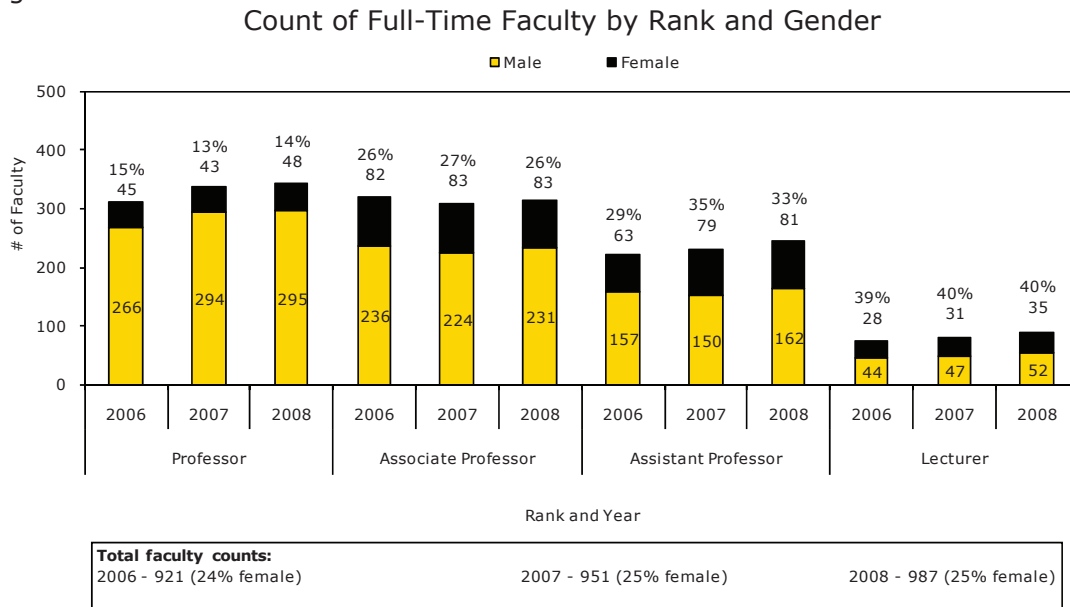
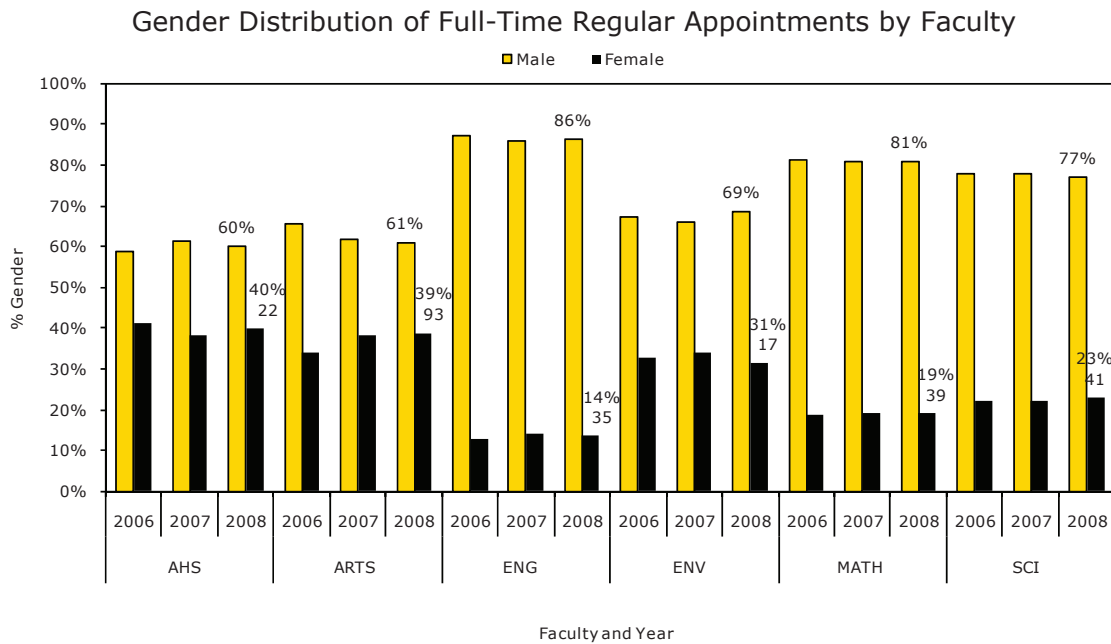


Figure 4.1.B³⁶

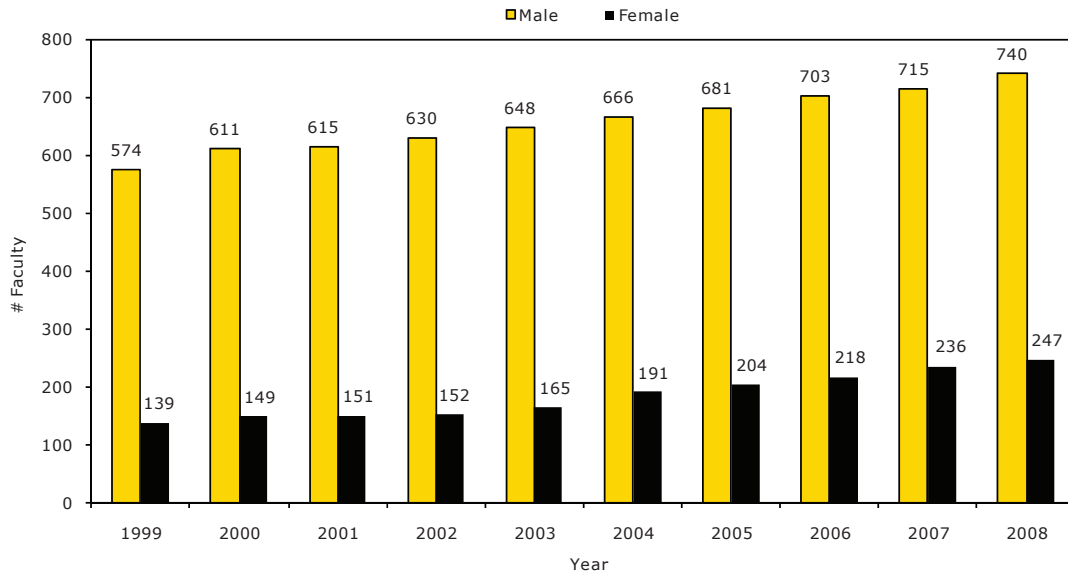


³⁵ Source: Stats Canada UCASS (University and College Academic Staff System) and UW Human Resources. Percentage female displayed in 4.1.A.

³⁶ Source: Stats Canada UCASS, as of October 1st of each survey year.

Figure 4.1.C³⁷

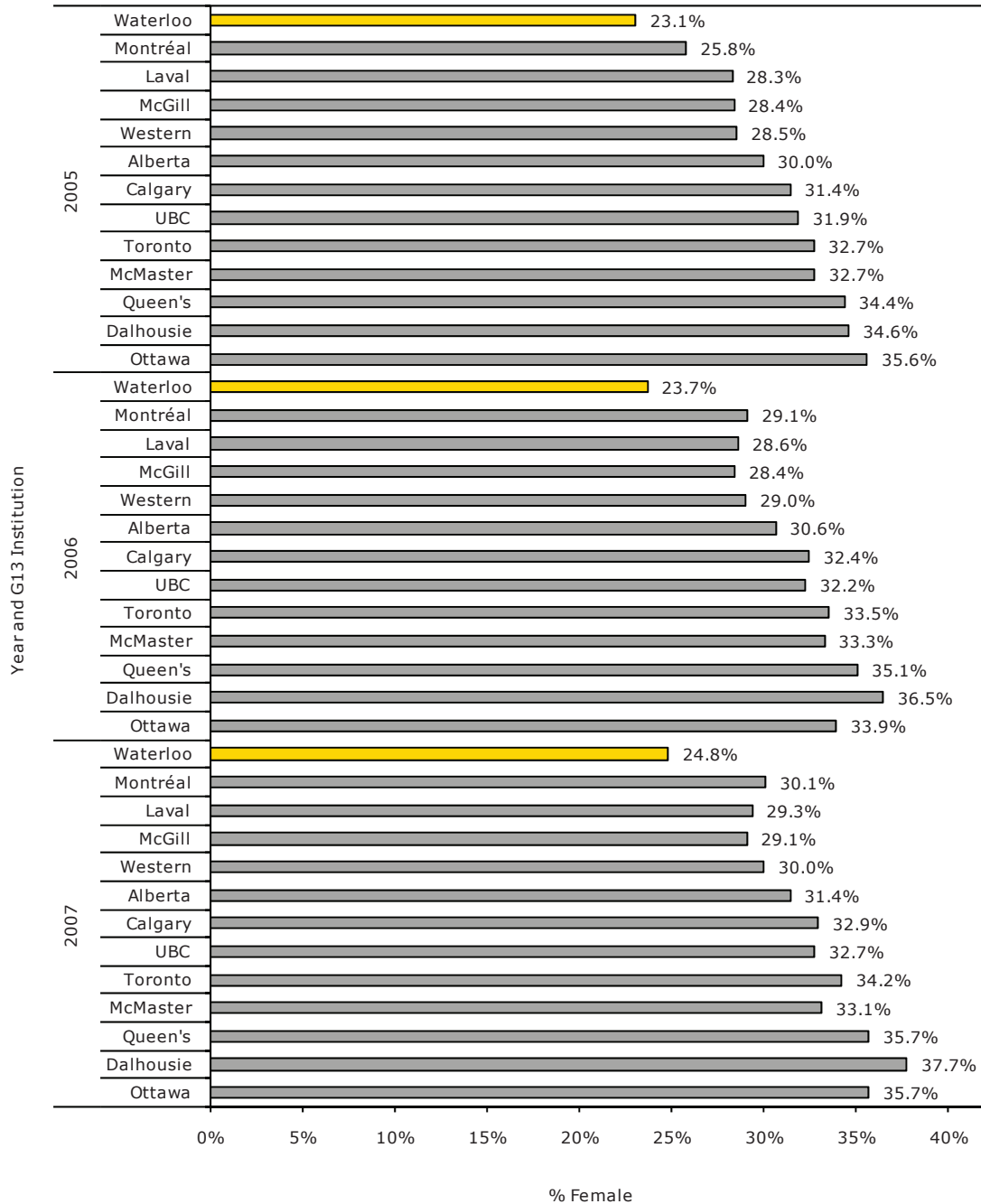
Full-Time Regular Faculty Appointments by Gender - 10 Year History



³⁷ Source: Stats Canada UCASS, as of October 1st of each survey year.

Figure 4.1.D³⁸

Faculty Appointments by % Female - Three Year History as Compared to G13 Universities

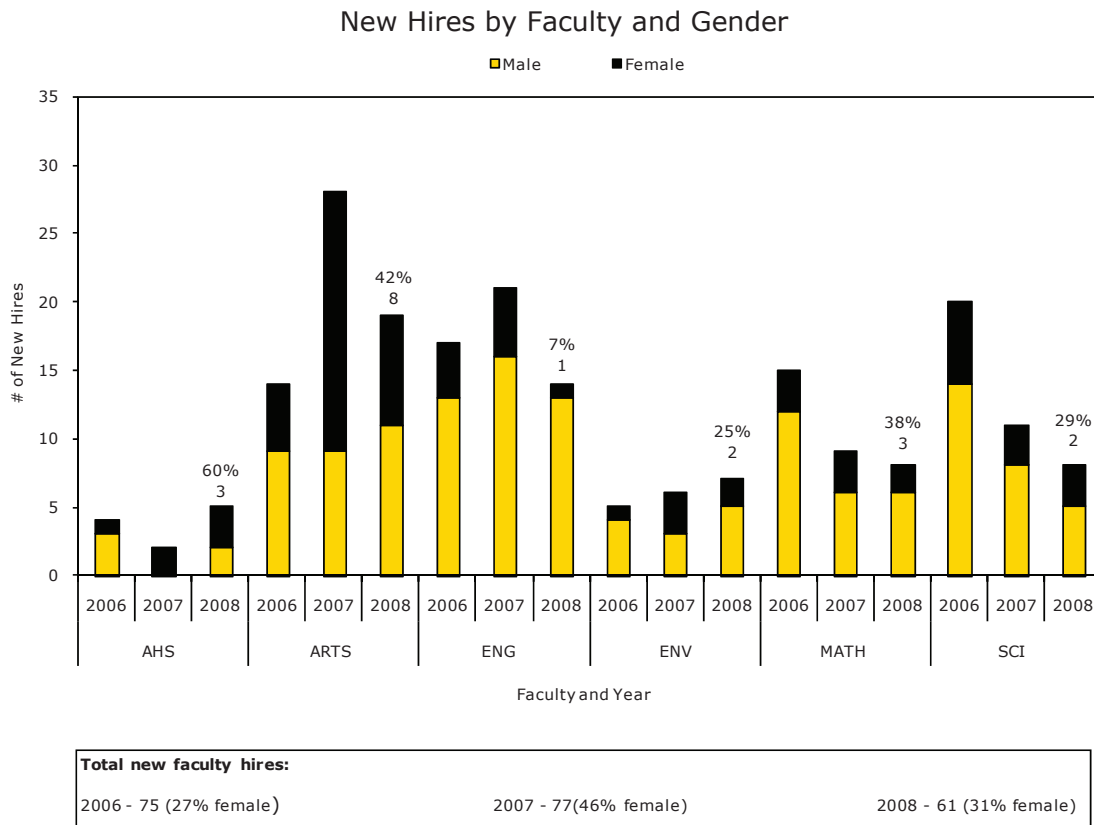


³⁸ Source: Stats Canada UCASS, as of October 1st of each survey year.

4.2. New Hires by Gender

Each decade, UW establishes a target for the hiring of female faculty by forecasting retirements and reviewing the proportion of females in discipline pools of PhD candidates. Two factors contribute to UW's seemingly low percentage of female faculty, particularly in the areas of mathematics, engineering, and science: UW has higher proportions of faculty in these disciplines than other universities, and the percentage of female doctoral graduates of mathematics, engineering, and science is smaller than the percentage of females in other disciplines. Data available from the Association of Universities and Colleges of Canada indicates, over the past several years, the available pool of females in mathematics has been about 45 per cent, in engineering 21 per cent, and in science 26 per cent. At the University of Waterloo our percentage of female faculty in Mathematics is close to 19 per cent, in Engineering about 14 per cent, and in Science about 23 per cent. For 2010, our female faculty target is 199; as of 2008, we had already surpassed the target with 280 female faculty.

Figure 4.2.A³⁹

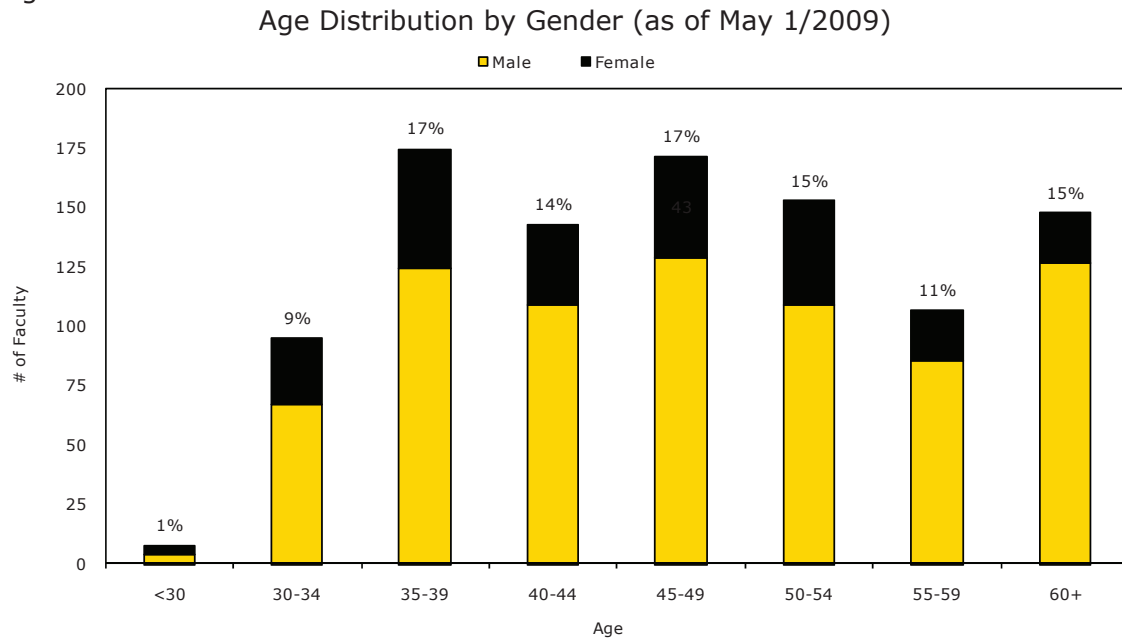


³⁹ Source: Stats Canada UCASS, as of October 1st of each survey year. Number and percentage of female faculty hires displayed.

4.3. Age Distribution

As of May 2009, 41 per cent of Waterloo’s faculty population was age 50 years or older.

Figure 4.3.A⁴⁰



⁴⁰ Source: Human Resource Management System. Percentage female displayed.

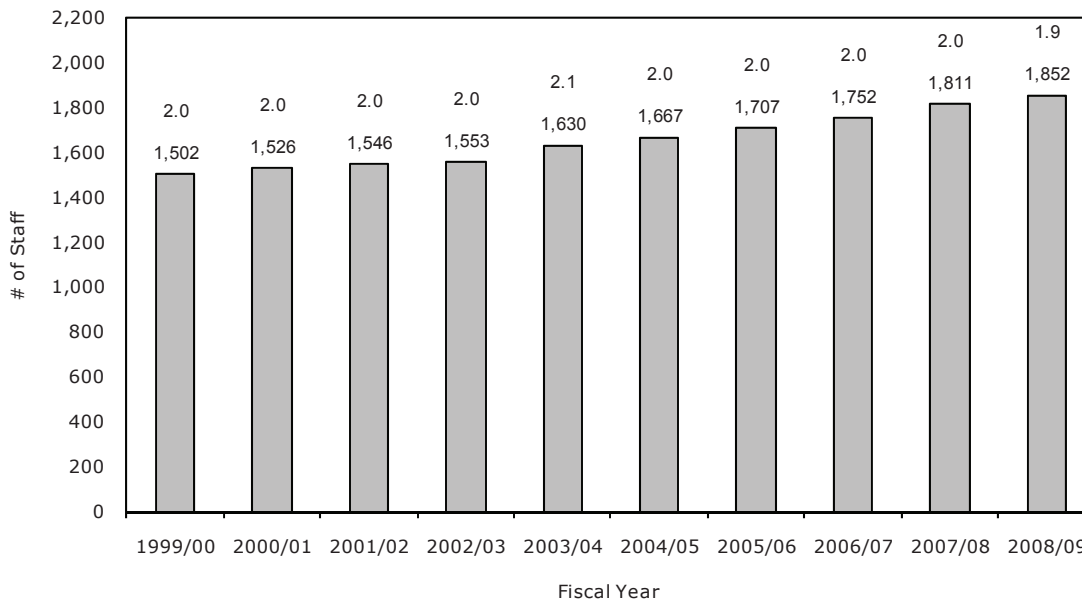
5. STAFF

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 complement⁴¹, 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

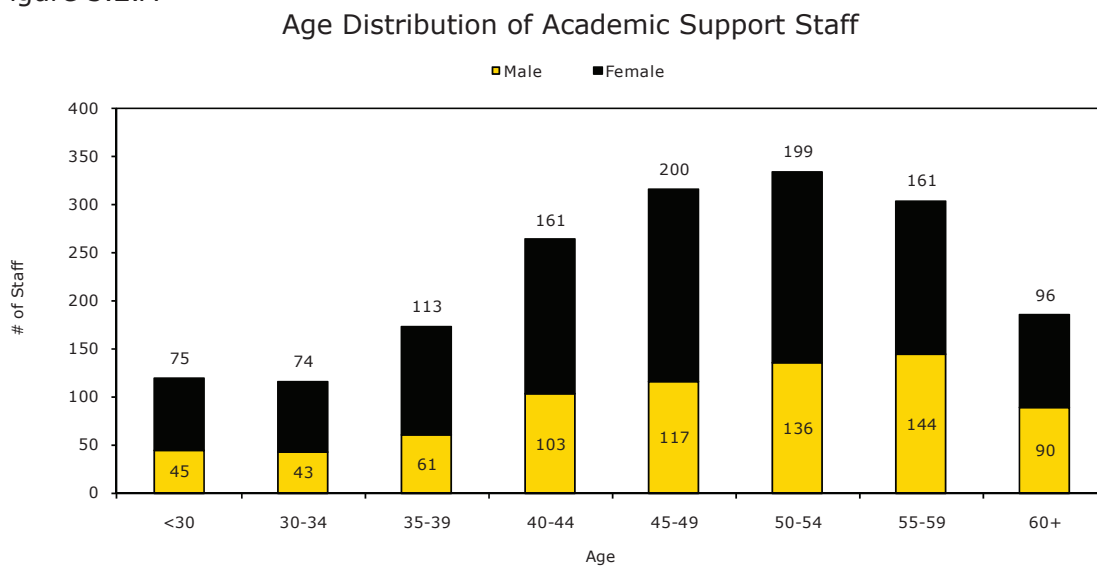


⁴¹ Source: Finance. Staff complement positions are ongoing positions—filled and open—supported by operating funds, for which the University has made a budgetary commitment. A position may have two incumbents sharing the responsibilities.

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.A⁴²



⁴² Source: Job information (Human Resources). Totals from 'head' count including University Support Staff and CUPE Local 793 employees currently on payroll or on approved leaves in operating, research, or ancillary funded on-going positions.

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 2008, 60 per cent of full-time undergraduate students were registered in more than 130 co-operative education programs across six academic faculties. Waterloo maintains over 23,000 active employer contacts, and has 4,000 to 5,000 students looking for employment each term. The first university to use the co-op model in Canada, Waterloo has the largest public university-based co-operative education program in the world.

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.

Significant progress continues in all areas of the framework, notably:

- Recruitment of senior managers to implement the employer relations strategy.
- Continued definition and stabilization of core processes using process management methodology; implementation of optimized processes to address the employment challenges in the current economy.
- Implementation of the new framework for employment feasibility studies, new programs and program changes.
- The development of a new information technology system is on target for 2010.
- Increased data analysis and measurement to support projects and business decisions.

Priorities for the renewal strategy have been adjusted to maximize resources focused on student employment in the current economy, specifically targeting job retention, job development, and support for students.

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 87.5 per cent. The overall final employment rate in 2008/09 grew to 97.4 per cent. This is lower than the rates achieved in 2007/08 of 98 per cent, and 2006/07 - 98 percent. This is due in part to a decline in new jobs as the global recession hit and in part by more students scheduled to work in 2008/09 than in previous years.

Figure 6.1.A

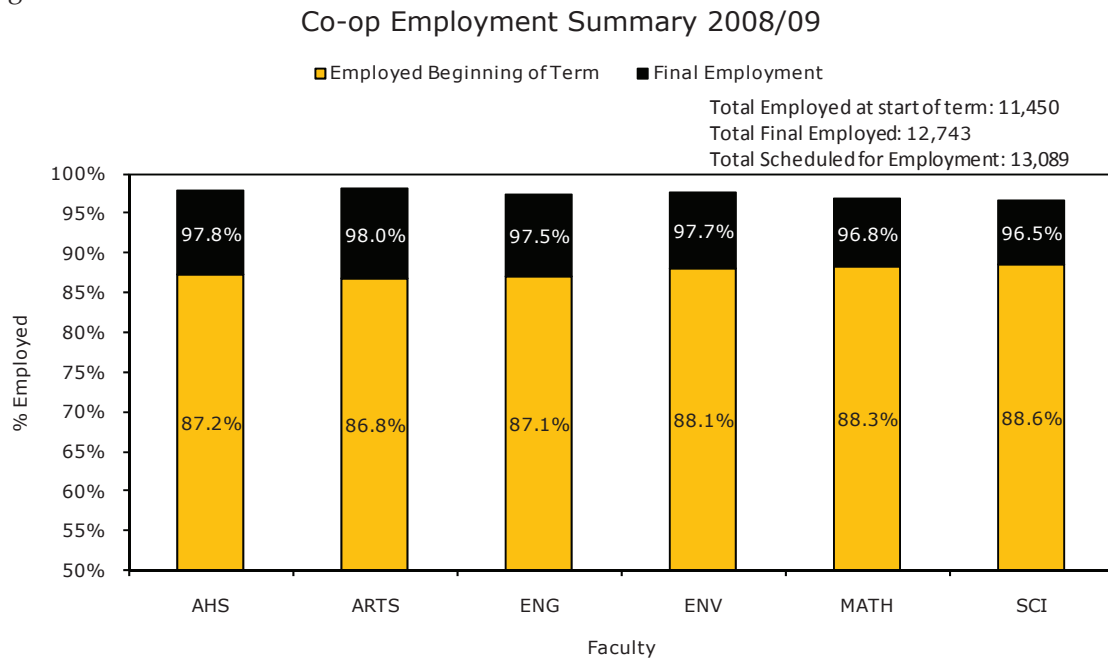
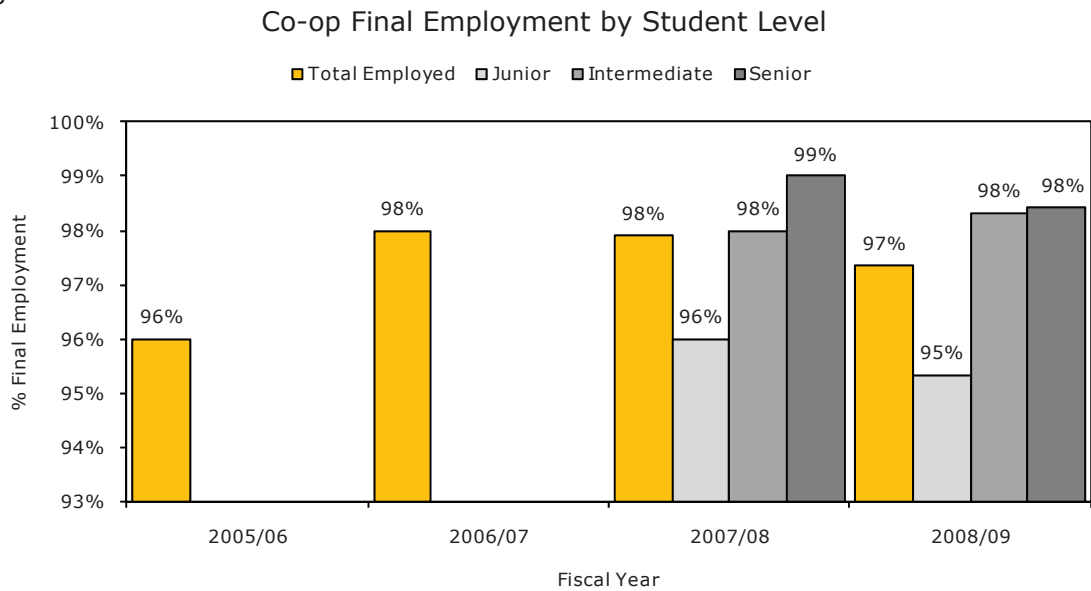


Figure 6.1.B shows final employment rates by level. CECS tracks employment rates as early as the middle of the academic term preceding the work term. We have identified junior students (1st or 2nd work term) as being hired later in the process and are working to understand how to help them gain employment earlier in the process.

Figure 6.1.B⁴³



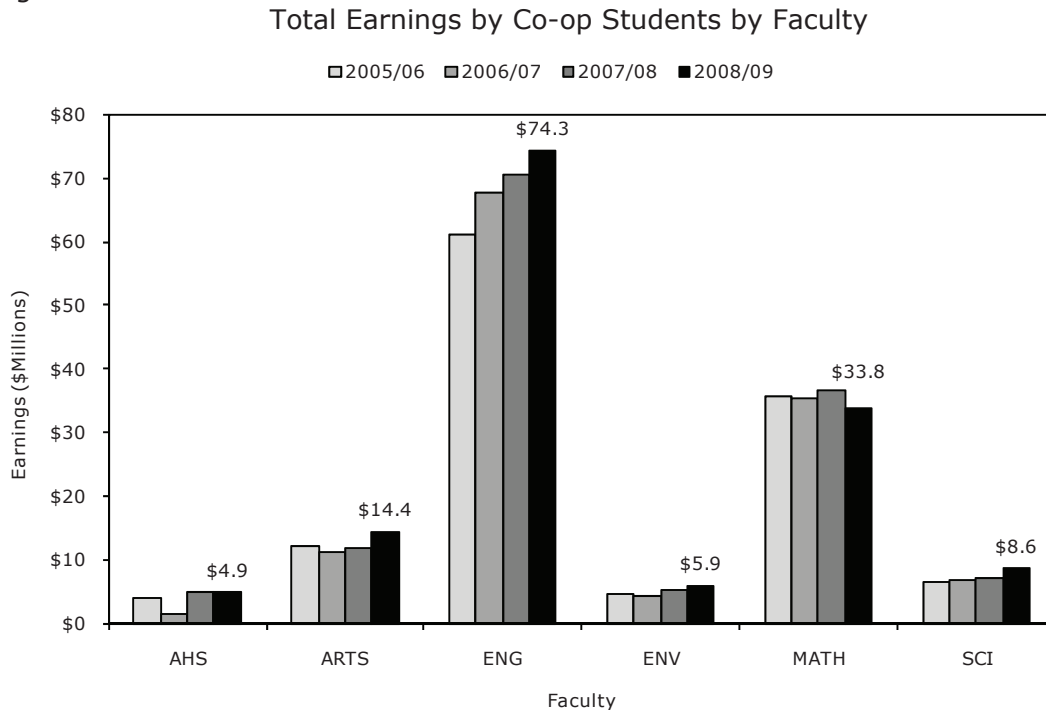
⁴³ 2005/06 and 2006/07 do not show level data as tracking of students by level was initiated in 2007/08.

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 Credit⁴⁴, 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 2008/09 were \$142 million⁴⁵, an increase of six million dollars over 2007/08.

Figure 6.2.A



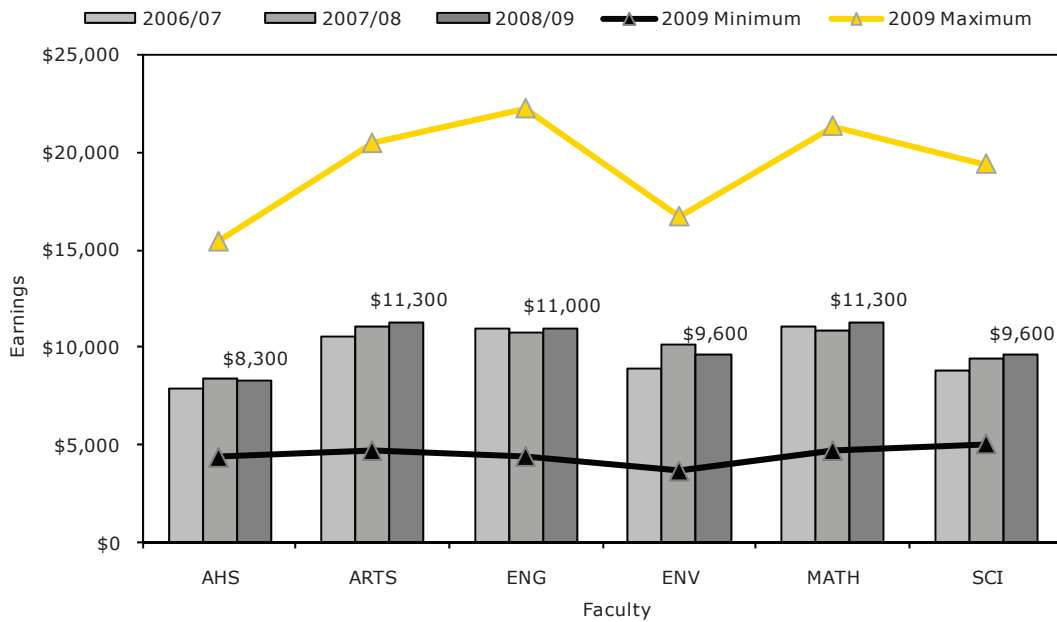
Co-operative work term income is an important measure for students, letting them know what to expect from the co-operative employment experience. Figure 6.2.B shows the average work term salary by faculty over the past four years. On average a student would earn \$10,800 during the work term.

⁴⁴ <http://www.rev.gov.on.ca/en/credit/cetc/>

⁴⁵ Total student earnings are estimated using average salaries.

Figure 6.2.B

Average Co-op Earnings per Work Term by Faculty 2008/09



In addition to a salary premium two years after graduation of approximately 12 per cent⁴⁶, 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.

⁴⁶ 2002 Waterloo study Co-operative Education: Greater Benefits, Greater Costs.

7. RESOURCES

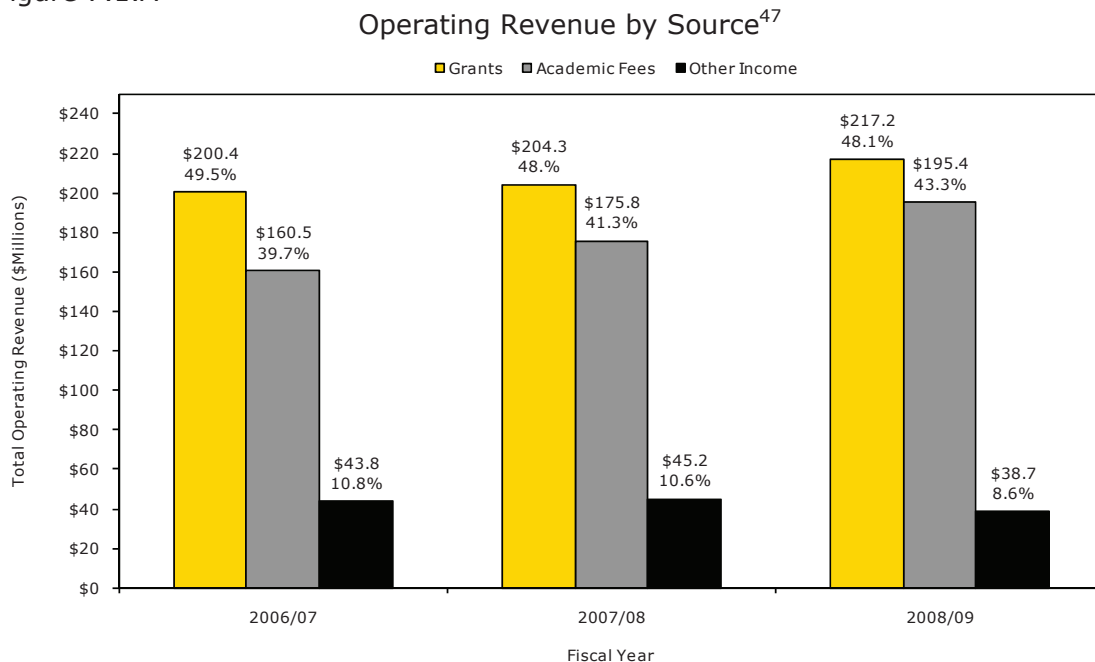
Financial stability and the flexibility to respond to new initiatives and opportunities are paramount to UW's success. Over the last decade and a half, reduced per-student government operating grants have resulted in higher student to faculty ratios. At the same time, students are paying more for their 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



⁴⁷ 2008/09 numbers are subject to Board approval.

Scholarships and bursaries as a percentage of operating expenses have increased dramatically over the past 14 years, from about three per cent in 1994/95 to almost 16 per cent in 2008/09 due, in most part, to UW's response to the increased financial demands placed on students.

Figure 7.1.B

Scholarships and Bursaries as % of Operating Expenses⁴⁸

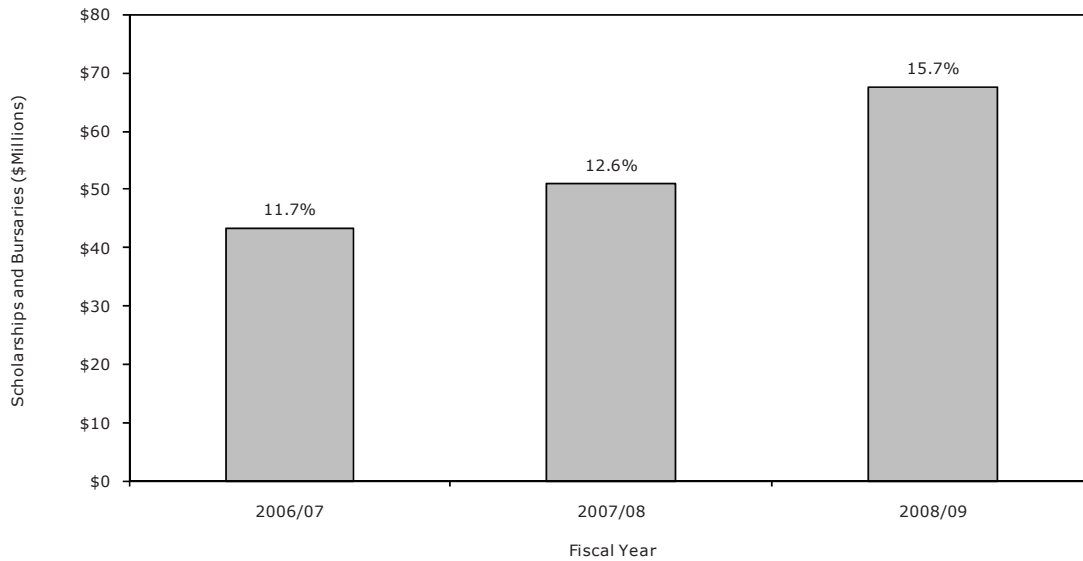
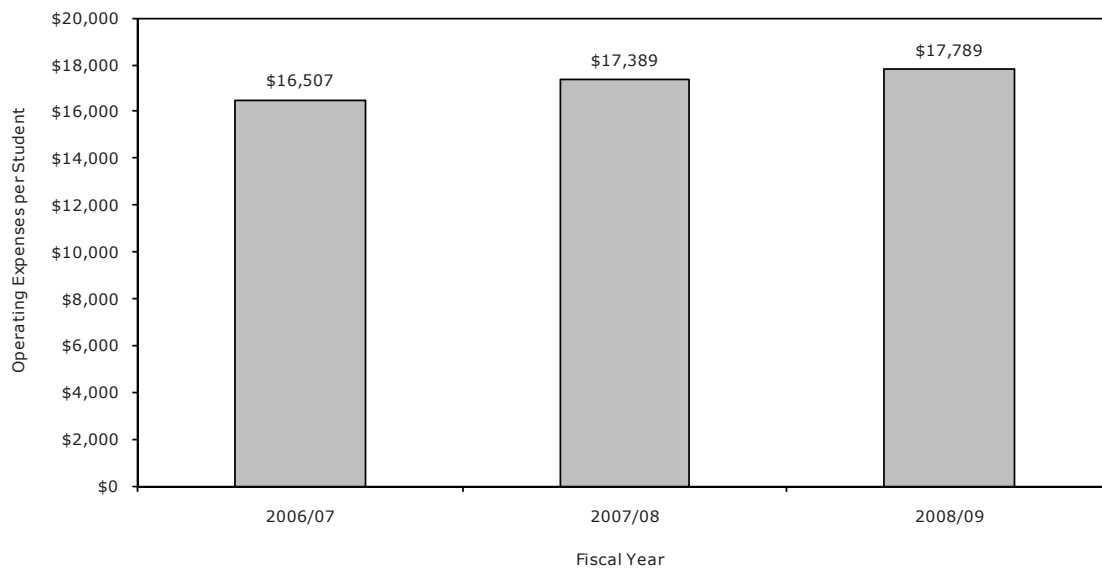


Figure 7.1.C

Operating Expenses per FTE Student⁴⁹



⁴⁸ 2008/09 numbers are subject to Board approval.

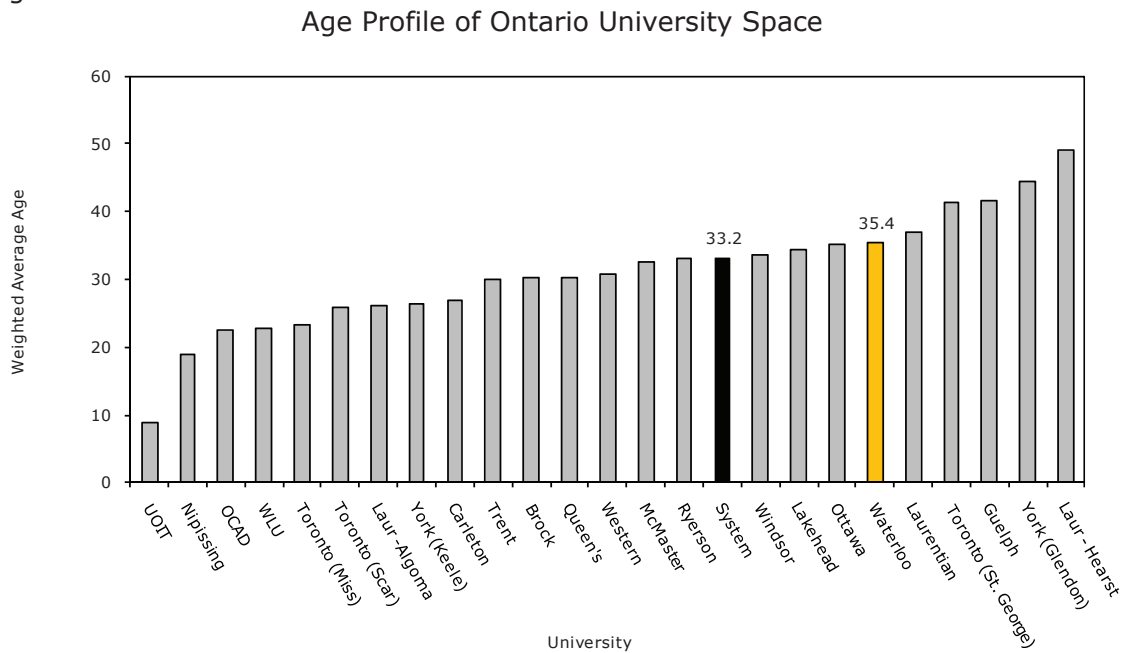
⁴⁹ 2008/09 numbers are subject to Board approval.

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 age of an institution⁵⁰ 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 next survey year is 2010 and new data will be available in the 2011 report.

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 2004.⁵¹

Figure 7.2.A



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.

⁵⁰ 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.

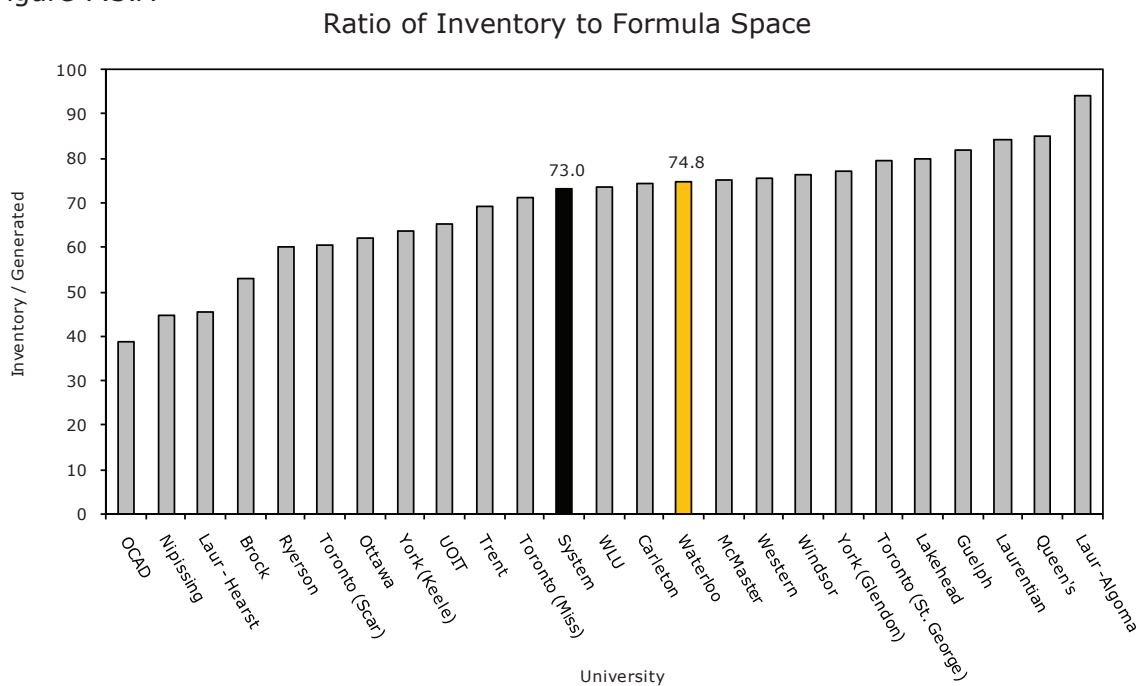
⁵¹ The 2007 figures are based on the preliminary Council of Ontario Universities space survey.

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 UW, 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.

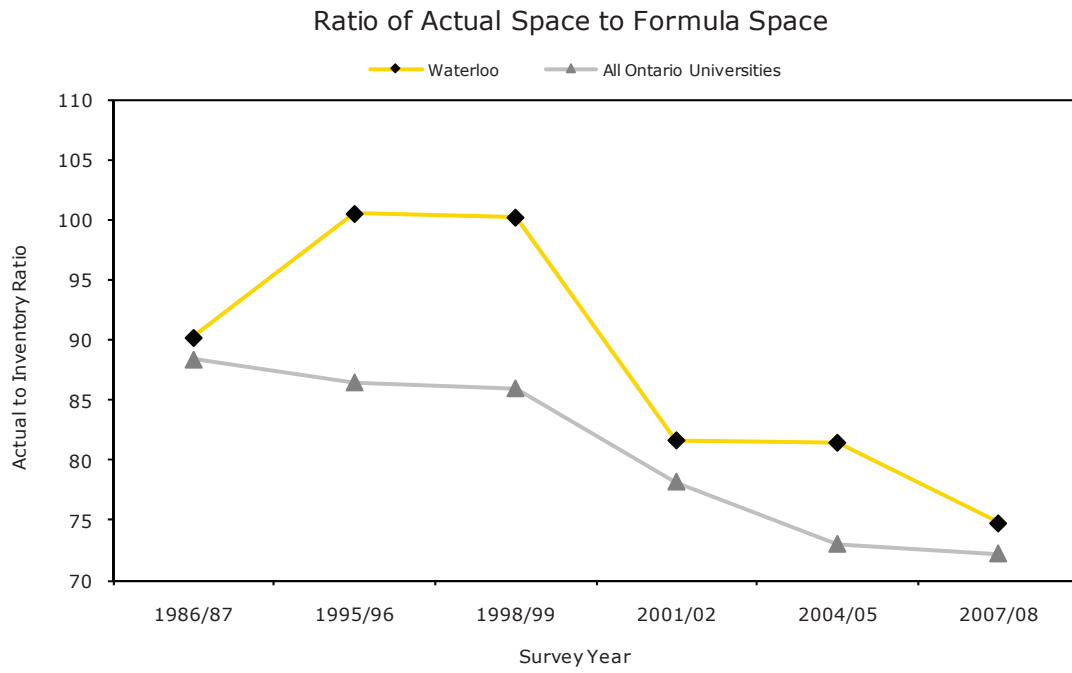
As of November 2007, UW was slightly better off than the system as a whole: we had 74.8 per cent of the space we needed, compared to an average figure of 73 per cent. If we adjust our entitlement to account for the difference resulting from our co-operative education programs, UW’s ratio of inventory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

Figure 7.3.A



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.B⁵²



⁵² Table 37 - COU Inventory of Physical Facilities of Ontario Universities, various years.

8. FUNDRAISING

Despite the global economic uncertainty, Waterloo continued to experience strong fundraising results in terms of gifts received and pledge commitments in 2008/09. Waterloo demonstrates its commitment to donors by prioritizing long-term relationship in all of its programs and investing in regular donor communication focused on conveying impact of giving and providing accountability for how gifts are used at the university. Waterloo's focus and clear objectives, guided by its sixth decade plan, guide its fundraising efforts and investments.

8.1. Alumni Donations

Alumni donors play an important role in supporting our goals of excellence. To help us stay in contact with them, we track the number of alumni with valid contact information and the number of alumni donors. Both figures below are cumulative five-year totals.

From these two figures we can calculate the percentage of alumni who make gifts to the University – approximately 18 per cent. This percentage may be seen as an indicator of how well the University served the alumni while they were students, the depth of their continuing affinity for the University, and a measure of their support for higher education in general. Our success in earning and retaining the loyalty of alumni may be measured over time by monitoring this indicator.

Figure 8.1.A

Alumni Donation Statistics	
	2004-2009
Alumni with valid contact information (cumulative five-year total)	409,196
Alumni donors (cumulative five-year total)	72,585
Participation	18%
Includes faculty, staff, and retirees who are also alumni, and includes both spouses in the case of joint gifts. Includes cash or gift-in-kind donations and/or pledge expectancies. Excludes honorary degree holders.	

8.2. Annual Fundraising

Despite the unstable economic situation, Waterloo continues to achieve good fundraising results and is holding steady in terms of private sector fundraising. Waterloo continues to be very successful in securing support from all levels of government in the form of matching funds, special grants, and partnerships in initiatives – notably the Stratford digital media project.

In addition, Waterloo remains committed to its guarantee to provide financial assistance for all eligible full-time undergraduate students, a commitment that is even more critical during challenging economic times. Thus, by focusing annual giving programs on raising funds for

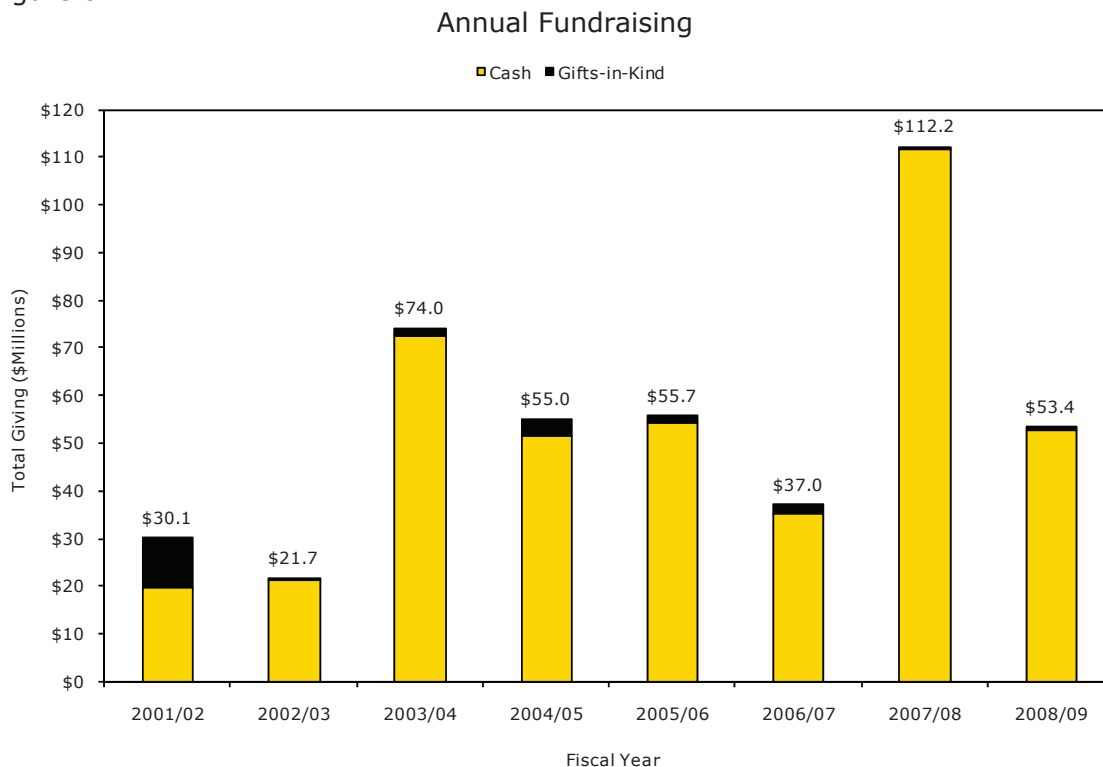
entrance scholarships, Waterloo is working to maintain the portion of our annual fundraising revenue that historically has supported students.

With significant momentum and sixth decade objectives to achieve, Campaign Waterloo continues towards its goal to sustain fundraising at the \$100-million level annually by 2017.

A summary of funds raised from the private sector is shown, year-by-year, from 2001/02 to 2008/09. Income in millions of dollars is broken out by cash and gifts-in-kind. It includes gifts to the University and to the four federated and affiliated university colleges 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 shows despite some exceptional years, there is a general upward trend in private-sector giving to the University from 2001/02 to 2008/09, with dramatic leaps in both 2003/04 and in 2007/08. These can be accounted for by several significant pacesetting gifts. Mike and Ophelia Lazaridis donated \$32.8 million in 2003/04, \$17.2 million in 2004/05, \$25 million in 2007/08, and an additional \$25 million in 2008/09, bringing their total giving to more than \$101 million. In recognition of this extraordinary support, the Mike & Ophelia Lazaridis Quantum-Nano Centre has been established. In 2005/06, Waterloo received a gift of \$25 million from David Cheriton (MMath '74, PhD '78), establishing the David R. Cheriton Endowment for Excellence in Computer Science. In 2007/08, pacesetting gifts were received from Jim Balsillie (\$20.8 million), the Bill & Melinda Gates Foundation (\$12.5 million), and \$25.5 million from an anonymous donor.

Figure 8.2.A



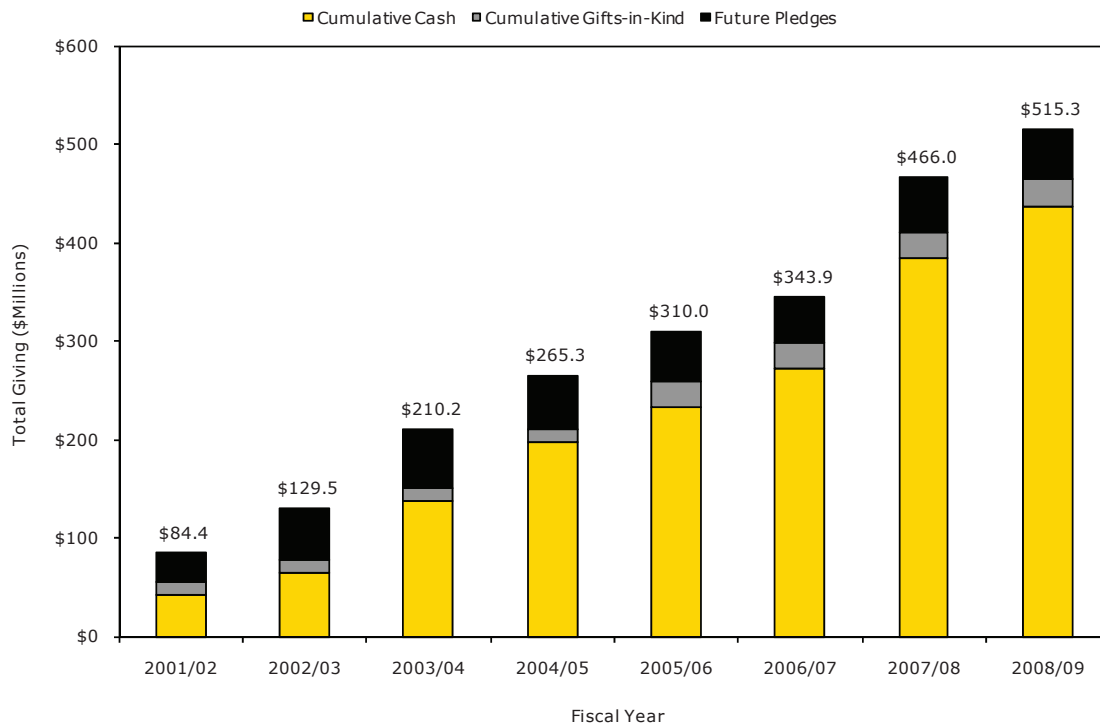
Annual fundraising achievements are used to measure overall performance of advancement activities across the entire University and are important indicators of how well we are doing to raise private sector gifts. Results published annually in the Report on Giving show donors how much was raised, how their funds were used, and the impact of their giving on Waterloo’s programs, scholarships, buildings, and research. Combined with other analysis, annual fundraising achievements are tangible indicators of support for Waterloo by its alumni, faculty, staff, and friends.

8.3. Cumulative Campaign Results

A good way to measure our fundraising progress is to show an annual cumulation, with results classified by cash, gifts-in-kind, and pledges. Campaign Waterloo officially began in May 2000 with a goal of \$260M. This goal was revised to \$350M in 2007, and by the end of 2008/09, the total raised stood at \$515.3 million.

Figure 8.3.A illustrates our cumulative fundraising achievements to April 30, 2009, representing 147 per cent of the 2007 campaign goal. The funds raised are being used to support priority projects that include new buildings (\$102.2 million), chairs and professorships (\$95.5 million), research support (\$108.4 million), the library (\$6.8 million), programs (\$124.7 million), and scholarships (\$77.2 million).

Figure 8.3.A
Cumulative Campaign Waterloo Results to April 30, 2009

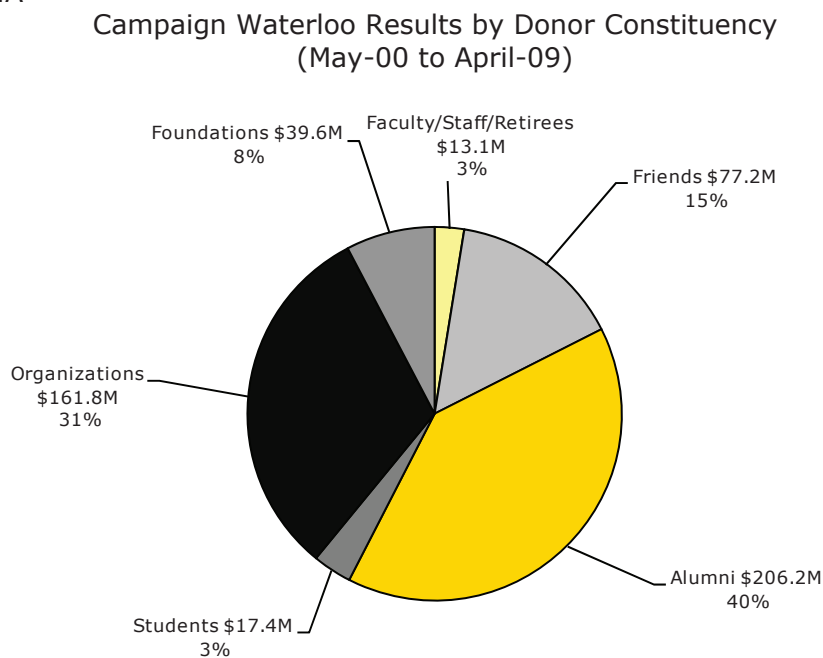


8.4. Donor Constituency

Figure 8.4.A shows campaign results by donor source or constituency, cumulated from the beginning of Campaign Waterloo in May 2000 to April 2009.

This indicator shows trends in giving by various donor groups and will allow us, over time, to track the effectiveness of programs aimed at different constituencies. For example, more than half of all donations came from individuals – all with some connection to the University of Waterloo – and less than half came from foundations, corporations, and organizations.

Figure 8.4.A



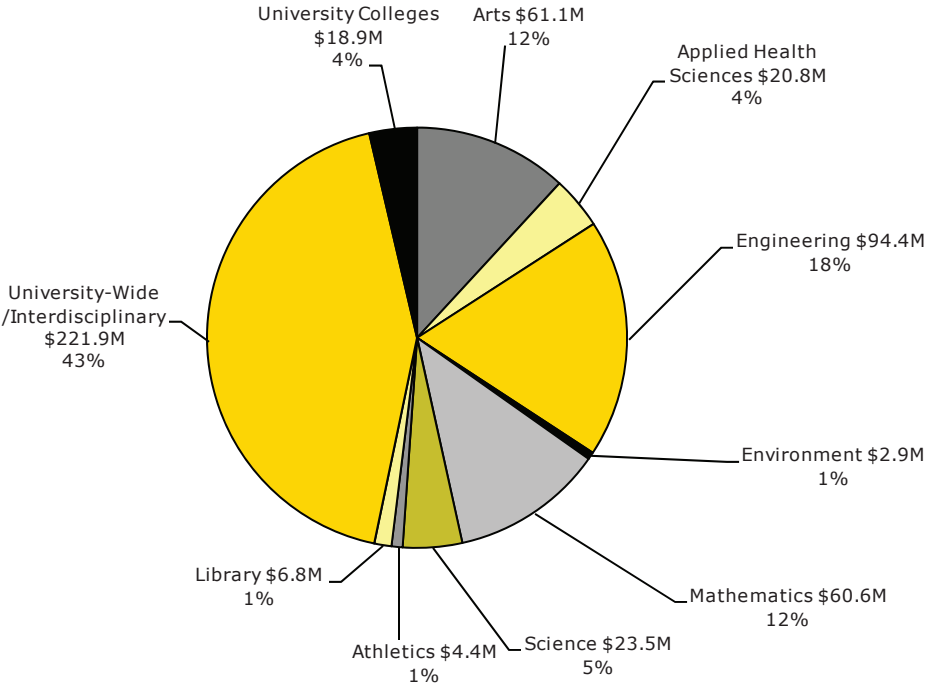
8.5. Gift Designation

Another way of measuring advancement is to show cumulative campaign fundraising results by the Faculty or unit that ultimately receives the funds. Most donors designate their gifts to benefit a specific Faculty, college, program, scholarship, or the like. 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 how funds raised through Campaign Waterloo between May 2000 and April 2009 have been directed according to the wishes of donors.

Figure 8.5.A

Campaign Waterloo Results by Gift Designation
(May-00 to April-09)



The “University-Wide/Interdisciplinary” sector may include scholarships that are open to students in two or more disciplines, or 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, and gifts to the School of Accountancy in the Faculty of Arts sector. Of note, in 2005/06, the School of Architecture moved from the Faculty of Environment to the Faculty of Engineering.

9. LIBRARY

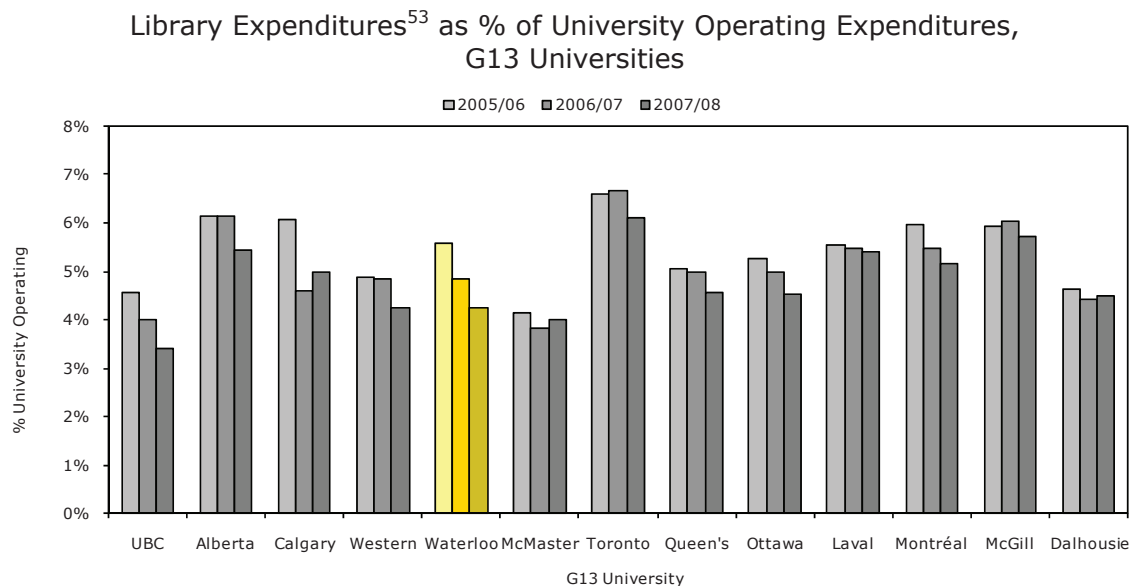
The University of Waterloo's goal is to rank among the top research libraries in Canada. We continue to strengthen our information resources by taking advantage of opportunities through our active participation in the Canadian Research Knowledge Network (CRKN) and the Ontario Council of University Libraries (OCUL). Our electronic monograph holdings have increased notably over the last few years, and the current round of CKRN negotiations will allow us to enrich and expand our electronic content further by the significant acquisition of even more e-books. As we move towards 2010, we will 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 9.1.A shows library expenditures as a percentage of the University operating budget for each of the G13 universities for the three latest fiscal years. Waterloo's library expenditures amounted to 5.57 per cent in 2005/06, placing it sixth. In 2006/07 the figure dropped to 4.85 per cent, placing Waterloo eighth. In 2007/08 we saw a further decrease to 4.26 per cent and a placing of tenth among the G13 universities.

Figure 9.1.A



⁵³ Source: Canadian Association of University Business Officers (CAUBO)

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 G13 universities as well as the TriUniversity Group (TUG).

While Waterloo ranks low in 2007/08 in total holdings at twelfth, the holdings count of the TriUniversity Group shows the benefit of making the collections of our University of Guelph and Wilfrid Laurier University partners readily available to our users through TRELIS (the online catalogue of the combined collections of the TriUniversity Group of Libraries). When total TUG holdings are taken into account, the ranking is similar to the third-placed G13 university (Alberta).

Figure 9.2.A

Total Library Holding (\$Millions), G13 Universities & TriUniversity Group (TUG)

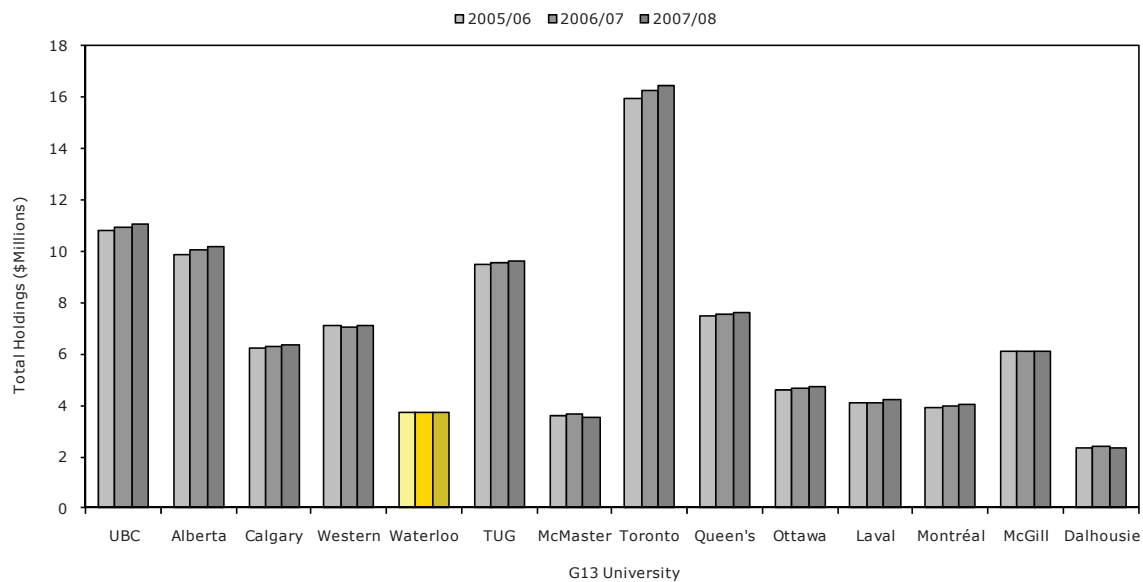


Figure 9.2.B shows the libraries' holdings in terms of items per full-time equivalent student (FTE), which takes into account the level of demand. Waterloo placed ninth among the G13 universities in 2006/07 with 166 items per student and remained in ninth position in 2007/08 with 161 items per student.

Figure 9.2.B

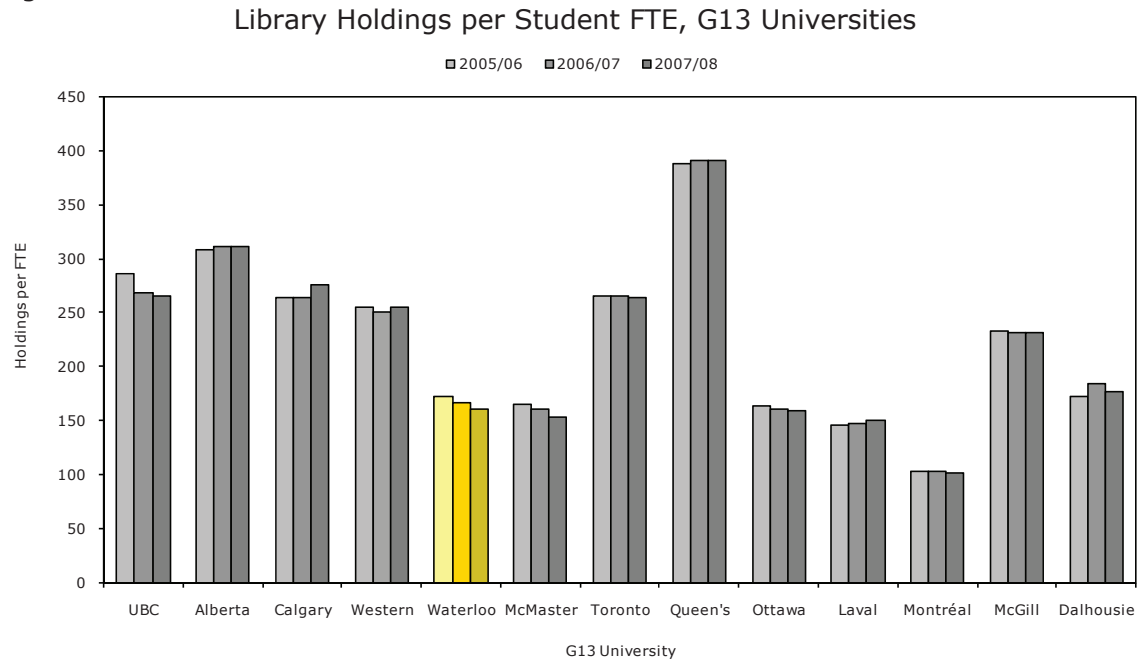
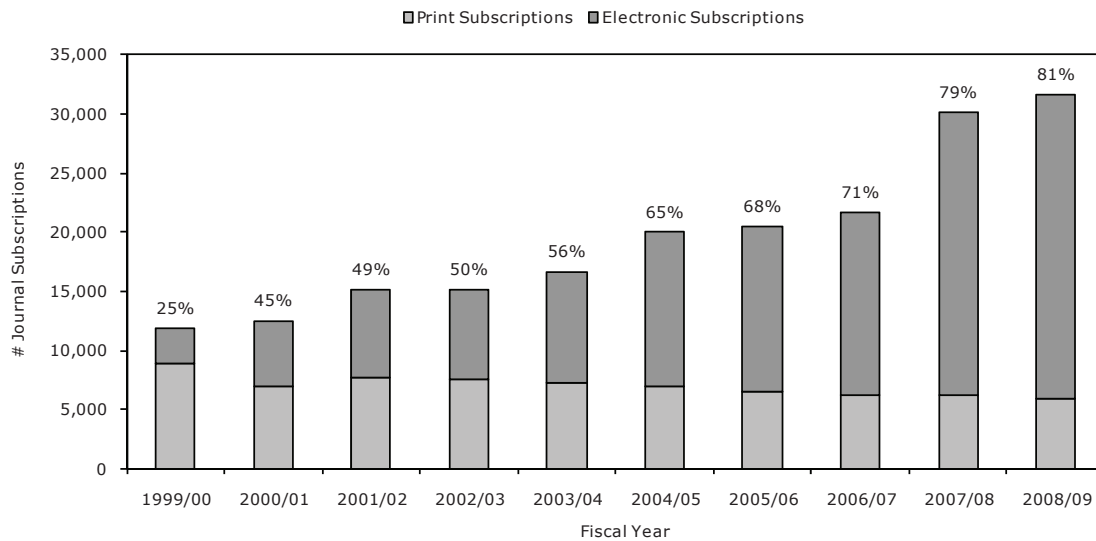


Figure 9.2.A and Figure 9.2.B include counts of printed materials (monographs, bound journal volumes, government documents) and micro-materials, but not electronic, cartographic, or audio-visual materials. The counts do not include the holdings of the libraries of Waterloo's federated and affiliated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

The data in these charts does not take into account the significance of electronic resources, which are playing an increasingly important role at all universities. Electronic monograph holdings have grown from 5,747 titles in 2000/01 to 290,182 titles in 2008/09 and now represent over 17 per cent of the total monograph collection.

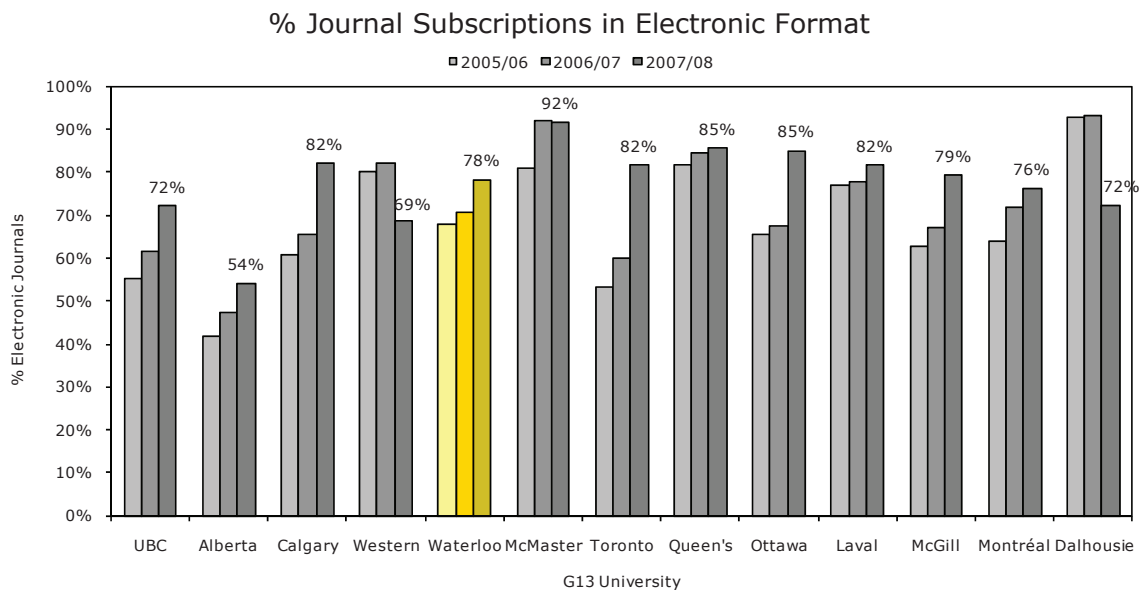
Figure 9.2.C shows that Waterloo's electronic journal holdings have also continued to grow substantially. Waterloo subscribed to 31,699 journals in 2008/09, of which 25,709 (i.e., 81 per cent) are in electronic format.

Figure 9.2.C
Library Holdings: Print and Electronic Journal Subscriptions



While Waterloo has placed last among G13 university libraries for total number of journal subscriptions since 2005/06, we rank higher in terms of our percentage of journal subscriptions in electronic format. Figure 9.2.D shows that in 2007/08 Waterloo is in eighth place with 78 per cent of its journal subscriptions in electronic format.

Figure 9.2.D



10. CONCLUSION

Now in our sixth year, the Performance Indicators Task Force and the Data Working Group have dealt with most of the issues and questions that have arisen as a result of the annual report, with one exception--to produce meaningful comparisons and trend analyses that would tell the stories of how we are doing relative to our sixth decade plan. Over the course of 2009 and early 2010, the task force will identify key areas and opportunities for reflection with the goal of producing a series of stories to better inform our communities.

The next several years promise both challenges and opportunities. The provision of analyses, benchmarks, and milestones will help us to assess our priorities, basic principles, and strategic directions. Change will be the theme in the coming year as we welcome our new senior administrators and find ways to help them plan and monitor for success and gauge the impact of innovative initiatives.

Prepared by the Performance Indicator Task Force, with the help of the Data Working Group, this report will facilitate strategic institutional planning and public accountability. We remain committed to the review and production of future reports.

University of Waterloo Performance Indicators Task Force, 2009

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