



A Framework for Graduate Expansion 2004-05 to 2009-10

1. Introduction

In May, 2000, Governing Council Approved a document entitled “*Framework for Enrolment Expansion at the University of Toronto*,” which guided the enrolment growth that has taken place over the past five years. The Framework called for a substantial increase in the number of undergraduate students and for a proportionate increase in graduate enrolment.

Graduate education is a distinctive feature of the University of Toronto and is a defining part of our vision. Graduate students are the lifeblood of research in the University and an essential component in linking research and teaching. In the last two decades, the University has accepted thousands of graduate students in the absence of any government funding – a clear signal of the importance of graduate students to our academic aspirations.

The University's commitment to graduate education has been a recurring theme in the University's academic planning documents, including:

- Planning for 2000 (1994): Proposed an overall increase in graduate enrolment to enhance programs.
- Raising Our Sights (2000): Encouraged graduate enrolment planning as a coordinated, university-wide process.
- A Framework for Enrolment Expansion at the University of Toronto (2000): Encouraged graduate expansion in parallel with undergraduate expansion, to maintain the student mix. It also set as a goal graduate enrolment expansion at the University of Toronto at Mississauga (UTM) and at the University of Toronto at Scarborough (UTSC).
- *Stepping UP* (2003): Emphasized the importance of graduate education to program enhancement.
- The Choice for a Generation [University submission to the Rae Review] (2004): Called for funding of graduate enrolment expansion in the Ontario.

At the same time, a number of external reports also emphasized the need for increased graduate student enrolment in the Province. These include:

- *Advancing Ontario's Future Through Advanced Degrees* (2003): This study, prepared by a committee chaired by Professor Paul Davenport for the Council of Ontario Universities (COU), called for a doubling of graduate enrolment.
- *Investing for Prosperity: Task Force on Competitiveness, Productivity and Economic Progress* (2003): This report of a Provincial Task Force chaired by Professor Roger Martin, Dean of the Rotman School of Management of the University of Toronto, noted that Ontario is graduating fewer Master's and PhD students than peer jurisdictions in North America.
- *Ontario: A Leader in Learning* (2005): In his review report, Mr. Rae strongly recommended a substantial expansion of graduate enrolment in the Province.

Stepping Up, which is the guiding document for all academic planning at the University of Toronto from 2004 to 2010, points to the centrality of discovery and research to the University's mission and the importance of the role that graduate students play:

We will recruit undergraduate, professional and graduate student cohorts with varied interests, experiences and abilities as well as the strongest academic records. We will continue to guarantee that no undergraduate admitted to our university is unable to enter or continue as a consequence of financial need. We will improve our graduate funding guarantee over the next years. ...

Our discovery and knowledge will provide important leadership nationally and internationally. We will provide leadership in research that defines emerging intellectual landscapes. ...

We will ensure a high quality of student experience at the University of Toronto, both in the classroom and beyond the classroom, and we will ensure a high quality of graduate supervision.

A Discussion Paper, entitled *Graduate Enrolment Planning 2005-15* (<http://www.provost.utoronto.ca/English/Reports.html>), addressing the possibility of increasing graduate enrolment at the University of Toronto was issued in October, 2005. The paper identified the major issues that such an expansion would entail, including the availability of appropriate supervisory capacity and the need for graduate student funding, research funding, and space. The discussion stressed the importance of maintaining the University's high-quality standards in the admission process and ensuring that operating grant funding is available to cover all the associated costs.

The Discussion Paper was circulated widely and discussed at length, including at the November 1, 2005 meeting of the Planning and Budget Committee of Governing Council, at the Academic Board on November 24, 2005, and at the Governing Council on December 12, 2005. The paper was also discussed at meetings of Principals, Deans Academic Directors and Chairs. Two town hall meetings were held to which all stakeholders across the University were invited. A thoughtful submission from the Graduate Student Union has also been received, addressing many of the points raised in the discussion paper and stressing the importance of maintaining and enhancing the student experience.

Valuable feedback has been received in these meetings and has informed subsequent actions and the development of this Framework. All stakeholders recognize the

important contributions that graduate students make to research and to the educational mission of the University. Above all, the consultations highlighted the importance of ensuring that the high quality of graduate education at the University of Toronto is maintained and enhanced. The discussions also identified key implementation challenges which are discussed in the final section of this paper.

2. Principles

Based on the discussions and feedback from all stakeholders, graduate expansion should be based on the following principles:

1. Academic units that increase graduate enrolments should do so consistent with their academic priorities and use this growth as an opportunity to maintain or improve quality.
2. Graduate enrolment expansion should take into account the desirable student mix in its various dimensions: professional masters vs. doctoral stream programs, domestic vs. international as well as the mix among the disciplines, all of which should be guided by an institutional academic plan.
3. The quality of students admitted should be maintained and enhanced.
4. The quality of the graduate student experience should be maintained and enhanced.
5. Financial support for graduate students should continue to be nationally competitive.

In May of 2006, Governing Council approved a preliminary increase of 1,000 FTEs in our graduate enrolment target for 2006-07. It is proposed that the University continue to take advantage of the current opportunities to increase graduate enrolment, provided that the expansion is carried out in a manner consistent with our academic plans and the principles stated above. As pointed out earlier, such expansion is highly congruent with the University's mission and aspirations. The opportunity presented by the Government of Ontario is the result of successful advocacy efforts which were based on our academic plans over the last decade.

3. Expansion Targets

Unlike undergraduate enrolments, the number of graduate students at the University fluctuates considerably from year to year. There are two main reasons. First, the number of years of study for a degree, especially a doctoral degree, is less predictable than for an undergraduate degree. The second reason is that graduate admission decisions are made by individual graduate units, informed by the availability of supervisory capacity, the academic merit of the student and other considerations such as the availability of funding. The number admitted is also affected by the size and quality of the applicant pool, which vary from year to year.

As a result, graduate enrolment targets should not be regarded as precise numbers. They are better viewed as estimates of how graduate units across the university will respond to the opportunities available to them.

To formulate the targets for graduate expansion, we begin by examining the available operating grant funding from the Government, then we examine the capacity for expansion in the University. The Government originally announced the creation of graduate spaces as part of its *Reaching Higher* plan announced in the 2005 budget, in response to the recommendations of the Rae Review. In April 2006, the Ministry of Training, Colleges and Universities asked Ontario universities to submit proposals for graduate expansion. The University of Toronto's proposal was developed based on the academic plans of its Divisions.

Operating Grant Funding

Recently, the Ministry of Training, Colleges and Universities allocated 2140 places of its graduate expansion target to the University of Toronto (consistent with our proposal), to be achieved by 2007-08 relative to 2004-05. Thus, the University is guaranteed to receive operating grant funding for up to 10,060 FTE graduate students in 2007-08.

Not all graduate students in the University are eligible for government funding. The University receives funding only for domestic students who have not exceeded the maximum period allowed by the Ministry for the degree in which they are enrolled. Typically, about 87% of the domestic students are eligible for funding. The Ministry's allocation of 2140 eligible FTEs corresponds to a total increase in the number of domestic graduate students estimated at about 2180 FTEs. This, together with a projected growth of about 150 FTEs in the number of international students, brings the total increase in graduate enrolment in 2007-08 to 2330 FTEs.

It is expected that the University will receive an additional allocation for further expansion beyond 2007-08. However, the Ministry's plans for that latter phase have not been announced.

Capacity for Expansion

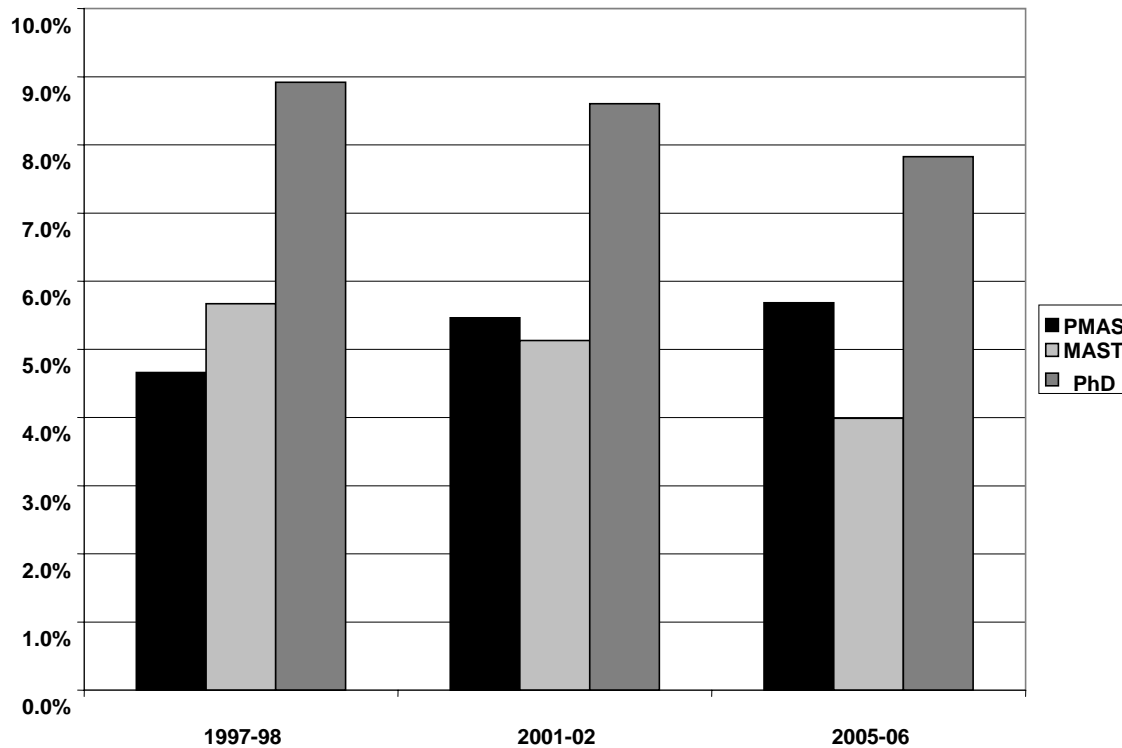
The increase in undergraduate enrolment that took place during the double cohort has not been matched by a proportionate increase in the number of graduate students. From 1997-98 to 2005-06, undergraduate enrolment increased by 46%. During the same period, enrolment in the Ph.D., doctoral-stream Master's and professional Master's programs increased by 25%, 0.6% and 74%, respectively. Overall, the number of graduate students increased by about 30%, but a major portion of this increase has been in the professional Master's programs. As a result, the proportion of graduate students enrolled in doctoral-stream programs has fallen significantly behind. This is illustrated in Chart 1.

A detailed study by individual graduate units in the University suggests that, in the long term, a steady-state enrolment of about 15,250 FTEs is desirable as an academic objective. This represents an increase of about 4,470 graduate student FTEs above the 2004-05 enrolment of 10,780, including both domestic and international students.

To ensure that quality is maintained and the appropriate infrastructure is provided, expansion should take place gradually. Table 1 shows the proposed enrolment increases for 2007-08 and in the long term. These targets have been set based on the academic plans of individual faculties and on the expansion places that have been allocated by the

Ministry to the University of Toronto. Hence operating grant funding for the proposed enrolment in 2007-08 is assured.

Chart 1. Graduate enrolment as a percentage of undergraduate enrolment.



PMAS: Professional Master, MAST: Doctoral Stream Master; PhD: Doctoral Stream

Only a modest increase in the number of international students is projected at this time - 150 by 2007-08 and 240 in the long term. In part, this is because a significant increase has already taken place in the first half of this decade. Also, attempts by the university sector to include international students in the Government's funding for graduate expansion have so far been unsuccessful. It is recommended that most of the increases in the next few years should be in domestic enrolments. However, the University's long-term advocacy efforts must continue to make the case for policies that enable the recruitment of the most qualified students globally.

Table 1. Graduate enrolment targets.

	2004-05	2007-08		Steady State (Long Term Objective)		
		Enrolment	Increase	Enrolment	Increase	
Domestic	9090	11,270	2,180	13,320	4,230	47%
Domestic, Eligible	7,920	10,060	2,140	12,000	4,080	51%
International	1,690	1,840	150	1,930	240	14%
Total Enrolment	10,780	13,110	2,330	15,250	4,470	42%

Table 2 shows the distribution of the proposed expansion among different graduate degrees. Expansion will take place in both the doctoral stream and professional Masters' programs. Graduate students enrolled in doctoral-stream studies are a very important part of research in the University, and increases in their numbers will strengthen the research enterprise. At the same time, the expansion of professional Masters' programs will enhance the University's ability to support government, social institutions, industry and business and increase the number of highly-qualified personnel in fields that are critical to our society. The table shows that the proposed expansion will not significantly alter the student mix among these degrees.

Table 2. Distribution by degree

	2004-05	2007-08		Steady State (Long Term Objective)		
		Enrolment	Increase	Enrolment	Increase	
Ph.D.	4,770	5,740	970	6,760	1,990	42%
Doctoral Stream Master	2,590	3,230	640	3,770	1,180	46%
Prof. Master	3,420	4,140	720	4,720	1,300	38%
Total	10,780	13,110	2,330	15,250	4,470	42%

Table 3 shows the distribution of the proposed increases in enrolment by 2007-08 among the four divisions of the School of Graduate Studies. Meaningful expansion will take place in each of the four divisions. In each case, the numbers reflect the academic plans of individual graduate units, taking into account supervisory capacity, the availability of research funds, and the ability to support students.

Table 3. Distribution among Divisions of the School of Graduate Studies

	2004-05	2007-08	Increase	Percent
Division I Humanities	1600	2100	500	31%
Division II Social Sciences	3980	4580	600	15%
Division III Physical Sciences	2055	2510	455	22%
Division IV Life Sciences	3145	3920	775	25%
Total	10,780	13,110	2330	22%

The expansion targets for 2007-08 proposed by each academic division are shown in Table 4. Participation in graduate expansion varies among faculties depending on individual circumstances. As pointed out earlier, the nature of the graduate operation is such that enrolment projections should be viewed as guideline rather precise targets. Also, enrolment projections are tentative at this time. Given the importance of graduate expansion to the University and the strong interest among the divisions, a buffer of about 400 students has been incorporated in the University's overall target requested from the Government. This is intended to ensure that the University will receive Government funding for all enrolled graduate students and that additional room for growth will be available as circumstances change over this planning period.

The long-term expansion target of 4470 students given in Table 1 anticipates a net growth of 2140 students beyond 2007-08. However, progress towards this target can only begin when the conditions of operating grant funding, research funding and student support are available. A specific timetable for that second phase can only be developed when the policies of both the Provincial and Federal Governments are clarified regarding these issues.

Table 4. Divisional Graduate Expansion Plans¹

	2004-05	2007-08	Increase	Percent
Applied Science and Engineering	1,226	1,371	145	12%
Architecture	292	322	30	10%
Arts and Science – Tri-campus	2,686	3,225	538	20%
UTM	133	237	104	78%
UTSC	46	83	37	79%
Dentistry	110	119	9	9%
Forestry	83	106	23	28%
Information Studies	304	355	51	17%
Law	104	128	25	24%
Rotman School of Management	842	945	103	12%
Medicine	2,243	2,666	424	19%
Music	115	245	130	113%
Nursing	236	260	23	10%
OISE/UT	1,459	1,561	102	7%
Pharmacy	103	120	17	16%
Physical Education and Health	39	47	8	21%
SGS Centres and Institutes	183	235	52	28%
Social Work	281	344	63	22%
Toronto School of Theology	296	339	43	14%
Buffer			400	
Total	10,780	13,110	2,330	22%

¹ Numbers include both doctoral-stream and professional Master's Full-Time Equivalent domestic students.

4. Observations Regarding Implementation

This Framework proposes an increase in graduate enrolment of about 4500 students, to take place in two phases. The first phase of the expansion, to be completed by 2007-08, increases total graduate enrolment by about 2330 students. Both operating grant funding and capital funding by the Government for this number of students are assured.

The second phase of the proposed expansion plan calls for a further increase of about 2140 students. However no firm timetable has been established for this second phase. Although a budgetary allocation has been made in the Ontario budget, funding allocations for universities beyond 2007-08 have not been decided.

This section addresses a number of implementation issues and important considerations that underlie the University's proposed plans.

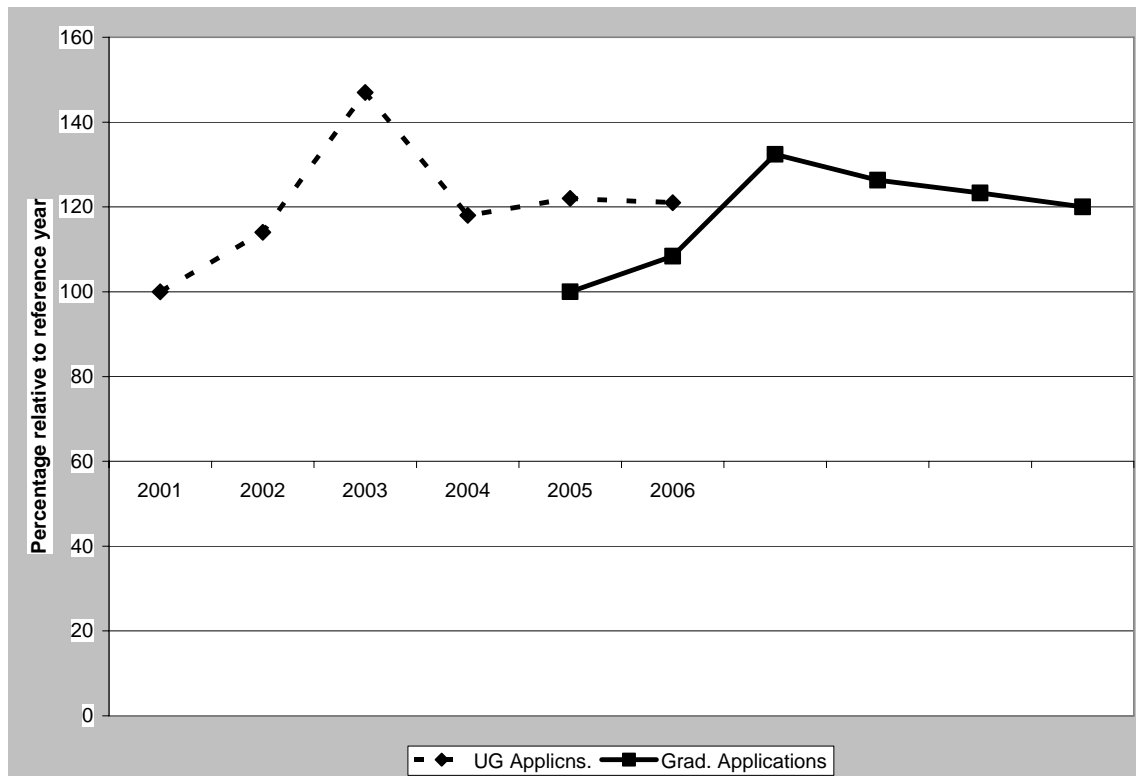
Recruitment and the Applicant Pool

The quality of students admitted to graduate school is crucial for maintaining academic standards and the excellence of the University's teaching and research enterprise. To ensure that quality will be maintained and enhanced as enrolment increases, we must endeavour to increase the size of the applicant pool and to increase our ability to attract the top applicants.

The Government's graduate expansion initiative has been motivated in part by the expected increase in the number of applicants to graduate studies resulting from the flow-through of the double-cohort students. These students entered university between 2002 and 2004, and are expected to graduate four to five years later. Chart 2 shows the projected increases in the applicant pool over the next few years based on university intake during the double-cohort period. The projected numbers take into account time-to-completion statistics and the fact that some students may not apply to graduate school immediately upon graduation. The Chart shows an increase of over 30% in the applicant pool for September 2007 relative to two years earlier, with a steady-state increase of about 20% in later years.

Graduate expansion is taking place in all Ontario universities. This will undoubtedly lead to increased competition. The School of Graduate Studies is mounting a significant recruitment campaign to ensure that we not only maintain our share of the expanded applicant pool but also increase it and attract students from other parts of Canada. By increasing the size and quality of the applicant pool, graduate units across the University will have the opportunity to achieve their aspirations for increasing graduate enrolment and at the same time enhance the quality of the graduate operation.

Chart 2. Projected increase in graduate school applications.



The University will also endeavour to increase admissions yield. Each year, about 65% of the offers of admissions we make are accepted. While this is a very good yield, it can be increased. There is general consensus that the magnitude of the graduate student support included in an offer is a significant factor in ensuring acceptance. To this end, the University allocation is ensuring additional resources for graduate student support.

The Ministry has recently announced the allocation of capital funding to support graduate student expansion. Funding will be provided in the form of a stream of payments over 20 years, starting in 2007-08. The present value of these payments is considered a “notional allocation” that universities are expected to use in support of the infrastructure needs of their expansion program. The University of Toronto has received a “notional allocation” of \$96M, assuming the 2007-08 targets in Table 1 are met.

The University intends to use its “notional allocation” as part of its overall capital plan to help support projects that are critical to our graduate expansion. Detailed plans and approvals for these projects will be submitted to Governing Council following established procedures.

Ultimate success of the graduate expansion initiative in Ontario will depend on the availability of the resources needed to support it. The Government’s *Reaching Higher* Plan has provided two key resources, namely operating grant and capital funding. However, graduate expansion is also critically dependent on the availability of research funds and student support awards. While the University of Toronto will endeavour to

increase the pool of funds available for graduate student support, the resources available to do so are very limited.

For these reasons, the University of Toronto calls on both levels of Government to increase their investments in research and graduate student support, in a manner commensurate with the planned increases in enrolment. Expansion of graduate enrolment in Ontario universities is a bold initiative of the *Reaching Higher* plan. It deserves to be properly supported so that it may deliver the benefits envisaged for students, universities, and Ontario.

As noted earlier, graduate admission decisions are made by individual graduate units, who will accept students only when all the needed resources are available. In the absence of these resources, continuation of the expansion plans is not possible. Thus, graduate expansion is a self-limiting process that will continue only when the resources needed are in place.

5. Concluding Remarks

Consistent with its academic mission and the academic plans of all its Faculties, the University of Toronto is proposing a significant expansion of graduate enrolment, to strengthen the research enterprise. The expansion would also create opportunities for enhancing the experience of both graduate and undergraduate students. It is consistent with the Government's *Reaching Higher* plan and would benefit from the funding provided in the Ontario budget of May 2005.

Although some key resources have been made available in the Ontario budget, continued implementation of the expansion plan is contingent on the availability of adequate research funding and student support awards. Regular monitoring and modification of the plans will be required as resources are identified.