



University of Toronto

OFFICE OF THE VICE-PRESIDENT AND PROVOST

TO: Committee on Academic Policy and Programs

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DATE: April 26, 2006

AGENDA ITEM: 3

ITEM IDENTIFICATION: School of Graduate Studies: Proposal for a new PhD in Planning to be offered through the Department of Geography, Faculty of Arts and Science.

JURISDICTIONAL INFORMATION:

The Committee has authority to recommend to Academic Board approval changes which establish a new degree program.

PREVIOUS ACTION TAKEN:

HIGHLIGHTS:

The proposal for a new PhD in planning builds on the success of the current MScPl program and is a response to the growing demand for PhD-trained planners in universities and in the world of professional practice. A description of the program and details regarding the academic rational and requirements are outlined in the attached proposal dated April 7, 2006.

The degree name and designation have been proposed to convey the breadth of the doctoral program, and given the association of the proposed PhD program with the Masters in Planning, the name is appropriate. The proposal has received the support of related units at the University, including the Centre for Urban and Community Studies, the Urban Studies Program (Innis College), the Centre for the Environment, and the Faculty of Architecture, Landscape and Design.

The proposal has been reviewed extensively within the Faculty of Arts and Science and the Department of Geography, and the Graduate Geography and Planning Student Society. The proposal was approved by the School of Graduate Studies Council on April 25, 2006.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

The Department of Geography and the Faculty of Arts and Science have committed to provide all the resources needed for this program. The size of the program has been determined in the context of financial implications and resources available to the program. Enrolment would be re-visited in the future, and enrolment will likely increase. The proposal will be presented to the Planning and Budget Committee on May 9, 2006.

RECOMMENDATION:

The Committee on Academic Policy and Programs recommends to the Academic Board:

THAT the PhD in Planning at the Faculty of Arts and Science Department of Geography be recommended to Governing Council for approval, effective September 2007.



UNIVERSITY OF TORONTO

Proposal for a

Ph.D. in Planning

In

Program in Planning
Department of Geography

7 April 2006

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1 Executive Summary

The primary initiative described in this proposal is the establishment of a new Ph.D. in Planning to be situated within the Department of Geography and Program in Planning. The Ph.D. in Planning will complement existing graduate programs within the Department, and build on the highly successful M.Sc.Pl. Degree program in Planning. The proposed initiative fits squarely within the Faculty of Arts and Sciences academic plan as it capitalizes on current strengths in Planning/Geography in urban, regional and environmental research. It also complements those existing and planned units on campus with urban interests, and it will create important linkages between the University and public policy agencies as well as local communities. The University's Stepping-Up (SU) Plan also emphasized the urban realm as one of its five long-term priorities.

Pedagogical Issues

There is a great deal of energy, enthusiasm and intellectual commitment within the Department in support of the development of a Planning Ph.D. program. The faculty believes that a Ph.D. in Planning will allow many of us to develop even stronger synergies between our research and our teaching than is now the case and will enhance our ability to attract high quality students.

Demand

Every year, outstanding graduates from our own M.Sc.Pl. program go on to pursue a Ph.D. in Planning or a closely related field elsewhere in Canada, the UK or the United States. There is further evidence of strong demand for doctoral training in the field internationally, as demonstrated by frequent unsolicited requests from potential students. The supply of Ph.D.-trained planners in Canada also does not meet the current demand.

Rationale

The rationale for the proposed Ph.D., in addition to the increasing demand for academic faculty and professional planners, is that we have the resources and expertise to create a first-class program within the Department. We need the intellectual legitimacy and external visibility of a separate Ph.D. in Planning, which would not be provided by a stream within the existing Geography program, in order to be competitive, to attract high-quality students, and to secure professional accreditation. The Department of Geography is the logical place to host such a program since it already has enough faculty strength in the fields of urban research, spatial planning and environmental sustainability to support the proposal.

Resource Implications

The Department's recent Graduate Enrolment Expansion Plan (October 2005) envisions starting with a class of three Planning Ph.D. students in the fall of 2007 and then admitting three students in each subsequent year for a total projected/steady-state enrolment in the program of 12 by 2010-2011. We have received approval from the Dean to increase the number of Ph.D. students in the Department, including 12 Planning Ph.D. students. The Department will ensure that each additional student receives the required TA and RA support as part of the guaranteed minimum funding package and as for all our Ph.D. students, work effectively with our own scholarships to substantially enhance this. As outlined elsewhere in this proposal we feel that we have the faculty resources and facilities in place or in the pipeline, to mount an effective and efficient Ph.D. program in Planning.

Program Impact on other Divisions

The Director of Planning has consulted with the Centre for Environment (formerly the Institute of Environmental Studies), Innis College, the Centre for Urban and Community Studies and the Faculty of Architecture, Landscape and Design. These are the four existing academic units identified as having a specific interest in the creation of a Ph.D. in Planning. All four support the proposal.

Program Description

The primary objective of the Ph.D. program is to prepare candidates for a career in teaching, research and professional practice in the discipline of Planning. The Program will have four fields of specialization: planning history and theory; society, economy and public policy; environment and sustainability planning; urban development and the built environment.

Designation

The name and designation of the proposed initiative – Ph.D. in Planning – is completely appropriate and accurately describes the new degree so that students, employers, professional associations and academic institutions will recognize the name and know precisely what it means. Planning already exists as a separate graduate unit within the University of Toronto. A Ph.D. in Planning is also consistent with the designation used for our Master's degree, namely the Master of Science in Planning.

2 Academic

2.1 Description and rationale for the proposal

2.1.1 Description of proposed program

The proposed doctoral program described in this submission will lead to the degree of Ph.D. in Planning. The expected start date for the new doctoral program is September 2007. The Ph.D. degree in Planning will require independent and innovative research, leading to the preparation and defense of a thesis, with an expected completion time of four years. It will also involve mandatory and elective course work and a comprehensive examination. The program will enroll up to 3 students a year up to a maximum of 12 students in the program by 2010-11.

The primary objective of the proposed Ph.D. program in Planning is to prepare candidates for a career in teaching and research. A number of students may also go on to a planning career in the private or public sector given the growing demand for people with a Ph.D. credential outside of academia. However, the main goal is to train a future generation of Planning scholars, educators and researchers.

Upon completion of the Ph.D. program, graduates would be expected to have acquired expertise in conducting research, preparing scholarly publications, and presenting their work at conferences. The Ph.D. program is designed to provide a broad knowledge of Planning theory and practice, as well as training in basic research. These objectives will be achieved through a combination of course work, a comprehensive exam, advanced seminars and workshops, and a major thesis. Students will also receive teaching assistantships and will be offered research assistantships, as these become available.

The Ph.D. program will have 4 fields:

- Planning history and theory
- Society, economy and public policy
- Environment and sustainability planning
- Urban development, design and the built environment

There are sufficient faculty members associated with the program to support four distinct fields of doctoral research (we currently support five similar fields of specialization at the Master's level).

The admission requirements will be consistent with those of the Department as will be the structure of the program. That is, candidates will have a Supervisor (on entry) and a Supervisory committee, will sit the comprehensive exam at the end of year 1, will be required to present and defend a thesis proposal by the end of year 2, and will be strongly encouraged to finish by the end of year 4. To be consistent with the existing funding norms within the Department of Geography, the Ph.D. in Planning will only guarantee funding to Ph.D. candidates for a period of 4 years (this is despite the fact that our M.Sc.Pl. is in the non-funded cohort, and other departments receive 5 years of funding for the Ph.D. when their master's are unfunded). We fully expect, given the Department of Geography's strong track record in terms of achieving a relatively short time to completion (by FAS standards), and with tight supervision, that Planning Ph.D. students will generally finish their degrees in four years.

Students will enter the program with either a M.Sc. degree in Planning or a M.A./M.Sc. in a closely related field. Students with a M.Sc. in Planning will be required to take 6 half-courses. Students who enter with a M.A./M.Sc. in a related field may be asked to take up to two additional half-courses depending on their backgrounds and expectations. In either case, students should be able to complete the degree in four years.

This plan essentially requires only two new half courses, PLA 2000H and PLA2001H, which will be open to all graduate students in the Department with appropriate backgrounds. The majority of applicants to the Ph.D. in Planning program will have taken courses that satisfy a number of the requirements above and will therefore not generally be required to take additional courses beyond the six required.

2.1.2 Rationale for proposal

The consensus within the discipline of Planning is that demand for academics to teach Planning is increasing across the globe. The skills, techniques and approaches practiced by planners in cities of the West are in growing demand, from both the industrialized and the developing world. Cities in North America, for example, are renewing and recreating themselves, in the North and East, and growing rapidly (and unsustainably) in the West and South. Countries in much of the developing world seek planners to help guide the pace and pattern of growth currently underway in most of their cities and towns. More academics are required to educate and prepare planners to function and excel under a variety of conditions in a diverse set of places.

The growing demand for academics to teach Planning is therefore linked to: 1) the increasing awareness around the world of the importance of cities to economic viability, social cohesion, environmental sustainability, and an overall high quality of life; 2) the escalation of urban problems stemming from rapid urban growth across the globe; 3) the need for theoretically – grounded expertise in planning and public policy; and 4) the demographic structure of the current professoriate. An indication of the strength of the market for professors with a Ph.D. in Planning is the unprecedented number of jobs advertised during the past two years in planning oriented publications such as the job bulletin of the Associated Collegiate Schools of Planning and Jobs in Planning newsletter.

We have some experience with the growing demand for doctoral studies in Planning among our own students. Every year, several outstanding graduates from our M.ScPl. program go on to pursue a Ph.D. in Planning or a closely related field elsewhere in Canada, the UK or the United States. Some come to Geography at the University of Toronto. There is further evidence of strong demand for doctoral training in the field internationally as demonstrated by frequent unsolicited requests to our planning program from potential doctoral students and the relative lack of Ph.D. programs in Canada. The Department of Geography and Program in Planning receives approximately 10-15 unsolicited requests a year from students interested in a Ph.D. in Planning.

The four existing Ph.D. Programs in Planning in Canada currently graduate approximately 10 Ph.D. students a year. At the same time, there are 14 Planning programs (Masters and undergraduate) in Canada along with a faculty complement of approximately 200. There are some 75 Planning programs in the United States, with well over 1200 tenure-stream and affiliated faculty, many of which do not offer Ph.D. degrees. The large number of courses in Planning departments and programs in North America that require Ph.D.-trained faculty provides another rationale for the new program proposed here. In parallel, the need for Planning academics, trained here but working at universities and colleges abroad, is acute, because the field of Planning is only beginning to grow in the developing world. Finally, many high-level planning-oriented jobs in the private and public sector (such as serving as the director of a major government agency) are starting to seek applicants with Ph.D. credentials. Planning is a field that, due to its multidisciplinary nature, attracts people who seek careers both inside and outside academia. In summary, given the market for Planning Ph.D. graduates, there is a unique opportunity for us to create a Ph.D. Program in Planning at the University of Toronto that will meet with an immediate and positive response, especially given the shortage of Ph.D. programs in Canada and, more generally, on the international stage.

There are a number of additional positive aspects associated with the introduction of a Ph.D. in Planning at U of T. A Ph.D. in Planning program will contribute to and strengthen the links between the City of Toronto and its many communities through the research interests and activities of these graduate students. Planning is a normative discipline that requires a commitment to improving the public realm on the part of its adherents. It is our expectation that the majority of the Planning doctoral students will focus their research efforts on local issues and metropolitan concerns. Their research, however, will not be limited to studying communities but also to giving voice to community concerns, suggesting and negotiating solutions, and making policy recommendations. As such, a Ph.D. in Planning program will help connect the University better with the local community in terms of public policy and outreach. Other students may work on national or international issues. Once again, because of the nature of the discipline, we would expect these students to amplify the connection between the University, public policy agencies and the broader national and international policy communities.

In addition, Ph.D. in Planning students will create strong bridges between other units and departments within the University and on all three campuses. An obvious and likely linkage exists between Planning Ph.D. students and the undergraduate Innis College Urban Studies Program, perhaps as TAs or even instructors. The Ph.D. program will find cognate areas of collaboration among faculty based at the Centre for Urban and Community Studies. It may be that some Ph.D. students will be given the opportunity to work on projects based in the Centre, for example through the recently inaugurated CURA project. Furthermore, Ph.D. students in Planning studying urban design will likely interact with and have common interests with faculty and students in the Faculty of Architecture, Landscape and Design. In addition, many Planning Ph.D. students will likely focus their research on environmental issues and policy concerns, which is one of the main fields of specialization within the Planning discipline, and their work will clearly resonate with faculty, students and programs within the new Centre for Environment.

Finally, given the strong policy orientation of the Planning discipline, we would anticipate strong linkages between the Planning Ph.D. program and the proposed School of Public Policy (and the MPP program) and the new Cities Centre initiative. It seems evident to us that both the new School and the Cities Centre could save resources by leveraging some of the courses, faculty and students in the Ph.D. of Planning program to support their anticipated new programs, and vice versa.

Our proposed program differs from the other two English-language Canadian Ph.D. programs in terms of its setting, orientation and resource base. The School of Planning at Waterloo, located within the Faculty of Environmental Studies, emphasizes regional and ecological planning and the challenges facing small and medium size cities. The School offers three degrees and thus is heavily influenced by undergraduate teaching needs. The UBC School of Community and Regional Planning emphasizes local economic development, resource and ecosystems planning and the problems faced by BC communities. Our Ph.D. program in Planning will be unique in several ways. First it is located with an academic faculty and in a large department that offers cognate support that other smaller and more specialized departments of planning do not have. Given its location the program has to meet the highest standards of scholarship before meeting any professional standards. Second, its situation within the Geography Department is unique and - we argue - innovative. This situation gives the program access to much greater resources in faculty and research facilities than would otherwise be the case. It also facilitates close linkages with other divisions of the University. Third, the Program will offer a wider range of distinct specializations than is typically the case, but at the same time is committed to integrating theoretical discourse and critical policy analysis and practice across those specializations. Fourth, the presence of the Ph.D. program in Canada's largest city gives it a competitive advantage with respect to student demand and professional resources. This location also permits a unique emphasis on the problems and opportunities of large metropolitan areas.

A new Ph.D. in Planning within the Department of Geography and Program in Planning would be a unique combination in Canada, although there are examples abroad. The rationale for this administrative arrangement is as follows. First, we need the professional legitimacy and external visibility of a separate Ph.D. in Planning, which would not be provided by a stream within the existing Geography program, in order to be competitive and to attract high-quality students. Second, the Department of Geography is the logical place to host such a program since it already has enough faculty strength in the fields of urban research, spatial planning, environmental sustainability and urban design to mount the new Ph.D. This combined strength is also unique in Canada. Third, it is not only pedagogically sound but also more cost effective to offer two distinct but cognate Ph.D. degrees in the same department rather than to do so in two separate departments. Fourth, we will seek professional accreditation for the Planning Ph.D. degree (the M.Sc.Pl. degree is already accredited) for those students who want that accreditation. The latter option also calls for a distinct Ph.D. degree in Planning. Accreditation is important because most university programs, including our own, require that a specified number of faculty members must have professional planning credentials.

This is a unique opportunity to innovate, to add a new doctoral program, to extend both the intellectual breadth and quality of research in our existing programs, and to do so in an efficient and cost effective manner.

We have selected the name “Planning” for the degree, rather than a more specialized title, after considerable thought and with good reason. Not only is this the name of our M.Sc.Pl. program but it conveys the breadth of the doctoral program that we are proposing to establish.

2.2 Pedagogical and other academic issues, including expected benefits of the proposed program

There is a great deal of energy, enthusiasm and intellectual commitment within the Department to develop a Planning Ph.D. program. Faculty members across all three campuses believe that a Ph.D. in Planning will allow us to develop even stronger synergies between our research and our teaching than is now the case. A number of faculty, even those who do not teach core Planning courses, have applied and policy oriented interests and a stronger connection between their applied work and advanced graduate teaching is very desirable. Additionally, a Ph.D. in Planning is likely to attract even better students to the M.Sc.Pl. program than is now the case because, often, the best Planning students are hoping to go on to a Ph.D. in that discipline and would prefer a program that offers both degrees. The quality level of courses in the Planning curriculum also stands to be enhanced with the presence of Ph.D. students. Finally, having Ph.D. students in Planning could work to enrich the interactions between geography and planning students because the Planning Ph.D. students would have a great deal in common with both M.Sc.Pl. students and Geography Ph.D. students.

We note further that all of the top-tier Planning programs to which we compare ourselves are able to offer Ph.D. programs that emphasize planning issues and build on planning theory. This explains why we believe that it makes sense for the Program to offer a Ph.D. in addition to the M.Sc.Pl. degree. Planning is not considered to be a subfield of Geography, although the two disciplines are closely related. This is why Planning is currently a semi-autonomous graduate unit within the Department, and why the existing M.Sc.Pl. degree is a separate degree. A Planning degree also offers the guarantee of professional recognition and formal accreditation by the Ontario Professional Planners Institute (OPPI) and the Canadian Institute of Planners (CIP), which a Geography degree does not. The two disciplines share resources, faculty, courses and facilities, and borrow frequently from each other, but they are distinct. Indeed, students benefit immensely from having the two programs in the same Department.

2.3 Projected student demand

There is substantial agreement among faculty in the Planning Program and the Department as a whole that this is an opportune time to initiate a new Ph.D. program in Planning, for a number of reasons. In addition to the increase in provincial graduate funding, and the support of the SU vision, our estimations indicate that the demand is high. We know from past experience that Master's students in Planning at the University of Toronto are interested in a Ph.D. program. Every year, outstanding graduates from our own M.Sc.Pl. program go on to pursue a Ph.D. in Planning or a closely related field elsewhere in Canada, the UK or the United States. There is further evidence of strong demand for doctoral training in the field internationally, as demonstrated by frequent unsolicited requests from potential students. The supply of Ph.D.-trained planners in Canada does not meet the demand. There are currently only two English language (at Waterloo and UBC) and two French language (Université de Montréal, Laval) Planning programs that offer Ph.D.s in Canada. At the same time, the job market for Ph.D.s in Planning (both in academia and in other sectors) in Canada is very strong at this time and will be for the foreseeable future.

The four existing Ph.D. Programs in Planning in Canada currently graduate approximately 10 Ph.D. students a year. At the same time, there are 14 Planning programs (masters and undergraduate) in Canada along with a faculty complement of approximately 200. There are some 75 Planning programs in the United States, with well over 1200 tenure-stream and affiliated faculty, many of which do not offer Ph.D. degrees. The large number of courses offered in Planning departments and programs in North America require Ph.D.-trained faculty providing another rationale for the new program proposed here. In parallel, the need for Planning academics trained here but working at universities and colleges abroad, is acute, because the field of Planning is only beginning to grow in the developing world. Finally, many high-level planning-oriented jobs in the private and public sector (such as serving as the director of a major government agency) are starting to seek applicants with Ph.D. credentials. Planning is a field that, due to its multidisciplinary nature, attracts people who seek careers both inside and outside academia. In summary, given the expanding market for Planning Ph.D. graduates, there is a unique opportunity for us to create a distinctive Ph.D. Program in Planning at the University of Toronto, a program that will meet with an immediate and positive response, especially given the shortage of doctoral programs in Canada and, more generally, on the international stage.

Our estimate of student demand for the Ph.D. in Planning is based on a number of informal surveys and on the evidence presented above in Section 2.1.2. We receive a number of enquiries each year regarding a Ph.D. in Planning, and several of our own Master of Planning students have gone on to complete Ph.D.s elsewhere. Our sense from talking to our own students and recent graduates is that a Ph.D. in Planning would attract many first class applicants from Canada and from many other countries. Table 2.1 shows the projected enrolments for both the existing Master's and proposed Ph.D. in Planning.

TABLE 2.1 PROJECTED INTAKE AND ENROLMENTS**Current Master's (M) and Proposed Doctoral (D) Programs in Planning**

YEAR	FULL-TIME				PART-TIME				TOTAL ENROLMENT	
	Intake		Enrolments		Intake		Enrolments		M	D
	M	D	M	D	M	D	M	D		
2006	27	0	52	0	2	0	2	0	52	0
2007	28	3	55	3	2	0	4	0	59	3
2008	30	3	58	6	2	0	4	0	62	6
2009	30	3	60	9	2	0	4	0	64	9
2010	30	3	60	12	2	0	4	0	64	12
2011	30	3	60	12	2	0	4	0	64	12

2.4 Impact on the Department's and Division's program of study, including impact on other divisions

The proposed Ph.D. in Planning has the full support of the Department of Geography. The Ph.D. in Planning is one of the key initiatives put forth by the Department in the recent Stepping Up Planning Exercise. In addition, the Department met in November 2004 to discuss the details of the proposal at a Departmental Council Meeting. The meeting was the most heavily attended in recent memory and included elected representatives of the graduate student body and faculty from all three campuses. The Department voted strongly in favor of the proposal and the creation of a new Ph.D. in Planning at the conclusion of the meeting. This decision was reaffirmed at the Departmental Council meetings in the spring and fall of 2005.

Ph.D. in Planning students will also contribute to creating stronger bridges beyond the Department to other units and departments within the University such as the undergraduate Urban Studies program at Innis College, the Faculty of Architecture, Landscape and Design, environmental studies at the Centre for Environment, the Centre for Urban and Community Studies, the proposed School of Public Policy and the new Cities Centre.

2.5 Evidence of consultation with other affected divisions

The Director of the Program in Planning during the last academic year consulted with other relevant academic units, including the Faculty of Architecture, Landscape and Design, the Centre for Urban and Community Studies, the Centre for Environment (formerly Institute for Environmental Studies) and Innis College. All of these consultations resulted in strong expressions of support for the proposed Ph.D. program. There have, in addition to formal discussions among different units, been numerous informal discussions among faculty, students and administrators regarding the proposed Ph.D. in Planning. The input has helped to clarify and improve the resulting proposal and the Program in Planning believes this has been an inclusive and constructive process.

2.6 Appropriateness of the name and designation of the new program

As noted earlier, the name and designation of the proposed initiative – Ph.D. in Planning – is completely appropriate and accurately describes the new degree so that students, employers, professional associations and academic institutions will recognize the name and know precisely what it means. It is also consistent with the designation used for our Master's degree, namely the Master of Science in Planning.

2.7 Program description and requirements, course titles/numbers, and faculty members

2.7.1 Program description and requirements

o Admission requirements

Ph.D. applicants will have graduated with an A- average or better from a master's program in planning or a master's program in a related field and have demonstrated competence in analytical methods (or successful completion of one of two methods courses in the current Master's program). We will view professional planning experience favourably during the admissions process. This process will include submission of a statement of intent, transcripts, three confidential reference letters (at least two from university instructors), samples of the applicant's written work (where appropriate), and a curriculum vitae.

Applicants whose first language is not English must provide evidence of written and verbal proficiency in English by completing one of the following tests:

- (1) Test of English as a Foreign Language (TOEFL) and the Test of Written English (TWE). Minimum TOEFL is 580 (paper) or 237 (computer) plus 5.0 TWE. Minimum score for Internet-based Testing is 93/120 overall and 22/30 for each of the Writing and Speaking sections
- (2) International English Language Testing System (IELTS). Minimum score required is 7.

o Program requirements

Degree requirements

The degree requirements consist of successful completion of: coursework, a comprehensive examination, a thesis proposal, and a thesis. Students are required to prepare and defend a thesis as per the regulations of the School of Graduate Studies (see <http://www.sgs.utoronto.ca/current/thesis/index.asp>). The degree program is designed to be completed within four years.

Course requirements

Course requirements are set out in summary form below. At least two courses must be taken within the candidate's field of specialization. These fields are: (1) planning history and theory, (2) society, economy and public policy, (3) environment and sustainability planning, and (4) urban development, design and the built environment.

Ph.D. Course Requirements

Core Courses

- | | |
|-----------|---|
| PLA 2000H | Advanced Planning Theory (new course) |
| JPG 1111H | Advanced Research Design (existing course, jointly offered with Geography, currently GGR 1111H) |
| PLA 2001H | Planning Colloquium(CR/NCR) (new course) |

Electives

Normally the Ph.D. in Planning student will be required to take three additional half courses, with at least one half course taken outside the Planning Program.

To a considerable extent, the Ph.D. in Planning course requirements are driven both by pedagogical concerns as well as a desire to design a program that will be recognized and approved by the Canadian Institute of Planners and the Ontario Professional Planning Institute. It is anticipated that the majority of Ph.D. in Planning students will take 6 half courses, including the Colloquium. We should note, however, that a very small number of Ph.D. in Planning students might have to take as many as 8 half courses if they have had limited education or practical background in Planning. We feel, however, that this type of person will only rarely be admitted to the Ph.D. in Planning program and would necessarily have to be an outstanding applicant. As such, taking 8 half courses (one of which is a CR/NCR Colloquium) should not prove too onerous for that rare individual (without any planning experience) who we decide to accept into the Ph.D. program.

Ph.D. students may take any of the PLA or JPG courses listed in Tables 2.2-2.7. There is no restriction on the type or source of courses that must be taken outside the Program in Planning. The student's doctoral supervisor will approve outside course requests.

Comprehensive Examination

Students will take a written and oral Ph.D. Comprehensive Examination. The Supervisory committee will consist of at least three faculty members who hold graduate appointments in the Program in Planning and will serve as the nucleus of the examination committee. Fourth or fifth committee members could be graduate faculty from other Departments if desirable. The purpose of the exam is to ascertain whether a student has obtained an adequate knowledge base to continue in the Ph.D. program; to ascertain any knowledge gaps and suggest remedial action; and to provide a student with the opportunity to obtain a broad perspective on his or her chosen field of study. The scope and three areas of concentration of the examination are to be jointly determined by the Supervisory Committee and the student, are to be laid out in a Ph.D. Research Statement, and are to be confirmed by the Supervisory committee (The scope of the exam cannot be changed after this stage.) The Ph.D. Exam should be taken between June of Year I and no later than October/November of Year II. After the Supervisory Committee has reviewed the Research Statement, the student can take the initiative in contacting one or more additional faculty members inquiring as to their willingness to serve on the Ph.D. examination committee.

The student should seek the advice of all committee members in preparing for the Ph.D. examination. The student should compile an appropriate reading list for each area of study. The reading list should be circulated to all committee members for their comments and should form the basis of the examination.

The supervisor, after discussion with the student and committee members, is responsible for preparing the examination paper on the basis of inputs received from the committee members. The detailed instructions e.g., the grouping of the questions into areas of concentration, the number of questions to be answered, the period of time given for the examination, the expected length of each answer, and the degree and style of referencing, should be finalized in consultation with the student and committee members. The Ph.D. examination is comprised of a written section and an oral section. The written section will take the form of a closed book single/two day examination written in the department, or a take-home examination with varying time limitation from two to five days. The oral defense should take place not later than one week following the submission of the written exam. It is the responsibility of the student to provide committee members with duplicate copies of the written answers.

At the time of the oral examination, the committee should base its evaluation of the student on the following grounds:

- i) The quality of the written responses: mastery, coverage, and communicative clarity for all questions on the examination;
- ii) The quality of the oral defense of written responses: in terms of capturing the essence of the questions posed; ability to address the concerns raised and to deliver reasoned answers to legitimate criticisms;
- iii) Familiarity with, and sensitivity to, the broader range of matters raised by other questions on the examination (other than the questions answered in writing);
- iv) Oral responses to any questions related to the scope of the exam;
- v) Previous course record and the quality of their previous research papers.

Thesis proposal

Ph.D. students are required to submit a detailed Research (Thesis) Proposal to a committee consisting of at least three faculty members (consisting of the Supervisory Committee and one or more additional members, possibly including a faculty member who does not hold a graduate appointment in the Planning Program). The committee will advise the student on the acceptability of the proposal and will decide on any further steps to be taken in shaping the thesis research project. The committee will sign a Research Agreement, the content of which will be determined through negotiation between the student and the committee. Ph.D. students wishing to make substantial changes to their research must do this in consultation with the committee. The Research Proposal should be presented between the beginning of the first term in Year II and the end of February in the following year.

The Research Proposal should be prepared when the student has settled on a research topic, completed a preliminary exploration of the sources, identified the problem and defined a research strategy. Ideally, the research proposal should take the form of a paper of about twenty to thirty pages in length which includes a statement of the problem, a discussion of the research context in which it is set, a brief outline of the sources and methodology, and a suggested timetable for completion. The necessity of providing additional background information of the research topic may lead to a lengthening of this paper. It is not necessary that a student determine at this point whether the thesis will take the form of a traditional monograph or three journal length papers. The research proposal should be presented to the Supervisory Committee and discussed in a meeting prior to undertaking extensive research. It should not constitute a draft of the final thesis.

Thesis requirements

The candidate, through the graduate unit (Program in Planning), shall present a thesis embodying the results of original investigation, conducted by the candidate, on the approved topic from the field of specialization. The thesis shall constitute a significant contribution to the knowledge of the field and must be based on research conducted while registered for the Ph.D. program.

A thesis should have a coherent topic with an introduction presenting the general theme of the research and a conclusion summarizing and integrating the major findings. Nonetheless, it may contain a collection of three or more papers where the candidate is the primary author. Ideally, the papers should be submitted to peer-reviewed journals as soon as possible although this is not a requirement for the departmental defense. It is also not required that any of the papers be accepted for publication by the time of the departmental and School of Graduate Studies (SGS) defenses. The collection of papers may be expanded or supplemented by unpublished material, scholarly notes, and necessary appendices. In all theses, pagination should be continuous; there should be a common table of contents and an integrated bibliography for the whole thesis. The hard copy of every thesis must be a printed or typed document in a standard form that can be easily microfilmed (see National Library).

Progress through the program

The SGS Calendar (2005-06) sets out criteria for "good academic standing" and "satisfactory academic progress". The Department of Geography and Program in Planning apply these criteria in the evaluation of a student's progress.

Progress through the Ph.D. Program

- Year 1 Complete course work
- Year 2 Complete comprehensive exam/Complete thesis proposal/Complete planning colloquium/Start thesis research
- Year 3 Research and thesis writing
- Year 4 Thesis writing and defense

The Planning Ph.D. program is a four-year program that can be completed on a full-time basis by a student who has a Master's degree in Planning or in a discipline appropriate to the intended field of specialization. (See also SGS Calendar, 2005-06). The Ph.D. program also requires a minimum of two years residence as a full-time student. The SGS Calendar (2005-06) defines "residence" and "full-time studies". All Ph.D. program requirements must be completed within six years from first enrolment. For exceptions, "lapsed status", and both parental and medical leave, see the SGS Calendar (2005-06).

Progress reports

Review Meetings must be held in May of each year in the Ph.D. student's program. The Review Committees (normally the Supervisory Committee) must consist of at least three faculty from the Program in Planning. The Ph.D. student must be present at the meetings. For the Review Meetings in Years II, III, and IV, the Ph.D. student must submit a Progress Report of between two to five pages. The Progress Reports can be accompanied by materials such as draft questionnaires, initial tabulations and analysis results, or draft thesis chapters. (For further details see the SGS Calendar, 2005-06)

Thesis evaluation procedures

The regulations of the School of Graduate Studies for the evaluation of theses are set out in the OCGS submission and appendices. As is the norm in the Department of Geography, students will participate in two thesis defenses. For the Departmental Thesis Defense, the examination committee will consist of at least four faculty members (normally including the members of the Supervisory Committee). One or more members can be from outside the Program in Planning. The committee will notify the Graduate Coordinator that the thesis is ready to be forwarded for final SGS defense.

For the second thesis defense, held by the School of Graduate Studies, an Examination Committee will conduct the Final Oral Examination. The Examination Committee must include at least four, but no more than six, voting members: one to three of the voting members will have served on the candidate's Supervisory Committee, and at least one voting member will not have been closely involved in the supervision of the thesis. Eligible for inclusion in the latter group are the external appraiser (in person or by audio or video connection), members of the graduate faculty of the candidate's graduate unit, and members of the graduate faculty of other departments, centres, or institutes of the University. A quorum is four voting members. Detailed rules for the submission of the dissertation, the appointment of an external examiner, the exam procedures and steps to be taken after the exam are set out in the SGS Calendar (2005-06).

Language requirements.

There will be no language requirements for the Ph.D. program other than those specified by the candidate's Ph.D. committee. The committee may require proficiency in a language other than English in cases where the thesis research is in a country where English is not the mother tongue.

2.7.2 Course titles/numbers

The tables below list the graduate courses offered by the Planning program during each of the past three years with their enrolments and instructors. All courses are half courses. These courses will be open to Ph.D. students.

Table 2.2

Master's Program Core Courses Offered to Graduate Students in the Past Three Years and Enrolment				
Course	Faculty member(s) responsible	2002/03	2003/04	2004/05
PLA 1101 Issues in Planning History, Thought and Practice	Rankin (03/04, 04/05), Savan (02/03), Gertler (02/03), Macdonald (03/04, 04/05)	24	23	14
PLA 1102 Urban and Regional Dynamics	DiFrancesco	24	23	14
PLA 1103 The Legal Basis of Planning	Makuch	26	23	15
PLA 1105 Planning Decision Methods	Daniere	26	22	14
PLA 1106 Workshop in Planning Practice	Daniere (02/03), Gertler/Hess (03/04), Gertler/Maclaren (04/05)	22	24	23
PLA 1107 Current Issues: the Planning Report	Campsie/Staff	22	24	23

Table 2.3

Urban Planning and Development Courses Offered to Graduate Students in the Past Three Years and Enrolment ¹				
Course	Faculty member(s)	2002/03	2003/04	2004/05
JPG 1501 The Political Economy of Cities	Hackworth	15	10	19
PLA 1502	Goonewardena	8	Not offered	Not offered
PLA 1505 Urban Development Controls	Van Loan	10	Not offered	Not offered
JPG 1507 The Geography of Housing and Housing Policy	Bourne	Not offered	19	13
JPG 1510 Recent Debates on Urban Form	Sorensen	8	8	Not offered
PLA 1553 Urban Transportation Policy and Analysis	Soberman/Hemilly	Not offered	20	Not offered
JPG 1554 Transportation and Urban Form	Sorensen/Hess	-	-	New:
PLA 1651 Planning and Real Estate Development	Goldhar	21	5	16
JPG 1702 Historical Urban Geography and Planning	Lewis	5	Not offered	Not offered
JPG 1810 Globalization and Postmodernism	Goonewardena	8	5	5
PLA 1904 Law and Planning	Makuch	Not offered	9	Not offered
JPG 1914 Spatial Information Systems	Chen/Boyes	2	3	0

¹ New course added in 2004/05: JPG 1554.

Table 2.4

Social Planning and Policy Courses Offered to Graduate Students in the Past Three Years and Enrolment				
Course	Faculty member(s)	2002/03	2003/04	2004/05
PLA 1503 Planning and Social Policy	Ruddick (02/03,03/04) Mahtani (04/05)	8	12	3
JPG 1506 State/Space/Difference	Ruddick	Not offered	6	Not offered
JPG 1508 Planning for the Urban Poor in Developing Countries	Daniere	Not offered	14	3
JPG 1509 Gender Planning and the Politics of Development	Hershkovitz (03/04)	Not offered	9	11
JPG 1804 Space, Power and Geography: Understanding Spatiality	Ruddick	5	11	Not offered

Table 2.5

Economic Planning and Policy Courses Offered to Graduate Students in the Past Three Years and Enrolment				
Course	Faculty member(s)	2002/03	2003/04	2004/05
PLA 1551 Policy Analysis	Farrow	Not offered	22	Not offered
PLA 1552 City Planning and Management	Farrow	11	Not offered	12
GGR 1602 Industry: Location, Behaviour & Policy	Britton	Not offered	2	2
JPG 1614 Regional Development and Policy	Gertler	6	7	11
JPG 1615 Planning and Financing the Social Economy	Rankin	11	19	9
JPG 1670 Regional Economic Analysis	DiFrancesco	1	4	4
PLA 1751 Public Finance for Planners	Slack	11	13	8

Table 2.6

Urban Design Courses Offered to Graduate Students in the Past Three Years and Enrolment ¹				
Course	Faculty member(s)	2002/03	2003/04	2004/05
PLA 1650 Urban Design: History, Theory, Criticism	Goonewardena	7+14 from URD 1031	2+16 from URD 1031	5+14 from URD 1031
PLA 1652 Introductory Studio in Urban Design and Planning	Goonewardena	Not offered	13	9
PLA 1653 Advanced Studio in Urban Design and Planning	Hess	10	4	8
PLA 1654 Urban Design Research Methods	Hess	6	9	16
PLA 1655 Urban Design and Development Controls	Hess (02/03, 03/04)	13	24	Not offered
JPG 1710 Historic Preservation Planning	McQuillan and Fram (02/03)	12	Not offered	Not offered
JPG 1713 Place, Design and Landscape	Relph	16	14	25
JPG 1906 Geographic Information Systems	Boyes	-	-	12

¹ New course added 2004/05.² URD = Urban Design

Table 2.7

Environmental Planning and Policy Courses Offered to Graduate Students in the Past Three Years and Enrolment ¹				
Course	Faculty member(s)	2002/03	2003/04	2004/05
JPG 1402 Environment and Development	Boland	5	Not offered	10
JPG 1404 ² Issues in Global Warming	Harvey	5G 78UG	6G 91UG	4
JPG 1413 Workshop in Environmental Impact Assessment	Ligeti (02/03) Hostovsky (03/04)	3	6	Not offered
JPG 1414 Cities as Ecosystems	White	7	9	8
JPG 1415 ² Environmental Justice	Jaakson	1G 13UG	0G 14UG	0
JPG 1416 Environmental Consequences of Land Use Change	Conway	-	-	New
JPG 1418 Rural Land Use Planning	Bunce	13	4	Not offered
JPG 1419 Aboriginal-Canadian relations in Environmental and Resource Management	McGregor	4	Not offered	Not offered
JGE 1420 ³ Urban Waste Management	Maclaren	4	17	4
JPG 1421 Health in Urban Environments	Wakefield	Not offered	9	Not offered
JPG 1609 Cities, Industry and the Environment	Desrochers	-	-	New
PLA 1601 Environmental Planning and Policy	Morgan (02/03), Maclaren (03/04, 04/05)	2	9	12

¹ New courses added in 2004/05: JPG 1609, JPG 1416.

² indicates that this course has a graduate and undergraduate component; the graduate component has additional seminar hours and different assignments

³ JGE = joint geography, planning and environmental studies

2.8 Faculty members

Table 1 lists the faculty members involved in the M.Sc.Pl. program who are expected to be involved in the Ph.D. program (with the exception of faculty retiring in 2005 and 2006). The table identifies their Ph.D. field affiliation and indicates gender, and expected retirements in the next seven years. There are currently 29 core faculty (26 in Category 3 and three in Category 5) as well as an additional 11 non-core faculty (Category 6), teaching in the Program in Planning, drawn from all three campuses. Core faculty members are expected to be involved in thesis supervision. Non-core faculty members include six planning professionals with adjunct appointments. These are not permanent appointments, but in recognition of the professional nature of the Master's Program in Planning, the Department has committed funds to supporting stipend positions on a continuing basis.

Table 2.8. Faculty Members by Field

Fields⁴

Faculty Name & Rank	M/ F	Ret. Date ¹	Budget Unit ²	Supervisory Privileges ³	1	2	3	4
Category 3								
Boland, Alana – Assistant	F		Geography	Master's			X	
Bunce, Michael – Associate	M		UTSc	Full			X	
Conway, Tenley – Assistant	F		UTM	Master's			X	
Daniere, Amrita – Professor	F		Geography	Full		X	X	X
Derochers, Pierre – Assistant	M		UTM	Master's		X	X	
DiFrancesco, Richard – Associate	M		Geography	Full		X		
Gertler, Meric – Professor	M		Geography	Full		X		
Goonewardena, Kanishka – Associate	M		Geography	Full	X	X		X
Hackworth, Jason – Assistant	M		Geography	Full				X
Hess, Paul – Assistant	M		Geography	Master's				X
Leslie, Deborah – Associate	F		Geography	Full		X		
Lewis, Robert – Associate	M		Geography	Full	X			X
Maclaren, Virginia – Associate	F		Geography	Full			X	
Mahtani, Minelle – Assistant	F		UTSc	Master's		X		
McGregor, Deborah – Assistant	F		Geography/ UC	Master's			X	
McQuillan, Aidan – Associate	M	2007	Geography	Full				X
Miron, John – Professor	M		UTSc	Full				X
Prudham, Scott – Associate	M		Geography/ Centre for Environment	Full			X	
Rankin, Katharine – Associate	F		Geography	Full	X	X		X
Relph, Edward – Professor	M		UTSc	Full				X
Ruddick, Susan – Associate	F		Geography	Full	X	X		X
Sorensen, Andre – Assistant	M		UTSc	Full				X
Wakefield, Sarah – Assistant	F		Geography	Master's			X	
Walks, Alan – Assistant ⁵	M		UTM	Master's		X		
White, Rodney – Professor	M	2009	Geography	Full			X	
Wilson, Kathi – Assistant	F		UTM	Master's		X		
Category 5								
Bourne, Larry – Professor Emeritus	M	2005	Geography	Full		X		X
Britton, John – Professor Emeritus	M	2005	Geography	Full		X		
Jaakson, Reiner – Professor Emeritus	M	2005	UTM	Full			X	
Category 6								
Bedford, Paul – Adjunct Professor	M		Geography	Master's		X		X
Boyes, Don – Senior Lecturer	M		Geography	Master's				X
Campsie, Philippa – Adjunct Professor	F		Geography	Master's				X
Chen, Jing – Professor	M		Geography	Full			X	
Farrow, John – Adjunct Professor	M		Geography	Master's		X		
Goldhar, Mitch – Adjunct Professor	M		Geography	Master's		X		
Harvey, Danny – Professor	M		Geography	Full			X	
Macdonald, Mary – Adjunct Professor	F		Geography	Master's			X	
Makuch, Stan – Adjunct Professor	M		Geography and Law	Master's				X
Savan, Beth – Senior Lecturer	F		Innis and Geography	Master's			X	
Slack, Enid – Adjunct Professor	F		Geography	Master's		X		

-
- ¹ Indicates retirement date, if within the next seven years.
² This is the budget unit paying the salary: Geography=St. George Campus, UTM=University of Toronto at Mississauga, UTSc=University of Toronto at Scarborough
³ Indicates the level of supervisory privileges held by each faculty member
⁴ 1=Planning history and theory, 2=Society, economy and politics, 3=Environmental and sustainability planning, 4=Urban development and the built environment.
⁵ New appointment, July 2004.

Category 3: tenured or tenure-track core faculty members who are involved in teaching and/or supervision in other graduate program(s) in addition to being a core member of the graduate program under review.

Category 5: other core faculty: this category may include emeritus professors with supervisory privileges and persons appointed from government laboratories or industry as adjunct professors. Please explain who would fall into this category at your institution.

Category 6: non-core faculty who participate in the teaching of graduate courses.

3 Planning and Budget

3.1 Resource implications

3.1.1 Staffing and Supervision

The retirement of Professor Bourne (2005) left a gap in our urban offerings and supervising capacity in this field, but the Faculty of Arts and Science has approved a search for his replacement this year and that search is underway. (and Professor Bourne has stayed on as an instructor and as Director of Planning for 2005-06). The new position will be in the area of urban geography and planning. Professor McQuillan's (2007) retirement will reduce our urban development and design offerings, but a new faculty member, Professor Sorensen (who started at UTSc in 2002), also has urban development and design interests and is providing new expertise in these fields. Professor Walks (appointed at UTM in 2004) also adds expertise in urban development and planning. Professor Britton retired in 2005 but the Faculty of Arts and Science has approved a replacement position in economic geography and public policy for 2006-2007. Professor White retires in 2009 and the Faculty of Arts and Science has approved a replacement position that will make up for the loss of environmental expertise with a search in 2008-09.

It is our strong belief that the position approved for a search in 2006-2007 in economic geography/public policy, will result in the hiring of faculty member who has interests in planning and who would play a prominent role in the Ph.D. in Planning program. We anticipate that this individual will also teach in the core program, or free-up another colleague to teach in the core, thus allowing one of the several faculty members prepared to offer core courses in the Planning Ph.D. to do so.

It is our intention, following the Department's current five-year (2004-2009) plan, to request from the Faculty of Arts and Sciences, perhaps through a multi-disciplinary AIF application, a new faculty position who could contribute to Planning by 2009. Although this is not crucial to the success of the Ph.D. in Planning proposal, it would greatly enhance our ability to deliver a wider range of courses to all students in the Department and to cover one or two courses at a more sophisticated and deeper level for Ph.D. students than can currently be done. The new faculty member would contribute to at least one of the new proposed core courses for the Ph.D. program.

One of the most important implications for the Department as a whole in initiating a new Ph.D. program is the additional demand on faculty time required to supervise the new students. Based on our review of supervision commitments, a reasonable estimate of the current average number of supervisions per faculty member is just under 2 Ph.D. students per year per faculty member. These data clearly mask the fact that some professors supervise more than 2 Ph.D. students at any given time. Nonetheless, the data collected in the survey revealed that many faculty members in the Department are willing and able to supervise more Ph.D. students than they currently supervise. Most faculty members contacted indicate they would welcome the opportunity to supervise at least 3 Ph.D. students on average, spread over the course of the Ph.D. program, and would not find this level of commitment to be onerous. Seventeen of our tenured and tenure-stream faculty have experience in supervising planning students at the Master's level and would likely be involved in Ph.D. supervision and committee work.

The faculty resource base for the Planning doctoral program has recently been substantially enriched through the establishment of the endowed Bousfield Distinguished Visitor in Planning (DVIP). This endowment will allow the Program in Planning to bring in leading scholars and practitioners in Planning for extended periods from a month to an entire year.

3.1.2 Space

Students in the Ph.D. program in Planning will be housed primarily in Sidney Smith Hall. A suite of rooms on the second floor of Sidney Smith Hall is dedicated for sole use by graduate students in the Planning Program. This area includes one large smart classroom (capacity 40), one seminar room (capacity 18), one student workshop room, and the Planning computer lab. The basement of Sidney Smith Hall contains several facilities for planners. These include additional computing facilities (shared with Geography), shared office facilities for all students with teaching assistantships, and an urban design studio (capacity 16). There is one seminar room on the fifth floor of Sidney Smith, shared with Geography (capacity 12).

Faculty members on all three campuses have private offices with telephone and high-speed connections to the university backbone.

Several faculty members have research labs with dedicated space for graduate students. These include Danieri (graduate student capacity 2), Bourne (capacity 2), Gertler (capacity 2), Miron (capacity 3) and Leslie (capacity 4).

Over the next five years, our plans (based on Faculty of Arts and Sciences plans) are to consolidate all faculty and graduate student offices in one location, likely on the renovated fifth and sixth floors of Sidney Smith Hall.

The Ph.D. in Planning will bring in a steady-state of 12 new students by 2011. This increase is in addition to planned expansion in Geography graduate student enrolment so our overall space plans are integrated across all our programs, and in the case of Geography, across all three campuses. Our current space for the 50 M.Sc.Pl. students consists of 12 desks in a single room, a teaching design studio with 10 drafting desks, a small five work station computer lab and a project room with one workstation used for group project work. Ph.D. students in Human Geography and who are TA's have shared office space with three to four desks in a standard sized office (14 NASM's). Our graduate enrolment expansion plans are contingent upon re-configuration of space in Sidney Smith Hall as four departments move out of the building. In this re-configuration process our standard for Ph.D students will be a minimum of 9 NASM's for two desks or 14 NASM's for three desks. Our plans call for the trading of space on the ground floor of SSH to fifth or sixth floor space for graduate students. The new Ph.D. in Planning will thus require 4 new small (inner offices) or three new outer offices. We are assured by the Dean's Office that the new space can be assigned within the new re-configuration of Sidney Smith Hall although it will take an additional year to plan for. We have also sought and received Decanal approval for this first phase of our graduate

student expansion. For 07-08, the first year of the program, we will use existing space.

3.1.3 Libraries

The report from the Chief Librarian (included in this submission) notes that the University of Toronto library system provides a rich resource for the support of doctoral studies in planning.

There are currently extensive collections of planning-related monographs, journals, e-resources, data banks and mapping resources.

3.1.4 Computing facilities

All faculty and graduate students are provided with an account on the departmental main e-mail server. Separate accounts are also available through the UTORDIAL network administered by the University of Toronto's Information Commons. Electronic mail, Internet, and library access to online journals is provided by both of these from campus and at home.

The department supports one local area network (LAN) that links 20+ servers and two buildings through high-speed connections and the university backbone. Numerous workstations provide department-wide access to data processing, data analysis (e.g. SPSS), as well as computer mapping and geographic information systems (GIS) software.

Every faculty member has a computer in his/her office. These machines are generally Pentium IV or better and are connected by an integrated inter-building LAN.

The central file server is named Delta (account administration) which is currently a Dell PowerEdge Pro with one Pentium III MHz and 1GB RAM with 120 GB of disk storage. This server provides data storage and software used commonly by faculty, students, and staff and includes GIS (ArcInfo, ArcView, MapInfo), spreadsheets, and desktop office functions. The server is linked to the University of Toronto backbone network. The backup server, Tarn, is an IBM Personal PC 480 with a 486 CPU, 128 MB RAM and 1.5GB disk storage, and an external Exabyte Eliant 7GB backup tape drive. The server functions as a backup to Delta.

There are two digitizers both of which are Calcomp 33360 models (61cm x 91 cm) with 16 button cursors. The digitizers are connected directly to the Unix workstations, which run the digitizing software (ArcInfo/ArcView) and which are dedicated to that function whenever the digitizer is in use.

All preliminary printing of text and maps is done on three HP 4200 Laser Jet printers. Final map production is done on a Tektronix Phaser G200dtn colour laser printer. The HP InkJet 1220 can handle up to 11 X 17. The HP colour Jet 800PS can handle up to 42" wide.

The Network and Operating System on the Delta file server and local area network (LAN) is Windows 2000 Advance. The mapping/image software available includes ArcView 3.3, MapInfo and IDRISI, as well as ArcGIS 3.9, ERDAS, FME, and PCI. The department is now running ArcIMS 4.1. We currently have a university-wide site license with ESRI for almost all products, all platforms and unlimited seats. In addition, students have access to ERDAS and PCI for remote sensing and image analysis.

PC and Unix workstations for graduate students are housed in four separate labs. Two are in the Physical Geography Building (PGB) (one general PC lab and a dedicated PC/Unix lab) and two in Sidney Smith Hall. The general access graduate PC lab in Sidney Smith Hall has 14 PCs (see configuration above). The second graduate PC lab in Sidney Smith Hall, containing 5 fully networked PCs and an HP laser printer, is dedicated for use by students in the Program in Planning. All of these computers, which are specifically intended for work in computer mapping, urban design and vector-based GIS, are either IBM clone Pentium based workstations or Dell Pentium based PC workstations. The configuration of the workstations is Pentium IV or above with 520KB cache, 1GB RAM, 8GB hard disk, 250 zip drive CD Rom, 3.5" diskette drive, Super VGA Graphics with 32 MB RAM and Super VGA NI monitor and

mouse.

The facilities described here were significantly upgraded in 2000-01. On-going maintenance and standard cycle upgrades (usually five year cycles) of these facilities are a priority for the Department.

3.1.5 Enrolment/admissions

Our enrolment scenario, as outlined in the Department's recent Graduate Enrolment Expansion Plan (October 2005) envisions starting with a class of 3 Ph.D. students in the fall of 2007 and then admitting 3 students in each subsequent year for a total projected/steady-state enrolment in the program of 12 by 2010. Each year, from 2010, we expect to graduate 3 Ph.D. students and admit 3 more new candidates so that 12 represents the total number of additional Ph.D. students that the program would add to the number of Ph.D. students in the Geography Department. Among these 12 students we would expect to admit international students beginning in 2008-09, in a ratio roughly equivalent to that in the Geography doctoral program. We believe that a steady state of 12 doctoral students represents a sufficient cohort of students to permit intellectual coherence and to provide an exciting academic environment. That environment would be enhanced by the presence of 50 M.Sc.Pl. students with whom the doctoral students would interact.

Year	2007	2008	2009	2010	2011	2012	Average
Intake	3	3	3	3	3	3	3
Total in Program	3	6	9	12	12	12	12

Included with this submission is our graduate enrolment expansion plan submitted in October 2005. The plan includes the proposed new Ph.D. in Planning. We received approval for the plan in November 2005. Also supporting this submission is our newly revised space requirement proposal (which has received Decanal approval).

3.1.6 Revenues/costs

Our graduate enrolment expansion plan shows that we anticipate 9 domestic and 3 international students at steady state. Each would receive the required minimum funding (currently \$13k plus tuition). We anticipate a significant proportion would receive major scholarships and thus would receive more than the minimum. The Department will provide the required RA support at a minimum of \$1500/student (often faculty provide much more than this from faculty grants). The budget framework requires a minimum of \$6-7k in TA support which will come from enrolment expansion revenue sharing. The Dean has approved the UTF support in our enrolment expansion budget framework. Based on our experience with the M.Sc.Pl. program we know that applicants to the Ph.D. in Planning will be very successful in obtaining major scholarships.

The Department has received the approval of the Dean of the Faculty of Arts and Science (FAS) to increase the number of Ph.D. students that are enrolled over the next five years. FAS, thus, is willing to provide the funding required to support the number of new Ph.D. students we proposed in our Stepping-Up plan and then revised and updated in our most recent (2005) Graduate Enrolment Expansion Plan. This projection includes full funding of 12 Planning Ph.D. students for four years. Unlike current M.Sc.Pl. students, Planning Ph.D. students will be part of the funded cohort.

The Department will ensure that each additional Ph.D. student also receives approximately \$7000 in TA support as well as an average of at least \$1500 in RA support per year. These numbers are derived from the standards used in the current funded doctoral-stream cohort for our Department. TA support will come from the agreed revenue sharing scheme proposed in our Graduate Enrolment Expansion Plan. The Department will also strongly encourage these Ph.D.

students to compete for external grants/fellowships, in recognition of their excellence and future potential, and in order to help reduce the UTF funds required from FAS. Ph.D. students in Geography and M.Sc.Pl. students in Planning have been very successful at winning external and internal grants and fellowships, which help to defray some of the Department costs. We anticipate a similar or even greater level of success at winning scholarships for the new Planning Ph.D. students.

Our estimate, overall, is that the Program will need, when it reaches its steady state enrolment in 2010-11, approximately \$84,000 in TA funding and approximately \$116,000 in UTF funding annually to support the 12 Ph.D. students in the new program.

3.1.7 Financial aid

The University of Toronto currently funds Ph.D. students to the amount of \$13,000 annually plus the cost of tuition for four years. Anticipated sources of funding for this commitment will typically include a combination of University of Toronto Open Fellowships, external scholarships, endowed fellowships, teaching assistantships (maximum 210 hours over two terms), and research assistantships. The exact combination of funding sources will vary by student, depending on their fit to teaching assistantship needs and the availability of research assistantships.

The University has several competitive awards for which Ph.D. students in the Planning Program would be eligible, including the David Chu Scholarship in Asia Pacific Studies and the David Chu Travel Awards, and the Royal Bank Graduate Fellowships in Public and Economic Policy. Our Master's students in the Program in Planning have been successful in obtaining funding from a number of sources and we expect that the doctoral students would be equally successful. For example, the Program has been able to raise considerable funds through an aggressive outreach program resulting in alumni contributions and donations to endowed Planning scholarships that have increased the overall amount of University funding available to our Master's students every year since 2000. Master's students have also competed very successfully in the last two academic years for Royal Bank Scholarships of \$5,000 per year per student winning 3 for the year 2003-2004 and 6 in 2004-2005 and 2005-06. This past year, three of our students also won funding for research and study from the David Chu Traveling Scholarship program.

Our Master's students have also won numerous external scholarships such as OGS awards (7 in 2003-2004, 2 in 2004-2005 and 5 in 2005-06) as well as the new Canada Graduate Scholarships (3 in 2004-2005 and in 2005-06). The Program in Planning has raised 5 OGS matching fund scholarships and is well positioned to fund future OGS winners. Furthermore, planning students are sought after as TAs for a number of undergraduate geography or urban studies courses. More than half of all planning students TA at least one course and many second year students TA two courses a year. Part-time students are not eligible for funding but exceptional MUDS students (the Planning Program's one-year Master in Urban Design Studies) have, on occasion, received UTF funding support.

As noted above, the impressive track record of our Planning Master's students coupled with the excellent record of achievement of Geography Ph.D. students, suggests that the Ph.D. students in Planning will be highly successful at winning their share of external scholarships and grants in addition to the guaranteed UTF funding. Furthermore, the training and interests of Planning Ph.D. students will mesh well with the types of courses where undergraduate demand is growing in Geography, Urban Studies, Public Policy and Environmental Studies. Thus, Planning Ph.D. students should be in high demand as TAs for a variety of undergraduate courses.

4 Space and Facilities

4.1 Requirements for physical facilities

The current configuration of space for our graduate students is less than optimal because the space is separated from faculty office by five floors in Sidney Smith Hall, but plans are in process to bring those offices together. As indicated in section 3.1.2 we anticipate the need for 4 new small offices (~9 NASM's per office) or three regular size SSH offices (~14 NASM's per office) to accommodate (by 2011) the 12 new Ph.D. in Planning students. When we move all graduate student space to the fifth and/or sixth floor of SSH, then renovations will be modest (paint, new furniture, network upgrades). Revenue for renovations will come from three sources: the general budget for consolidation of departmental space in SSH (from A&S), graduate enrolment expansion revenue that comes to the Department that we have allocated for this purpose and other revenues to be raised by the Department (development projects).

4.2 Capital projects for approvals

No newly constructed space is required; only the renovation of existing space as specified in the general SSH consolidations plans. As indicated in Section 3.1.4 existing computer labs will require hardware upgrades and if the labs are to be relocated as part of consolidation then some minor capital work is needed (networking and/or HVAC) but all of this is tied to overall graduate activity in the Department and not just this new proposal. Existing computer and design labs, assuming appropriate hardware upgrades, will service the new program.

5 Students

5.1 Student affairs and services

All of the usual student facilities and services will be available to the Ph.D. in Planning students. Moreover, the Department of Geography and Program in Planning also have well organized and very active graduate student organizations and alumni associations that assist new student admissions, monitor course programs and arrange seminars, field trips and social events.

5.2 Student conduct and discipline

Standard University guidelines will govern student conduct in the Ph.D. Program in Planning, just as they currently do in the Department of Geography.

5.3 Financial Support

See our response to 3.1.7.

5.4 Student registration and information systems

The usual University procedures for registration and enrolment will apply to the incoming Ph.D. in Planning students. The Department already has considerable experience with doctoral student evaluation and admissions and has well-established and widely-respected systems for student advising, monitoring and supervision.