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urban design and planning group

1997 Ph.D. Program Self Study

An Interdisciplinary Program of the University of Washington Graduate School

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THE INTERDISCIPLINARY GROUP FOR

THE PH.D. IN URBAN DESIGN AND PLANNING

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The most important task that planning educators can do to strengthen the Ph.D. for all future students, regardless of their career paths, is to improve the quality and rigor of the research that these students do. Not only is research the investment in the future of the field, it is the most important career skill and source of competence for the graduates. We need to put far more of our creative energy into research training, mentoring, and raising funds for research than we have done. We need to take more time ourselves to identify the important planning research directions and to help students to work in ways that will allow them to make valued contributions. We cannot do this by mimicking disciplines, but need to create our own models and exemplars of research that will advance planning as a field.

We need also to be more aware of our students' needs and of how the climate and sense of community (or lack of it) within each of our programs are important in the educational experience. We need to lay more explicit roles in preparing students for their careers, particularly careers in planning education.

From the Report of the Commission on the Doctorate in Planning to the Association of Collegiate Schools of Planning, 1992.

Executive Summary

This Self Study examines the Ph.D. in Urban Design and Planning which is administered by the Interdisciplinary Group for the Ph.D. in Urban Design and Planning. The Interdisciplinary Group ("the Group" hereafter) is comprised of 30 faculty members from 12 different University of Washington (UW) schools and departments.

The Context

- Urban Design and Planning is a multidisciplinary field. There are 27 Ph.D. programs in the U.S. and Canada. The UW degree was one of the first founded in 1967.
- A recent national study found that the field is a healthy enterprise and predicts a shortfall in the supply of graduates, particularly with the majors offered at UW.
- The Group was formed in 1991 to address the low level of scholarship observed in the Department of Urban Design and Planning (DUDP) by a 1989 Graduate School Review.
- In addition to offering the Ph.D. degree, the program elevates the quality of bachelors and master's degrees offered by DUDP, furthers interdisciplinarity at UW, and addresses leading urban problems within and beyond Washington State.
- Over the past five years, many actions have been taken to organize the Group and improve the Ph.D. program in the areas of curriculum, student progress, student quality, advising, research, and community cohesion. Efforts to improve DUDP scholarship have also been made.

Key Findings

- The core purpose of the program today is to produce planning scholars and researchers. This is reflected in a core curriculum that emphasizes theory and research methods. Beyond the core, most students major in land use planning or urban form and design. Others study environmental planning, urban planning history, or transportation planning. The program has more specific requirements than the other Ph.D. planning programs examined.

- An average of three new students enroll each year and 27 students are currently enrolled. Student diversity is similar to national averages for Ph.D. planning programs. Student quality is higher than in other UW Ph.D. programs and among the highest nationally for Ph.D. planning programs. Attrition is below national averages.

- Student satisfaction at graduation has been declining and is below the average for all UW Ph.D.s. A survey of current students is underway to see how students feel today.

- More students have been published by graduation than the average for all UW Ph.D.s.

- Sixty percent of program graduates are placed in academic positions.

- Nearly all students have funding for at least three quarters while in the program and more students are funded each Fall Quarter than the average for all UW Ph.D.s.

- About one in three Group faculty have a Ph.D. in urban planning or design. This is about average for accredited North American planning schools. Gender balance and ethnic diversity among the faculty is slightly below the national planning school average.

- Group faculty publish an average of 2.8 items per year, serve on a variety of planning and design related journal boards, and receive a large number of research grants and contracts.

- Scholarship in DUDP has improved considerably since 1989. Four new research oriented faculty have been hired, productive scholars have been given adjunct appointments, publication rates among the eight research oriented faculty are similar to or greater than the average rate in the Group, and the percentage of DUDP's budget from outside sources is now higher than that of most comparable social science units at UW.

- Student evaluations of core courses range from good to very good.

- The program is guided by an interdisciplinary steering committee and has increased its budget from around $30,000 in 1993/4 to $100,000 in 1997/8.

- The program has made progress implementing virtually all of the recommendations of the 1992 national study of planning Ph.D. programs by the Association of Collegiate Schools of Planning.

Key Recommendations

- Expand the core purpose of the program to include preparing students for teaching and public service along with the current emphasis on research. Place greater emphasis on research that serves planning practice.

- Develop a Group-endorsed, interdisciplinary syllabus of core competencies, concepts, readings, and courses for each major and cover these concepts in the General Exams. Do the same for the core courses and require final exams for each core course to ensure the concepts have been mastered. Review the curriculum to ensure adequate coverage.

- Admit students without a professional degree in urban planning or its equivalent but require those without the degree to take master's level core courses.

- Increase cooperation with other units to offer joint-listed courses.

- Have the Steering Committee facilitate the development of interdisciplinary research projects.

- Increase the size of the entering class in selected areas by increasing efforts to recruit master's students, promote the program, and offer long-term student funding.

- Heighten the relevance of dissertations to planning practice by working with agencies to prioritize and fund relevant work and by encouraging the Legislature to fund agencies for this purpose. Create an externship program so that students can spend time in agencies that they hope will use their dissertations.

- Add more women and minority faculty members to the Group.

- Work with the Center for Instructional Development and Research to improve core class evaluations. Survey students at the end of each Phase rather than only at graduation to improve student feedback and to measure progress toward program goals.

- Encourage more student mentoring by faculty members.

- Enhance the program's reputation by various mechanisms including publishing a peer reviewed journal on physical planning and a working paper series and hosting national conferences in the area.

- Increase participation by non-DUDP Group members in the Association of Collegiate Schools of Planning.
- Develop a UW urban affairs Web page with information on course syllabi, colloquia, faculty and other topics of interest to students and faculty from the various programs with a common interest in urban policy, planning, design and affairs.
- Replace unnecessary library journals with those more relevant to the Program's majors.
- Obtain space for a student lounge and offices.
- Find mechanisms, including funding, to increase the participation of non-DUDP Group faculty in the program.
- Increase program funding in order to support long-term RA positions and fund greater participation by non-DUDP faculty.
- Adopt an implementation program, including benchmarks, responsibilities, and monitoring mechanisms after the program review is completed.

I. AUTHORITY AND RESPONSIBILITY

A. Degree Title

Ph.D. in Urban Design and Planning

B. Unit Authorized To Offer The Degree

The Interdisciplinary Group for the Ph.D. in Urban Design and Planning ("The Group"). The Group is a unit of the University of Washington Graduate School. It is composed of 30 faculty from 12 departments or schools across campus.

II. CONTEXT

A. *Academic Mission*

The mission of the Ph.D. in Urban Design and Planning is to help students master general knowledge and understanding in the fields of urban design and planning, to train students to be scholars and researchers in a particular area of the field, and to guide students in the development of original research. It is one of 27 Ph.D. programs in urban and regional planning in North America and one of the oldest, founded in 1967. It ranks as one of the top programs in the nation in terms of qualifications of entering students (top three), competition for entry (top three), and placement of graduates in U.S. academic positions (top two). In terms of these indicators, our peers would include the Ph.D. programs at Berkeley, Chapel Hill, MIT, Cornell and Michigan.

B. The Field Of Urban Design And Planning

Planning is a multidisciplinary field dedicated to helping society manage change (ACSP 1996). It has roots in engineering, geography, law, architecture, landscape architecture, social sciences, social ethics and public affairs. Its breadth and diversity distinguish it as both a professional and an academic field. Today's planners combine research, design, analytical, and communication skills in order to address the policy problems facing our cities. At their best, planners and planning educators are synthesizers and integrators, flexible in their ability to deal with many issues (ACSP 1992).

The field of urban planning as a subject of graduate education is firmly established in academia. There are 75 U.S. programs that offer professional master's degrees in planning. Ph.D. programs have been growing slowly,

but continuously, since 1965, to a total of 27 programs now listed for the U.S. and Canada in the Association of Collegiate Schools of Planning Guide to Graduate Education in Urban and Regional Planning. The overall conclusion of the *Report of the Commission on the Doctorate in Planning to the Association of Collegiate Schools of Planning* (*ACSP Report*) is that "the Ph.D. in planning is a healthy enterprise. Graduates appear to be fully employed in planning or related fields, pursuing careers which take advantage of their skills and knowledge" (ACSP 1992).

The *ACSP Report* predicts a large shortfall between the demand for physical planning faculty and the supply of Ph.D. graduates. Physical planning fields are emphasized in the University of Washington program: land use planning, urban design, historic preservation, environmental planning, and transportation planning. The *ACSP Report* encourages Ph.D. programs to offer specializations in these areas and suggests that this may require alliances with other fields. (It should be mentioned here that not all subjects at UW are limited to the physical planning realm. Our strength in urban history, for example, extends into social and cultural concerns.)

C. History Of The Ph.D. At UW

The Ph.D. in urban planning is beginning its fourth decade at UW:

> *Responding to a need for advanced and research oriented studies, the Department (of Urban Planning) and the Graduate School developed a Ph.D. program in Urban Planning Studies that admitted its first students in 1967. Its first Ph.D. was awarded in 1970. The interdisciplinary character of the program was fostered by the Graduate School and attempts are still made to keep the program widely-based....* (From the 1983 Graduate School Ph.D. Program Review)

In 1982, the Dean of Architecture and Urban Planning and the Dean of the Graduate School proposed replacing the program with a college-wide Ph.D. in the College of Architecture and Urban Planning (CAUP) due to "diminished resources." In 1983, an independent committee strongly recommended against termination. It reasoned that the case for closure was not compelling, the program satisfied all criteria for continuation, a Ph.D. was at the heart of urban planning given its nature as a social science, and the negative impact would be considerable.

In the mid-1980s, the names of the Department of Urban Planning and its Ph.D. degree were changed to Urban Design and Planning when the CAUP Urban Design Program and faculty were joined with the Department of Urban Planning. From then until 1989, the Ph.D. program was administered by the Department of Urban Design and Planning (DUDP).

In 1989, a Graduate School review found that despite a very high level of student satisfaction with the program (well above the UW average), the faculty in DUDP had an unacceptable level of scholarly research and publication for a research university. The review committee recommended that DUDP faculty have time made available for doing more research, that the faculty develop much stronger intellectual ties to the rest of the university, and that CAUP specify and implement its commitment to the program. The committee also said that a new outside Chair should be found for DUDP, that two new positions should be made available jointly with other departments, and that the program should be granted provisional status until scholarship significantly improved in DUDP.

In response, the Graduate School Council recommended that the Provost transfer degree-granting authority to an Interdisciplinary Graduate School Group.

An Ad Hoc Committee identified the research strengths of various faculty across campus in the general area of physical planning related to the uses of land and the characteristics of the urban and suburban envirionment. The focus on physical planning was considered timely because scholars in the planning literature were calling for a renewed commitment to physical planning (Alonso 1986; Kaufman 1988; Sawicki 1988). This debate and the recognition that few schools had the resources to offer physical planning specializations (ACSP 1992; Weiss 1988; Pivo 1989; Pivo et al. 1990) led the Ad Hoc Committee to recognize the tremendous role the program and university could play by becoming a national leader in physical planning.

In March of 1991, the Graduate School appointed four senior faculty to an Interdisciplinary Committee on the Ph.D. in Planning. The Committee was charged with forming the Interdisciplinary Group and organizing a new Ph.D. program. The Interdisciplinary Program for the Ph.D. in Urban Design and Planning was initiated in the fall of 1991.

D. Relationships To Other Fields

Planning and urban design are highly interdisciplinary. They share theories and research with many other disciplines. A study of the planning literature described this interaction as a kind of academic crossroads (Stevens 1990). One professor in our Group, for example, has had his work cited in journals of economics, geography, architecture, resource management, public policy, and urban affairs. Other fields with strong ties to urban design and planning include history, law, civil engineering, psychology, political science, anthropology, landscape architecture and conservation biology.

E. Criteria For Measuring Success Of The Program

As in other fields, the most highly regarded Ph.D. programs in urban planning are judged to be those that attract the best students, place more of them in faculty positions, and retain faculty with prominent reputations.

As an interdisciplinary unit, our Group is also concerned with less traditional criteria of success including sustaining the interest of high-quality faculty from a variety of disciplines and producing a synthesis that is greater than the sum of its parts.

The recommendations produced by the 1989 Graduate School Review of DUDP are another set of criteria for measuring success, albeit not of the Group itself. Although the decision to create the Interdisciplinary Group was taken by the Graduate School Council as an alternative to implementing the committee's recommendations for strengthening DUDP academically, the capacity of DUDP remains of interest relative to the Ph.D. degree because it is a major participant in the Ph.D. program. DUDP has striven to implement the spirit and letter of the 1989 recommendations. This will be demonstrated in various sections later in this self study where specific references are made to conditions in DUDP. Appendix W contains a more detailed account of the 1989 recommendations and a summary of how DUDP has responded to them.

Finally, the *ACSP* Report contains several recommendations to the nation's Ph.D. planning programs. These can be used as further ways to judge how our program is doing. Appendix V summarizes the ACSP recommendations and what we are doing to implement them. Overall, our Program is making good progress implementing virtually all of their recommendations.

F. The Market For Graduates

Nationally, the demand for professionally trained planners has been increasing since 1985 and will continue to grow (APA 1996; ACSP 1996). The Bureau of Labor Statistics recently declared city and regional planning to be one of the fastest growing job opportunities for individuals with master's degrees. The market for planners in Washington State continues to be very strong. Since 1990, 77 percent of UW master's graduates have found work in Washington State, and last year 91percent of DUDP graduates secured their first job preference (*The Seattle Times*, July 6, 1997). Moreover, salaries for entry-level planners in Washington are the second highest in the nation. Given the strong job market in the region, and high salaries, it is not surprising that some of our Ph.D. students prefer to work in professional practice rather than in academia.

Nonetheless, the academic job market for planning educators is healthy. The *ACSP Report* projected a conservative number of 75 full-time and 75 half-time faculty retirements between 1992 and 1997, resulting in 15 to

25 new positions per year. (Note that unanticipated delays in retirements, resulting from changes in law, have made it reasonable to extend this projection to the 1997-2002 period.) In addition, there has been a corresponding trend in faculty retirements in related disciplines like geography (Gober *et al.* 1995). A review, done for this report, of new positions available over the past few years suggests that ACSP's projections may be slightly low.

The *ACSP Report* indicates that the supply of new Ph.D.s averages around 75 graduates per year. This supply will just satisfy the projected demand for 15-25 new faculty per year. This is due to the fact that 20 percent of the graduates are foreign students who typically return to their home countries after graduation, and many other graduates choose to pursue professional practice or find academic positions in other disciplines like history, geography or environmental studies (typically around 45 percent of planning graduates).

As noted earlier, the *ACSP Report* predicts strong demand for physical planning faculty. It finds that over one-third of expected faculty retirements will be in the fields of land use and urban design. Further, the report states that those with specializations in land use have been hired as academics at a greater rate than those in any other specialty (ACSP 1992). The *ACSP Report* also anticipates that demand will continue to grow in the fields of transportation, information systems, and environmental planning.

G. How We're A Leader

Ours is one of the few Ph.D. planning programs in the nation that is directly managed by an interdisciplinary group of faculty from more than one department. To students who value interdisciplinarity, this is a very attractive feature.

UW also has one of the few Ph.D. programs that emphasizes physical planning (as distinct from social, economic and policy planning) and urban design (as distinct from architecture and landscape architecture). This gives our program an advantage because of the strong demand for academics in physical planning fields.

Another element that promotes the program is its location. Seattle and Washington have emerged as global leaders in growth management, historic preservation, and sustainable urban planning, and students come here to be at the forefront of these fields.

Student quality is a fourth area upon which the program can draw. For example, we estimate that we rank among the top three programs nationally in terms of the average undergraduate grade point average of our entering class. Good students attract others.

H. New Developments That Have Influenced Our Scholarship

Most scholars agree there is no single planning paradigm. Still, many have subscribed to a social scientific model for the past few decades. Now, under the influence of post-modern and radical thinking, new methods, such as action research and participant observation, are infusing the field. Furthermore, design, as a creative problem-solving process, is gaining renewed favor (Schon 1987, 1983). Meanwhile, modeling and quasi-experimental research designs are increasingly popular due to better research training and computing technology. Today, more than ever, planning scholars require training in a variety of methods and theories.

Significant amounts of federal funding are now available for transportation and environmental research. Private foundations are also very interested in environmental problems. One particularly important development may be the growing interest at the National Science Foundation (NSF) and the Environmental Protection Agency (EPA) in scientific projects that relate to urban, planning, and policy issues.

Geographic information systems, the Internet, remote sensing, computer graphics, virtual reality, decision support systems, expert systems, and urban modeling are all affecting planning scholarship at UW.

I. The Program's Role

The program's primary roles are 1) to help students master knowledge in the fields or urban design and planning; 2) to train students to be scholars and researchers in a particular area of the field; and 3) to guide students in the development of original research.

Beyond these basic responsibilities, the program is important as:

- a source of teaching assistants for master's and undergraduate degree programs and research assistants for faculty work;
- a way to bring faculty with an interest in planning and design together, from across campus;
- a factor in attracting and retaining top-quality planning and design faculty;
- a source of research on public policy problems important in Washington and other places;
- a producer of research that's useful to other academic disciplines; and
- a training ground for the physical planning faculty desperately needed by other universities.

The resurrection of physical planning in the nation's planning schools, and the anticipation of a shortage of planning faculty, have influenced the Group's perception of its role at UW. Other changes in the field that have

shaped our views include the development of the Internet, growing interest in undergraduate planning studies, public interest in planning and design issues, and the "globalization" of planning.

Internally, our students have been advocating for more advanced and specialized courses. However, given their small numbers (three enter each year), it is hard to offer many courses exclusively for Ph.D.s. Consequently, the Group has recognized that its role must include working with other departments to produce courses that meet the needs of planning Ph.D.s while the courses also respond to the interests of other students..

Students have also asked us to find ways to facilitate greater interaction with their faculty and with one another. In response, the Group has been organizing the Ph.D. Colloquium and the Mid-Winter symposium.

Students have also wanted more research assistantship opportunities. This has encouraged the faculty to lead and participate in more proposals for external funding. The Group is slowly but surely being transformed into a research unit as well as a degree-granting program. Our participation in the Puget Sound Regional Integrated Synthesis Modelling project, a proposal to NSF for the Seattle Long-Term Ecological Research Center, and three proposals to NSF under the Interdisciplinary Graduate Education Research and Training program are examples of this trend.

One more pressure coming from students is for financial support during their dissertation work. We have responded by giving priority to Ph.D. students when filling DUDP teaching assistantships (TA's) and by adding RA funding to the Group budget to support dissertation work.

From outside the Group there has come pressure:

- to offer specializations in transportation, international planning, and planning information systems;
- to produce graduates who are sensitive and responsive to the needs of the planning profession;
- to attract and graduate more women and minority group members; and
- to speed up the degree program so graduates can go to work.

We have responded to these external pressures by developing a new specialization in transportation planning (with an urban form and environmental emphasis) to begin in the 1998-99 academic year; by encouraging students to take on research that serves professional needs; by recruiting more women and minority faculty for the Group; and by streamlining program requirements (i.e., getting students started earlier on their own research).

J. Opportunities Taken

During the past five years, we have done much to take advantage of our opportunities. Among other things, we have:

- created, supported, and expanded the Interdisciplinary Group;
- focused Ph.D. studies on four (now five) major areas of concentration where the faculty has its greatest strength and demand for graduates is strong;
- increased the program's focus on research methods, planning theory, and urban theory;
- added funding for research and teaching assistantships;
- reinforced Advisory and Supervisory Committees by requiring the majority of their members to be from the Interdisciplinary Group;
- added new core courses and advanced seminars in major areas of specialization, mostly taught by DUDP faculty;
- linked to courses outside DUDP to encourage multidisciplinary studies;
- created a Ph.D. Colloquium to promote community and scholarship;
- established the Mid-Winter Symposium to build cohesion and interaction between Ph.D. faculty and students;
- improved procedures for monitoring and encouraging student progress;
- appointed new DUDP faculty and leadership, including three new research-oriented faculty members (one as Associate and two as Assistant), in response to two retirements, and one new joint appointment at the Associate level with the Graduate School of Public Affairs;
- pursued interdisciplinary research projects, including leading a proposal to NSF for the Seattle Long-Term Urban Ecological Research station, and having faculty serve on the Steering Committee of the recently funded University Initiative Fund proposal to build a Puget Sound Regional Integrated Systems Model;
- planned and funded a Teaching Fellows program, including a seminar on the pedagogy of urban planning; and expanded student teaching opportunities in DUDP's Community & Environmental Planning B.A. program.

Even though we have accomplished much, there is still more that should and will be done. That is the subject of the plan that follows.

III. EVALUATION AND PLANS

A. Our Core Purpose

1. Our Goal

- To have a core purpose that keeps the program focused on preparing graduates to be successful in the work toward which they choose to apply the degree.

2. The Program Today

In our Program Prospectus (see Appendix E) we state that the objectives of our program are to help students master general knowledge and understanding in the fields of urban design and planning; to train students to be scholars and researchers in a particular area of the field; and to guide students in the development of original research. These objectives may not be broad enough to meet the changing demands in the field of urban design and planning. While our program is seen primarily as preparation for careers in university teaching and research, the degree is not necessarily limited to persons who wish to pursue a career in academia. Many of our graduates find employment opportunities within the private sector and different levels of government in a variety of research and applied settings.

Our program , as already explained, places a strong emphasis on physical planning. This field is at the center of professional planning education programs. There is a tremendous opportunity to broaden our core purpose to build upon our strength as a leader in physical planning, and to educate student who can not only teach practice well, but also conduct research that merges theory and practice. Further, our purpose could be expanded to provide an opportunity not offered by other universities, that of educating professional practitioners interested in pursuing a Ph.D. in applied research, which focuses on the pressing planning issues facing the region and nation.

Issue No. 1: Is the core purpose broad enough? Have we placed too much emphasis on training students exclusively in research?

Recommended Strategy: Broaden the core purpose statement to add emphasis on training for teaching, research, and community service as practiced in both academic and professional settings.

Issue No. 2: Should the program's core purpose focus more on applied research and integrating theory with the practice of urban design and planning?

Recommended Strategy: Emphasize the value of both applied and basic research in the purpose statement and curriculum, and encourage dissertations with relevance to planning issues.

Issue No. 3: Should we place more emphasis on educating students on teaching practice well, for those who choose to become ACSP faculty for professional planning programs?

Recommended Strategy: Incorporate professional education teacher training into the curriculum.

B. The Curriculum

1. Our Goals.

- To offer a curriculum that contains:
  - A core of urban design and planning theory and practice;
  - A core of urban social science (urban politics, economics, sociology, geography, and history); and
  - Methodological techniques appropriate to teaching and research on the broad intersection between social science and urban design and planning
- To excel in exploiting ongoing developments in related social and natural sciences and integrating them with intellectual developments in the field of urban design and planning.
- To maximize the interdisciplinary approach to the degree and build an international reputation for developing Ph.D. graduates who are unparalleled in their breadth of social science understanding and their ability to address the role of urban design and planning within a broad range of socio-spatial processes.
- To directly offer or facilitate access to well-taught courses, colloquia, symposia, and tutorials that give students advanced training in core and specialized planning fields.
- To prepare students to be successfully employed in professional planning programs, non-academic planning research positions, and other academic settings.
- To support a cohesive academic community among students and faculty.
- To ensure the educational development of students through effective advising and evaluations.

2. The Program Today

a) Current Interdisciplinary Program

The Program Prospectus (see Appendix E) gives a detailed description of the program curriculum. More briefly, a student entering the Ph.D. program today would undertake the following curriculum.

With a Master's in Urban Planning (MUP) or the equivalent, a student begins Phase One of the program. It covers core material, including planning theory (one seminar), urban theory (one seminar), and research methods (two required courses and nine elective credits to be completed during Phases One and

Two). Students normally complete Phase One during their first year. The research courses include Practical Research Planning and Design and a three-quarter Ph.D. Colloquium at which faculty and students present their research. In the Fall, the Colloquium is taken for four credits and includes the Colloquium, a discussion section, and a research paper focusing on methods. The Colloquium continues for one credit each quarter for the remainder of the student's time in the program (all three phases). Also, during Phase One, students prepare a Research Paper, which is presented in the Spring. They take a one-quarter independent study, working with a professor during the Winter Quarter, to develop the paper. Aside from the research electives, full-time students generally have the opportunity to take five elective courses during Phase One, usually courses in their areas of specialization.

Students are promoted to Phase Two by the Program Steering Committee, based upon the recommendation of the Phase One Advisory Committee assigned to each student. These recommendations are based upon the quality of the Phase One paper and student performance in Phase One courses.

In Phase Two, normally undertaken during their second year, students complete their research methods electives, take the Advanced Research Methods seminar, which helps them design their own research plan, and prepare for their (written and oral) General Examination, covering a major and minor field. (The Dissertation Prospectus may or may not be included in the Exam, at the discretion of the Supervisory Committee.) Advanced seminars are available for Ph.D. and other students in each of the major fields associated with the program, to help them prepare for their General Exam. Majors offered include Land Use, Historical Processes, Urban Design, and Environmental Planning. The Steering Committee has recently decided to add Transportation Planning as a fifth major field.

Among the nineteen students who have entered the program since 1991 (excluding 1997), seven students have declared land use to be their major, six have chosen urban form and design, four have selected history, and two are studying environmental planning.

Students are promoted to Phase Three and designated as Ph.D. Candidates (A.B.D.'s) once they have passed their General Exams. The dissertation is supervised by the Dissertation Committee and is accepted after the candidate passes his or her Final Examination on the dissertation itself.

b) Comparison with Peer Programs

Appendix F provides a matrix that compares our program with other peer Ph.D. programs. Data for the matrix was taken from the *1996 ACSP Guide to Graduate Education* as well as individual admissions materials for each program.

Requirements for core courses and major phases and exams vary considerably across programs. Many programs allow students to put together an individualized area of concentration that falls within the broader field of urban planning. Our program appears more structured than most, in that its major fields are more limited and we require an outside field, with courses to be taken outside the Department of Urban Design and Planning. Most programs have core courses in both theory and research methods. Our program requires more core courses in theory (two) and research methods (three) than most. In addition, we require nine additional credits in research methods, as well as offer optional advanced theory courses in land use, urban design, urban history and environmental planning every other year. We now also require students to participate in colloquiums whenever they are in residence.

One program we found requires at least one semester of teaching experience and another requires one course in teaching skills. Most programs anticipate that students will spend up to two years taking courses. Programs vary regarding the requirement for a preliminary exam or first-year paper. Like our program, those that require a first-year research paper instead of a preliminary exam typically require a MUP or its equivalent for entry. All programs require qualifying exams prior to candidacy (some oral, some written, some both) as well as a final dissertation exam.

c) How We've Responded to the Changing Teaching Environment

(1) The need to prepare faculty for the full spectrum of high education institutions

According to the Graduate School exit questionnaires, very few students who have graduated since 1990 have made plans to work in a public or private school or community college. A few have planned post-doctoral work, but most have intended to teach in a four-year college or university or to work in a government post. Since 1990, virtually all graduates have secured their first or second position preference upon graduation.

Because of this positive job market, the Ph.D. program has up until now not made teaching outside of a four-year university an element in the curriculum. At most, some students have taken positions as community college instructors during their Ph.D. work.

(2) Increasing numbers of undergraduates

The DUDP launched a new undergraduate degree program in 1994. Known as Community and Environmental Planning, the program now serves almost 75 majors. Our Ph.D. students have played a significant role in CEP as instructors and counselors. They also serve as TA's and instructors in planning and design courses for non-majors. The Ph.D. program has secured Graduate School funding for a Teaching Fellows program that will involve Ph.D. students as undergraduate teachers (in CEP) and in a regular seminar on teaching practice and research for all Ph.D. students. This will further the capacity of the Ph.D. program to address the increasing number of undergraduate students.

Most Ph.D. students get teaching and lecturing experience before they graduate. During summer quarter nearly all DUDP courses are taught by Ph.D. students. (See Appendix G.)

(3) Interdisciplinary Studies

In general, the development of interdisciplinary studies has produced a supportive atmosphere for the Group. At least indirectly, this has encouraged the Graduate School to provide growth in program funding; helped students move among the disciplines in search of useful courses, theories, and methods; and encouraged Group faculty to participate in the program.

Support for interdisciplinary studies has also produced research funding opportunities. The University Initiatives Fund, created in part to support interdisciplinarity, has funded the Puget Sound Regional Synthesis Model project, which will generate research assistantships for faculty and students in the Group. Further funding of this nature is anticipated. Another example is the Case Control Study of Pedestrian Injury Sites with the Harborview Injury Research Center and the Southern California Injury Research Center (1994-99).

(4) Distance Learning

Students use the Internet to access information and make contact with faculty and students in their field of study around the world. This process is encouraged when they enter our program by having them plan Web sites and by giving them an e-mail roster of all ACSP planning faculty, sorted by area of specialization.

A Web site is maintained for the program and updated regularly. It contains the Program Prospectus, faculty list, and faculty bibliographies.

(4) Experiential Learning

The Community and Environmental Planning B.A. program in DUDP emphasizes service-learning. Several Ph.D. students have the opportunity to participate each year as TA's in CEP service-learning projects. Most Ph.D.s also have the experience of learning research methods by working as RAs and TAs for Group faculty.

(5) International Study

Many Group faculty have interests in foreign studies. Almost half our students come from other countries, and some American students conduct research abroad. Currently, for example, Ph.D. Candidate Michael LaFond has a Graduate School Travel Award to study sustainable planning movements in Germany. Other recent examples include Loren Siebert's work in Japan and Laura Grosso's work in Africa and Europe.

International conferences present additional opportunities for students to learn about other countries. Six months ago, students from the Group attended the joint meeting of ACSP and ACSE in Toronto. This past summer, students Paul Hess and Kiril Stanilov presented papers at an international meeting on urban morphology in England.

This year, Professors Alberti and Bae joined the Group. They are foreign citizens themselves, from Italy and Korea, respectively, and are exploring the potential for exchange programs with their native countries.

Over the past several years, a number of visiting faculty have spent time in DUDP. Most are from Asia and Europe and all provide enrichment to the Ph.D. program. (See Appendix H.)

(6) Educational Technology

The educational function of the Ph.D. program has been less affected by computing and technology than has the research function. Nevertheless, there has been some impact on the classroom. Most obvious are courses offered by DUDP and Geography in computer methods (especially Geographic Information Systems), where major new computer labs and computerized classrooms are now available.

Another place where computers have made a difference is in student library work. Many indexes to planning-related literature are now available on-line through the University of Washington Information Navigator or Suzzallo CD-ROM software.

An additional resource that should be available to students by the end of 1997 is the new research design and methods expert system just released by SAGE, Inc.

The Internet has broadened access to experts in other universities. It also allows professionals to be consulted. A new project, the Electronic Professionals Council (EPROC) is being developed by Professor Bae and Ph.D. student Tim Chapin. It will allow students to discuss classroom topics with practicing planners via Web technology.

(7) Demand to accommodate the needs of full-time professionals

In any given year since 1990, between 15 and 40 percent of the students in the program have been part-time students. It is common for Ph.D. candidates in particular to hold full-time jobs, slowing their progress to the degree. Several candidates currently are in academic positions in the U.S. and abroad.

To help address this, we have set aside RA funds for use as dissertation grants to allow candidates to take time off from work to complete their dissertations. This has been done for this year for the first time, so it cannot be evaluated here. To minimize the number of pre-candidate students who are working, we have tried to streamline the program, particularly by eliminating the Preliminary Exam, requiring student learning plans, and requiring research methods courses and the first-year paper, which are intended to move students more swiftly into their own research projects.

(8) Increased need for training for industry

So far, nothing has been done in this area. One idea that has been suggested is the creation of a doctorate degree in planning that gives students training in more advanced professional practice methods (e.g., urban and environmental modeling) for work in government and industry. Research would be de-emphasized, and partnerships would be sought with government and industry to support employees to be sent through the doctorate program.

2. Issues and Solutions

Issue No. 1: Should we continued to require a MUP or its equivalent prior to admission?

Completion of a core MUP curriculum or its equivalent is necessary to ensure that graduates are prepared to teach in master's degree programs. It also reduces the need for a preliminary exam and preparatory

coursework, reducing the time to a degree. However, this requirement eliminates some qualified applicants.

Recommended Strategy: Change the entry requirement to requiring completion of the DUDP Master of Urban Planning core courses, or their equivalent, and allow these to be completed during Phase One of the program.

Issue No. 2: Is the core curriculum achieving the program's goals for urban design and planning theory, urban social science, and teaching and research methods?

The core has been designed to achieve these objectives by providing courses in planning theory, urban theory and research methods. Two years ago, a review of the core was conducted and revisions were made to the curriculum. They included adding additional requirements and courses in research methods and a new core class on urban theory. At the present time, DUDP is conducting a major review of the core competencies required for all of its degrees and the Ph.D. program is being considered as part of this exercise.

Recommended Strategy: Further articulate our desired core theoretical and methodological competencies. Match them against existing core courses taught in DUDP and elsewhere. Fill gaps by adding new courses or formalizing access to courses in other departments. Seek Graduate School funding to support any needed new courses and make remaining gaps a high priority for future DUDP faculty searches.

Issue No. 3: Is better definition of expected competencies needed in the major fields?

The major fields offered by the program are recognized as legitimate fields among planning scholars. As such, each contains core materials that scholars in the fields expect one another to have mastered. Aside from the statements in the Program Prospectus that describe each major, the Group as a whole has not articulated what should be common knowledge for students majoring in each field. Instead, each student works with their Supervisory Committee to define the breadth and scope of their major field. While reliance on this student-Committee process is common in many Ph.D. programs, it nevertheless makes it difficult for Supervisory Committees to test for important core competencies during the General Exams and more difficult for students to know how to prepare for their fields. The Group has the unique opportunity to develop nationally significant field descriptions using interdisciplinary sources.

Recommended Strategy: Develop a syllabus of concepts and methods that should be mastered for each major, and recommend readings and courses that can help students master them. Test for this knowledge

during the General Exams. Use the annual Winter Symposium to work in groups of faculty, students, and visiting scholars to build and refine these syllabi.

Issue No. 4: How should student course evaluations be regarded?

Some of the core courses for the program have recently received disappointing student evaluations. However, due to the crude nature of the evaluations, it is unclear what Ph.D. students actually think of the courses and how they can be improved.

Recommended Strategy: Conduct more thorough evaluations of the Ph.D. core courses in order to determine how to increase student satisfaction.

Issue No. 5: Are enough advanced courses available in the major fields?

To help students prepare for their General Exams, they need to take advanced seminars or organize study groups where they can discuss the literature in their major field. DUDP now offers at least one advanced seminar for each field every other year. This may not be sufficient to meet the demand.

Recommended Strategy: Bring related departments together to explore ways of offering advanced seminars or directed tutorials every year for each field, somewhere on campus. Utilize the interest in these fields by graduate students from several departments to make this cost-effective.

Issue No. 6: Should new majors be added?

There is demand for teaching in fields that are not offered by our program, but which are within the faculty's areas of expertise. For a new field to be feasible, there should be student interest, market demand for graduates, enough faculty to compose part of a Supervisory Committee (probably three or four people), and the capacity to fund research, support students, and offer advanced courses in the area. In addition, the field should be recognized by other scholars, or at least have that potential.

Fields that may meet these criteria include international planning, planning with diverse communities, community and economic development planning, and planning models and information systems.

Recommended Strategy: Conduct a feasibility study for adding these fields to the program, and add them if the criteria listed above can be satisfied.

Issue No. 7: Should a preliminary examination be held in addition to or in lieu of the Phase One paper?

There is some concern that, without a preliminary exam, there is no certain way of determining whether students have satisfactorily mastered research methods, planning theory, and urban theory. The Phase One paper is an insufficient vehicle for making this determination, as are papers written for the core seminars on

urban and planning theory. The papers are, however, a good mechanisms for moving students forward on their own research agendas and for helping students publish before graduation.

Recommended Strategy: Reach agreement among the faculty on the theory and methods topics that should be mastered, ensure that these are covered in the core courses, and require students to pass a final examination in each of these courses in lieu of an end-of-phase preliminary exam. Continue to require the Phase One paper.

Issue No. 8: Does a healthy community exist among students and faculty in the program or is alienation a significant problem?

Opportunities for community building include the Candidates' Colloquium, Mid-Winter Symposium, Annual Meeting, Phase One paper presentation, core courses, advanced seminars, directed tutorials, and seasonal socials. These appear to be effectively generating community cohesion and reducing alienation.

Recommended Strategy: Continue these functions and monitor community cohesion.

Issue No. 9: How should we further respond to our changing teaching environment?

Recommended Strategy:

To prepare faculty for the full spectrum of higher education institutions and increasing numbers of undergraduate students:

- Continue the Teaching Fellows Program and Planning Pedagogy Seminar
- Create guaranteed teaching positions in the undergraduate CEP program for Ph.D. students.
- Have Ph.D. students supervise undergraduate research.
- Fund Ph.D. students to visit community colleges both to inform their students about the urban design and planning field and to discuss opportunities for community college teaching with administrators. Tie this activity to minority student recruitment into the MUP and CEP programs.

To promote interdisciplinary studies:

- A key to realizing the vision of graduates who are unparalleled in their interdisciplinary approach to urban design and planning is having the faculty engage in research that advances these objectives and giving students opportunities to participate in this work through courses and funded research assistantships. While it has already been noted (see "The Program's Role") that the Group is slowly becoming an interdisciplinary research unit, it is likely that if this is identified as a priority, much more of this activity could be promoted. One of the core activities in the Steering Committee of the Group,

therefore, should be to identify opportunities to promote collaborative, interdisciplinary research relevant to urban design and planning in ways that advance scholarship outside the normal disciplinary confines. The Graduate School could help facilitate this, and opportunities to develop proposals to the University Initiatives Fund or other agencies could be pursued. The Graduate School and Office of Research could provide some combination of administrative and financial assistance that could be used, for example, to buy out a course or provide a TA for faculty members taking a lead on major interdisciplinary research proposals.

- Develop course lists in various departments that support the major fields.
- Adopt formal understandings with other departments for course sharing, particularly with Political Science for research methods and with Geography for urban theory.
- Cooperate with other departments to provide advanced seminars and courses in major fields. Shift funding for instruction to faculty from outside DUDP who are willing to make these courses available, and include an appropriate level of planning and design content.
- Organize discussions by faculty in the Group on how their discipline can contribute to each major in the program. Suggestions should include both courses and readings. Utilize the Mid-Winter Symposium as a mechanism for doing this.
- Continue participating in interdisciplinary education proposals, such as the Interdisciplinary Graduate Education, Research and Training (IGERT) proposals recently made by several units to NSF, which included participation from UDP. Develop an IGERT proposal from the Ph.D. Group.

To further distance learning:

- Add sessions on distance learning and Internet access to the Ph.D. colloquium series.
- Continue distributing information on faculty in other schools of planning and in related fields, and encourage students to contact them.
- Explore the feasibility of involving students in the program who are not in residence for the colloquium series, perhaps through the World Wide Web.

To support experiential learning:

- Examine ways of using experiential learning to close the research/practice gap. For example, give Ph.D. students credit for spending time as externs with professional planning and design agencies, observing the practical side of issues that they plan to study in their dissertations.

- Establish cooperative research agreements with agencies and organize an externship seminar.

To take fuller advantage of educational technology:

- In view of rapid technological advances and new applications outside of academia, there is a need to expose our students to new technology and the increasingly highly integrated information and communications environment, both conceptually (e.g., "telecommunications and the future of the city") as well as in relation to their doctoral research and future careers as teachers or practitioners. This would involve (but not be restricted to) the networked academic and professional communications environment, electronic access to world-wide information, moving between and integrating different technological environments (e.g., GIS, statistical packages and th Internet), formulating objectives, and strategies for the development of Intra- or Internet-oriented planning reports and documents, collaborating in hypertextural/hypermedia environments with software engineers, graphic designers, information professionals and HTML developers ,and ultimately, reviewing the conceptual foundation of planning theory in light of such ongoing developments in academic and professional work environments and parallel organizational, structural, geographic, and other societal change.

To address the need for training for industry

- Consider creating a professional doctorate program emphasizing advanced practice methods.

C. *The Students*

1. Our Goals

- To attract and retain some of the world's best students in the fields that we offer.
- To accept only highly qualified applicants.
- To have students complete the program expeditiously, preferably in less than four years.
- To have enough students to fill the demand for research and teaching assistants and for graduates.
- To graduate more women and minorities.
- To obtain excellent student evaluations of the program.
- To place every graduate in his or her first preference for work upon graduation.
- To provide full student funding from program start to finish.

2. The Program Today

A *Student Profile* (see Appendix I) has been prepared which lists students who entered the program between 1982 and Autumn 1996. It distinguishes between those who entered before and after 1991 (when the Group was formed). The profile lists students' names, and shows, among other things, their supervisory committees, primary and secondary fields of interest, when they entered the program, and when or if they have graduated. The information used in the following discussion is taken from the *Student Profile* and not from *the Graduate Student Statistical Summary* (Appendix A). The Profile reflects more accurate information and is useful in distinguishing between current students who entered the program before restructuring versus after.

1) Admissions

All prospective students must meet Graduate School requirements. In addition, the Group requires that they possess a master's degree in urban planning or its equivalent.

The Steering Committee evaluates each applicant's GPA, course work, experience, and references. For qualified students, the Steering Committee contacts the Group faculty members in their fields of interest to determine if faculty would serve on or chair their Advisory Committees, and possibly help fund them.

Funding is available to pay for student visits after they have been accepted to the program. One recruitment research assistantship (including salary, fee waiver, and benefits) has been provided in recent years by the Graduate School, as has a three-year Hall-Ammerer Fellowship (to be used once every three years). DUDP and other Ph.D. program RA funds have been used lately to supplement these recruitment grants where necessary.

Between the Fall of 1991 and 1996, the program enrolled 25 students, for an average of about four new students per year. Of that total, six dropped out, usually within the first quarter of study, resulting in an average of three new students in the program each year. Of the 19 remaining, 4 have already graduated, leaving a total of 15 currently enrolled students who have entered the program since the 1991 restructuring. The *Student Profile* (see Appendix I) also lists students who enrolled in the program between 1982 and 1991, when the Ph.D. was administered by DUDP. Of the 29 students in that group, eight are still in the program. This brings the total number of current students to 23.

b) Composition

Since 1991, the program has enrolled 13 males and 6 females. This ratio corresponds to the *ACSP Report* finding that men outnumber women by two to one in Ph.D. planning schools. Only one U.S. citizen enrollee was a minority, and she is an African-American who has since graduated.

Almost 50 percent of our students since 1991 have come from foreign countries—six from Asian countries, and one each from England, Bulgaria, and South Africa. This increasing trend in international students corresponds with the *ACSP Report*, which states: "The planning Ph.D. is attractive to international students because it is offered in few universities outside the U.S. The Ph.D. moreover has a high status in many developing nations—probably more so than in the U.S.—and this translates into important job qualifications" (ACSP 1992). The *ACSP Report* also found that international students make up 40 percent of the total of incoming Ph.D. students. Further, the largest group of international students comes from Asia, about 20 percent of the total. Given Seattle's strong link to Pacific Rim Countries, it is not surprising that UW attracts a high proportion of Asian students. The *ACSP Report* also notes that the gender disparity is greater among international students, with only about 20 percent being women. Three of the six women in our program are international students, or 50 percent.

c) Qualifications of Entering Students

The quality of incoming students is quite high (See Appendix J). For example, the mean undergraduate GPA among the students admitted for 1995/6 was 3.52, which was the eighth highest out of 27 North American Ph.D. programs (see Figure 1) and above the UW Graduate School average of 3.46. In 1996/7 this climbed to 3.74, which we estimate moved us into the top three ranked programs in North America and well above the UW Graduate School average of 3.48. One reason for this improvement is that the competition for admission has been comparatively tough. For the last four years (1993/4-1996/7), we averaged 6.8 applications for each offer made. This would rank us as the third most competitive program in North America, after Berkeley and Chapel Hill, and places us well above the UW Graduate School average of 3.6 applications per offer made in 1996/7. Another reason for our high student quality is that a large percentage of those we accept are actually enrolling, allowing us to remain selective. During the past four years, an average of 64 percent of the offers we made were accepted, which ranks us among the top ten programs for this variable (See Figure 2).

d) Time to Degree and Attrition

Figure 3 shows that the average time to degree for students who graduated between 1993 and 1996 was 6.4 years. This compares with similar numbers for the UW as a whole (6.9), Geography (5.7) and other social science (8.0). The *ACSP Report* found that about 50 percent of all planning Ph.D. students took between seven and eight years to finish, with international students completing their doctorates within six year

Four students (including two international students) who entered the program after 1991 have already graduated. Their average time to degree was just over four years (students who entered the program prior to and graduated after 1991 had an average time to degree of 7.6 years). It's too early to tell if this trend will continue with other students, but it appears that students who have enrolled since 1991 are making quicker progress toward becoming Ph.D. candidates. This could be due to such factors as changing the requirement for a preliminary exam to a first-year paper, earlier and more careful course planning, more systematic supervision from Advisory and Supervisory Committees, greater focus on majors that fit faculty interests and university resources, and better funding of students while they are in Phases One or Two.

Since 1990 our attrition rate has been around 20 percent; however, recently it has been climbing toward 30 percent. According to the *ACSP Report*, the national attrition rate in planning is over 40 percent, so we are doing better than most, but this trend is of concern.

Two other findings from the *ACSP Report* deserve mention and discussion here. One is that completion rates appear slower for students with planning master's than for those from other fields. This finding suggests that those with master's degrees in planning may feel the "pull" of the market and work as planning professionals throughout their education. Professional work can act as a distraction from focused academic progress and may even lead to abandonment of the Ph.D. Moreover, teaching and research assistantships cannot compete with the lure of the professional market, especially in a market with a strong demand for professional planners. Further, anecdotal evidence from our students, especially those who entered the program before 1991, indicates that those without secure and adequate funding during their studies are susceptible to being lured away by professional practice. This could explain longer completion rates, as well as higher attrition rates, for some of our students.

Alternatively, the *ACSP Report* hypothesizes that master's students from other fields may have a better grasp of research and quantitative methods, making it easier for them to move forward in an academic setting. Most of our students enter with a planning master's. We seek students with some professional planning experience, combined with the academic ability and experience to conduct scholarly research. But we have also come to recognize that planning at a master's level places more emphasis on practice than on academic research, so we now require more courses in research methods for our Ph.D. students.

e) Student Evaluation of Program

According to Graduate School exit surveys, overall student satisfaction (when filing for graduation) has declined since 1989-90 (Figure 4). At that time, student satisfaction was quite high, 4.47 on a 5 point scale, with the university average being 4.07. By 1996-97 it had fallen to below the average for the whole university -- to 3.2, with the university average being 4.2. The exit surveys also show a similar decline in student satisfaction with academic standards, response to trends or developments, adequacy of research and professional training, satisfaction with supervision, and quality of faculty (see Figures #5, 6, 7, 8 and 9). It is not clear why this trend has occurred. Because it corresponds with the existence of the Interdisciplinary Group, it could indicate dissatisfaction with the new program structure. However, given that these surveys were completed by people close to graduation who had been at the university for an average of 7.6 years, it is unlikely to be a good measure of our current program. It probably speaks to courses taught five or so years ago, and more recent experiences with advising and dissertation guidance. To explore this issue further, a survey of presently enrolled students is now underway and its results will be provided to the review committee.

During spring quarter 1994, we sought additional student comment through an informal survey of student interests and concerns. The students' top three concerns were: (1) lack of interaction between students and between students and faculty; (2) not enough assurances of funding from quarter to quarter; and (3) lack of clear program requirements and committee responsibilities. The three things most students wanted were: (1) funding for research; (2) clearer specifications of program requirements and what is expected of committees; and (3) more opportunities for student/faculty interactions. These concerns are being addressed by the Ph.D. Colloquium and other opportunities for interaction already mentioned,

increased budgeting for research and teaching assistantships, and plans to use the Mid-Winter Symposium to begin designing more standardized expectations for competencies needed to pass the general exams.

f) Achievements, Knowledge, Skills at Degree Completion

The program places a strong emphasis on research methods and writing. Students are required to take two core classes in research methods, as well as a first-year colloquium in which students must write a paper on research methods. In addition, each student is required to take nine credits of research methods outside of the core courses. Many students take these courses outside the Department of Urban Design and Planning. (the methods sequence in Political Science has lately been a common elective.) Three of these nine credits must be in social statistics. The core classes and research methods electives provide the foundation for the student's first-year research paper. The purpose of the first-year paper is to help students produce a publishable paper. This strategy is working. According to the exit questionnaires, in the last two years, 75 percent and 50 percent of the students, respectively, have published papers while in the program (see Figure 10). This is slightly more than for all Ph.D. students graduating from UW. Travel funds from the Graduate School have also provided important opportunities for students to present papers at professional meetings and academic conferences. Just last year, six students presented papers at academic conferences worldwide. Appendix K lists the dissertation titles of graduates from 1988 to the present.

A survey was conducted of the 19 students who entered the program since 1991 in order to identify awards, honors, fellowships and scholarship they have received. The results are included in Appendix T. Included are eight national or international items, including an NSF Scholarship and two Dissertation Fellowships from the Lincoln Institute for Land Policy, and an award for "best annual conference paper on pedestrians" from the National Academy's Transportation Research Board Pedestrian Research Committee.

g) Placement of Graduates

Appendix L provides a roster of our graduates since 1983 and lists their current positions and employers.

According to Graduate School exit survey data, on average since 1991/2, weighted by the number of graduates each year, 33 percent of our graduates planned on working for government immediately upon graduation; 33 percent planned on working for a four-year university or college; 25 percent planned a postdoctoral fellowships or research associateship; 6 percent planned self-employment; and 3 percent

planned to work in a school or community college. Thus, roughly 60 percent had plans to be academics and about 40 percent planned to work for government or themselves.

Also according to these surveys, again since 1991/2, an average of 69 percent of all graduates in a given year had secured a position upon graduation. This is slightly less than the UW average of 73 percent for Ph.D. students. Among those who had secured a position, an average of 71 percent and 29 percent, respectively, had secured their first or second preference. This compares to averages of 88 and 10 percent, during the same period for all Ph.D.s graduating at UW. Taken overall, upon graduation about 50 percent of our students had secured a job of first preference and about 20 percent had secured a second preference position. This compares to 64 and 7 percent, respectively, for UW as a whole.

Of the 17 graduates between 1993 and 1997, 10 (59 percent) were placed in academic positions (college, university, or post-doctoral research associate) and one is an adjunct faculty member at Huxley College in Bellingham, Washington. Two others work for the Puget Sound Regional Council and are not actively seeking placement within a university setting.

In 1992 we were found to be one of the eight schools in America to send 40 to 50 percent of their graduates to academic positions (ACSP 1992). Since the publication of that report, we have improved our rate to nearly 59 percent. One reason for our high rate may be that our program concentrates on physical planning and there is strong demand for new planning faculty in this field, and a gap in the supply of qualified graduates (ACSP 1992).

Too few students have entered and graduated from the program since 1991 to establish employment trends for this particular group. However, among the four who have graduated, two are professors and two are working in state government. Three current Ph.D. candidates already have academic positions—one in the U.S. and two abroad.

Overall, our program has a long history of being in the top ranking of schools by professorship placement rates. Appendix M indicates the schools that have the highest percentage of Ph.D. alumni currently teaching in the 75 schools that are members of the Association of Collegiate Schools of Planning ("ACSP Schools"). For programs with more than 15 Ph.D. Graduates, UW has the fifth highest percentage of graduates currently teaching in ACSP schools. In rank order, Berkeley has a 35% placement rate, Chapel Hill has 24%, Michigan has 22%, Cornell has 22%, and UW has 19%.

Another measure of success is the impact of our graduates on the planning literature. One study recently examined the contributions made by graduates of various Ph.D. planning programs to the Journal of Planning Education and Research, the peer reviewed publication of the Association of Collegiate Schools of Planning (Stiftel and Connerly 1995). It found that over a two-year period, 38% of the submissions came from authors with degrees from six institutions, including UW, MIT, Cornell, Berkeley, Penn and UCLA.

Our recent graduates' success indicates that we are well positioned to continue to improve on our academic placement rate. Interestingly, the *ACSP Report* found that nearly 45 percent of those in academic settings were in fields outside of planning. In contract, nearly all of our U.S. graduates have found placements within planning programs. This could be linked to our requirement that students have a master's in planning and our program's strong emphasis on physical planning and professional practice. Our continuing high professor placement rate demonstrates that the program is having a significant national impact in producing ACSP faculty.

We are also having a significant impact on professional planning in Washington State. Several of our graduates have found professional positions that match their academic interests and dissertation subjects. Two 1993 graduates are senior planners for the Puget Sound Regional Council, involved in coordinating intergovernmental planning required by the Growth Management Act. Another is a planning manager for the State Department of Ecology's water programs. These are well paid public positions and match extremely well with the dissertation topics of the particular individuals.

As discussed earlier, there is a strong demand for professional planners in the region. This is fortunate, as some of our students do not want to relocate, leaving friends, family and the region's high quality of life.

h) Student Funding

Available data indicate that financial support is available to students, and nearly all those who want to work on campus find positions most quarters.

According to the Graduate School Statistical Summary (see Appendix A), an average of 98 percent of the Ph.D. planning students who were enrolled full-time during the 1993/4-1995/6 period had a teaching or research assistantship or a fellowship. Data are unavailable before and after this time. This compares to about 62 percent for Ph.D.'s university-wide (with traineeships added into this figure.)

Another source, the exit surveys, shows that the percentage of our graduating students who held an RA, TA, or fellowship position for three or more quarters while at UW was 100 percent in 1992/3, 68 percent in 1995/6, and 100 percent in 1996/7. This compares to total UW figures of 91 to 96 percent in the same years.

Despite these results, we have almost no experience in multi-year funding commitments to students. This makes it harder to successfully compete for the best students during the admissions process. Although there is no real difference between the average qualifications (in terms of GPA and GRE scores) of the students who are accepted and enrolled versus those who are accepted but do not enroll, it remains very difficult to get the very highest ranked applicants to enroll, because of longer-term financial support offered by other top schools such as Berkeley and MIT.

3. Issues and Solutions

Issue No. 1: Should we increase the number of students admitted?

A strong demand for graduates is anticipated and it is sometimes difficult to find research assistants in selected areas.

Recommended Strategy: Increase the size of the entering classes in areas where student funding and job opportunities are expected.

Issue No. 2: How can we increase the number of highly qualified applicants?

In order to increase the number of students admitted, it will be necessary to increase the number of highly qualified applicants.

Recommended Strategy: Promote the Ph.D. degree among students in the MUP and related UW master's degree programs. Implement recommendations to enhance the program's reputation (see below). Develop and advertise the availability of specific, long-term RA and fellowship opportunities. Relax the requirement that applicants hold an MUP or its equivalent (see above). Develop a track for students to enter after their first year in a master's degree program. Expand the variety of majors offered.

Issue No. 3: How can we increase the acceptance ratio?

No data is collected on why students choose not to accept offers of admission. Reasons may include better funding elsewhere, employment opportunities, preference for other programs, and late decisions on our part.

Recommended Strategy: Study why students have chosen other programs and adopt appropriate countermeasures. In addition, begin making long-term commitments of support. The statistics on student employment suggest that this should be feasible within the DUDP and Ph.D. program budgets.

Issue No. 4: How can we graduate more women and minorities?

There is no evidence that women and minorities have any particular difficulties graduating once they join the program. The challenge is getting them to apply and come to UW.

Recommended Strategy: Target recruitment efforts on women and minorities. Add major and minor fields on gender and minority issues. Establish a women and minority recruitment committee.

Issue No. 5: How can we provide more predictable, longer-term student funding?

Students desire predictability and it enhances our capacity to attract the best students.

Recommended Stategy: Pursue funding for multi-year fellowships and recruitment research assistantships. Schedule DUDP and CEP teaching and research assistantships for multiple-year appointments. Explore partnerships with other units without Ph.D. programs, such as Public Affairs, for recruiting UDP Ph.D. students who can serve their TA needs. Continue to pursue long-term external grants and contracts such as IGERT funding from NSF. Work with the Puget Sound Integrated Assessment Model project to recruit and fund long-term RA positions.

Issue No. 6: What can be done to improve the percentage of students who get their first job preference?

Recommended Strategy: Survey students to determine which ones are not getting first preference positions and develop strategies based on causes. Continue efforts to help students compete for academic jobs by disseminating job information to students and recent graduates, discussing job search strategies at the Ph.D. Colloquium, and giving students the opportunity to practice their job presentations.

Issue No. 7: How can we increase the relevance of dissertations to leading problems of planning practice in Washington State?

Recommended Strategy: Work with agencies to identify priority issues. Encourage students to pursue these issues and ask agencies to provide students with research support. Implement the recommendations for an externship program (see Experiential Learning, above).

D. Faculty

1. Our Goals

- To ensure that faculty associated with the program are productive researchers and scholars with knowledge and skills related to the core subjects and majors offered.
- To attain gender balance and racial and ethnic diversity among Group faculty.
- To achieve and maintain high-quality teaching in the courses associated with the Ph.D. program.

2. The Program Today

The Group has 30 members from 12 different departments or units in 1997. We began this academic year with three new members. Two are new faculty members from DUDP and one is from Marine Affairs.

a) Academic Training of Faculty

One of the major strengths of the Group is its diversity of faculty, including the variety of disciplines, degrees, and research interests represented. Appendix D lists the Group's faculty by rank, each member's degrees, schools graduated from and year, and discipline of study. Twenty-two of the faculty are professors, six are associate professors, and two are assistant professors.

Nine of the faculty have a Ph.D. in planning (30 percent) and seven have received degrees in geography (23 percent). The *ACSP Report* found that approximately 30 percent of the planning faculty nationwide had the Ph.D. in planning. Ph.D. degrees in the social sciences—such as public affairs, political science, sociology, and history—are well represented. The Group's faculty come from highly regarded programs across the nation. For example, seven members received their degrees from Berkeley and five from UW. Other faculty come from prestigious schools such as Yale, Duke, MIT, and UCLA.

The expertise of the faculty corresponds well with the majors offered in the program. For example, a majority of the Group faculty have research interests or teach courses in land use (23 members) and/or in environmental planning (18 members). The Group has members from every department where students are taking courses except for Architecture, Psychology, Statistics, and Urban Horticulture.

As suggested in the 1989 Graduate School Review, the DUDP has continued to improve the academic training and research capacity of its faculty in order to better support the Ph.D.

program. First, it has appointed three new research-oriented faculty members (one as Associate and two as Assistant) in response to two retirements. These appointments are in the fields of planning theory, land use, and environmental planning. Second, DUDP has made a research-oriented joint appointment at the Associate level in partnership with Public Affairs, adding strength in the areas of urban theory and research methods. These four new faculty have recently been or soon will be appointed to the Group. Three have Ph.D.s in Urban Planning and one has a Ph.D. in Political Economy. Their degrees are from excellent schools, include U.C. Berkeley, MIT, USC, and the University of Texas, Dallas. In addition, there is a new research-oriented Chair of DUDP. These new appointments ensure that strong academic qualities will prevail in DUDP and bode well for its ability to strongly contribute to the Ph.D. Program.

b) Research Productivity of Faculty

The research productivity of the faculty has been evaluated in four ways: (1) by subject areas; (2) by publication rate; (3) by memberships on journal boards; and(4) by external grants and contracts.

(1) Subject Areas of Research

The creation of the Group greatly expanded the range and amount of research by faculty involved in the Ph.D. program. Appendix N provides an impressive list of publications in the field of urban planning by members of the Group. Appendix O sorts the work by subject matter. Land use and growth management, environmental planning, and transportation planning are well represented by a wide variety of faculty from the Group. The areas of urban form and design as well as historical processes have a smaller number of publications, but these areas of research do not have as many contributors, reflecting a smaller pool of faculty conducting research in these fields.

(2) Publication Rates

Figure 11 illustrates the publication rates of selected units between 1991 and 1996. The Group had an average publication rate of 2.78 items per member per year. This contrasts with DUDP, which had a rate of 1.82. The research-oriented faculty in DUDP who were also members of the Group had a rate of 2.42 items per person per year.

DUDP should have a higher publication rate in the near future. The new DUDP faculty have produced at an average annual rate of 2.21. The two DUDP faculty who retired in 1996 and 1997 had rates well below the DUDP average. This combination of retirements and new appointments should boost the overall performance of DUDP. Moreover, the new DUDP faculty have almost double the publication rate for refereed articles in either the Group or DUDP.

(3) Membership on Journal Boards

Eighteen members of the Group faculty are on at least one journal or book series editorial board. A variety of journals are represented including refereed journals that publish urban design and planning research. They include *Urban Affairs Quarterly, Journal of Planning Education and Research, Growth and Change, Professional Geographer*, *Urban Design*, and *Urban Morphology* (see Appendix P for a complete list).

(4) Grants and Contracts

External research grants are strong for both the Group and DUDP faculty. Appendix Q lists grants and contracts received by Group faculty between 1991 and 1997. Many of the grants and contracts are for applied research and give both faculty and students the opportunity to work on public policy issues in the region. One example is Professor Peter May's work on integrating seismic policy with land use planning and state planning mandates.

Appendix R shows a continuing and significant increase in grants and contracts awarded to DUDP. This reflects the restructuring of the department, freeing up research-oriented faculty from heavy teaching loads, in order to allow them to concentrate on research. This was a key recommendation of the 1989 Self Study review process that has been implemented in the department. In 1995/6, 12 percent of the department's budget came from external sources, which is higher than for all other departments in CAUP or other social science units, including Geography, Political Science, Law, and Public Affairs (see Figure 12). Over a five-year total (1991-96), the department still ranks very high in its percentage of external funding.

c) Teaching Effectiveness of Faculty

The teaching effectiveness of Group faculty is difficult to determine, as most faculty do not teach in the program. This is compounded by the fact that some Ph.D. core courses were never evaluated by students. Thus, the following data is sketchy at best, but does point to the need for more systematic student evaluations of the program's core courses. Since 1991 the Planning Theory core course was evaluated three times ('92, '93, and'95) and ranged on a five-point scale from a high of 4.5 (very good to excellent) to a low of 3.25 (good). Two core research methods courses were also evaluated in 1991 and received a median rating of 3.6 (good to very good) and 2.7 (fair to good). The 2.7 was for a course being taught for the first time (Practical Research Planning and Design). It was evaluated by over 25 students, but only a few of them were Ph.D. students. Despite uncertainty as to what the Ph.D. students felt about the course, vigorous improvement efforts were made prior to its second run this fall, and a mid-term evaluation was conducted by the Graduate School's Center for Instructional Development and Research. The results of that evaluation indicate that the course is being improved. The evaluator also noted that the form used to produce the 2.7 score the previous year was probably the wrong one for the class and should not be considered a valid measure of the course's quality.

d) Faculty Diversity

Of the 30 faculty in the Group, 25 are male and 5 are female, 83 percent and 17 percent, respectively. Eight percent are non-white and 3 percent are non-white females. The *ACSP Report* found that of the 395 full-time U.S. planning faculty, 80 percent were male, 20 percent were female, 14 percent were non-white, and 3 percent were non-white female.

Over the past few years, steps have been taken to increase the balance and diversity of the Group. First, DUDP conducted a faculty search and replaced two retiring white male faculty members with three women, including two women of color. These new faculty have joined or will soon join the Group. Second, the Group has voted to offer membership to one Black male and one White female professor who joined the UW faculty this Fall. Fourth, the Group has identified another White female and an Asian male faculty member who are interested in being considered for appointment to the Group.

3. Issues and Solutions

Issue No. 1: How can we increase gender balance and diversity?

Women and minorities are underrepresented in the Group.

Recommended Strategy: Complete the appointments to the group of the UW women and minority faculty members who are known to the Group and interested in joining. Identify additional women and minorities who may wish to join. Explore adding an additional major—Planning with Diverse Communities—to stimulate interest in the program. Track faculty searches in other units that are related to Group activities and encourage the units to make faculty diversity a strong factor in the search process.

Issue No. 2: How can we increase student satisfaction with teaching in the program?

Recommended Strategy: Continue working with the Center for Instructional Development and Research to evaluate core courses and make needed improvements. Engage students and faculty peers in the process.

E. Student-Faculty Interaction

1. Our Goals

- To achieve frequent formal and informal interaction among students and faculty as a means of furthering advising, mentoring, teaching, and collaboration.
- To increase student satisfaction with the advising and guidance they receive.

2. The Program Today

Student advising and supervision varies through the three phases of the program. Each student in Phase One is supervised by an individual Advisory Committee initially appointed by the Interdisciplinary Group Steering Committee. After Phase One, each student forms a Supervisory Committee to guide him or her through Phases Two and Three of the program.

During Phase One, the student is expected to meet frequently with the Advisory Committee. It is responsible for helping students choose electives, for guiding completion of and evaluating the first-year paper, and for advising the Steering Committee on whether students are ready for promotion to Phase Two. The Advisory Committee Chair keeps the Steering Committee informed of student progress.

The Advisory Committee is typically composed of three faculty members from the Group. However, as students refine their courses of study and research interests, they are allowed to change the makeup of their Advisory Committee, subject to approval of the Steering Committee. After the initial

committee is assigned to the student, he or she may change its composition in early Fall Quarter and is then expected to select a Chair from among the members. Advisory Committee chairs since 1991 have included Group faculty from Urban Design and Planning (14), Geography (2), Civil Engineering (1), Political Science (1) and Marine Affairs (1).

In 1997 a new procedure was instituted to strengthen Advisory Committees. Beginning in the Fall of 1997, students are required to prepare a Self Assessment and Study Plan in collaboration with their Committee, and to file the plan with the Steering Committee early in Fall Quarter.

Once a student has completed Phase One, she or he proposes a Supervisory Committee. The Supervisory Committee has a minimum of four members. The Chair is not required to be a Group member. At least two members must be from the Group and two from DUDP. A Graduate Faculty Representative is appointed to the Supervisory Committee by the Graduate School. Of the eighteen currently enrolled students with Supervisory Committees, 13 have Chairs from DUDP, two from Geography, and one each from History, Civil Engineering, and Anthropology. Chairs of these Supervisory Committees are all Group faculty. Of the 30 Group faculty, 24 now serve on at least one Supervisory Committee. In addition, eighteen non-Group faculty from across the university serve on at least one Supervisory Committee, with about half of these coming from the College of Architecture and Urban Planning and the balance from Sociology, Ethnic Studies, Public Affairs, Psychology, and Marine Affairs.

A further cause of interaction among students and faculty are research and teaching assistantships. According to exit surveys, 86 to 100 percent of our graduates in any given year since 1992/3 held at least one of these positions for three or more quarters while at UW. This compares to a UW-wide rate of 91 to 96 percent.

A survey of students who entered the program since 1991 was conducted to learn about the number of students who have conducted research with faculty. The results are given in Appendix U. Overall, they show that over 90 percent of the students have had some research experience directly with faculty, that most of the experience is with Group faculty, and that many of the projects result in reports, papers, or journal articles.

Student exit surveys show that student satisfaction with supervision and/or guidance has declined over the past few years and has fallen below the average for the university as a whole. Because many of the recent graduates, who completed these surveys, entered the program prior to 1991, it is not clear if this

decline is related to the restructuring of the program, and the advising and supervising capabilities of the Group. Nonetheless, this is a concern that needs to be addressed. Due to the dispersed locations of Group faculty offices, there is less opportunity for catching a professor "in the hall." It is likely also more difficult to convene advisory and supervisory meetings because faculty are housed in various departments across campus.

According to the *ACSP Report*, advising and mentoring are closely related to a student's satisfaction with the overall Ph.D. experience. Thus, the need for both structured and informal faculty/student interactions becomes even more important. We have recently targeted our efforts at increasing interactions by offering faculty forums, colloquia, presentations of first-year papers, annual program meetings, and the Mid-Winter Symposium.

3. Issues and Solutions

Issue No. 1: How do we increase the level of student mentoring among faculty members?

Recommended Strategy: New efforts to strengthen interaction should be given time to be evaluated. However, greater focus should be given to student mentoring. The program should develop and implement strategies to promote mentoring, including giving more credit for joint research and teaching, more student/faculty partnerships in Ph.D. program management, faculty mentoring training, greater use of directed readings, and other incentives to further relationships.

F. Leadership and Reputation

1. Our Goals

To be recognized as the best Ph.D. program for physical planning subjects in the world.

2. The Program Today

There is only one source that ranks city and regional planning programs nationally. It is *The Gourman Report: A Rating of Graduate and Professional Programs in American and International Universities*. In the latest (1996) edition, "Washington" is listed as one of 15 institutions with scores in the 4.5-5.0 range (on a 5-point scale, with 4.5 to 5 being "very strong"). While the rating is clearly based on multiple considerations, it is not well explained and its direct relevance to the Ph.D. program is unclear.

Recently, the Chair of DUDP was called by a representative of the Office of Naval Research in Bethesda to discuss planning education for the U.S. Navy. He was informed that he was called because "Navy number crunchers" had ranked UW as "one of the top ten programs in the nation."

3. Issues and Solutions

Issue No. 1: How do we enhance our image and reputation?

Recommended Strategies: Get marketing assistance from UW staff. Host a series of international conferences on the "scholarship and practice of physical planning." Publish a peer-reviewed journal on physical planning, and a working paper series. Publish a regular newsletter on the work and findings of UW faculty and graduates. Publish more reports on the Ph.D. program in the ACSP newsletter.

G. Collaboration

1. Our Goals

- To work with other planning programs where it furthers the program's goals.
- To collaborate with other units inside the University of Washington to achieve greater efficiency and interdisciplinary cooperation.

2. The Program Today

a) Work with Other Institutions

DUDP is a member of the Association of Collegiate Schools of Planning (ACSP) and participates in the annual meetings of that organization. This year, for example, DUDP is sending five Group members to present research papers at the national meeting in Florida.

Within ACSP, there is a standing committee concerned with the Ph.D. in urban planning. A member of our program's Steering Committee, Dr. Hilda Blanco, serves as a member of that committee and chairs its subcommittee on women and minorities. ACSP also publishes a quarterly newsletter in which the activities of our program and others are reported.

Another vehicle we use for learning about other programs is the Mid Winter Symposium. At this event, planning scholars from other programs are invited to spend a few days at UW to share information on their research and program design. Dr. Raymond Burby, from the University of New Orleans, and Dr. Gary Hack, from the University of Pennsylvania, served in this capacity at our first symposium last year.

Members of the Group maintain ties with other institutions in a variety of other ways, including memberships in scholarly societies, Internet discussions, and joint research. It's notable that one of the founders of PLANET, the largest Internet discussion group for planning scholars,

was DUDP Professor Emeritus Earl Bell. PLANET routinely provides an effective mechanism for communication with other planning institutions.

Visiting scholars on sabbatical also provide bridges to other universities. In recent years, several have visited DUDP from countries in Asia and Europe. Also, for the past few years, we benefited from having Dr. Paul Niebanck, U.C. Santa Cruz Professor Emeritus, as a Visiting Scholar. In 1998, Dr. Lewis Hopkins, a leading scholar from the University of Illinois at Champaign-Urbana, will be a Visiting Scholar in residence in DUDP

b) Work with Related Areas on Campus

Given the interdisciplinary membership of our Group, it is common for Group members to be active in many places on campus. However, the Group itself collaborates with other units in several ways, including those that follow.

- Curriculum Sharing: The program formally encourages or requires students to take course work in Geography and Political Science in order to meet requirements for course work in urban theory and research methods.
- Faculty Sharing: The program successfully brokered an agreement between DUDP and the Graduate School of Public Affairs to bring Dr. Paul Waddell, an expert in urban modeling, theory, policy, and geography, to UW from the University of Texas for a joint appointment in the two programs. Dr. Waddell now serves on the Group's Steering Committee, expressly to strengthen the interdisciplinary character of that committee and to build permanent bridges between the Group, DUDP, and other campus schools and departments.
- Students in the Ph.D. program routinely serve as teaching or research assistants in other units.
- Our students take courses from units throughout campus. Since 1991, our students have taken courses in 15 different departments. Among those taken outside of DUDP, 25 percent were taken in Geography; Public Affairs, Political Science, and Engineering each contributed about 10 percent to the non-DUDP courses taken.

3. Issues and Solutions

Issue No. 1: What can be done to enhance cooperation?

Although we enjoy a good level of cooperation at this time, further work is possible. In keeping with the discussion above relating to promoting a culture of interdisciplinary scholarship, opportunities should be developed to engage students from various departments and schools that have interest in urban design, planning, and policy with each other, with faculty, and with outside scholars and practitioners. In general, anything that can promote cross fertilization of both faculty and students can provide a more lively intellectual environment that would engage students early, and help them navigate the intellectual resources of this campus.

Recommended Strategies: Arrange for members of the Group outside of DUDP to become members of ACSP. Obtain funding for non-DUDP faculty to go to ACSP meetings. Encourage faculty visits and exchanges with similar Ph.D. programs. Invite faculty on sabbatical to visit Seattle. As recommended elsewhere, host a series of national conferences on physical planning. Within UW, participate in Graduate School activities that promote information sharing among interdisciplinary programs. Formalize agreements with participating departments concerning faculty participation and course cross listings. Find ways to credit faculty for participation in the program. Prepare a UDP proposal to NSF's IGERT program. Work with the new interdisciplinary coordinator in the UW Office of Research. Explore the feasibility of Ph.D. student exchange programs both with planning Ph.D. programs in other schools and with other Ph.D. programs inside UW. Coordinate the colloquia of Urban Design and Planning, Geography, the GSPA Urban Gateway, Civil Engineering and other seminars and brown bag events that have content relevant to urban design and planning and hold one shared event each quarter. Use Web pages to link course syllabi and descriptions, seminar events, research projects, and other matters of interest to urban-related students from across campus. Engage students in these coordinating functions to promote an active, healthy cross-disciplinary community.

H. Service

1. Our Goals

- To serve the region and beyond by producing Ph.D. research and graduates who can help solve the most pressing problems facing Washington, the U.S., and world cities and regions.

- To serve the University by providing a successful vehicle for faculty cooperation across disciplines.

2. The Program Today

A number of faculty from the Group actively provide service to the region, and beyond, on urban design and planning issues, through their work as consultants, advisors, applied researchers, media commentators, and public speakers. Students from the program also are actively engaged outside the university.

As discussed above, under Student Scholarship, student research often relates to important planning problems. However, this work generally has not focused directly upon the very most important planning problems facing Washington State.

One important benefit of the Ph.D. program is that it attracts high-quality planning and design faculty to UW and helps keep them there. This enriches the DUDP, MUP, and CEP programs and generates significant external funding and other benefits; it applies to the largest producers of external funding and publications in CAUP and DUDP.

3. Issues and Solutions

Issue No. 1: How can student research be tied more directly to the most pressing planning problems facing Washington State?

Washington needs all the help it can get when it comes to solving hard planning and design problems. By selecting study topics in collaboration with faculty and outside agencies, UW Ph.D. students and faculty can do more to address these needs without reducing the national and international significance of their work.

Recommended Strategy: As mentioned above, develop a partnership program with agencies for identifying and funding research related to Washington's problems. Promote the providing of new money from the Legislature to state and local agencies of this purpose.

I. Facilities

1. Our Goal

- To ensure that library, computing, and office facilities are fully capable of supporting the work of the faculty and students in the program.

2. The Program Today

Group faculty are supported by the facilities of their home departments. The students in the program are supported by facilities in DUDP and CAUP.

DUDP and CAUP have done a reasonably good job of providing needed computing facilities. Within the past year, they upgraded their GIS lab, which now contains two SUN workstations and four high-speed PC's. Better printing and digitizing facilities are still needed. Silicon Graphics and Macintosh hardware are currently available for graphics and virtual reality work.

Many of the library materials needed by students are housed in the Architecture and Urban Planning Library in CAUP. However, some of the journals closely associated with the urban planning field (e.g., *Land Use Policy*) are located in Suzzallo Library.

A review of the quality of the planning and design collection is not available. We do not known exactly which books, journals and other materials are absent from the collection; however, anecdotal evidence suggests that important gaps do exist. The library is now planning to cut some journal subscriptions for financial reasons which heightens our concern.

3. Issues and Solutions

Issue No. 1: Student work space.

No formal work space is designated for use by Ph.D. students; however, many get desk and/or office space as part of RA or TA positions. Most use the library and computer labs for much of their work. DUDP recently opened a new Ph.D. student work area with three desks and a phone to accommodate up to six students.

Recommended Strategy: Determine student work space needs more crefully. Consider work habits necessitated by new technologies. Develop a facilities master plan to address essential needs.

Issue No. 2: Library resources.

There is no systematic attention paid to reviewing the adequacy of library materials for students and faculty. However, there is evidence that the journals collection has not kept up with the changing times.

Recommended Strategy: Survey faculty and students to determine whether issues exist, and work with librarians to address them. Replace less relevant journals with those more relevant to the program's foci.

J. Organization and Administration

1. Our Goal

- To create and maintain an administrative structure that encourages interdisciplinarity, student involvement, continuous strategic planning, aggressive implementation, and accountability for progress toward organizational objectives.

2. The Program Today

The Ph.D. Group Faculty is responsible for changes to the program structure and requirements. The Group meets once each year in the spring to consider program changes, such as those made two years ago to increase the requirements for courses in research methods. At other times, the Group faculty are consulted as necessary, particularly during admissions, by the Steering committee and Group Director.

The Steering Committee of the Group meets four times each quarter to consider ongoing administrative matters such as admissions, recruitment awards, student progress, student promotions to Phase Two, Group membership, and program planning. While there are no formal rules for its composition, we have tried to keep the Steering Committee interdisciplinary. In practice it has been composed of one or two Group members who are affiliated with the Department of Geography, two or three Group members affiliated with DUDP, and one or more faculty from some other unit associated with the program. In the past, faculty have held this position from Civil Engineering, Zoology, History, Public Affairs, Political Science, and Anthropology. Almost all non-DUDP faculty on the Steering Committee have been Full Professors. The Steering Committee routinely consults with Steering Committee and Advisory Committee chairs on matters of student progress.

This fall, the Steering Committee voted to include a Ph.D. student as a member.

It is a policy of DUDP to offer adjunct appointments to members of the Steering Committee as a means of furthering relationships with scholars from other fields. It also has been

a policy of the Group to encourage the Chair of DUDP to sit as an ex officio member of the Steering Committee to enhance coordination among the units.

The Director of the Group chairs the Steering Committee and Group meetings. He currently also holds the Graduate Program Coordinator position.

The Dean of the Graduate School is responsible for appointing members to the Group, as well as appointing its Director. She also approves the Group's budget.

A Graduate Program Assistant is provided to the Group by the Graduate School. She maintains program records and assists applicants, students, and faculty. She works in the Graduate School offices in Gerberding Hall.

3. Issues and Solutions

Issue No. 1: Should the Program remain the sole responsibility of an Interdisciplinary Group of the Graduate School?

The program greatly benefits from the contributions made by its members from outside of DUDP. Some of them labor to teach, advise and supervise students, some help steer the program, and some do both. However, because of their full-time appointments to their home departments, it is difficult for non-DUDP faculty to invest very much time in program management. Even more importantly, they have limited incentives to further develop themselves as scholars in the field of urban design and planning. This makes the program disproportionately dependent on DUDP faculty for committee work, program development, and scholarly leadership, which lessens the full potential to achieve a truly interdisciplinary approach to the program. If higher levels of participation are wanted from non-DUDP faculty (not to belittle the value of present contributions), then funding or other means of compensation will be needed to obtain it.

Recommended Strategy: Increase non-DUDP faculty involvement by budgeting funds to support their participation in the program. Also, create new positions in non-DUDP departments for faculty with management responsibilities in the Ph.D. program. Obtain funding through the cooperation of the Deans of CAUP, the Graduate School and the affected non-DUDP unit. Consider the successful joint appointment of Paul Waddell to GSPA and DUDP as a model for this approach.

Issue No. 2: How do we obtain good accounts of student and faculty work in order to allow us to monitor and be accountable for progress toward our goals?

Recommended Strategy: Implement a more comprehensive student survey program at the end of each Phase in the program in order to allow better and more timely information to be gathered on student work and satisfaction. Use annual faculty reports to better track new relevant work by Group faculty members.

K. Budget

1. Our Goal

- Have funding that is consistent with and capable of achieving program goals.

2. The Program Today

A budget history and forecast for the program is given in Appendix S. It shows that the budget for this year is nearly $100,000, close to 2.5 times the budget in 1993/4.

The recruitment allocations allow us to bring students to visit the program once they have been accepted and are still choosing between UW and other schools. We can also offer a one-year research assistantship (including salary, tuition and benefits) to one prospective student. Over the past six years we have also had the opportunity to use two three-year Hall-Ammerer Fellowships for recruitment.

Our operations budget will support three additional research assistants and has funds for meetings and other expenses. Two of the RA positions are normally used to supplement our recruitment efforts and to support other emergency needs.

The third RA position under operations is for a Teaching Fellow. The Teaching Fellows Program, new this year, will allow us to support one additional RA each year, designated as a Teaching Fellow and engaged in innovative teaching activities. The program also has funding for a biannual seminar on teaching in planning and design.

Student travel support for conferences is available. Most grants are $500 and a total of$3,500 is available each year.

A budget of $5,000 is available for supporting the Mid-Winter Symposium.

3. Issues and Solutions

Issue No. 1: What additional funding is needed to support the program?

This study has identified a few specific areas in which limited new funding could help make very significant improvements to the program. The first is a fund to support greater faculty involvement in the Program from outside of DUDP. This could be used to buy faculty out of teaching, provide summer funds, or offer faculty TA's or RA's in exchange for their teaching courses for the PhD. Program, or participating more heavily in program development. The second area is a fund for longer-term student support in order to help with recruitment. Additional RA's are what is needed here and they could be used to both recruit students and attract greater involvement in the program from the faculty that they assist. Third, funds are needed to make the program a member of the Association of Collegiate Schools of Planning and provide Group members with the ACSP newsletter and Journal of Planning Education and Research. Faculty travel funds are also needed to allow non-DUDP faculty to attend the annual ACSP conference. Additional administrative support is needed to install and maintain an urban planning, policy, and studies web site (containing syllabi, event calendars, research ideas, bibliographies and so forth) and to coordinate the various colloquia and other programs running in various units that relate to this area. Funding to support the externship program and seminar, as well as agency funding for applied research, could be very beneficial. Funding is required for a working paper series, physical planning conferences, and to launch a new interdisciplinary physical planning journal. Finally, computer enhancement funds are needed to provide computer peripherals for the GIS work center.

Recommended Strategy: Complete a supplemental budget request to the Graduate School for an interdisciplinary faculty support fund of $20,000; 4 additional RA'ships; $1000 for ACSP membership; and $3000 in faculty travel support; a 1.0 FTE staff position to build and maintain an urban affairs Web site, coordinate activities across units (shared by multiple units), organize the working paper series and conferences, and help launch the new journal; and $5000 for computer peripherals. In addition, work with

the Graduate School to find external support for agency supported research and the externship program and seminar.

IV. Implementation

A. Monitoring Goals

The strategic plan recommended here should be refined during the program review process. Once adopted, an implementation program that contains benchmarks and allocates responsibilities will be prepared. The program will contain an approach for tracking and reporting progress toward implementing recommendations and measuring their effects on desired outcomes. An updated program budget and development plan will be included.

B. Rewards for Accomplishments

It is important to ensure that students, faculty, and staff have incentives to implement our plan. The implementation plan will be based, to the extent possible, on the existing reward structure in the university and, to the extent necessary, recommend changes in this structure to promote the goals of the Ph.D. program.

C. Ways the Graduate School Could Help

The implementation plan will include a listing of ways in which the Graduate School can help the Ph.D. program.

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