

SECTION I: The Request

The University of Utah College of Architecture + Planning requests approval to offer the *Doctor of Philosophy in Metropolitan Planning, Policy, and Design*, effective Fall 2009.

Executive Summary

Program Description

This proposal completes the strategic plan of the College of Architecture + Planning to have an integrated suite of undergraduate, masters, and doctoral degree opportunities facilitated by a Metropolitan Research Center (proposed simultaneously) – all of which are interdisciplinary involving several units across the University. The plan has included hiring among the nation's pre-eminent scholars in planning, along with investing in new facilities, hiring support staff, and committing resources to the doctoral effort – all of which has been completed.

For its part, the Ph.D. in Metropolitan Planning, Policy and Design helps meet society's need for researchers, scholars, teachers, and leaders to make our metropolitan areas sustainable and resilient. The degree will be managed by the Department of City & Metropolitan Planning in the College of Architecture + Planning but it is designed to facilitate the interdisciplinary culture of the University of Utah. Depending on the nature of prior graduate work, the doctoral degree will require between 61 and 83 credit hours, or more, and extend a minimum of six full time semesters of course work. Along with rigorous admission standards, admitted students will have posed a clear direction in pursuing doctoral studies.

The doctoral degree includes core, dissertation field, qualifying examination, and dissertation benchmarks. The core is composed of a sequence of semester-long doctoral seminars in metropolitan planning, metropolitan policy, metropolitan design, and research design; and a series of 1-credit seminars for a total of 16 credits. Doctoral students will complete a minimum of 24 credits in a "dissertation" field including courses outside the Department. (Students without a master degree in planning will need to take up to 22 credits in core planning courses.) The qualifying examination will demonstrate the ability of the candidate to undertake independent research through the preparation of a paper sufficient for submission to a scholarly journal; the paper itself will include literature review, theory, research design, research execution, findings, and conclusions. The dissertation will then be proposed, prepared, and defended.

Role and Mission Fit

The Mountain West (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) is the nation's most urbanized region as well as its fastest growing. By 2040, the region will double in population to more than 30 million people with nearly 20 million jobs. Most of the existing built environment will be rebuilt. Sustainable development is an imperative more so in the Mountain West than perhaps any other region. The region must also learn to be resilient in the face of global climate change, limited water supply, problematic air sheds, and fragile landscapes. The Ph.D. in Metropolitan Planning, Policy and Design at the University of Utah will prepare the next generations of scholars and researchers for the interdisciplinary challenges of shaping metropolitan areas so they are sustainable and resilient. Given this challenge, the role of the degree in the future of the region and the nation is reflected in its title: The *planning* challenge is to anticipate change and learn how best to manage it; the *policy* challenge is how to craft and implement policies needed to facilitate desired change; and the *design* challenge is how to shape the built environment to achieve desired outcomes.

The mission of the Ph.D. in Metropolitan Planning, Policy and Design is to produce doctoral graduates who will *serve the people of Utah and the world through the discovery, creation and application of knowledge; through the dissemination of knowledge by teaching, publication ...; and through community engagement* (italicized language from the University Mission Statement). The core curriculum and matriculation benchmarks are designed to facilitate discovery and knowledge creation. The program is designed to facilitate dissemination of knowledge through research, teaching, publishing, and engagement.

Faculty

The doctoral program will be managed by faculty members in City & Metropolitan Planning possessing doctoral degrees, who will be assisted by others in the Department, illustrated in the table below.

Status	Tenure #	Contract #	Adjunct #
Number of faculty with Doctoral degrees*	5		1
Number of faculty with Master's degrees**	1		
Number of Other Faculty***	1		

**The adjunct is a full-time university scholar teaching half time in the Department.*

***Includes the Dean of the College of Architecture + Planning, an international scholar in urban design, whose graduate architecture degree was the terminal academic degree at the time.*

****Includes a faculty member with a J.D. degree who is an international scholar in metropolitan planning.*

Market Demand

We estimate an annual demand for about 60 new planning doctorates annually in North America but the supply ranges about 30. Many academic positions go unfilled as do many non-academic ones. The demand for doctorates in planning may be growing faster in the Mountain West than any other region. Nationally, there are about two planning doctorate graduates per 10 million residents but in the Mountain West the figure is less than half this, despite being the nation's most rapidly growing region and its most environmentally stressed.

Student Demand

Student demand is composed of two groups: (1) local students who are of doctoral caliber but who are "place-bound" for personal and/or family reasons, and (2) external students. Between the two groups, we estimate a maximum number of 20 full- and part-time students in residence during any given year.

Statement of Financial Support (first five years)

The largest resource required is the faculty component, which is already in place. Graduate assistantships comprise the next largest part of the financial support. The program will be financially self-sufficient.

Legislative Appropriation	\$0
Grants	\$875,000
Reallocated Funds	\$0
Productivity	\$99,000
Other (College commitments to graduate assistantships)	\$85,500
Total	\$1,059,500
Revenues in excess of costs (ratio)	\$238,585 (1.29)

Similar Programs Already Offered in the USHE

There are no similar doctoral degrees offered by any unit within the Utah System of Higher Education.

Section II: Program Description

Complete Program Description

This proposal completes the College of Architecture + Planning's strategic plan to have an integrated, interdisciplinary approach to helping create sustainable and resilient metropolitan areas. It includes a redesigned undergraduate curriculum focusing broadly on metropolitan ecology; a newly accredited master of planning degree that is unique in the nation in linking explicitly the four stages of planning – exploration, development, execution, and communication; a Metropolitan Research Center (proposed simultaneously with this); and the proposed doctoral degree. All these initiatives are integrated: it is because of the faculty and graduate students that the Center generates resources which are used to support education, research and engagement at the undergraduate and graduate levels, which then generates knowledge and skills used to further the mission of the Center and its academic partners. These initiatives are also interdisciplinary because each degree is connected intimately to partnering academic units at Utah, and the Center is designed to engage talent across the University.

For its part, the Ph.D. in Metropolitan Planning, Policy and Design is designed to serve three groups of students, but do so in a way in which the interdisciplinary culture of the University of Utah is advanced. One group of students are those in planning, usually having completed an accredited master of planning degree at Utah or elsewhere. The second are students with masters degrees in fields related to planning especially at Utah such as Geography, Sociology, Family and Consumer Studies (including demography and community development), Public Policy, Public Administration, Political Science, and Economics, among others. Included in this group are graduate Architecture students for whom metropolitan design may be their only option for doctoral study. The doctoral degree may also be attractive to a third group of students who have graduate degrees from other Utah universities, such as the Master of Landscape Architecture and Master of Natural Resources degrees at Utah State University, and the Master of Public Administration and Public Policy degrees at Brigham Young University.

The doctoral program will be available to students on a full-time and part-time basis. In either case, admission will be selective (see below) to (a) assure the number of students being managed by the faculty is never very large (20 in residency) and that (b) those admitted have demonstrated their ability to complete demanding, long-term commitments within a reasonable period of time.

The Ph.D. in Metropolitan Planning, Policy and Design will be guided by a particular philosophy. Students entering the program will demonstrate a clear purpose in pursuing doctoral studies; this assures direction in students' doctoral work. They will also demonstrate their ability to complete challenging projects. Third, students' interests will be highly correlated with several faculty members to assure a critical mass of mentoring. Finally, a least one member of the faculty will need to "champion" the student including chairing relevant student doctoral committees and seeking funding support if needed. The objective is to assemble a group of highly motivated, self-directed, and talented students who show great promise to complete the degree and succeed in society after graduation.

Requirements for completing the Ph.D. in Metropolitan Planning, Policy and Design are as follows:

Ph.D. Supervisory Committee

Upon admission, a Ph.D. Supervisory Committee will be formed consisting of five faculty members, the majority of whom will be regular doctoral faculty in the Department. One member of the committee will be from another department at Utah. Another member may be external to the university whose expertise is

relevant to the student's anticipated dissertation topic. The Supervisory Committee will be responsible for approving the student's academic program, preparing and judging the qualifying examination, approving the dissertation subject, and administering the final oral examination (dissertation defense).

Program of Study

Doctoral students will complete a minimum of six semesters of full time course work as approved by the Supervisory Committee and reflected in an approved Program of Study

Graduate Planning Foundations

For students with an accredited planning master degree from Utah or elsewhere, the graduate planning core is waived. For those without this degree, the graduate planning core is required although individual courses may be waived by the Advisory Committee based on comparable graduate work at Utah or elsewhere. For most students without an accredited planning degree, completing the core planning courses will require the equivalent of about one full academic year of study.

Maximum credits = 22

Doctoral Foundations

Subject to the needs of individual doctoral students as determined by the Advisory Committee, each doctoral student will satisfactorily complete the following core courses:

URBPL 7101 – Metropolitan Planning Seminar – 3 credits (Course to be proposed upon approval of the doctoral degree)

URBPL 7201 – Metropolitan Policy Seminar – 3 credits (Course to be proposed upon approval of the doctoral degree)

URBPL 7301 – Metropolitan Design Seminar – 3 credits (Course to be proposed upon approval of the doctoral degree)

URBPL 7401 – Research Design for Metropolitan Planning, Policy and Design – 3 credits (Course to be proposed upon approval of the doctoral degree)

URBPL 7501 – Metropolitan Planning, Policy and Design Research Seminar – 1 credit, 4 credits minimum (Course to be proposed upon approval of the doctoral degree)

Minimum credits = 16

Field Study

Working with the Supervisory Committee, a selection of courses including independent study will be identified providing sufficient foundation for the student to pursue the dissertation topic. Depending on the topic, many courses may be taken outside the College. Relevant courses would be those in theory, methods, processes, and foundations related to the dissertation topic. While a minimum number of credits are expected, however, this may vary depending on the level of preparation by the student as determined by the Supervisory Committee.

Minimum credits = 18

Language Requirement

Unless determined as necessary by the Supervisory Committee based on the nature of the dissertation work anticipated, there will be no language requirement other than English proficiency.

Qualifying Examination

The qualifying (preliminary) examination will be unique among doctoral programs nationally in that a publishable scholarly work will be the written product and reviewed orally with the Supervisory Committee. The philosophy is that since a key skill of a doctoral graduate is to disseminate knowledge through scholarly work the very best way to demonstrate mastery of this skill, and thus ability to continue on to the dissertation, is to write such a work. Together with the Supervisory Committee, the topic for preparing a scholarly, publishable work will be identified along with prospective sources of data and literature. The student will then have a prescribed period of time, not more than a semester, to produce the scholarly work. It will include review of relevant theory, discussion of the research design appropriate for the theory and data or other forms of information, application of the selected research method, findings, and conclusions including relevant metropolitan planning, policy, and design implications. After oral review it is anticipated that students will refine their qualifying examination product and submit it to an appropriate peer-reviewed journal for its consideration. To facilitate this unique approach to doctoral preparation, students will enroll for at least six credit hours of independent study.

Minimum credits = 6

Dissertation Research Proposal

Candidates will prepare and defend their proposal for a dissertation based on the plan and format negotiated with the Supervisory Committee. The design for the proposal itself may be commenced at any time but may not be approved until after satisfactory completion of the qualifying examination. A minimum of 3 credits is required.

URBPL 7970 – Ph.D. Dissertation Research – variable 1-12 credits per semester but minimum 3 credits needed to satisfy the dissertation research proposal requirement (Course to be proposed upon approval of the doctoral degree)

Minimum credits = 3

Dissertation

The candidate must propose a dissertation proposal to the Supervisory Committee and once approved must then prepare, submit and defend a dissertation embodying the results of scientific or scholarly research or artistic creativity. The dissertation will provide evidence of originality and the ability to do independent investigation and it must contribute to knowledge. A minimum of 18 credits in dissertation research will be required. However, the timing of those credits may be negotiated with the Supervisory Committee.

URBPL 7970 – Ph.D. Dissertation Research – variable 1-12 credits per semester (Course to be proposed upon approval of the doctoral degree)

Minimum credits = 18

In review, for doctoral students who have an accredited master of planning degree, the Ph.D. in Metropolitan Planning, Policy and Design will require as many as 61 credits or more; for other doctoral students as many as 83 credits or more may be needed.

Institutional Readiness

For much of this decade, the College of Architecture + Planning has been restructuring itself to advance graduate education in planning, including launching a doctoral program by the end of the decade. It is toward this end that the University and the College have made strategic investments to hiring national leaders in planning research and scholarship. Support staff has also been hired. In addition, financial aid to doctoral students has already been pledged by local sponsors allowing the program to support doctoral students well into the next decade. The College has also pledged to match externally generated doctoral support. Indeed, the doctoral program already has funding to support at least four full time doctoral students for most of the next five years.

The overall plan includes restructuring the undergraduate program in important ways. For more than 25 years, Utah had an urban planning major housed in the Department of Geography. In the middle 2000s it was transferred to the College of Architecture, and the College itself was renamed by adding "+ Planning". There are now more than 100 majors and minors in planning. However, a purely undergraduate focus would never elevate planning to the prominence it needs in Utah, the Mountain West, and the nation. The College strategic plan thus included creating an accredited master of planning degree – the Master of City & Metropolitan Planning, adding a metropolitan research center, and launching a doctoral degree – all by AY 2010.

A nationally prominent faculty would not be able to manage both the undergraduate and master degree efforts, however. The doctoral degree allows for this. Doctoral students facilitate faculty productivity leading to more externally generated resources that may be used to hire adjuncts to teach undergraduate and selected graduate courses. Doctoral students themselves will become a pool of talent to teach undergraduate courses and assist faculty with graduate courses. By design, the doctoral program will enable the Department of City & Metropolitan Planning to improve its undergraduate program. The end result will be the West's only planning program with undergraduate, masters, and doctoral degree options and a research center.

Faculty

With University support, the College of Architecture + Planning has hired among the nation's top talents in city and metropolitan planning. Collectively, it would rank first in the nation in publications per faculty member. Perhaps only Berkeley and MIT have more books published by their planning faculty than Utah. Among planning programs, Utah's faculty members are a national leader in securing prestigious grants. This part of the College's strategic plan has been completed. No additional faculty members are needed to support the doctoral program. The core doctoral courses will be offered by doctoral faculty of the Department of City & Metropolitan Planning.

Assistant Professor Caitlin Cahill, Ph.D
Professor Philip Emmi, Ph.D
Professor Reid Ewing, Ph.D
Presidential Professor Arthur C. Nelson, Ph.D
Associate Professor Thomas W. Sanchez, Ph.D

Supporting the core doctoral faculty are three others:

Adjunct Professor Pamela Perlich, Ph.D. (Senior Research Economist, DESB)
Assistant Professor Keith Bartholomew, J.D.
Professor Brenda Case Scheer, M. Arch (Dean)

A review of faculty preparedness is noted in the table below.

Status	Tenure #	Contract #	Adjunct #
Number of faculty with Doctoral degrees*	5		1
Number of faculty with Master's degrees**	1		
Number of Other Faculty***	1		

**Ph.D. adjunct in the College of Business who teaches half time in the Department.*

***Includes the Dean of the College of Architecture + Planning, an international scholar in urban design, whose graduate architecture degree at the time was the terminal academic degree.*

****Includes a faculty member with a J.D. degree who is an international scholar in metropolitan planning and whose degree is considered the terminal academic degree in the field.*

The demands of the proposed doctoral degree on the faculty will be modest, as shown later.

Staff

No additional professional staff will be needed to support the doctoral degree. Because all doctoral student advising is provided by the major professor and because advising for the small number of anticipated enrollment in the Ph.D. will be spread among the faculty members no one faculty member will be overburdened. In addition, several doctoral students will be supported in their studies from funds already identified for the next several years plus matching funds provided by the College.

Library and Information Resources

University library resources necessary for supporting doctoral studies is of national caliber and in fact is better than many existing doctoral programs in planning and related fields (see supporting letter).

Admission

Applicants are normally expected to have a master degree in or related broadly to the fields of planning, policy, and/or design; but this will not be exclusive. We will have a selective doctoral program drawing students generally in the 60th percentile or higher of peer institutions based on GRE scores. (Consideration will be made that normally GREs are taken for master and not doctoral degree admission. Consideration will also be made of accomplishments since graduate education indicating preparedness for doctoral studies.) The resume, letters of reference, writing and/or other portfolio samples, statement of interest, presentation of a dissertation topic, and where feasible campus visits will be used to gauge suitability for doctoral work at the University.

The Doctoral Admissions Committee will carefully screen all applications, and all admissions decisions will be made by consensus of the entire faculty. At least one faculty member must agree to supervise any applicant whose record meets admissions requirements before they will receive a formal offer of admission.

Student Advisement

Student advisement will be consistent with the established advising practices within the Department of City & Metropolitan Planning for MCMP students. Each doctoral student will be advised by at least one faculty member who will also facilitate financial support during doctoral studies. We will update the Department Graduate Handbook to reflect the doctoral degree.

Justification for Graduation Standards and Number of Credits

This is not applicable.

External Review and Accreditation

This is not applicable.

Projected Enrollment

By design and intention, the Ph.D. in Planning, Policy and Design will not be large. We anticipate admitting two to four full-time equivalent students annually. At maturity we anticipate about 15 FTE students in residency (about 20 headcount). The following table shows our current enrollment expectations.

Projected Ph.D. Enrollment, First Five Years

<u>Year</u>	<u>Total FTE Students</u>	<u>Mean Student FTE to Mean Faculty FTE Ratio</u>
2009-10	3.0	1:2.7
2010-11	6.0	1:1.3
2011-12	9.0	1:0.8
2012-13	12.0	1:0.7
2013-14	15.0	1:0.5

Expansion of Existing Program

This is not applicable.

SECTION III: Need

Program Need

Demand for doctorates in planning is growing. Since about 2000, there have been about 40 academic positions in or related to planning available each year in North America but only about three-quarters are filled with doctorates in planning. The reason is that of the estimated 60 planning and related doctorates graduating each year, many secure positions in their home countries while others secure positions in consulting, think-tanks/foundations, or government (at all levels) where the pressures of academic performance are less, job security is comparable, and income is often more. Data from the Bureau of Labor Statistics indicate that as jobs in planning are growing faster than population demand for doctorates in planning and related fields grows about a third faster. A major part of the reason for this growing demand is the cross-disciplinary nature of planning itself. Professional planners (especially those with doctoral degrees) and planning academicians are considered among the most cross-disciplinary in society. As society's needs become more complex the professional and academic skills of planners come in greater demand.

Supply

About 35 universities in North America offer doctorates in planning or related fields (such as urban studies, urban affairs, and urban/regional geography). Most universities do not graduate doctorates in planning with regularity. For instance, Georgia Tech, which has had a doctoral degree in planning since the 1980s, has graduated fewer than 10. Larger programs, such as those at North Carolina, Illinois, and UC Irvine, graduate perhaps one or two annually. The largest programs, such as those at UC Berkeley and MIT, graduate about a half dozen annually, but many secure positions in their home countries. Although there is no formal census, we estimate there are no more than about 60 doctoral graduates in any given year between the U.S. and Canada – perhaps fewer. Of those about a quarter to a third are foreign nationals who return to their native countries where repatriation is required in exchange for national government support of their studies. The net supply of doctoral graduates generated annually in North America is likely around 40 in any given year; perhaps fewer.

Demand

Demand is considered for academic institutions, the private sector, and the government and non-profit sectors, respectively.

Academic Demand

There are about 120 graduate programs in planning, urban studies, and urban affairs in the U.S. employing about 1,000 tenure-line faculty members. A generation ago, planning faculty members need only have a master degree. This has changed: it is the rare academic hire these days that does not have a doctorate, usually in planning. About the only exception are those with law degrees or urban design degrees whose role is to teach those topics to planning students.

Demand for faculty with planning doctorates is growing. Reasons include a growing number of accredited planning programs (roughly one new program is accredited each year), expansion of existing programs, and – for the next generation – accelerated retirements of “baby-boom” era professors. Indeed, we estimate that retirements alone will average 20-30 annually for the next several decades. New and expanded programs add another 20-30 new faculty positions in planning annually – including a growing number of research faculty positions. We estimate that the average annual demand for faculty hires ranges

about 40-60. (For instance, there are presently about 50 academic positions advertized by the Association of Collegiate Schools of Planning.) In short, demand for academic positions in planning exceeds supply.

Private Sector Demand

Although demand for planning doctorates has traditionally been mostly in academia, demand for planning doctorates in the private sector is not trivial and growing. Data on this are difficult to gather but some inferences can be made. Consulting firms engaged in planning may be viewed as more competitive when they include doctorates on their staff. Examples include Berkeley Policy Associates where nearly all the senior staff have doctoral degrees and Abt Associates and Cambridge Systematics where about a third do. A reasonable metric based on the experience of City & Metropolitan Planning faculty is that about 10-15% of planning doctorate graduates finds their way into the private sector. It is also sometimes the case that tenure-tracking faculty choose to leave academia for the private sector before facing the tenure decision.

Demand in the Public and Non-Profit Sectors

Growth in demand for doctorates in planning in the public and non-profit sectors may be growing faster than for academia. Federal, state and larger local government agencies are increasingly in need of technical competence in data assembly and analysis, surveying, and various applications of pure and applied research. Non-profit "think tanks" such as the California Public Policy Institute and the Brookings Institution, and foundations such as MacArthur, Rockefeller, and Ford, often fill senior positions with planning doctorates. A reasonable metric again based on personal knowledge of faculty is that nationally about 10-15% of planning doctorate graduates finds their way into the public and non-profit sectors.

Summary Demand and Supply

Available information indicates that the national demand for planning doctorates ranges more than 60 annually in North America and perhaps a comparable number internationally. Compared to other fields, this is not a large number. Society's pay-back per planning doctorate, however, is not small. Planning professors may be among the most influential in shaping the built environment over the next several generations based on their research, civic engagement, and especially teaching. Consider that between 2005 and 2040 more than \$50 trillion will be spent on physical development nationally, and roughly two-thirds of everything seen in 2040 has yet to be built. Planning may play as important role as any field in facilitating how and the extent to which this development is sustainable and resilient.

There is another consideration. The Mountain West is the nation's least-served region in terms of doctoral planning opportunities, yet it is perhaps the nation's most stressed region when it comes to accommodating development demands on a fragile landscape. The University of Utah can shortly become the region's premier doctoral program in planning, helping meet the need for planning doctorates in university academic and research positions, the private sector, and public and non-profit sectors.

Student Demand

There are two ways to look at demand: Locally and externally generated. Locally generated demand comes from doctoral-caliber students who can only study part-time and/or are place-bound for personal or family reasons. Externally generated demand comes from students outside the region/state who seek mentoring offered by nationally prominent faculty members.

A proxy for estimating local demand is the number of doctoral students in programs that have substantial numbers of part-time students and some full-time students without financial support. Examples include Cleveland State University, Portland State University, Texas A&M University, University of Cincinnati, and

the University of Maryland. Doctoral enrollments in these programs average about one (full- and part-time) student in residency per 100,000 in their metropolitan area. Applied to the Wasatch Front, student demand would presently be about 20 but doubling to about 40 by 2040.

A proxy for estimating external demand is the number of full-time doctoral students on full support per nationally prominent faculty member. (We define “nationally prominent” as a faculty member who has published at least one book since 2000 and has more than 20 refereed articles over their career – roughly 10% of the nation’s planning faculty members meet this definition.) Given Utah’s nationally prominent faculty members, we estimate they will attract at least a dozen doctoral students coming to Utah to take up residency over a typical period of study.

Current demand is estimated to range about 30 but perhaps doubling in a generation. However, we anticipate admitting two to four new doctoral students annually, growing to about 20 total full- and part-time doctoral students in residency equal to about 15 FTE, with about a third studying full-time under various forms of financial assistance. The small size allows us to maximize faculty attention on selected students, and thus achieve high graduation rates.

Similar Programs

There are no similar programs in Utah.

Collaboration with and Impact on Other USHE Institutions

This is not applicable.

Benefits

Utah’s metropolitan areas will double in population and jobs between 2005 and 2040. Half a trillion dollars will be spent replacing more than half of the existing built environment not to mention accommodating the demands of growth. Assuring that this unprecedented level of development advances the quality of life for Utahns requires thoughtful and inclusive planning, policy, and design. The challenges are real and the risks of failure are not trivial. The proposed Ph.D. in Metropolitan Planning, Policy and Design complements other significant university commitments that will make the University of Utah a leader in the Mountain West and the nation in achieving sustainable and resilient outcomes at the metropolitan scale.

From an institutional perspective, the Utah System of Higher Education will benefit from the proposed doctoral degree program principally because it will help the state meet the demand for advanced education in planning. It is likely that the program will elevate the stature of the university and the state in planning and related fields, and will attract high quality students from outside the state to study here. The current demand for advanced work by prospective students who are place-bound will also be met.

Numerous benefits across programs and centers are anticipated. Although the doctoral degree will be managed by the Department of City & Metropolitan Planning, in many respects it may be considered a joint venture with the Metropolitan Research Center that is proposed separately. The Center will include many of the core faculty, provide financial aid to doctoral students especially through graduate assistantships, and be a source of research topics of interest to many doctoral students. Together, the doctoral program and the Center will lead to variety of collaborations benefiting many partnering units across campus.

Metropolitan Planning, Policy and Design doctoral students will enhance enrollments in several graduate programs across campus including those in civil and environmental engineering, demography, health,

public administration, public health, public policy, real estate (business), and sociology among others. Many doctoral students may benefit from taking courses leading to certificates in demography (Center for Public Policy and Administration) or geographic information systems (Geography). Subject to Graduate School rules, a master degree may be earned in conjunction with doctoral studies in such areas as geography, public health, public administration, public policy, and sociology, among others.

The combination of the doctoral degree and the Center will facilitate joint research opportunities beneficial to students and a variety of units across campus. For instance, faculty research in global climate change, active living, and transportation planning will not only engage doctoral students in planning but faculty and their graduate students in civil and environmental engineering, public health, and public policy. Faculty research in metropolitan development will engage doctoral planning students as well as faculty and their graduate students in architecture, business/real estate, and demography. Indeed, the interdisciplinary nature of the core doctoral faculty will assure beneficial collaborations across campus. The faculty have graduate degrees in city and regional planning, engineering, environmental psychology, geography, public policy and administration, and physics. They also have active research agendas in community development, geographic information systems, global climate change, metropolitan policy and governance, public health, transportation, and urban form and design. In many ways, the doctoral degree and the Center create an important platform on which city & metropolitan planning faculty can create a variety of collaborations among units across the University.

Collaborations are also envisioned in teaching and advising. The graduate educations and research agendas of the core doctoral faculty are already being put to use in guest lectures and cross-listed courses across campus; the doctoral degree will only extend these options. Advising is another important function that can lead to beneficial collaborations. Graduate School rules require that the supervisory committee include at least one member from outside the department. While assuring a minimum level of interdisciplinarity the practical effect is to invite collaborations among faculty between units. Several of the core doctoral faculty members have created such interdisciplinary collaborations while serving on the doctoral faculties at other universities – often leading to funded research, co-authored publications, shared presentations at scholarly conferences, and so forth.

Academic programs may benefit in two other respects. One is through increased enrollments. The proposed doctoral degree will require doctoral students to take a substantial number of courses outside the department. Another is through cross-listing courses to broaden their attractiveness to students from several units.

The doctoral program and Center platform will inevitably lead to joint ventures between it and other programs and their centers for symposia, guest lectures, community-based forums and the like. This can lead to important engagement, research, and publication outcomes benefiting all partners.

For these and other reasons, numerous units across the University have submitted or will submit letters of support including the College of Health; Civil and Environmental Engineering in the College of Engineering; Family and Preventive Medicine (Public Health) in the College of Medicine; the College of Business; the Bureau of Economic and Business Research; the College of Architecture + Planning and its Department of City & Metropolitan Planning; and the College of Social and Behavioral Sciences including its programs in Economics, Geography, Family and Consumer Services, Public Administration, Public Policy, and Sociology.

To be sure, the Ph.D. in Metropolitan Planning, Policy and Design and the Metropolitan Research Center will be granted by the Department of City & Metropolitan Planning located and housed in the College of Architecture + Planning. Together, they will create serious and interesting interdisciplinary research and teaching related to the areas of metropolitan planning, policy and design. The nature of these areas also assures interdisciplinary participation among many centers and academic units across campus.

Consistency with Institutional Mission

Like the University of Utah as a whole, the Ph.D. in Metropolitan Planning, Policy and Design is crafted to produce doctoral graduates who will *serve the people of Utah and the world through the discovery, creation and application of knowledge; through the dissemination of knowledge by teaching, publication ...; and through community engagement* (italicized language from the University Mission Statement). The core curriculum and matriculation benchmarks are designed to facilitate discovery and knowledge creation. The program will be among the few in the nation designed to facilitate dissemination of knowledge through teaching and publication of scholarly works. In various ways, depending on individual circumstances, community engagement will be a centerpiece of many doctoral programs of study.

SECTION IV: Program and Student Assessment

Program Assessment

Goals and measures of achievement for the Ph.D. in Metropolitan Planning, Policy and Design are adapted from those of the Master of City & Metropolitan Planning degree. We review the MCMP goals and objectives, then add measures/benchmarks by which to gauge the doctoral program over time.

Goal 1: Core Values

Integrate environmental sustainability, resilience of the built environment to change, social equity, and normative economic efficiency as core values throughout the degree program.

Objective:

Include ecological/systems approaches emphasizing interdependency, equity, sustainability and resiliency in core doctoral course content and in material subject to the qualifying examination and the dissertation.

Measures/Benchmarks

All core doctoral courses to include one or more objective elements.

The qualifying examinations will include one or more objective elements.

The dissertation will include one or more objective elements.

Goal 2: Communication

Equip planners to meaningfully engage a diverse society by fostering the development of interactive communication skills, including active listening, the understanding of a plurality of perspectives, and the ability to effectively communicate with a diverse range of audiences.

Objectives:

Engage doctoral students in teaching planning and related courses

Measure/Benchmark

To the extent reasonable, all planning doctoral students will have taught at least one course in or related to planning prior to graduation.

Make the qualifying examination into an opportunity to demonstrate the student's proficiency in communicating planning related research design, execution, and implications through the preparation of a scholarly work suitable for submission to a relevant scholarly journal.

Measure/Benchmark

To the extent reasonable, the qualifying examinations of all doctoral students will be sufficient for submission, if not submitted to, a relevant scholarly journal after approval by the Supervisory Committee.

Engage doctoral students in other modes of communication that foster the development of one or more interactive communication skills.

Measure/Benchmark

To the extent reasonable and relevant, engage doctoral students in graduate studios, master degree student capstone projects, facilitating scholarly events (such as guest lectures, seminars, symposia), and engaging in community outreach activities.

Goal 3: Collaboration

Provide planners with an understanding of the many disciplines and interests that intersect with city and metropolitan planning and the skills to effectively collaborate with representatives of those diverse disciplines and interests.

Objective:

Incorporate into the doctoral experience courses, materials, and perspectives from a wide range of allied disciplines and foster the development of effective collaboration skills.

Measures/Benchmarks

Require all doctoral students to include courses outside the College of Architecture + Planning in their Programs of Study.

Require all doctoral students to include at least one member of the Supervisory Committee from the University outside the College of Architecture + Planning.

To the extent reasonable and relevant, include on the Supervisory Committee a faculty member outside the University.

Goal 4: Leadership

Provide leadership in teaching, research, and public activism to the community, profession, and discipline.

Objective:

Nurture among doctoral students leadership skills relevant to their respective field of work.

Measures/Benchmarks

To the extent reasonable, every doctoral student will give at least one scholarly paper to a conference of scholars in planning or allied field. This will be an indicator of leadership in expressing new/emerging areas of scholarship by both presenting and defending propositions.

To the extent reasonable, every doctoral student will assume leadership in at least one research, scholarly and/or engagement activity including but not limited to seminars, symposia, studios, and broadly accessible public events.

Goal 5: Innovation

Continually seek and employ new knowledge, methods, and techniques through innovation and creativity.

Objective:

Encourage doctoral students to expand research into substantive areas that provide new levels of understanding in their respective fields and to incorporate those insights into their creative work, teaching methods, and public service.

Measure/Benchmark

The nature of engagement in doctoral work implies the desire to seek new knowledge, methods, and techniques through innovation and creativity. Given this, innovation is demonstrated best by (a) preparing a qualifying examination suitable for submission to a scholarly journal, (b) successfully defending the dissertation, and (c) submitting one or more works based on the dissertation to scholarly journals or other outlets. This will be the ultimate measure of achievement for each student and the program as a whole.

Expected Standards of Performance

Successful completion of the Ph.D. in Metropolitan Planning, Policy and Design will demonstrate the student's capacity to be a leader in generating and disseminating new knowledge, and participating in engagement activities that facilitate use of this knowledge in metropolitan planning, policy, and/or design. At minimum, doctoral students are expected to:

1. Master the theories of planning, policy and/or design relevant to the dissertation field.
2. Master planning, policy and/or design methods of inquiry relevant to the dissertation field.
3. Engage in independent research.
4. Disseminate research and knowledge.

Critical benchmarks include:

1. Developing a Program of Study approved by the Supervisory Committee.

2. Preparing and successfully defending the qualifying examination which will be patterned after a scholarly article composed of relevant theory, methods, applications, findings, and implications for metropolitan planning, policy, and/or design.
3. Preparing a dissertation proposal approved by the Supervisory Committee.
4. Preparing and successfully defending a dissertation submitted to the Supervisory Committee.

Toward these ends, the program measures noted above are also viewed as measures of individual student performance. In review, the expected standards of student performance include, to the extent reasonable and relevant to the individual student:

The qualifying examination and dissertation prepared and defended by the doctoral student will include one or more of the elements of environmental sustainability, resilience of the built environment to change, social equity, and normative economic efficiency.

The doctoral student will have taught at least one course in or related to planning prior to graduation.

The qualifying examination prepared and defended by the doctoral student will be of sufficient quality for submission, if not submitted to, a relevant scholarly journal after approval by the Supervisory Committee.

The doctoral student will engage in one more graduate studios, master degree student capstone projects, facilitating scholarly events (such as guest lectures, seminars, symposia), and engage in relevant community outreach activities.

The programs of study of the doctoral student will include courses outside the College of Architecture + Planning as approved by the Supervisory Committee.

To facilitate interdisciplinarity, the Supervisory Committee will include one member from the University outside the Department of City & Metropolitan Planning.

To further facilitate interdisciplinarity, the Supervisory Committees will include one faculty member outside the University to the extent reasonable.

The doctoral student will give at least one scholarly paper to a conference of scholars in planning or allied field.

The doctoral student will assume a leadership role in at least one research, scholarly and/or engagement activity including but not limited to seminars, symposia, studios, and broadly accessible public events.

The doctoral student will submit at least one scholarly work based on the dissertation to a scholarly journal or other scholarly outlets.

Section V: Finance

Budget

The budget for this initiative is shown in the table below.

Funding Sources

The budget table below illustrates how the program will be funded. The program will be supported through a combination of tuition revenues based on enrollment growth, external revenues from grants and contracts, and College reallocation of revenues to match program-generated support for doctoral students. It is important to note that all funds necessary to support doctoral instruction have already been pledged for this purpose, consistent with the College of Architecture + Planning's strategic plan. We elaborate on other financial issues below.

Reallocation

For every doctoral student supported from resources generated by the doctoral program another will be supported by the College (see *Reallocation* line). At the present time, external funding exists to support a minimum of two doctoral students full time (at 20 hours per week). College matching funds double this to four.

Impact on Existing Budgets

There will be no impact on existing budgets; indeed, the current budget for the newly formed Department of City & Metropolitan Planning includes faculty, staff, and operational funds for this purpose that were intended for the doctoral initiative as per the College's strategic plan.

Finance Discussion

From the beginning, the doctoral program will be financially feasible generating more revenues than costs. The principal reason for this is grants and other externally generated funds that support doctoral faculty and students (see *Grants & Contracts* line). Indeed, we are already ahead of projections. While we project an average of \$175,000 in new funding annually for the next five years, the faculty has generated more than \$500,000 this year alone with a multiple of this in various stages of negotiation. Indeed, the Metropolitan Research Center, proposed simultaneously with this proposal, projects average annual grants of about \$500,000. We report only the most conservative projections in the table.

In addition, all tuition capitation revenues accruing to the College generated by doctoral students will be assigned to the doctoral program (see *Tuition to Program* line). Not included are revenues generated from doctoral students outside the Department that will also be transferred to the doctoral program.

The budget footnotes explain other assumptions about costs and revenues.

Financial Analysis

	Year 1	Year 2	Year 3	Year 4	Year 5
Students					
Projected FTE Enrollment	3	6	9	12	15
Cost per FTE	\$41,194	\$29,056	\$19,370	\$14,528	\$11,622
Student/Faculty Ratio (FTE)	2.7	1.3	0.9	0.7	0.5
Projected Headcount	4	8	12	16	20
Projected Tuition					
Gross Tuition	\$11,864	\$23,728	\$35,591	\$47,455	\$59,319
Tuition to Program (productivity) ¹	\$5,700	\$11,400	\$17,100	\$22,800	\$28,500
Expenses					
Salary & Wages ²	\$80,000	\$128,750	\$128,750	\$128,750	\$128,750
Benefits ³	\$31,583	\$33,583	\$33,583	\$33,583	\$33,583
Total Personnel	\$111,583	\$162,333	\$162,333	\$162,333	\$162,333
Current Expense	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Travel ⁴	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Capital	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Library Expense	\$0	\$0	\$0	\$0	\$0
Total Expense	\$123,583	\$174,333	\$174,333	\$174,333	\$174,333
Revenue					
Legislative Appropriation	\$0	\$0	\$0	\$0	\$0
Grants & Contracts ⁵	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Donations	\$0	\$0	\$0	\$0	\$0
Reallocation ⁶	\$11,000	\$22,000	\$22,000	\$22,000	\$22,000
Tuition to Program	\$5,700	\$11,400	\$17,100	\$22,800	\$28,500
Fees	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$191,700	\$208,400	\$214,100	\$219,800	\$225,500
Difference	\$68,117	\$34,067	\$39,767	\$45,467	\$51,167
Revenue-Expense Ratio	1.55	1.20	1.23	1.26	1.29

Notes

1. \$95 per credit hour assuming 75% stays in the program (reflecting courses taken elsewhere)
2. 1.0 FTE faculty load assumed. First year includes 2.0 FTE GAs, other years assume 4.0 GAs.
3. Faculty at 33%, GAs at 10%.
4. Primarily to support doctoral students attending scholarly conferences; this is net of individual grants and contracts that may be available for the same purpose.
5. Minimum external funding expectations (see text for discussion).
6. College matching support for doctoral students.

Appendix A: Program Curriculum

All Program Courses

The table below sorts courses by doctoral core and the three thematic areas. A few courses at the 6000 level cut across all three thematic area. URBPL 7000-level are to proposed. Variable (“Var”) credit courses have no minimum number of hours available to doctoral students. All University graduate students are eligible to take URBPL 7000-level courses with instructor approval. Graduate City & Metropolitan Planning students may take such courses as credit toward their master degree subject to their approved Program of Study.

The Supervisory Committee will determine which of the courses listed below, or others, are sufficient preparation for dissertation work. It is anticipated that all students will take several courses in planning along with courses outside City & Metropolitan Planning, and that students without an accredited graduate degree in planning may take more. The list is illustrative of how students may tailor doctoral studies, and is subject to change. The categories are not necessarily exclusive; many courses cut across multiple fields.

Course Prefix & Number	Title	Credit Hours
<i>Core</i>		
URBPL 7101	Metropolitan Planning Seminar	3
URBPL 7201	Metropolitan Policy Seminar	3
URBPL 7301	Metropolitan Design Seminar	3
URBPL 7401	Research Design in Metropolitan Planning, Policy & Design	3
URBPL 7501	Metropolitan Planning, Policy and Design Research Seminar	Var
URBPL 7970	Research and Dissertation	Var
	Total number of fixed credits	12
	Minimum credits needed in core	30
<i>Metropolitan Planning</i>		
URBPL 7501	Metropolitan Planning, Policy and Design Research Seminar	Var
URBPL 6010	Urban Research	3
URBPL 6011	Planning Seminar	1
URBPL 6020	Urban and Regional Analysis	3
URBPL 6040	Physical Plan Analysis	3
URBPL 6200	Urbanization	3
URBPL 6220	Land Use Planning	3
URBPL 6270	Metropolitan Regional Planning	3
URBPL 6280	Graduate Workshop	4
URBPL 6330	Urban Growth Management	3
URBPL 6340	Public/Private Interests in Land Development	3
URBPL 6371	Complexity and Systems Thinking	3
URBPL 6390	Sustainability Planning	3
URBPL 6430	Technology in Planning	3
URBPL 6720	Community Transport	3
CVEEN 6540	Community Transportation	3
CVEEN 6110	GIS Applications in Civil & Enviro. Engineering	3

Course Prefix & Number	Title	Credit Hours
<i>Metropolitan Planning (continued)</i>		
CVEEN 6540	Community Transportation	3
CVEEN 6560	Transportation II	3
CVEEN 7545	Transportation Modeling	3
CVEEN 7590	Public Transportation Systems	3
GEOG 6140	Methods in Geographic Information Systems	4
H EDU 6550	Introduction to Research Methodology	3
H EDU 6560	Experimental Design and Analysis	3
H EDU 6600	Introduction to Health Research Design	3
H EDU 6610	Evidence Based Health Research	3
H EDU 6660	Health Service Administration Seminar	2
H EDU 6700	Epidemiology in Community Health Practice	3
FCS 6100	Graduate Research Methods	4
FCS 6110	Graduate Multivariate Statistics	4
FCS 6120	Demographic Methods	3
PRT 6000	Survey of Parks, Recreation and Tourism	3
PRT 6050	Environmental Ethics	2
PRT 6070	Seminar in Outdoor Recreation Management	3
PRT 6410	Park Planning	2
PRT 6420	Ecology and Management of Wildland Recreation Settings	3
PRT 6800	Graduate Seminar in Parks, Recreation and Tourism	1
PRT 6965	On-Site Policy Analysis	3
PRT 7000	Seminar in History and Philosophy of Leisure	2
PRT 7010	Behavioral Science Foundations of Parks, Recreation and Tourism	3
PRT 7100	Theory Development, Trends, and Issues in PRT	6
PRT 7101	Measurement in Parks, Recreation and Tourism	3
PRT 7102	Behavioral Science Process in PRT I	3
PRT 7103	Behavioral Science Process in PRT II	3
PRT 7104	Behavioral Science Process in PRT III	3
PRT 7105	Concepts and Application of Hierarchical Linear Modeling in PRT	3
SOC 6120	Statistics I	3
SOC 7130	Statistics II	3
	Total number of credits	141+
<i>Metropolitan Policy</i>		
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	Var
URBPL 6010	Urban Research	3
URBPL 6011	Planning Seminar	1
URBPL 6030	Leadership & Public Participation	3
URBPL 6100	City and Profession	3
URBPL 6240	Planning Theory and Ethics	3
URBPL 6260	Land Use Law	3
URBPL 6280	Graduate Workshop	4
URBPL 6300	Housing and Community Development	3
URBPL 6310	Urban Development Policy and Method	3

Course Prefix & Number	Title	Credit Hours
<i>Metropolitan Policy (continued)</i>		
URBPL 6320	Metropolitan Fiscal Analysis	3
URBPL 6350	Public Lands and Environmental Policy	3
URBPL 6360	Environmental Planning Law and Policy	3
URBPL 6370	System Dynamics and Environmental Policy	3
URBPL 6500	Project Finance and Economics	3
URBPL 6600	Politics of Planning	3
ECON 6300	Public Finance: Public Expenditures and Cost-Benefit Analysis	3
ECON 6380	Law and Economics	3
ECON 6180	Poverty and Inequality	3
ECON 6240	Urban Economics	3
ECON 6250	Environmental and Natural Resource Economics	3
FCS 6300	Housing and Community Development	3
FCS 6730	Community & Environmental Change	3
FCS 6200	Families and Social Policy	3
FCS 6400	Families and Economic Policy	3
FCS 6450	Nonprofit Community Organizations	1-3
FCS 6563	Program and Policy Evaluation	3
FP MD 6100	Biostatistics I	3
FP MD 6101	Data Analysis using SAS	3
FP MD 6105	Advanced Topics in Epidemiology and Biostatistics	2
FP MD 6301	Occupational and Environmental Epidemiology	3
FP MD 6305	Advanced Methods Epidemiology Research	3
FP MD 6309	Seminar in Epidemiological and Biostatistical Techniques	1
FP MD 6311	Research Design	3
FP MD 6340	Infectious Disease Epidemiology	3
FP MD 6370	Occupational Epidemiology	3
FP MD 6400	Public Health Administration	3
FP MD 6401	Public Health Policy and Health Systems	3
FP MD 6405	Health Services Research	2
FP MD 6500	Introduction to Public Health	3
FP MD 6520	HIV/AIDS and Public Health	4
FP MD 6550	Health Programs Planning and Implementation	3
FP MD 6600	Social Context of Medicine and Public Health	3
FP MD 6602	Community Analysis	1-2
FP MD 6700	Environmental Public Health	3
PADMN 6290	Applied Quantitative Methods in Public Policy	3
PADMN 6322	Environmental Policy	3
PADMN 6323	Policy Analysis	3
PADMN 6563	Program and Policy Evaluation	3
SOC 6110	Methods of Social Research	3
SOC 6115	Sociological Analysis	3
SOC 6340	Social Stratification	3
SOC 7070	Seminar in Population and Health	3
SOC 7921	Population and Health Readings I	3

Course Prefix & Number	Title	Hours
<i>Metropolitan Policy (continued)</i>		
SOC 7922	Population and Health Readings II	3
PUBPL 6900	Public Policy Research	3
	Total number of credits	159+/-
<i>Metropolitan Design</i>		
URBPL 7501	Topics in Metropolitan Planning, Policy & Design Research	Var
URBPL 6011	Planning Seminar	1
URBPL 6280	Graduate Workshop	4
URBPL 6400	Urban Design Visualization	3
URBPL 6410	Site Planning	3
URBPL 6420	Open Space Design	3
URBPL 6390	Sustainability Planning	3
URBPL 6430	Technology in Planning	3
ARCH 6230	Utah Architecture and Cities	3
ARCH 6235	American Suburban Development	3
ARCH 6262	Urban Design Theory	3
ARCH 6500	Preservation Theory and Practice	3
ARCH 6581	"Main Street" Revitalization	3
ARCH 6851	Societal Change, Architecture and Planning	3
FCS 6620	Advanced Environment and Behavior	3
FCS 6650	Advanced Community Psychology	3
FCS 6630	Healthy Communities	3
FCS 6700	Research for Community Needs	3
FCS 6600	Environments and Human Behavior	3
FCS 6730	Community Development & Environmental Change	3
GEOG 6000	Spatial Statistics	3
GEOG 6140	Methods in Geographic Information Systems	4
GEOG 6160	Spatial Modeling with GIS	3
GEOG 6190	GIS & Environmental Health	3
GEOG 6240	Locational Analysis	3
	Total number of credits	81+

New Courses to be Added in the Next Five Years

URBPL 7101 Metropolitan Planning Seminar (3)

Survey of theories, processes, and outcomes of metropolitan planning focusing on contemporary planning challenges and debates. Students will be engaged in leading discussions and preparing papers assessing metropolitan planning issues especially relating to sustainability and resilience of the built environment.

URBPL 7201 Metropolitan Policy Seminar (3)

Survey of theories, processes, and outcomes of metropolitan policy focusing on contemporary policy challenges and debates. Students will be engaged in leading discussions and preparing papers assessing metropolitan policy issues at the federal, state, and local levels.

URBPL 7301 Metropolitan Design Seminar (3)

Survey of theories, processes, and outcomes of the form of metropolitan areas focusing on contemporary metropolitan-scale land use design challenges and debates. Students will be engaged in leading discussions and preparing papers assessing metropolitan form and design issues especially relating to sustainability and resilience of the built environment.

URBPL 7401 Research Design in Metropolitan Planning, Policy & Design (3)

Foundations of research methodology as they apply to research in metropolitan planning, policy and design focusing on the relationship between methodology and epistemology, formulating research questions, scientific method, paradigms, causation, research design, reliability, validity, sampling, survey research, qualitative analysis, quantitative analysis, standards for evaluating research, and ethical issues related to social research.

URBPL 7501 Metropolitan Planning, Policy and Design Research Seminar (1-3)

Review of current and pending research in, pedagogical applications of, and emerging debates surrounding metropolitan planning, policy and design.

URBPL 7950 Independent Studies: Doctoral (1 to 3)

URBPL 7960 Special Topics (1 to 3)

Special topics class for doctoral students. Will provide us with a mechanism through which students can be exposed to "cutting edge" content from visiting professors who are experts in specific facets of scholarship in Metropolitan Planning, Policy and Design.

URBPL 7970 Dissertation: Doctoral (1 to 12)

URBPL 7980 Faculty Consultation: Doctoral (3)

Faculty consultation on dissertation research.

URBPL 7990 Continuing Registration: Doctoral (0)

Continuing registration for doctoral students.

Appendix B: Program Schedule

Students with Accredited Master of Planning Degree

Course Prefix & Number	Title	Credit Hours
<i>First Fall Semester</i>		
MPPD 7101	Metropolitan Planning and Policy Theory Seminar	3
MPPD 7401	Research Design in Metropolitan Planning, Policy & Design	3
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
	Total credits, minimum	10
<i>First Spring Semester</i>		
MPPD 7201	Metropolitan Policy Seminar	3
MPPD 7301	Metropolitan Design Seminar	3
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
	Total credits, minimum	10
<i>Second Fall Semester</i>		
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
Elective/Dissertation Field		3
URBPL 6950	Independent Study (qualifying examination)	3
	Total credits, minimum	10
<i>Second Spring Semester</i>		
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
Elective/Dissertation Field		3
URBPL 6950	Independent Study (qualifying examination)	3
	Total credits, minimum	10
<i>Second Summer Semester (dissertation proposal)</i>		
MPPD 7920	Research and Dissertation (Dissertation proposal approved by Supervisory Committee)	3
	Total credits, minimum	3
<i>Third Fall Semester</i>		
MPPD 7920	Research and Dissertation	9
	Total credits	9
<i>Third Spring Semester (dissertation defended at end of spring)</i>		
MPPD 7920	Research and Dissertation	9
	Total credits	9
Total credits		61

Students without an Accredited Master of Planning Degree

Course Prefix & Number	Title	Credit Hours
<i>First Fall Semester</i>		
URBPL 6010	Urban Research	3
URBPL 6011	Planning Seminar	1
URBPL 6040	Physical Plan Analysis	3
URBPL 6100	City and Profession	3
	<i>OR</i>	
URBPL 6200	Urbanization	3
	Total credits	10
<i>First Spring Semester</i>		
URBPL 6240	Planning Theory and Ethics	3
URBPL 6260	Land Use Law	3
URBPL 6430	Technology in Planning	3
URBPL 6020	Urban and Regional Analysis	3
	<i>OR</i>	
URBPL 6030	Leadership & Public Participation	3
	Total credits	12
<i>Second Fall Semester</i>		
MPPD 7101	Metropolitan Planning and Policy Theory Seminar	3
MPPD 7401	Research Design in Metropolitan Planning, Policy & Design	3
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
	Total credits, minimum	10
<i>Second Spring Semester</i>		
MPPD 7201	Metropolitan Policy Seminar	3
MPPD 7301	Metropolitan Design Seminar	3
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
	Total credits, minimum	10
<i>Third Fall Semester</i>		
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
Elective/Dissertation Field		3
URBPL 6950	Independent Study (qualifying examination)	3
	Total credits, minimum	10
<i>Third Spring Semester</i>		
MPPD 7501	Metropolitan Planning, Policy and Design Research Seminar	1
Elective/Dissertation Field		3
Elective/Dissertation Field		3
URBPL 6950	Independent Study (qualifying examination)	3
	Total credits, minimum	10

Students without an Accredited Master of Planning Degree (continued)

Course Prefix & Number	Title	Credit Hours
<i>Third Summer Semester (dissertation proposal)</i>		
MPPD 7920	Research and Dissertation (Dissertation proposal approved by Supervisory Committee)	3
	Total credits, minimum	3
<i>Fourth Fall Semester</i>		
MPPD 7920	Research and Dissertation	9
	Total credits	9
<i>Fourth Spring Semester (dissertation defended at end of spring)</i>		
MPPD 7920	Research and Dissertation	9
	Total credits	9
	Total credits	83

Appendix C: Faculty

Core Departmental Doctoral Faculty

Caitlin Cahill, Ph.D

Assistant Professor Caitlin Cahill is a community-based urban studies & youth studies scholar. Her research interests include young people's well-being, globalization, citizen participation in community development, critical race and feminist theory, community-based and participatory action research approaches, and social justice. Dr. Cahill has been named the "Community Scholar in Residence" for University Neighborhood Partners (with Drs. Matt Bradley and David Quijada). Currently she is co-directing the Mestizo Arts & Activism program, a participatory youth research collective that works to support and mentor youth in developing social change projects based on their concerns. Dr. Cahill is an editor of *Children, Youth, and Environments*; on the editorial board of *Children's Geographies*; a board member of the AAG Urban Geography Specialty Group; a member of the Participatory Action Research Collective at CUNY; and Co-Chair of the Participation Network of EDRA. Dr. Cahill received her doctorate in Environmental Psychology with a concentration in public policy and urban studies from the City University of New York.

Philip Emmi, Ph.D

Professor Philip Emmi holds a B.A. in Economics (magna cum laude) from Harvard, a Masters of Regional Planning, and a Ph.D. in Urban and Regional Planning from Chapel Hill. He served in the Peace Corp in Chile where he worked with municipal and national planning agencies. Dr. Emmi has served as an advisor to the Utah Governor's Office of Planning and Budget, has been awarded the Lowell Bennion Community Service Professorship, and participated as co-principal investigator on a National Science Foundation grant. He chairs an intercollegiate committee that administers an interdisciplinary certificate program in the Adaptive Management of Environmental Systems. Dr. Emmi has published 8 book chapters, 34 articles in 16 different academic journals with academic presentations in 21 different states and 9 foreign countries. These have most recently to do with the application of systems thinking and the dynamic simulation of urban systems to the analysis of urban land use and transportation, the energy requirements of alternative urban development strategies, and the role of cities in the production of global greenhouse gases.

Arthur C. Nelson, Ph.D., FAICP

For the past thirty years, Presidential Professor Arthur C. Nelson has conducted pioneering research in growth management, urban containment, public facility finance, economic development, and metropolitan development patterns. Numerous organizations have sponsored Dr. Nelson's research such as the National Science Foundation; National Academy of Sciences; U.S. Departments of Housing and Urban Development (HUD), Commerce, and Transportation; Fannie Mae Foundation; American Planning Association; National Association of Realtors; and The Brookings Institution. His research and practice has led to the publication of nearly 20 books and more than 200 other scholarly and professional publications. In 2000-01, Dr. Nelson he served HUD as an expert on smart growth and growth management for the Clinton and Bush Administrations. In this capacity, he helped expand HUD's research scholarship programs and create HUD's doctoral fellowship program. Dr. Nelson has earned three teacher-of-the-year recognitions at two universities (Kansas State University and Georgia Tech twice), researcher of the year honors at a third (University of New Orleans), and scholar of the year honors at Virginia Tech. His books have shaped the field of impact fees, growth management, and urban containment. His papers have won national awards and international distinction. Dr. Nelson's students have won numerous awards including the national student project of the year award given by the American Institute of Certified Planners.

Reid Ewing, Ph.D., AICP

Professor Reid Ewing is associate editor of the *Journal of the American Planning Association*, columnist for *Planning* magazine, and Fellow of the Urban Land Institute. Formerly, he was Director of the Voorhees Transportation Center at Rutgers University, and earlier in his career, he served two terms in the Arizona legislature and worked on urban policy issues at the Congressional Budget Office. He holds master degrees in Engineering and City Planning from Harvard University and a Ph.D. in Transportation Systems and Urban Planning from the Massachusetts Institute of Technology. Dr. Ewing has authored books for the major planning and development organizations: *Developing Successful New Communities* for the Urban Land Institute; *Best Development Practices* and *Transportation and Land Use Innovations* for the American Planning Association; and *Traffic Calming State-of-the-Practice* for the Institute of Transportation Engineers. The two books for the American Planning Association made him APA's top selling author for many years. His study of sprawl and obesity received more national media coverage than any planning study before or since, and at one time, was the most widely cited academic paper in the Social Sciences, according to *Essential Science Indicators*. His most recent book, written for EPA and published by the Urban Land Institute, is *Growing Cooler: The Evidence on Urban Development and Climate Change*. Also due out this year, and published by the American Planning Association, is *National Traffic Calming Manual*. Dr. Ewing's prior work on smart growth development includes the U.S. Green Building Council's LEED-Neighborhood Development guidelines, the Institute of Transportation Engineers' *Recommended Practice for Context-Sensitive Thoroughfares*, the National Wildlife Federation's *Endangered by Sprawl*, and dozens of consulting projects around the United States.

Thomas W. Sanchez, Ph.D.

Associate Professor Tom Sanchez earned a bachelor's degree in Environmental Studies from UC Santa Barbara, a master of City and Regional Planning from Cal Poly, San Luis Obispo, and a PhD in City Planning from Georgia Tech. Between his master and doctoral studies he worked for a private real estate developer with residential projects in San Diego County and Orange County, CA. Upon completing his degree at Georgia Tech he taught at Iowa State University and has since been on the planning faculties of Portland State University and Virginia Tech before coming to the University of Utah. Dr. Sanchez conducts research in the areas of transportation, land use, environmental justice, and the social aspects of planning and policy. His research has been published in leading urban affairs and planning journals including the *Journal of the American Planning Association*, *Housing Policy Debate*, *Urban Studies*, *Journal of Planning Education and Research*, and the *Journal of Urban Affairs*. His article, *The Connection between Public Transit and Employment*, was selected for the best article of the year in 2000 by the *Journal of the American Planning Association*. In 2007, he co-authored two books, *The Right to Transportation: Moving to Equity* (with Marc Brenman) and *The Social Impacts of Urban Containment* (with Chris Nelson and Casey Dawkins). Along with serving as Chair of the Department of City & Metropolitan Planning, Dr. Sanchez is a nonresident senior fellow of the Brookings Institution, review editor for the *Journal of the American Planning Association*, an editorial advisory board member for *Housing Policy Debate*, and chair of the Transportation Research Board's Social and Economics Factors Committee.

Supporting Faculty

Keith Bartholomew, J.D.

An environmental lawyer, Assistant Professor Bartholomew received his Juris Doctor from the University of Oregon and worked for ten years as a staff attorney for 1000 Friends of Oregon, a community development and land use planning advocacy organization in Portland. While at 1000 Friends, Professor Bartholomew

was the director of "Making the Land Use, Transportation, Air Quality Connection" (LUTRAQ), a nationally recognized research program examining the interactive effects of community development patterns and travel behavioral patterns. Professor Bartholomew is also the former associate director of the Wallace Stegner Center for Land, Resources and the Environment at the U of U's S.J. Quinney College of Law. Professor Bartholomew's current primary research focus is assessing the extent and nature of land use-transportation scenario planning in U.S. metropolitan areas. His other research work focuses on accessibility based transportation planning processes, legal issues inherent in transit-oriented development, public participation in transit facility design, the use of expert panels in transportation analysis, and the use of values-based communications in planning and urban design processes. Professor Bartholomew is a member of Oregon State Bar and the American Planning Association and is a Trustee for the Utah Transit Authority.

Pamela Perlich, Ph.D.

Pamela Perlich is a Senior Research Economist in the Bureau of Economic and Business Research at the University of Utah, joining BEBR in 2000. Before joining the BEBR, she worked for seven years in the Governor's Office of Planning and Budget concentrating on long-term economic and demographic projections. In addition, she is Professor Adjunct in the Department of City & Metropolitan Planning, College of Architecture + Planning. She has taught in the program since 1998. Current teaching responsibilities include URBPL 6010: Urban Research and URBPL 6020: Urban and Regional Analysis. Pamela specializes in Utah demographics, applied regional economic studies, and economic and demographic modeling. Dr. Perlich is a member of the Utah Population Estimates Committee, and is the University's primary contact with the Bureau of the Census through the State Data Center program. She serves on the Utah Council for Economic Education as the representative for the University of Utah and is a member of the Envision Utah Steering Committee. At the University she is a faculty in the Graduate Certificate in Demography and a member of the Center on Aging.

Brenda Case Scheer, M.Arch, AIA, AICP

Professor Brenda Case Scheer, AIA, AICP has been the Dean of the College of Architecture + Planning at the University of Utah since 2002. During her tenure, the College has been considerably transformed by the addition of the urban planning program. Her research specializations are the formal development of cities and urban design policy. She has published many articles and book chapters on design review, architecture, housing, and suburban form. Her books include *Suburban Form: an International Perspective*; *Design Review: Challenging Urban Aesthetic Control*; and *The Culture of Aesthetic Poverty*. She is the winner of the prestigious Chicago Institute of Architecture and Urbanism Prize, which is awarded for writings on urban design. Dean Scheer is also chair of the board of directors of Artspace, Inc., a member of the Envision Utah steering committee, and on the editorial board of the *Journal of the American Planning Association*. Dean Scheer has a long record of professional practice including master planning, urban design and design guidelines as well as several award-winning architectural projects. She has also been involved in sustainable development projects in Thailand and Crete. Dean Scheer was previously a professor at the University of Cincinnati, where she taught for 12 years. Before entering her academic career, she was a Loeb Fellow at the Harvard Graduate School of Design, director of urban design at the City of Boston, and vice president of a real estate development company in Houston.

SIGNATURE PAGE

Institution Submitting Proposal:

University of Utah

College, School or Program in Which Program Will Be Physically Located:

College of Architecture + Planning

Department(s) or Area(s) in Which Program Will Be Physically Located:

Department of City & Metropolitan Planning

Program/Administrative Unit Title:

Metropolitan Planning, Policy and Design

Recommended Classification of Instructional Programs (CIP) Code:

— — / — — — —

Certificate, Diploma and/or Degree(s) to be Awarded:

Doctor of Philosophy in Metropolitan Planning, Policy and Design

Proposed Beginning Date:

July 1, 2009

Institutional Signatures:

Department Chair: _____

Dean: _____

Graduate School Dean: _____

Chief Academic Officer: _____

President: _____

Date _____