

PhD Handbook Regional Planning 2017-2018

Program Overview

The Ph.D. program in Regional Planning leads to a research degree for students interested in careers in the academic world or conducting research in public agencies, non-profit organizations or private corporations. We are able to supervise doctoral work in most areas of planning, plus some areas where planning and landscape architecture overlap. To learn more about faculty interests and expertise, and the intellectual tone of the Department, potential applicants should review faculty descriptions on the LARP website (www.umass.edu/larp).

We are a craft rather than factory shop, bringing in students who are 'apprenticed' to existing faculty who mentor, support, and co-publish with students. Our total program enrollment tends to be around ten to fifteen students, in total, with two to three new students entering the program each year. It is generally helpful if the student's research interests align with a planning faculty member, and contact with the appropriate faculty member prior to application will assist the student in understanding current research opportunities. Applicants to this program are encouraged to visit the campus and meet with the Program Director and pertinent faculty.

Coursework and Timing

General steps and minimum/recommended timing of RP PhD Program:

Coursework: 3--4 semesters
Proposal drafting and reading for comprehensive exams: 1 semester

Take comprehensive exams, final proposal approval: 1 semester (can be combined with

proposal drafting semester above)

Dissertation research and writing: 1.5 – 3 calendar years

General time to complete: for very focused students who have moderate assistantship obligations, four years is quite feasible. Students who must work more, have more trouble focusing their research, or experience life transitions during their studies may take more like 6 years. The total university-allotted time to complete the degree (known as the Statute of Limitations) is four calendar years for those with a Master's degree in planning, and six years for those with degrees in other fields. Extensions to this may be granted if the student is making clear academic progress, but requests for more than one extension will require clear demonstration of unusual challenges and a feasible plan for quick completion.

The University requires all doctoral candidates to have a minimum of one year of full-time residence (two consecutive semesters); after that students may chose to go part-time, but this does not change

the statute of limitations described above. A typical full time course-load tends to be around 9 credits for students who are also working as TAs or RAs. Note also that dissertation credits (18 required) can be taken at any point during the coursework to bring a student's total credits up to 16 maximum per spring or summer semester (without an overload).

Preparation for comprehensive exams can coincide with the proposal drafting where the research plan is very clear early on. For almost all students, there is significant overlap and iteration in the proposal development and the preparations for the comprehensive exams.

Required courses are as follows"

Required Courses	Recommended Timing
RP 651 – Planning History and Theory*	Fall, first year
RP 891 – Seminar in Advanced Planning Theory	Spring, first year (if available)
RP 635 – Research Methods or equivalent doctoral-level research design course in another program	Spring, first year
RP 892D – PhD workshop (1 credit)	Any semester
3 Elective courses with RP designation**	Various semesters
3 doctoral-level courses in Advanced Analytical Methods 1 statistical research methods, 1 qualitative, 1 student choice (with approval of GPD)	First year for quantitative and qualitative courses, second year for student choice
RP 899 – Dissertation credits (18 credits, max)	Any semester

^{*} Requirement may be waived for students with an MRP from an accredited US planning program.

Students take a total of 60 credits. Of these, 12 will be waived for those with a master's degree from a planning-related discipline or an MRP from a non-PAB accredited institution. 17 credits will be waived for those with a PAB accredited master's degree. Students register for 18 credits

^{**} One RP elective may be waived with permission of the GDP for students receiving their MRP from UMASS within the past five years.

of dissertation coursework, which is for independent work on their research. Thus, most students will take 25 to 30 active course credits.

Students should establish a strong foundation in research skills through their coursework, studying for comprehensive exams, as well as in their independent research. To this affect, we require advanced courses in research design, quantitative and qualitative methodologies. Statistics courses designed for professional Master's students (such as RP 620) are typically not sufficient to qualify as a doctoral-level quantitative methods, but may be used as a departmental elective for students entering the program that need a gentle introduction to the topic.

Although not required, we encourage students to use elective coursework to build their pedagogical and other professional research skills. For example, in the past, the College of Education has offered credit-based courses in college teaching and in the fundamentals of writing scholarly literature reviews. Other, non-credit based, workshops are offered by the Center for Teaching and Learning and other UMASS Centers and Institutes.

Students may wish to explore the various certificate programs the Department and the University offers. These include Departmental certificates in Cultural Landscapes Management and Green Infrastructure Planning, and certificates in other Departments such as Public History, Heritage Studies, GIS, Feminist Studies, and Latin America, among others. Certificate courses without RP designation can only serve as additional non-required electives for the degree.

Roles of the Student, GPD, Comprehensive Exam Committee, and Dissertation Committee

PhD studies work best for students who are self-directed in their learning and motivated to research and write. Much of initiative for meetings, topics, funding, etc., will need to come from the students. The faculty are responsible for mentoring the students with whom they have an advising relationship, and generally keep an open door for conversations with PhDs about research or other program issues.

The student should at the outset of their studies establish strong relationships with their likely dissertation advisors by whenever possible taking their courses. Initial advising will be done by the Graduate Program Director (GPD). Over time, advising responsibilities will shift from the GPD to the examining and then the dissertation committees, but the GPD is available to discuss issues wherever the student is in their matriculation. Generally:

 During coursework: the GPD will identify the minimum course requirements students must achieve. Selection of courses outside the PhD core, and particularly courses the student anticipates will fulfill methods requirements, should be undertaken in concert with the advice of both the GPD and the likely dissertation chair.

- Comprehensive exams: prior to beginning the comprehensive exams, the student prepares a list of courses completed and grades achieved on the course record (Appendix A), and the GPD certifies that course requirements have been met. The student then works with the committee to schedule their comprehensive exams, and informs the GPD of that schedule. The examining committee has primary responsibility for determining the type and content of exams, as well as whether the student has passed.
- Dissertation research: the dissertation chair with advice from other committee
 members is the student's primary advisor regarding content and method of the
 dissertation. The committee will indicate to the student when they think the student is
 ready to schedule their oral dissertation defense. The student will coordinate the time
 for the oral defense with the committee and the GPD. Those in attendance at the
 defense include the committee, any other faculty who wish to attend, and friends of the
 student, but only the committee votes on whether the student has passed.
- The student should check with university requirements regarding forms, timing, statute
 of limitations, etc. For instance, the final approved proposal must have the signature of
 all committee members as well as the GPD, and must be officially filed with the
 Graduate School.

The Comprehensive Exam committee: This includes three faculty members, which must include at least two members from LARP PhD Program Faculty. Examinations in planning history and theory must be by an appointed RP faculty. Almost always, the anticipated chair of the dissertation will be among the comprehensive examiners, but otherwise members can be on the exams but not on the dissertation, and vice versa. It is often most efficient, however, for the comprehensive exam committee and the dissertation committee to be more or less the same.

The Dissertation Committee: Dissertation committees consist of a minimum of three members, with the chair and at least one other member coming from LARP PhD Program faculty. A list of Planning PhD faculty and their research interests is included in the Appendix. It is also expected that the committee include at least one member from outside the department. One rare occasion, all three members are LARP faculty with special approval of the Graduate Program Director. All dissertation committee members must have a doctorate and have graduate faculty status as determined by the UMASS graduate school. A dissertation supervisor is generally identified by the end of the first semester in residence, and a dissertation committee by the end of the second or third semester. Committee members are formally appointed by the Dean of the Graduate School after submission of an acceptable research proposal, generally in the fourth semester.

Comprehensive Exams

During their last semester of coursework as they plan their exams, the student should make an appointment with the GPD to review the list of courses taken (see course record worksheet, Appendix A) so that the GPD confirms that all coursework requirements have been met. Students must take three comprehensive field exams at the conclusion of their coursework, but prior to attaining the 'doctoral candidate' all-but-dissertation (ABD) status. The three areas are:

- Planning Theory and History: this exam must be given by an appointed member of the RP faculty
- Substantive Area: the primary area of research
- Method: philosophical as well as pragmatic concerns regarding the research approach.

The exact format, timing, and duration of the comprehensive exams are determined collaboratively by the student, advisor, and exam committee members, with approval from the graduate program director. Two major formats are typical:

- The single-day exam where the student brings only their notes--no original texts--and answers the questions to the best of their memory of the literature in relatively short essays completed during the exam hours. Or,
- Take-home exams, which may stretch up to three weeks. In this format the student receives her/his questions usually on a Monday, and returns a completed essay either three or five days later.

The advisor and student may choose an alternate format to satisfy the comprehensive exams requirement — with approval of the Graduate Program Director. For instance, the student may author a scholarly article that is submitted to a peer reviewed journal in place of one or more the traditional exams. The paper might be the result of collaboratively research, however, the student must be the primary author on the submitted paper and the faculty advisor must attest that paper predominantly reflects the original work of the student. A comprehensive exam paper cannot be used to directly satisfy other milestone degree requirements (such as a standalone chapter used in the student's dissertation).

Prior to approval to sit for their exams, the students develop reading lists that are approved by their examiners for the three areas that reflect their particular interests and research plans. Prior to the undertaking comprehensive examinations, the student also develops a draft dissertation prospective addresses the topic and methods of their anticipated dissertation proposal. The committee must be satisfied that the prospectus is sufficiently developed to

provide meaningful guidance on the topics of the examinations, and a relatively speedy oral proposal defense after the examinations.

The general focus area of each exam is determined by the student and the examiner together, but in all cases must be demonstrably relevant to the central concerns of the field of urban and regional planning. Thus, the examination answers must include reference to core planning literature, and should explore the connections between the typical fields of planning and the topic at hand.

Expectations regarding the length and polish of the exam answers will naturally vary based on the type of exam, but in all cases the answers must demonstrate mastery of the literature in the topic, the ability to think originally and critically about the field, and the ability to effectively organize and communicate those findings.

At least one week prior to oral exams, the student will provide all committee members of their examination answers. Committee members as well as the GPD may request copies of, extensions to or clarifications of examination answers. Scheduling of the oral exam is coordinated by the student amongst all members of the examining and dissertation committees.

Oral examination: Shortly after completion of the written exams, the student takes an oral examination. In the oral examination, the examining committee members may question the student on any remaining issues not well covered in the written exams, as well as any other questions the committee may have for the student. For students selecting the research paper exam option, it is expected that they deliver a short conference-worthy presentation of their research. It is at this point that the examination committee determines whether the student has passed, failed, or needs to revise any portion of their examinations. Student may pass, fail, or be asked to undertake revisions to their written or oral work before a second defense. At a second defense, they will either pass or fail.

Committees may choose to combine the dissertation proposal defense with the comprehensive oral examination, or hold them separately. If they are combined, all members of the examination as well as of the dissertation committee must attend the defense.

Dissertation Process

Dissertation Proposals: Prior to undertaking their comprehensive exams, the student will have prepared a draft dissertation prospectus that clearly summarizes the topic and its importance to

planning scholarship, primary research questions, and likely research methods. This prospectus will help guide the faculty craft relevant and interesting questions for the exams, and can be useful in recruiting potential dissertation committee members with relevant interests.

The final dissertation proposal defense would ideally be completed within one to three months after the passing the oral examination. The proposal must be approved by the committee and the GPD, with a copy sent to the Graduate School, and must be completed at least seven months prior to the dissertation defense.

The dissertation proposal can be thought of as a 'hand shake' contract between the committee and the student, in which the student identifies what steps she/he will take to achieve the specified goals. Significant movement by the student off the approved proposal should be very carefully discussed by the committee and approved; significant variances between the process and content identified in the proposal and the final dissertation that have not been approved by the committee can significantly slow the student's graduation. Similarly, if a committee member requests significant work beyond that identified in the proposal, the committee as a whole should carefully discuss the need for the change and its appropriate form. Proposals must be of a sufficient length and specificity that the committee is very clear regarding what the student intends to do. A typical table of contents for a proposal is included in Appendix B, but proposals will vary in style to meet the needs of the research.

Students must undertake a public defense of the dissertation proposal. As noted above, this can be combined with the comprehensive examination defense or held separately—the student's committee will decide.

Dissertation

The rules and regulations of the Graduate School will govern the format and procedures for the dissertation. Dissertations must represent a substantial contribution to new knowledge in the field of urban and regional planning. While some dissertations may include policy recommendations for a case study site, all dissertations must result in generalizable knowledge that will inform future scholarship in that general area. Further, all dissertations must be based on an appropriate and explicitly identified theoretical foundation or interpretive paradigm. The best dissertations will likely provide both empirical knowledge and also contribute to better theory or models.

Generally, there are two types of acceptable dissertations:

- Traditional single-topic dissertation: this is generally a book-length investigation of a particular research question.
- One field, multiple investigations: in this model the student selects a general area of inquiry, and then undertakes usually three different investigations into important research questions in that field. These must be substantially different from one another, so that for instance data sets at different scales are used; or one investigation is theoretical, two are empirical regarding different but related phenomena; or different research questions are posed at three different sites with substantial data for each. In all cases, the different investigations must be closely linked to form a coherent intellectual whole. This wholeness is demonstrated by a shared introductory chapter that clearly and broadly places the investigations into the existing scholarship on the general topic, and a concluding chapter that identifies the intersecting findings of the investigations and their importance to policy or scholarship. The chapters within the body of the document should stand each on their own as coherent articles including literature review, methods, and findings, in a format suited for submission to scholarly planning or related journal. When students submit these to journals, co-authors are acceptable; including committee members and other student collaborators, but the dissertating student's name should be first. This should reflective the distribution of work, with the majority of the ideas and work coming from the student, and direction and editing coming from the faculty members. The dissertation research of one student cannot be used to satisfy the degree requirements of another student. For instance, a paper or chapter (or significant portion thereof) cannot be appear in two different dissertations.

In all cases, the content of the dissertation should be a result of new research and theory building undertaken during doctoral studies in the program, and must reflect the original and largely independent contributions of the student. Other graduate students and faculty are permitted to work as collaborators on research related to the dissertation, and may be listed as co-authors on subsequent published articles, but the work appearing in the dissertation should reflect the individual student's original contribution.

Dissertation Defense: Once the committee chair believes that the student has rigorously and effectively completed the research outlined in the dissertation proposal, she or he will give permission for the student to schedule a defense of the dissertation. The GPD will be consulted regarding scheduling the defense, and will likely attend it.

• The defense is a public presentation, and the student must advertise the time and place of it one month in advance, and fill in forms for the Graduate School; see the current Graduate School requirements for details.

The student gives a presentation of the key questions, methods and findings of the dissertation, and answer questions that the committee poses regarding the research. Time allowing, the committee may allow the doctoral candidate to take questions from the audience. After the defense and the questions and answers, the committee will meet to determine what further work is required to achieve a fully acceptable, preferably excellent, dissertation. Extremely rarely, a student could fail the defense; very rarely are students told that the dissertation is ready for signing. Typically, committee members identify a set of revisions that are needed, and sign their approval subject to those revisions.

After the defense, the student completes the revisions, receives signatures, and turns in the dissertation to the Graduate School. Note that formatting requirements of the graduate college apply, so it is best to follow these format guidelines from the start. Once the graduate school has accepted the dissertation and all fees etc. are paid, the student is ready to graduate. All committee members should be given bound copies of the final approved dissertation, and the department also gets a bound hardback copy.

Appendix A: Course Record – PhD Regional Planning To be turned into GPD prior to Scheduling Comps!

Name	Matriculation and Statute of
	Limitations dates

Requirement	Semester /Year	Grade	Credits
Core LARP Courses			
Planning Theory and History (RP 651)*			3.0
Seminar in Advanced Planning Theory (RP 891)			3.0
Research Methods (RP 635 or equivalent)			3.0
PhD Seminar (RP 892)			1.0
RP Dissertation Credits			18.0
Three Elective Courses with RP Designation			
1.			
2.			
3.			
Three Advanced Analytical Methods (1 statistical, 1 qu	ualitative, 1 studer	nt choice)	
1.			
2.			
3.			
Other Electives			
1.			
2.			
3.			
4.			
Advanced Standing***			
(please list degree and institution)			
Total Credits (minimum of 60 credit hours)			

^{*} Requirement may be waived for students with an MRP from an accredited US planning program.

^{**} One RP elective may be waived with permission of the GDP for students receiving their MRP from UMASS within the past five years.

^{***} Maximum 17 for PAB degree, 12 for other related graduate disciplines/non-PAB accredited programs

Appendix B

Typical Proposal and Dissertation Table of Contents: One-topic Dissertation

Note that the proposal and dissertation tend to follow a similar pattern, with the proposal being shorter. Chapters can change, arrangement can change, but dissertation must include these elements.

I. Introduction

- a. Overview of research problem in connection to existing literature
- b. Brief explanation of case study or data sets
- c. Brief explanation of methods to be used
- d. Brief explanation of contribution the dissertation will make to new knowledge

II. Literature Review and Research Question

- a. Describes the major literature(s) within which the dissertation operates
 - i. Theoretical frame
 - ii. Substantive literature
- b. Explains where there are gaps the dissertation will address
- c. Justifies approach taken in rest of the dissertation
- d. Full statement of Research Question/objectives

III. Research Method

- a. Philosophical/procedural issues that method must address, based on literature in the field
- b. Steps (to be) taken, data to be used
- c. How results will be analyzed into findings
- d. Limitations of study
- e. Case study description (may instead go in Ch II or IV)

IV. Findings

 Will likely include both empirical findings from research, and reflections on how these findings change/improve the existing theory within which the dissertation worked

V. Conclusions/Contributions to Knowledge

- a. You may be able to be more speculative/policy oriented in this chapter, depending on the topic and your committee
- b. Likely will also indicate directions for research in the future
- VI. Sources/Bibliography
- VII. Appendices lengthy data reports, matrices used for analysis, etc.

Appendix C

Typical Proposal and Dissertation Table of Contents: Multi-topic Dissertation

I. Introduction

- a. Overview of research problem in connection to existing literature
- b. Explanation of how chapters/articles below fit together
- c. Brief explanation of contribution the dissertation will make to new knowledge

II. Literature Review and Research Question

- a. Describes the major literature(s) within which the dissertation operates
 - i. Theoretical frame
 - ii. Substantive literature
 - note that while you will also present literature in each of the articles, it will be helpful to do a broader review here that places all the next articles into context and demonstrates their connections
- b. Explains where there are gaps the dissertation will address
- c. Justifies approach taken in rest of the dissertation
- d. Full statement of Research Question/objectives

III. Article 1

- a. Research Question
- b. Literature Review
- c. Research Method
- d. Findings
- e. Conclusions/Contributions to Knowledge
- f. Sources/Bibliography

IV. Article 2

- a. Research Question
- b. Literature Review
- c. Research Method
- d. Findings
- e. Conclusions/Contributions to Knowledge
- f. Sources/Bibliography

V. Article 3

- a. Research Question
- b. Literature Review
- c. Research Method
- d. Findings
- e. Conclusions/Contributions to Knowledge
- f. Sources/Bibliography

VI. Summary

- a. how three articles fit together
- b. their contributions to knowledge
- c. future directions
- VII. Appendices lengthy data reports, matrices used for analysis, etc.

Appendix D: Planning PhD Faculty

Ahern, Jack

Professor of Landscape Architecture and Vice Provost for International Programs. B.S. in Environmental Design, University of Massachusetts, 1974; M.L.A., University of Pennsylvania, 1980; Ph.D., Wageningen University, 2002. Teaches plants, landscape ecology, design studio, landscape urbanism, and landscape architecture study tour. Experience in private practice involving site and environmental planning and design. Research interests include: sustainable urbanism, landscape ecology for landscape planning design and management.

Brabec, Elizabeth

Professor of Landscape Architecture. B.Sc. in Environmental Agriculture and M.L.A. University of Guelph, Canada, 1984; Juris Doctor, University of Maryland, 1992. Founded and managed the landscape planning firm, Land Ethics, Inc. in Washington, D.C. Teaches real estate law, public participation and leads international field studies programs. Research interests focused on land conservation and the design and planning of sustainable open space; and culture and the historical basis of landscape form.

Carr, Ethan

Professor of Landscape Architecture and Director of the Master of Landscape Architecture Program. B.A. and M.A. in History of Art and Archaeology, Columbia University; M.L.A. Harvard University Graduate School of Design. Instructor in landscape history, landscape architectural theory, historic preservation and design studios. Has worked extensively with the National Park Service as a historical landscape architect. Author of Wilderness by Design - Landscape Architecture and the National Park Service, which received an ASLA award for research.

Hamin, Elisabeth M

Professor of Regional Planning. B.A. in Business Administration, Cleveland State University; Masters of Management, Northwestern University; PhD in City and Regional Planning, University of Pennsylvania 1997. Teaches growth management, climate change planning, real estate planning and regional planning studio. Current research into the planning adaptation and mitigation of climate change impacts to local communities and sustainable community development.

Hamin, Mark

Senior Lecturer in Regional Planning and Director of the Master of Regional Planning Program. B.A. History and B.A. Philosophy, Brown University 1984; PhD History and Sociology of Science, University of Pennsylvania 1999. Teaches planning history and theory, City Planning and Sustainable Cities cource. Research includes: the influence of life sciences on planning; urban infrastructure and ecological history; social, economic and cultural perspectives on environmental risk, security, and 'quality of life' in cities; and technologically-transformed food ecologies/economies.

Eisenman, Theodore S.

Assistant Professor of Landscape Architecture. Hold a Ph.D. in City & Regional Planning from the University of Pennsylvania; an M.L.A. from Cornell University; and a B.S. in Journalism from the University of Maryland. Primary research agenda addresses the historical, scientific, cultural, and design bases of urban greening, defined here as the introduction or conservation of outdoor vegetation in cities. Teaches an urban greening theory & practice seminar, landscape architecture design studios, and junior year writing.

Montenegro-Menezes, Flavia

Assistant Professor of Regional Planning. Dipl. Architecture and Urbanism, University Izabella Hendrix, Belo Horizonte, Brazil, 1995; Master's in Integrated Territorial Planning, DESS, UNESCO Chair on Sustainable Development, France, 2001; PhD, Social Sciences, Territorial Planning and Environment, l'Institut des Sciences et Industries du Vivant et de l'Environnement (Agro Paris Tech), Doctoral School ABIES, Paris, France, 2009. Research addresses cultural heritage planning relative to urban-regional sustainability, focusing on international, interdisciplinary, community-based projects. She uses participatory approaches to document the cultural significance of heritage to local residents and other stakeholders, and teaches courses on cultural heritage preservation, sustainable management practices, and regional resource planning.

Mullin, John R

Professor Emeritus of Regional Planning. BA, Government, University of Massachusetts, 1967; MRP, Community Planning and Area Development, University of Rhode Island, 1969; MSBA, Boston University, 1972; PhD, Urban and Regional Planning, University of Waterloo, Ontario, 1975. Specialties: Research, teaching and outreach focused on regional economic development strategy and adaptive reuse/redevelopment in mill towns.

Pader, Ellen

Associate Professor of Regional Planning and Director of the JD/MRP Program. B.A. in Art History and English, Kenyon College, 1972; PhD in Anthropology, Cambridge University, 1981. Teaches social issues in planning from inter-ethnic and cross-cultural perspectives, including: identifying discriminatory practices on the basis of ethnicity, race, gender and class; social change; housing policy and social policy. Major area of research is the cultural, social, and political facets of housing policy and design.

Ramsey-Musolf, Darrel

Assistant Professor of Regional Planning. Professor Ramsey- Musolf holds a PhD from UW-Madison and Master's degrees from Cal Poly Pomona and Suffolk University. While at Madison, he received a HUD Doctoral Dissertation Research Grant that supported his mixed-method examination of California's Housing Element Law and a 2-year AOF research grant from the College of Letters and Science. He has served on UW's the Campus Planning Committee (2007-2010) and on the search and screening committee for Vice Chancellor of External Affairs. While at Cal Poly Pomona, he co-chaired of the Graduate Student Planning Association, received the

California Planners' Roundtable and UCLA Hagman scholarships, and served on APA's Student Representatives Council representing Region VI.

Renski, Henry

Associate Professor of Regional Planning, Director of the PhD in Regional Planning Program, Director of the Center for Economic Development, and Associate Director of the Institute for Social Science Research. PhD, University of North Carolina, Chapel Hill, 2006. MRP, University of North Carolina, Chapel Hill, 1998. B.A., University of Southern Maine, 1995. Former Special Assistant to the Governor of the State of Maine in Economic Development. Teaches GIS, quantitative methods and economic development. Research focuses on understanding the forces driving regional economic competitiveness and transformation, and building upon this knowledge to improve the effectiveness of economic development policy.

Ryan, Robert

Professor of Regional Planning and Landscape Architecture and Department Chair. Professor Ryan holds a Ph.D. in Natural Resources and Environment from the University of Michigan, and has Masters Degrees in both Landscape Architecture and Urban Planning. His research addresses the question: what motivates people to become engaged in sustainable landscape design, planning and management practices that benefit the environment and how does that affect their attitudes and behaviors in the landscape? His studies in urban parks, rural landscapes, and national forests have shown that people's connection to nearby nature or landscape (i.e, place attachment) is critical to developing better land stewardship. A key part of this work has been to understand the landscape patterns that are both ecologically beneficial, as well as perceived as beautiful by local residents. In addition, his research has shown that place attachment can help promote connections between local residents and urban parks, particularly those undergoing ecological restoration. His research has focuses on visual resource management, greenway and green infrastructure planning, and sustainable site design.