

Self Study 2017



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PART A Section I: Overview of Organization

Geography is the science and art of understanding dynamic relationships among people, places, and environments on Earth. The University of Washington Geography Department advances analyses of the spatial workings of social power and decision-making, questions of social and environmental justice, and processes of economic, socio-cultural, environmental and political change. Our research, teaching, service and collaboration activities are central to the university's mission to confront urgent challenges of our time and to educate the next generation of responsible global citizens. Our program is vital to the future of our discipline, our region, and more distant places. Faculty and graduate student research forges new intellectual agendas in the discipline of geography, and our graduate program places PhDs in geography departments around the world. We engage critically important issues such as poverty, affordable housing, health and well-being, labor rights, racial justice, immigration, sustainability. We connect research to action through close collaboration with policy makers, local communities, and activists. Our longstanding commitment to service learning, courselinked participatory action research, student-directed research, creative digital learning and other experiential pedagogies position us at the forefront of campus-wide efforts to transform the undergraduate experience.

Our department is committed to critical spatial thinking, integrative analysis across space, scale and time, epistemological pluralism, and methodological creativity, as avenues for catalyzing ethical action in the face of injustice, oppression, and ecological harm. Our work explains and intervenes in the urgent problems that face our world: disparities in health and well-being across place and populations; crises of migration and bordering; labor markets and inequalities; impoverishment and uneven development; structural oppressions along lines of race, gender, and sexuality; unsustainable resource use; climate change and other socio-ecological harms, and much more. Crossing disciplinary divides without ever losing sight of uniquely *geographical* understandings of place and space, we challenge existing boundaries of knowledge by reframing these problems from new and fruitful perspectives, often through interdisciplinary collaboration and partnership with communities outside the academy. We play a central role in the University of Washington's innovation and excellence in sustainability, inclusive public policy, digital technologies, population health and racial, environmental and economic justice.

For over 80 years the Geography Department has been a global and national leader in the discipline, consistently ranking among the top ten departments in the US since 1965. In 2010, we were ranked 8th in the nation for the quality of our program and 10th for our research quality and productivity. More recently, we rank 18th in the Academic Ranking of World Universities, with only two departments in North America ranked higher. These high ranks are noteworthy given that we are a department of human geography (rather than human *and* physical geography), which exerts downward pressure on rankings. The quality and significance of our scholarship is signaled by a sustained history of national and international fellowships and awards (such as Guggenheim Fellowships and National Science Foundation Awards). We provide key leadership in the discipline through high profile national and international service

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¹ University of Washington Geography Self Study, 2007, p. 3.

² Chronicle of Higher Education. 2010. *Doctoral Programs by the Numbers Geography*. http://www.chronicle.com/article/NRC-Rankings-Overview-/124734/

³ http://www.shanghairanking.com/Shanghairanking-Subject-Rankings/geography.html

to organizations such as the Association of American Geographers, the International Geographical Union, the National Academy of Sciences, the Institute of Medicine, and the University Consortium for Geographic Information Science, editorships and editorial boards in top ranked journals, review panel service to the National Science Foundation, and other science, social science, and arts/humanities foundations worldwide. Our excellence in teaching is recognized: We hold 4 UW Distinguished Teaching Awards and a UW Distinguished Graduate Mentor Award. Our faculty lead academic programs and research initiatives across the College and University (too numerous to fully list but including Integrated Social Sciences, Law Societies and Justice, Northwest Research Data Center, Center for the Study of Demography and Ecology, and the Relational Poverty Network). We serve on key committees and executive councils, such as College of Arts & Sciences College Council, Faculty Council School of Public Health, Urban@UW, and the UW Population Health Initiative.

This is a critically important time for our department. We are vibrant and successful. Our undergraduate majors number higher than ever, our faculty and graduate students do internationally recognized research, and we build research and teaching collaborations that have transformative impacts across campus and in the city, state, and world. Yet since our last review, we have experienced staff reductions, a reduced ability to support graduate students, and the loss of many senior faculty⁴ (with a further wave of retirements likely in the next decade). These structural challenges have stretched us to capacity in all aspects of our academic programming and departmental life. Sustaining the Geography Department's tradition of excellence in research, education, and campus/community collaboration is important, and we urgently need College and University support in the form of faculty lines and instructional funding.

Our foundations. As geographers, the foundation of our work as researchers and educators is our interconnected relational theorization of space and society. 5 Across the diverse ideas and empirical worlds we study, we begin from the notion that space and society co-constitute one another. For example, racial identity formation in the US is produced through myriad spatial processes (immigration, land dispossession, residential segregation, policing of urban spaces) and the situated spatial imaginaries bound up in them (e.g. framings of 'rural', 'urban', 'suburb', or 'inner city'). From these foundations, our research and teaching traces interconnections of human practices with social, economic, political and ecological worlds. We theorize space as constituted by diverse interconnected processes, such as global capitalism, classed/gendered/geopoliticized health care practices, or cultural politics around particular activities such as migration, work and care, and that these processes extend beyond the boundaries of specific places. We and our students analyze how multiple overlapping processes come together in particular spaces (and times), building explanations of how social, political, economic, and socio-ecological differences are produced – a critically important dimension of coming to grips with complex problems like poverty, environmental harms, disease/ill health, racial inequities and much more. Our approach is *trans-scalar*: We trace connections between the spaces and relations of everyday life and the broader processes in which they arise, to consider how, for example, family relations and intimate processes of

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⁴ Katharyne Mitchell and Matt Sparke (UC- Santa Cruz), JW Harrington (UW-Tacoma), Bill Beyers and Craig ZumBrunnen (retirement).

⁵ Relationality emphasizes the significance and variety of relationships that knit planet, people and societies together across space, scale and history.

social reproduction take shape amidst transnational migration. This approach to trans-scalar explanation focuses on co-constitutions: We analyze how large structural processes come together in particular places and lives, *and* how social subjects' lived practices and experiences constitute and can transform these broader processes.

Our work as geographers also coalesces around our shared focus on questions of *spatial* politics. Across our diverse research areas, we all focus in some way on how socio-spatial processes produce and challenge relations of difference and domination. 'The political' for us is found in the structural mediation of inequalities across places and populations, in spaces and social relations of everyday life, in formation of identities and subjectivities, in choices about nature/society relations around resource use, and much more. We interrogate how socio-spatial relations and processes negotiate these kinds of politics. For instance, how are geographies of sexual health produced by urban public health practices around sexually transmitted infections, and how do they work in concert with cultural politics of morality to cement the subordinate citizenship of gay men and other sexual minorities? How do practices of 'place-making' aimed at materializing middle class identities in mixed income neighborhoods simultaneously produce a stigmatized poor Other and make governance and exclusion of impoverished people seem logical, necessary, and legitimate? Finally, our work as geographers is defined by epistemological pluralism and methodological creativity. We recognize and value a plurality of knowledge forms and knowledge making practices as essential for making sense of complex socio-spatial phenomena. Collectively, we rely on diverse forms of qualitative and quantitative data; numerical, textual, and visual forms of representation; and interpretive, computational, geovisual, and affective modes of analysis. UW faculty and graduate students have long pioneered methodological advances in the discipline, and we continue this trajectory today. We are helping establish and advance multi-method, epistemologically complex areas of scholarship such as critical physical geography, big spatial data, CyberGIS, qualitative GIS, critical quantitative and qualitative methods, digital spatial humanities, and more.

Degrees offered. The Department offers a Bachelor of Arts degree in Geography, an undergraduate minor, an MA and PhD in Geography, an online, fee-based MA in Geographic Information Science for Sustainability Management (MGIS, reviewed separately in 2015-2016, see Appendix F), and a Certificate in GIS aimed at working professionals. We currently have 233 undergraduate majors, and on average, we grant 100 BA degrees annually. 6 Compared to Geography departments at peer institutions, our majors numbers and degrees granted are quite high, especially given that the comparison departments have many more faculty (Appendix D.6). In 2016-17, 50 of our undergraduate majors are transfer students, and 36 are international students. While many other units in the social sciences have experienced a steady decline in student majors over the last decade, Geography's path is different (Appendix D.1). Majors and student credit hours declined from 2011-2013, as Activity Based Budgeting brought increasing competition from new undergraduate degree programs. After hiring three dynamic new faculty members and undertaking a significant revision and expansion of our lower division courses over the last few years, we are seeing tremendous enthusiasm for Geography among undergraduates, and rapid growth in majors (2014-2017, majors jumped from 180 to 233, Appendix D.1). This growth can and should continue: Our faculty offer exciting courses at the heart of campus-wide commitments to social justice, health and well-being, new technologies,

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⁶ Mean over last 10 years

and sustainable environments; and our Director of Academic Services is initiating many new co-curricular activities for our majors. However, the department faces key structural challenges (budgetary uncertainties, significant reductions in faculty available for undergraduate instruction due to leadership across campus, a smaller graduate program) that are forcing us to limit the courses we offer, even with temporary instructors, and in some cases reduce capacity in existing courses. The future of our excellent undergraduate program depends on addressing these critical threats.

Currently 39 students are enrolled in our in-residence graduate program and 32 in the MGIS program. We receive approximately 120 applications to our in-residence graduate program annually and over the past decade have enrolled 7-8 new students on average (Appendix D.7 and D.8). Recent budget challenges (detailed below) have led us to drastically reduce the number of funding offers to new graduate students to assure full funding of continuing graduate students. We enrolled only 2 new graduate students in Fall 2016 and will not enroll any in Fall 2017. We **must** enroll much larger cohorts if our outstanding and internationally significant graduate program is to survive.

We have granted 55 PhDs and 36 MAs since 2008, approximately 4-6 PhDs and 2-4 MAs per year (Appendices D.9 and D.10). Since it began in 2010, the MGIS Program has granted 81 Masters of GIS degrees. Of our in-residence geography MA students, approximately 63% continue on to our PhD program or another, while 37% pursue non-academic career paths: founding businesses, attending professional school or pursuing employment in the public and private sectors. Student progress through the doctoral program is good, with time to PhD degree averaging 6.8 years (below the national average of 7.8 years in the social sciences). Our PhDs who pursue careers in academia are employed at institutions ranging from community colleges and liberal arts colleges to top research universities in the US and abroad.

Organizational structure, staffing and governance⁸. The Department has 14 faculty members (10 Full, 1 Associate, 3 Assistant Professors) for a formal Full Time Equivalent (FTE) of 13.5, due to joint appointments. This is down from the 14 FTE reported in our last program review. Importantly, 4 of our faculty hold significant additional administrative and leadership roles across the university that reduce their availability for teaching in our undergraduate and inresidence graduate programs (Appendix D.5.C). Professors Herbert and Lawson are directors of, respectively, the Department of Law, Societies and Justice and UW Honors Program. Professors Jarosz and Elwood respectively serve as Chair and as Arts and Sciences College Council member. We have 18 adjunct and affiliate faculty, including several PhD-holding professionals in the region and faculty from all three UW campuses (Appendix A.3). The Geography Chair leads overall administration of the department, assisted by the Administrator, the Director of Academic Services, the Executive Committee (elected by faculty), and the Graduate Program and the Undergraduate Program Coordinators (Appendix A.1).

The Department is dedicated to collaborative governance by faculty, staff and students. We hold faculty meetings 3-5 times per quarter, which are attended by the elected representatives

8 See Appendix A.1 for Organization Chart and Appendix F.1 for details on MGIS faculty and staffing.

⁷ National Science Foundation. Doctoral Recipients from U.S. Universities: 2014. https://www.nsf.gov/statistics/2016/nsf16300/digest/nsf16300.pdf

of the Geography Graduate Students Association (GGSA). At our annual faculty and staff retreat we plan for the coming year and launch new initiatives. The Chair gathers graduate student concerns and feedback on the graduate program through meetings with GGSA (at least quarterly) and informal brown bag meetings. The Chair convenes regular meetings with all staff members. Our standing committees (Appendix A.2) lead the work of planning, managing and strengthening our academic programs and collective intellectual and professional development.

The Department has 4 full-time and 1 part-time staff members⁹, all hired in the last 4 years. They are a dynamic team building responsive and efficient administrative systems that support our mission, faculty and students. Of this 4.63 total staff FTE, 3.88 supports in the in-residence program and .75 supports (and is paid by) the MGIS Program. A net .12 FTE has shifted from the in-residence program to support the MGIS Program.

Administrator Sharon Frucci reports to the chair and manages all administrative aspects in the department (payroll, employment processes, grad student contracts, budget management, physical infrastructure, grant submissions, and more). She supervises the IT Systems Supervisor, Fiscal Specialist, and student office assistants. IT Systems Supervisor Wendy Kramer manages the department's IT infrastructure, supervises a part-time Senior Computer Specialist and student computer lab assistants, and assists in infrastructure maintenance and inventory. Fiscal Specialist Parwati Made Martin handles budget reconciliation, payroll coordination, purchasing, reimbursements, travel, honoraria, facility requests, reception and more. Part-time Senior Computer Specialist Lisa Sturdivant oversees IT needs of the MGIS Program and assists the IT Systems Supervisor. Director of Academic Services James Baginski manages all aspects of student advising (registration, course planning, graduation clearance): curriculum and classroom scheduling; coordinating of graduate student exams, program completion, and annual graduate progress reviews; maintains alumni records and builds alumni events; organizes capstone events (e.g. graduation and awards ceremonies, undergraduate research symposium); and maintains all administrative records on majors, courses, graduation, etc. He supervises a half-time graduate assistant advisor and an undergraduate website manager, and devotes significant time to individual advising.

Budget¹⁰ and Resources. The Department relies on these sources of funds: *UW General Operating Funds (GOF)* from tuition revenues and state appropriations. Over 98% of this budget is allocated to faculty, staff, and TA salaries and benefits (remainder to operating costs). Over three biennia from July 2011 –June 2017, increases to this budget have not kept pace with rising salary and benefit costs (Appendix B.2). Over the past two biennia (2013-2017), salary and benefits costs increased by at least 22%, while the increase in the GOF budget was approximately 15%.

Gifts and Discretionary. This category (Appendix B.3.1-3) contains income from endowed and non-endowed sources. The revenues from this category have grown over the past three bienna, but we have also increased expenditures at a faster rate than they are growing due to increasing expenditures to support graduate student travel and awards.

MGIS fee-based online program.

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⁹ We lost 1 full-time staff position to budget cuts in 2010, and re-allocated her tasks among remaining staff.
¹⁰ See Appendix B.1 for Geography Budget Summary. See Appendix F.1 for budgetary information about the

Self-sustaining-Aux Ed. This category (Appendix B.3.1-3) contains income from lab rentals by Continuum College GIS Certificate and other programs (~\$10,500/year) and net revenues from the MGIS Program (~\$31,000/year through year 6 of the program, FY2016). We also know that there will be zero revenue coming to the Department in 2017-18, and we may receive little to no revenue in 2018-19.

Permanent GOF funding has remained flat, while faculty, graduate student and staff salaries and benefits have all risen in the wake of tuition freezes and rollbacks mandated by the State of Washington. For example, graduate student salaries have risen 46% over the past two biennia (Appendix B.2). This has left us with inadequate permanent funding for operational costs, which have shifted to revenues coming from budgets #2 and #3 above. Temporary GOF funding from the Dean's office has been shrinking, and the College of Arts and Sciences is expecting significant contraction in budgets across all units and programs in the coming decade. Moreover, we are reliant upon temporary GOF recapture funding from individual faculty who are serving the UW in administrative posts in other programs and units, which we expect will radically shrink beginning in 2018-19 (Appendix D.5).

We have acted decisively to ensure we can fund contractual commitments to graduate students and to try to secure the fiscal health of the Department with the resources we have. This year, we dramatically reduced graduate admissions (2 enrolled in 2016; 0 in 2017). Projected shortfalls in TA/Instructor support for 2018-19 are severe, threatening a healthy graduate program and our high quality undergraduate curriculum (e.g. we have already reduced our graduate seminars and increased the size of undergraduate lab and discussion sections). This crisis is structural, severe and beyond department level solutions. We desperately need more faculty and instructor resources. We need clear guidance from the UW administration about the future of public undergraduate and graduate education in the social sciences. This vision is critical to our ability to position our outstanding program for survival and success.

Geography faculty, graduate students and staff continue to be extremely successful in competing for graduate student funding from other sources. We received a UW Top Scholar Award in each of the last 10 years, and Graduate Opportunity and Minority Achievement Program (GO-MAP) funding for incoming graduate students in 9 of the last 10 years). Faculty and graduate students work closely to identify and apply for TA and instructor positions in other programs. Our students have successfully obtained teaching positions in Anthropology, Comparative History of Ideas, the Interdisciplinary Writing Program, Law, Societies and Justice; and in the UW Bothell's highly competitive Project for Interdisciplinary Pedagogy. Our graduate students are extremely successful in winning international, national and UW-based fellowships and research awards¹¹, and faculty grants employ several research assistants each year.

We prioritize mission, growth, sustainability and diversity in allocating our funding and human resources. Our highest priority is investments that advance our research and education missions: faculty and graduate student support for research and professional travel, dissertation writing support, course innovation and redevelopment, and TA-student ratios that support high quality teaching and mentoring. We prioritize investing at key moments of individual or

¹¹ Full listing available at: https://geography.washington.edu/awards-and-honors#graduate

collective growth and transition, such as the start of faculty careers, run-up to promotion or graduation, and initiating new research or pedagogies. We emphasize investments in our diversity mission (details below). Sustainability drives our decisions. Are we spending in ways that allow creative growth now while also ensuring a healthy future?

Advancement. Geography has 7 endowed funds or fellowships that generate a total annual average income of \$27,000. Since our last program review, the Department has initiated or significantly expanded 4 funds: The Abernathy Family Fellowship Fund, The Dennis and Diane Durden Endowed Fellowship Fund, The Mitchell-Sparke Student Support Fund, and The Richard Morrill Graduate Fund in Scientific Geography. The Durden Fellowship supports PhD students' participation in periodic dissertation proposal writing retreats with the University of British Columbia and Simon Fraser University Geography Departments. Approximately \$20,000 per year has come into our non-endowed gifts funds¹² such as the Friends of Geography discretionary fund (Appendix B.3.1-3).

We use these funds to advance our research and education missions, including funding *Plenum* (our undergraduate research journal), student conference travel, student awards, graduate student research, and a single-quarter dissertation writing fellowship. We are working to more actively connect to Geography alumni, to strengthen our graduates' professional networks and build our potential donor base. Our Director of Academic Services is building a more robust alumni database, inviting alumni to departmental events such as our fall reception, involving them as professional mentors and career panelists, and featuring their activities and accomplishments on the Geography website. We aim to continue strategic conversations about the broad vision for our advancement efforts and work to translate it into specific activities. We work with UW Advancement to identify and reach out to Geography alumni interested in interacting with faculty and contributing to the Department.

Academic Unit Diversity

"We seek to foster an inclusive and reflexive community by actively working against intentional and unintentional exclusionary practices. Our work on diversity and community encompasses intersecting dimensions of difference (gender, class, race, disability, religion, sexual orientation) and values **how** we do our work as much as what work we do." (https://geography.washington.edu/diversity-and-inclusivity).

This statement informs all aspects of department life. Specific diversity activities are led and coordinated by our Diversity and Inclusivity Committee. Our Diversity Plan is updated annually by the Graduate Program Coordinator and Diversity Committee. The Diversity Committee organizes departmental events aimed at deepening our capacity to be a community in which all can contribute, create, and thrive. Highlights from the past 5 years include workshops on whiteness and race privilege, building ethical pedagogies, safe spaces for teaching and learning, micro-aggressions, cycles of oppression/liberation, fostering inclusive classrooms around age, race, disability, sexual orientation, religious diversity and student mental health. We rely on diversity/inclusivity resources on campus and beyond, including the Center for Teaching and Learning, Public Health's Committee on Oppression Racism and Education, Disability Studies, the Q Center and others. We are especially proud of our

¹² In biennium 2015-17, the College deposited \$32,000 in gift funds to support the Interdisciplinary Writing Studio.

community's robust participation in a 2016 all-department training by UW Leadership Without Borders, in which geography faculty, staff, and students learned about ally-ship with undocumented students. Staff, faculty, and graduate students are active in UW Race & Equity Initiative workshops.

A critical piece of our approach to building a diverse and inclusive community is translating our collective learning into action. For instance, events focused on privilege, race, class and economic precarity led us to develop a Diversity Fellowship (from MGIS Program revenues) aimed at supporting underrepresented graduate students at critical moments in their studies (relocation to Seattle, summer income). Such strategies extend our efforts to recruit and retain under-represented minorities in our graduate program. In our graduate admissions process, we try to expand the number of students of color in our applicant pool in several ways. We send personalized, targeted letters to McNair Scholarship students and students identified through the National Names Exchange and the California Diversity Forum. Geography is a highly networked discipline (<80 doctoral programs in the U.S.), so we also rely on the disciplinary relationships of faculty *and* graduate students to identify and recruit applicants. We coordinate our graduate recruitment day with the Graduate Opportunities-Minority Achievement Program's (GO-MAP) recruitment, so that students of color can meet potential campus allies.

These recruitment efforts are aided by the diversity of the department along a number of axes. Of our faculty, 50% are women, 7% are from under-represented minority (URM) groups, 14% identify as LGBTQ and 28% are international. Several were first-generation college students. Among our staff, 4 of 5 are women, 1 is international and 1 is URM. Of our graduate students, 43% are women, 16% are from under-represented minority groups, 26% or more identify as LGBTQ and 6% are international. Among our undergraduates, 39% are women, 16% are under-represented minorities, 50% are students of color, and 18.3% are international (many to most of them from China). In terms of gender of our faculty and students, we are well ahead of the discipline as a whole, where 38% are women. ¹⁴ The racial diversity of our faculty, graduate students and undergraduates slightly exceeds that of the discipline as a whole:

	U.S. Geography ¹⁵	UW Geography	UW^{16}
URM Undergraduate students	14.8%	16%	18.3%
URM Graduate students	11.9%	16%	14.7%
URM Faculty	6.1%	7%	7.8%

However, the discipline of geography remains white, male, European and heterosexual, and we

¹³ Throughout this document, we follow the Universities' use of the terms 'underrepresented minority' (URM) and 'students/faculty of color'. URM references federally recognized minority groups (African American, American Indian/Alaska Native, Hawaiian/Pacific Islander, and Latino); 'students/faculty of color' includes these groups as well as those identifying as Asian. "International scholars" and "international students" are considered separately. All percentages have been calculated using these parameters.

15 http://www.aag.org/galleries/disciplinary-data/Geographers_by_Race_and_Ethnicity_summary_report.pdf

¹⁴ http://www.aag.org/galleries/disciplinary-data/AAG Membership Data Report.pdf

¹⁶ Sources: Undergraduates: 2016 OMAD Fact Sheet; Graduate Students: 2016 UW Grad School Admissions and Enrollment Report, https://grad.uw.edu/wordpress/wp-content/uploads/Graduate-School-Admissions-and-enrollment-Report-2016.pdf; Faculty: 2016 UW Academic Personnel Fact Sheet.

are committed to transforming this. Future hiring of faculty from under-represented groups is essential, as is successful recruitment of students from under-represented groups to our graduate and undergraduate programs.

Part A Section II: Teaching and Learning¹⁷

Our pedagogies are creative, experiential, and oriented toward an accountability to near and distant places. Students learn powerful relevant concepts, techniques, and modes of analysis and critique that prepare them to intervene in urgent spatial processes shaping our world: globalization, climate and environmental change, migration, bordering, urbanization, impoverishment, racial equity, population health, land and water resource use, and more. Service learning and experiential education are foundational to teaching and learning in Geography. We have been using these approaches since their earliest inception at the UW in the 1990s. Geography courses support several other undergraduate degree programs across the University, including Law, Societies and Justice, International Studies, Environmental Studies, the Comparative History of Ideas, and the Global Health minor. Our graduate seminars enroll students from around campus, as well as from the Bothell and Tacoma campuses.

Student learning goals and outcomes. Our undergraduate and graduate programs advance students' development as change agents who understand the importance of space, environment, context, location, place, and scale, and can bring geographical modes of analysis to bear on society's most pressing environmental and social concerns. Our overarching goal is for students to be able to interpret, study, and synthesize local through global interconnections and between people, places, and phenomena.

We want our students to:

Develop critical spatial thinking capabilities:

- a) The ability to interrogate and explain how complex social and environmental phenomena such as urbanization, migration, impoverishment, health, energy policy, or climate change are produced through spatial processes operating across times and scales;
- b) An understanding of spatial politics--the production and disruption of socio-spatial difference, inequality, and injustice.

Develop the ability to articulate meaningful geographical questions, use diverse forms of evidence, analysis and interpretation to develop robust answers to these questions, and communicate their findings in visual, oral and written forms.

Connect theory and analysis to praxis, producing ethical, critically reflexive and transformative action in the world through service learning, internships, activism and careers. Be able to identify the concepts, skills, and modes of thought they have developed as geographers, and understand how to connect these capabilities to employment and education pathways after graduation.

These learning goals animate our undergraduate program from the level of assignments and course design, to curricular pathways, to degree program structure and requirements. For instance, to prepare our students to ask and answer geographical research questions, all majors are required to take Geog 315: Explanation and Understanding in Geography. They formulate

¹⁷ Focuses on our in-residence BA, MA and PhD programs (See 2016-17 MGIS program review in Appendix F.1).

an original research question that addresses a gap in existing theoretical and empirical knowledge, and design a strong and viable research project. Students learn a range of techniques for gathering, analyzing and interpreting qualitative and quantitative data. Since our last self-study, we have expanded opportunities for students to learn creative digital methods that blur boundaries between humanistic, social scientific and scientific modes of enquiry. For example, students in Kim England's Geog 490: The Seattle Region, study historical and contemporary urban redevelopment by gathering historical maps and images, newspaper accounts, Census data and their own observations. They collaboratively curate their materials into an online exhibit using Omeka, an open source digital humanities platform. Geog 258: Digital Geographies (Elwood) and Geog 458: Advanced Digital Geographies (Bergmann) help students develop closely related capabilities across a wide range of digital platforms. Students in Tim Nyerges' Geog 482: GIS Data Management learn to perform large-scale spatial data processing with server-based Enterprise GIS technology, an approach aimed at improving resource sharing and collaboration within large organizations working on complex problems.

Student-designed research activities are central to our approach and students frequently craft their own research questions and projects. Community engaged service and action are a critical part of our pedagogies, with most geography majors participating in an internship, course-linked service learning, or collaborative research with non-profit and public sector partners at some point during their studies. Finally, geography students learn by actively sharing their work in the world: Presenting projects at our departmental undergraduate research symposium and to public and scholarly audiences (e.g. Seattle Design Festival, the AAG or Association of Washington Geographers' meetings), and publishing in *Plenum* (the department's student-run journal of undergraduate research) and other outlets.

Assessment of student learning. The primary ways we evaluate undergraduate learning in geography courses is through students' performance via writing-intensive, experiential, and praxis-based assignments and exams. We assess their ability to:

- 1) Read, write and think critically
- 2) use geographic concepts to theorize complex problems
- 3) synthesize what they have learned
- 4) critically reflect on the significance and limits of the knowledge they create

We use active learning techniques to evaluate students' abilities to bring together their conceptual and methodological learning to 'read' the world as geographers. Students in Michael Brown's 200-level class use concepts from political geography and discourse analysis to analyze media coverage of national policy debates, such as the 2017 executive orders around immigration, and theorize their spatial processes and impacts. In Mark Ellis' Geog 310: Immigrant America and Geog 479: Diversity and Segregation in US Cities, students acquire quantitative data and analyze these data through mapping and descriptive statistics. They write analytical prose that articulates meaningful interpretations of their findings, justifiable conclusions and key uncertainties. We evaluate students' ability to connect theory to praxis through their work on applied projects and engaged action in service learning, capstone projects and independent research. For instance, students in Geog 469: GIS Workshop (Elwood and Nyerges) carry out 8-12 collaborative spatial analysis and mapping projects for local advocacy groups and researchers doing anti-poverty, racial and economic justice, land use, transportation, and environmental sustainability work.

We regularly assess student learning across our undergraduate program, engaging students directly and analyzing papers, projects and portfolios produced during their geography education. Our Geography Study of Undergraduate Learning (Geog SOUL), updated in 2007, 2010, and 2013, conducted interviews, focus groups and email questionnaires with majors to analyze: 1) their performance in the context of departmental learning goals; 2) their pathways through the major; and 3) their reflections on specific aspects of our program that help them learn. Our 2007 Portfolio Assessment Project conducted a longitudinal evaluation of student learning in the major. ¹⁸ Our 2013-2014 Capstone Assessment Project also adopted a longitudinal approach, comparing a writing sample from a lower-division geography course with a paper or project completed in 400-level capstone style courses ('Capstone' in this instance signals original research, problem-based learning, or service learning and students integrating and synthesizing their learning). In this project, we also analyzed students' own self-reflection on their learning in the major. Our 2015 Life After Graduation Project assessed students' ability to connect what they are learning in geography classes with employment, further education and career paths. We found that capstone experiences are critical in helping students articulate their interests, develop their academic, civic and intellectual capabilities and link them to significant real world issues.

Student satisfaction. We assess student satisfaction in our undergraduate program through close attention to changes in course enrollments and number of majors. Our advising staff conducts an exit survey of graduating majors. Our 2015 Life After Graduation project convened focus groups with majors to solicit more detailed feedback. We find that students are enthusiastic about their learning and experiences as geography majors. They value courses that develop their aptitudes for critical reading, writing, reflection, and collaboration and are enthusiastic about the high quality of instruction and commitment of geography faculty, instructors and TAs. They are excited about opportunities to connect theory and praxis through service learning, workshop and capstone courses, independent study, and public scholarship. Our students have great ideas for new courses and they have pointed out some overlaps in the curriculum. We are developing new courses as feasible with our existing instructional capacity. New initiatives launched by Geography Advising respond directly to geography majors' requests for more opportunities to identify career pathways, articulate their preparation as geographers to diverse job opportunities, and build community among geography majors, the Department and alumni.

Assessment findings and actions. We continue to innovate in our program based on assessment findings. Many geography majors join the department late in their undergraduate program, limiting the time horizon for achieving learning goals. With this in mind, we have expanded our 200-level course offerings to open more pathways to geography. We have added new course offerings in global health, environmental geographies, nature society studies, and critical race geographies. We have revised tracks in the major to help students expand ways of identifying themselves as geographers. We now accept a range of qualitative or quantitative courses for our methods requirement, as a way of encouraging our students to value and develop methodological pluralism. Our Capstone assessment project revealed the need for still more work to enhance students' abilities to articulate and reflect critically on their learning as

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 $^{^{18}\,}http://www.washington.edu/oea/assessment/pdfs/PortfolioAssessment.pdf$

geographers and connect this to opportunities after graduation.

Instructional effectiveness. All faculty members conduct student and peer evaluations of their courses regularly (timing varies by rank). All TAs and graduate student instructors conduct student evaluations in every class, and the chair or another faculty member observes each one in the classroom annually. These evaluations illustrate that students consistently rank our courses and instruction as "very good" (numerical ranking of 4 on a scale from 1-5). We are always revising courses in response to student feedback. For example, students in Christine Biermann's Geog 370: Environmental Conservation have requested opportunities to bring spatial analysis and mapping skills learned in other classes to bear on conservation issues. She developed a new project where students analyze and interpret data on spatial and temporal patterns in forest cover and land use using an interactive online forest monitoring system and ArcGIS Online.

Faculty and graduate students are committed to developing new pedagogies and seeking ways to further strengthen our teaching. We routinely convene departmental events to enhance our teaching (i.e. 2016 Diversity Committee event on universal course design, 2017 panel on transitioning from TA to Instructor). We are regular participants in pedagogy and student life workshops by the Center for Teaching and Learning (CTL), Student Veteran Life, Health and Wellness, Samuel E. Kelly Ethnic & Cultural Center, UW Race & Equity Initiative and others.

Teaching and mentoring outside the classroom. Geography faculty do considerable undergraduate and graduate teaching and mentoring outside of the classroom. Faculty are supporting student organizations, such as the Relational Poverty Registered Student Organization and the UW Dream Project (assists low-income and first generation students). We are involved in mentoring students of color and supporting race and equity activities involving students. For example, Megan Ybarra is a co-organizer of the "We Stand Together" Racial Justice Teach-In hosted annually on campus. Other faculty facilitate student involvement in co-curricular activities in the broader community, such as Luke Bergmann's effort to connect students to local OpenStreetMap events (some of which we have hosted), where they have helped build open spatial data for disaster response. Faculty facilitate reading groups for graduate student and advanced undergraduates such as a 2017 reading group organized by Megan Ybarra on Detention, Abolition and Incarceration.

Geography Advising works closely with undergraduate students throughout their time in the department. We keep an open-door policy and encourage students to consult the advising team at least quarterly. This ensures progress toward their degrees *and* allows for mentoring around course planning, internship and career search; graduate school applications; study abroad opportunities; and development of resume and job search materials. Our advising office organizes a range of student activities from resume writing workshops, career panels and field trips. Geography Advising works closely with the Transfer Student Office, participating in its orientations and connecting with newly declared majors quickly to smooth their transition to our department. The Director of Academic Services supports the nearly 17% of our majors who are international students, including F-1 visa holders and those seeking work through the Curricular Practical Training program.

Teaching, Learning, Advising and Mentoring in the Graduate Program. Over and above the learning goals framed above, the Department mentors graduate students to carry out high quality original geographical research and disseminate their findings in significant scholarly and public outlets. Our MA and PhD students gain employment in research, higher education, policy, advocacy and a host of other fields (See Appendix D.10 for PhD placement). We assess their progress toward these goals based on the quality of their research and writing in thesis and dissertation projects, seminar papers, and directed readings; their success in competing for research funding; and the quality of the research they disseminate to scholarly and public audiences (e.g. conference presentations, peer reviewed articles, performances, op-ed writing). Graduate students' committee chairs take the lead in mentoring their academic progress. The Director of Academic Services and the Graduate Program Coordinator (in close consultation with the Chair) advise graduate students around degree requirements, course substitutions, funding questions, personal leave, and other issues. The Director of Academic Services assists graduate students with administrative tasks around general exams, MA/PhD defenses, and graduation. The faculty conduct an annual review of the progress of all graduate students, and the chair and the Director of Academic Services report key points from that discussion to each individual. We support students from underrepresented groups through close connections to the UW Graduate Opportunities and Minority Achievement Program (GO-MAP), as well as the efforts of our departmental Diversity and Inclusivity Committee. Geography faculty and graduate students regularly participate in GO-MAP events, and Sarah Elwood serves on the GO-MAP faculty advisory board. To strengthen recruitment of underrepresented or firstgeneration graduate students we offer Diversity Fellowships annually.

We implemented several changes to our graduate program since our last program review. We expanded the number and diversity of our graduate seminar offerings, given that many graduate students enter our program with degrees from outside geography. We have expanded graduate level training in research design and methods (e.g. Geog 525: Advanced Qualitative Methods), created a required course in research design (Geog 511: Contemporary Research Design in Geography), restructured Geog 500: Introduction to Geographic Thought to introduce graduate students to the discipline *and* to faculty research, and reinvented our graduate level offerings in quantitative methods (Geog 526/581: Advanced Quantitative Methods, co-taught by Suzanne Withers and Jonathan Mayer, which integrates GIS with health and spatial analysis). In response to graduate student feedback from our last program review, we have also taken steps to expand and deepen the department's collective intellectual life outside of seminars. We have made our colloquium series largely graduate-student directed, expanded it to include professional development events, and initiated a lunch discussion series for graduate students to convene with colloquium speakers, and initiated a regular coffee hour social event for students and faculty.

Our program supports graduate students' professional development in a variety of ways. Our collective culture is that graduate students publish and present their work in scholarly or public outlets, and we support them substantively and financially in these efforts. Our curriculum includes key professional development coursework for researchers (Geog 502: Professional Writing, Geog 513: Grant Writing Workshop). The Colloquium series includes professional development sessions on Inclusivity in the Classroom, as well as panels on publishing, human subjects review, library resources, careers outside academia, and applying/interviewing for academic jobs. Our graduate students participate in professional development opportunities

outside the department, such as the Simpson Center for the Humanities' Graduate Certificate in Public Scholarship or UW Bothell's Project for Interdisciplinary Pedagogy, an interdisciplinary arts and sciences program where of our doctoral students develop and teach their own courses. Our graduate students' contributions to the life of the department also play a key role in their professional development. Graduate students serve on some standing committees (Diversity, Colloquium) and GGSA co-presidents attend faculty meetings. With faculty, graduate students organize the Geography Colloquium series, convene professional development/mentoring discussions with visiting speakers, help plan and facilitate our graduate student recruitment and orientation events, and organize professional meetings such as Association of Washington Geographers and Critical Geographies mini-conferences.

Part A Section III: Scholarly Impact

Broad impact of faculty research. Our intellectual agenda embraces the spatiality of economic, social, cultural, political and ecological processes as they are tied to markers of difference such as place, nation, gender, sexuality, race, class, and citizenship. Geography faculty do significant research on important and complex problems: impoverishment, hunger, inequality, migration, racialized oppression, human induced ecological change, health and wellbeing (and much more). We lead agenda setting work in the discipline, developing conceptual frameworks, analyses, and explanations that help societies come to grips with these challenges. Our research builds interdisciplinary knowledge in close collaboration with other fields, and we bring this conceptual and methodological creativity to many cross-cutting research initiatives across the UW.

Faculty research contributes within (and across) four broad arenas of scholarship. First, we advance critical geographies of race, im/migration, gender, poverty and inequality. Megan Ybarra's work on immigrant detention and activism illuminates relations between the geopolitics of North/Central American border relations, transnational Latinx identities and transnational migration. Others study internal migration, as in Kam Wing Chan's studies of socio-economic and urban/rural development implications of China's *hukou* system, and Mark Ellis' work tracing the effects of anti-immigrant legislation on mobilities at a variety of scales. Kim England's work has long centered on intersectional inequalities in paid and unpaid work and labor markets, and she and Vicky Lawson advance geographers' work on feminist ethics/politics around care. Others are doing work on socio-spatial processes of impoverishment, such as Sarah Elwood and Vicky Lawson's work on middle class poverty politics, Lucy Jarosz's research on hunger and food security, and Suzanne Withers' analyses of social and spatial patterns of differential vulnerability in housing markets.

Second, our research pushes forward geographies of population, health, and well-being. Michael Brown and Larry Knopp's work on historical geographies of urban public health practice shows how existing socio-spatial dynamics of exclusion, subordination, and governance produce unequal urban geographies, sexual/gender identities, and landscapes of public health care. Jonathan Mayer does spatial epidemiology research on a range of infectious and chronic diseases and is pioneering integrative spatial/biomedical research on geographic variations in understandings of chronic pain and treatment approaches.

Third, faculty research advances research on human-environment geographies. Megan Ybarra advances political ecologies research through analyses of forest conservation, militarization,

and indigenous territoriality. Christine Biermann's work cross-cuts human-environment geographies and social studies of science and technology, tracing sociopolitical and scientific dimensions of species restoration and the implications of the 'molecular turn' in conservation science. Luke Bergmann's research intersects human-environment and economic geographies, for instance, modeling global economic relations of production, consumption and carbon flows.

Fourth, we advance critical GIScience and digital geographies research through our work on the societal significance of GIS and other digital geovisualization approaches. Faculty are involved in systems design for large group collaborative decision making, ontological and theoretical work aimed at humanistic approaches to digital spatial representation, and research on local to global scale inequalities produced through increasing digital mediation of everyday lives. Tim Nyerges contributes work on CyberGIS and geodesign for sustainable watershed management, Sarah Elwood has studied the role of interactive mapping technologies in critical spatial learning and youth civic engagement, and Luke Bergmann does theoretical work on spatial ontologies that could undergird digital epistemologies more commensurate with interpretative and humanistic approaches than conventional/legacy GIS.

Faculty research, advances in the field, and new directions. Our faculty continue to pioneer new directions in the discipline. Our research over the past decade advances four areas of innovation in geographical scholarship. First, our longstanding focus on the dynamic coconstitution of space and society advances what some scholars name as a 'relational turn' in human geography in the last decade (for instance, approaches such as relational economic geographies, geographical relational poverty, assemblage approaches in urban geography and more). Our faculty's research is defined by relational spatial thinking that examines the interworkings of multiple causal processes operating across space and time, and we use this approach to explain and generate action around urgent social and environmental challenges.

Second, health and well-being research is increasingly focused on socio-spatial thinking about the determinants of health and innovations in spatial analytics and data sources. Faculty across our department – not just those who identify as health geographers – are doing research that helps us understand multi-faceted social, economic and political determinants of health care provisions, health and well-being. Our research explains how social and spatial inequalities in health and life chances emerge through human and natural ecologies that shape human movement and, for example, circulate pathogens. These socio-spatial approaches to interdisciplinary health and well-being position us for key contributions to the UW Population Health Initiative. ¹⁹

Third, human-environment geographies, nature-society studies and political ecology are areas of exciting growth, with geographers advancing new frameworks for understanding paradigmatic shifts in human capacities to alter the Earth and life on it. Our three newest colleagues are pioneering new research aimed at understanding human/non-human interconnections, from studies of the science and politics of technological interventions into ecosystems, to studies of new global circulations of socio-ecological entities like carbon or viruses, to analyses of the militarization of conservation projects. Our faculty are also advancing new directions in feminist and critical race political ecologies.

¹⁹ Vicky Lawson is on the executive council and multiple faculty are in its researcher network.

Fourth, our faculty's critical GIS and digital geographies scholarship is at the forefront of research on paradigmatic changes in GIS, geovisualization and geocomputation. We study how digital architectures, from CyberGIS to mobile data collection and mapping platforms alter the technics of a "GIS", the boundaries of "GIScience", approaches to spatial data creation/curation, and the implications of these shifts for knowledge and power. We study ongoing re-organizations of digital economies and socialities around space, place and location (e.g. the geoweb and 'sharing economy'), to better understand connections between digitality and inequality.

Scholarly productivity and accomplishments. We are advancing scholarly knowledge across geography and other disciplines through publication of peer-reviewed journal articles, monographs, book chapters, and through diverse editorial activities and through public scholarship. We are co-editors of volumes that conceptualize new research agendas and methodologies, such as Handbook of Critical Physical Geography (Biermann, in preparation), Handbook of Qualitative Research in Geography (Herbert), Handbook of GIS and Society (Nyerges), Practicing Public Scholarship (Mitchell), Qualitative GIS (Elwood), International Encyclopedia of Public Health (Mayer), and Relational Poverty Politics (Lawson and Elwood). Our faculty have edited key journals (Social and Cultural Geography, Brown; Progress in Human Geography, Lawson and Elwood) and serve on countless journal and press editorial boards.

The quality and significance of faculty research is signaled in the number and range of national/international grants and fellowships received, including the Brocher Foundation Residency Fellowship (Mitchell and Sparke), Guggenheim Fellowships (Ellis, Mitchell), Mellon Foundation Grants (England, Sparke), National Geographic Education Foundation (Elwood and Mitchell), the National Institute of Child Health & Human Development (Ellis), multiple NSF grants (Brown and Knopp, Ellis, Elwood, Nyerges), an NSF Research Coordination Network grant (first in the social sciences, Lawson and Elwood), the Russell Sage Foundation (Ellis), the Spencer Foundation (Mitchell, Elwood), and others. Geography faculty have received a variety of local, national and international awards over the last decade. These include the AAG GIScience and Systems Specialty Group's Aangeenbrugg Distinguished Career Award (Nyerges), Distinguished Humanities and Social Sciences Visiting Fellow, Queen Mary, University of London (England), the National Council for Geography Education Paper Award (Mitchell and Elwood), University of Toronto Distinguished Alumnus Award (Chan), and a Washington State Academy of Sciences membership (Ellis).

Similarly, our graduate students' research is widely recognized for its significance and quality. Highlights over the last decade include: A UW Distinguished Dissertation Award (2008), the UW Graduate School Medal (2008, highest award given to graduate students), dissertation and paper awards from AAG specialty groups, and paper prizes from top geography journals (2016 *Progress in Human Geography* Best Paper Prize). Geography graduate students have won many grants and awards over the past decade, including 6 Foreign Language & Area Studies Fellowships (FLAS), 10 NSF Doctoral Dissertation Research Improvement Grants, 7 NSF Graduate Research Fellowships, and a US Presidential Management Fellowship. Additional national and international research awards won by our graduate students include fellowships from: the American Association of University Women (2), the Boren Foundation, the Center

for Engaged Scholarship, and the Foundation for Urban and Regional Studies (2), the Ford Foundation, Fulbright-Hays (2), Jacob Javits Foundation, the McNair Program, Social Sciences and Humanities Research Council of Canada (2).

Our undergraduates also win scholarly awards. Highlights include a UW Arts & Sciences Dean's Medal in Social Sciences (2013), UW Bonderman Fellowships (2012, 2016), and an NSF-REU research assistantship (2012). Geography majors typically win 2-3 undergraduate research fellowships annually from the UW Mary Gates Program (5 in 2017). In 2017, two undergraduate majors were named to the Husky 100 listing of the UW's top students. Our undergraduate alumni direct nongovernmental agencies doing critically important social justice and social service work, they work in public policy and at all levels of government throughout the State of Washington and they hold exciting positions in our region's innovative tech industry.

Our PhD program makes vital faculty placements in Geography departments and academic programs across the social sciences. Since our last review, we have placed 27 PhDs in tenure-stream positions at PhD-granting departments around the world: The Pennsylvania State University, University of California Berkeley, the Universities of Kentucky, Texas at Austin, Wisconsin-Madison, Wisconsin-Milwaukee, Michigan, and Michigan State University; the Universities of British Columbia, Calgary, Glasgow, Edinburgh, Liverpool, Auckland, the Philippines, and South China Normal University. Our PhDs hold tenure stream faculty positions in key BA/MA-granting departments of geography and a range of other interdisciplinary programs at Dartmouth College, George Washington University, Bucknell University, the Universities of Maryland-Baltimore County, New Mexico, and Illinois-Springfield; San Francisco State University, John Jay College, Marylhurst University, SUNY-Old Westbury, Metropolitan Community College, Antioch University and Grand Valley State University.

From 2007-2017, roughly half our PhDs have pursued careers outside academia (See Appendix D.10). They do research and policy work for important national and international agencies and institutes (U.S. Department of Housing and Urban Development, USAID, Max Planck Institute-Germany, India Institute of Geographical Studies, and others). Many work in "altacademic" positions that support teaching, advising, and service learning at colleges and universities, and others work at private sector firms like Google and Apple. Several have launched their own consulting and research firms. Our MA recipients also pursue diverse paths. Some complete PhDs, while others are attorneys, high school teachers, small business owners, activists, founders of nongovernmental organizations, planners, software engineers, artists, and policy analysts.

Interdisciplinary and cross-unit collaborations. Geography faculty lead interdisciplinary programs and cross-unit research collaborations around the University. We direct interdisciplinary research centers/networks and degree programs, including the Center for Studies in Demography and Ecology (Ellis, 2008-2015), Law, Societies and Justice Program (Herbert), the UW Honors Program (Lawson), the Northwest Federal Statistical Research Data Center (Ellis), and the Relational Poverty Network (international research network based at UW, Lawson and Elwood). We use our integrative socio-spatial modes of thought and analysis to catalyze interdisciplinary research activity campus wide. England (with colleagues from

History, Landscape Architecture, and Social Work) is a cofounder of the UW Cities Collaboratory, which advances historical, sociospatial, and digital approaches to urban environmental, economic, and social equity challenges. Bergmann has been centrally involved in the Initiative on Biological Futures in a Globalized World. This project of the Simpson Center for the Humanities and Fred Hutchinson Cancer Research Center brought together social science, humanities and science researchers to study new forms of biological knowledge and their socio-ecological implications. Other interdisciplinary collaborations include Brown's involvement in the Comparative History of Ideas Program's Postcolonial Animal research cluster. These activities deepen our contributions to vital areas of scholarly inquiry and strengthen the UW's infrastructure for interdisciplinary collaboration.

Supporting junior faculty success. We actively mentor our assistant professors' teaching, course development, publication, and research and funding strategies. We provide opportunities for them to learn about the UW tenure process, including a Fall 2016 full-day workshop led by Elwood and Jarosz. We fund junior faculty to attend professional development seminars such as the AAG's Early Career Workshops. Senior colleagues conduct annual collegial evaluations of their courses and consult informally on pedagogies and course development. A key building block for junior faculty's teaching success is ensuring that they can infuse their own creativities into innovation in our curriculum. The chair and other senior colleagues have worked closely with our assistant professors to revise or develop outstanding new courses on global environments, race and nature, energy development and digital geographies.

Success in diversifying our faculty. Since our last program review, we have hired three assistant professors (Luke Bergmann, 2011; Christine Biermann and Megan Ybarra, 2014) — two women and one who is Latinx. This period also saw the departure of our only African American colleague, JW Harrington, who took an administrative position at the UW Tacoma. We rely on a range of strategies in our efforts to recruit and retain a diverse faculty. Search committees meet with the Divisional Dean and Associate Vice Provost of Faculty Advancement (Office of Minority Affairs and Diversity) to discuss implicit bias and our values in hiring, and to craft specific strategies for practicing inclusion throughout the entire search. Search committees guide the full faculty through similar discussions as an introductory framing to our process of identifying short lists. We actively connect interview candidates and new faculty from underrepresented groups with potential faculty allies and key points of connection around campus, such as the Office of Minority Affairs and Diversity, Latin American & Caribbean Studies Program, Gender, Women & Sexuality Studies, the UW Dream Project, and WIRED: Women Investigating Race, Equity and Difference.

IV. Future Directions

We are a dynamic community of faculty, graduate and undergraduate geographers who do significant research, teaching and action that matters to the University, the region, the nation and the world. Maintaining and deepening our excellence is of the utmost importance. We identify five crucial goals for the next decade:

1. Sustain and build upon the enduring strength of our faculty. In addition to the very recent departure of two full professors, in the next decade we anticipate the retirement of over 35% of our faculty. This is critical moment for creative thinking and strategic investment that brings

our historic strengths forward to new and cutting edge forms of geographical scholarship, teaching and learning. We have longstanding strengths in economic geography, nature-society geographies, geographies of gender and sexuality, political geographies, health geographies, urban geography, quantitative methods and critical GIS. The integrative socio-spatial analyses of intersecting environmental, social, political and cultural processes that have long defined our work are rising to new prominence as researchers and policy makers seek new solutions to crises of health, environment, migration, racial violence, impoverishment, and much more. We identify several potential directions for new faculty hires that would bring these strengths forward in creative and significant ways. As we build the next generation and future of our department, we could imagine hiring colleagues whose research addresses:

The human impacts of climate change, including implications for global health, immigration/migration, geopolitical relations and more;

The socio-spatial effects of growing nationalism, violent bordering, and authoritarian rule, especially upon struggles over citizenship, race, identity, sanctuary and refugee politics; The intersection of political ecologies and political economies of urban environments and their implications for social and economic precarity, and for health and well-being; and the societal and/or epistemological and methodological implications of ongoing digital spatial innovations such as spatial big data, geosocial media, and new geovisualization and geocomputation environments. These research directions build on our historic strengths, connect with cutting edge geographical scholarship, and have important synergies with key campus initiatives: Population Health, Race and Equity, Urban@UW and others.

To realize these new directions and sustain excellence built over many decades, we need faculty lines. *Tenure line faculty hires are critical to our future.* Most immediately, we urgently need 3 new assistant professors over the next 5 years, given recent losses. In the coming decade, we anticipate needing 5 faculty lines as the coming wave of retirements plays out. Among these, we may need a mid-career associate professor, given that anticipated retirements will likely happen at a time when our current assistant professors are recently-promoted associate professors (Appendix C.1). Hiring faculty of color is a high priority for us, central to our race and equity work in the department and to recruiting and retaining students of color to our program. Outstanding departments like ours play a crucial role in maintaining the visibility and excellence of the College and the University. We must survive and thrive in spite of fiscal crisis.

2. Secure the fiscal health of the department – especially our graduate program. The budgetary pressures we face are largely structural and situated at College and University levels. This said, we identify two arenas of critical action around the future fiscal health of the department: expand graduate program funding and expand our development efforts. Maintaining our excellent graduate program is one of our highest priorities, and expanding revenues for grad education is a critical next step, given continued increases TA/RA costs (and Arts & Science projections of flat revenues in the short term). As well, we must take decisive action to ensure we can successfully recruit grad cohorts large enough sustain our program. We have begun this work: In Fall 2017 we are discussing key changes to our grad admission and funding processes to ensure enrollment new class of 5-7 (See Appendix D.8 for Graduate Student Enrollment Scenarios). Last year's admissions cycle underscored that we must find a way to offer initial funding packages of more than 2-3 years. We must find ways to expand funding for graduate education, whether by ramping up our extramural funding efforts,

instructional partnerships with other campuses, or other strategies yet to be explored. We need to undertake long-term planning for the graduate program learning from nation-wide initiatives aimed at re-imagining and defending PhD programs amidst austerity and re-structuring in higher education.

Further, we need to expand our development activities and develop a strategic vision to guide the work. Our creative pedagogies, our accountability to place, our research on critical challenges of this era, the global reach of our graduate and undergraduate alumni network, and our graduates' diverse connections to public, private and non profit sectors hold unrealized potential as bases for expanding our development activities. In the last decade, we have cultivated key alumni relationships that have resulted in gifts. Now we need to articulate the vision and priorities of our development efforts. What kinds of activities or events will best showcase our strengths to potential donors? What forms of growth and innovation in our program are we looking to support? How can we best frame these to resonate with donors?

- 3. Stabilize and expand our instructional capacity. In the last decade, we added an entire degree program and generated greater student demand for our courses, during a time of declining faculty numbers. We have bridged the gaps by hiring graduate student instructors and post-doctoral lecturers (Appendix D.4). This situation is unsustainable: Graduate student numbers are lower, identifying and hiring an ever-revolving cast of instructors/lecturers adds enormous administrative labor, and we need continuity in our curriculum. We are at a stage where we cannot meet student demand for key courses in our undergraduate curriculum. We urgently need greater instructional capacity immediately and in the years to come. Tenure stream faculty lines are critically important in addressing the instructional crisis we face (not to mention essential to securing the department's excellence long term). Additionally (but not in lieu of tenure line faculty) we may want to consider hiring a full-time lecturer in areas where high student demand and curriculum/program growth have created persistent problems in staffing courses (specifically, in our GIS, Mapping and Society track).
- 4. Invest in our engaged pedagogies. The Geography undergraduate experience is defined by creative, experiential, technology-intensive, research- and action-oriented pedagogies. Student enthusiasm for these approaches has been critical to expanding our enrollments and major numbers and is central to future growth. Engaged pedagogies are at the heart of the UW's vision for the future of undergraduate education. Our experience shows us that these approaches transform lives and communities. Sustaining and deepening Geography's dynamic pedagogies requires planning and key investments in personnel and infrastructure. Key questions include: How can we further support our faculty's pedagogical innovations? Can we partner with key units or programs that share our vision of undergraduate education (e.g. Law, Societies & Justice, Data Science for Social Good) to expand experiential learning for students? What strategic changes in the department's computing infrastructure would enhance cutting edge digital learning in across our curriculum? College support for TA lines to maintain discussion and lab sections, and ensure student/instructor ratios that allow for community-based, service, and digital learning is essential.
- <u>5. Build and deepen our research, teaching and public partnerships.</u> As detailed already, our faculty and students are catalysts in countless campus/community collaborations in research, education and social change activities. We have built enduring relationships with policy

makers, educators, nonprofit professionals, activists, and innovators in the private sector, through research partnerships, international study, experiential and service learning, and more. We aim to continue nurturing this dense ecosystem of collaborative activities. We also see untapped areas for new growth and relationship building that will further strengthen our work. First, we aim to enliven scholarly and educational connections among geographers within the UW system. An exciting cohort of geographers and critical spatial thinkers were hired in Tacoma's Urban Studies Program and Bothell's Interdisciplinary Arts & Sciences during the past decade. Coalescing this group to imagine new collaborations and creative ways we can mutually support one another's research, pedagogies, and public scholarship stands to benefit all. Second, we seek to expand connections with our alumni and key partners in the region and around the world. The vitality of the Seattle metro region and Pacific Northwest, together with our network of alumni in the private, public and non profit sectors constitute key opportunities to enrich our advising and mentoring of students, expand internship and experiential learning opportunities, and ultimately, maximize our impact upon crucial societal problems. We are imagining new ways to connect our alumni with the Department, such as a public lecture series by geographers working on the technology and society, human environment, sustainability, global health, and racial, economic and gender justice issues that have mobilized our students for decades

PART B: UNIT DEFINED QUESTIONS

1. Our undergraduate program develops interdisciplinary conceptual, analytical and practical skills that prepare students to intervene in key processes shaping our worlds (e.g. climate change, globalization, migration/bordering, urban transformation, poverty, inequality, population health, use of water and other resources, and more). How can we now best extend and enliven this substantive core of our undergraduate program?

The last 5 years has been a period of exciting innovation in our undergraduate program, with junior and senior faculty together pouring considerable creative energies into nearly 20 new and substantially revised undergraduate courses. This effort has greatly enlivened our students' engagement with creative digital methods, critical geographies of race, migration, citizenship and postcoloniality; development and economy; geocomputation; geographies of energy; nature-society relations: political ecologies; urban geography. We are delighted to see this paying off in rising student credit hours, majors and course fill rates (Appendices D.1, D.2, D.3 and D.5).

Going forward, we will build on these successes by expanding our efforts to help students 'find' Geography and showcase the defining strengths of undergraduate education in our department:

Geography is a place that nurtures progressive and radical thought and action. Our students are critical and independent thinkers who develop the concepts and analytical tools they need to strike out on their own as change agents.

Geography is a place where students learn powerful techniques, modes of analysis, and critique immediately relevant to understanding and acting upon urgent interconnected problems in health, economy, globalization, population, development and environment.

Geography is a place where students learn by doing: From our deep commitment to learning through service and activism, to rich opportunities for student-directed research and our diverse digital geographies coursework, we prioritize praxis-based learning.

We identify several ways to make these strengths more visible around campus and beyond. Continually seeking ways to intensify our outreach and messaging around these strengths (especially to lower division students) is critical, including creative recruiting for our 200-level classes and coordinated outreach to campus advising networks. Further, we envision broad efforts to expand our leadership in interdisciplinary and cross-college undergraduate programs - the kinds of programs that students interested in our kind of critical and integrative spatial thinking are likely to be seeking. This is a proven strategy: Geography faculty members' leadership in the Public Health major, the Global Health minor and Honors have been very effective in helping undergraduates find us. Ongoing efforts to develop an interdisciplinary food studies minor and a new undergraduate-led effort to create a poverty studies minor present key opportunities for us to forge strong intellectual and curricular connections between Geography and interdisciplinary education all across campus. We could consider additional ways to build creative pathways between Geography and undergraduate programs that have strong synergies with our program. For instance, what might be the potential of a 'technology and society' concentration or focus area in collaboration with Human Centered Design & Engineering or the Information School? Would the Law, Societies and Justice students be interested in spatial justice certificate that could complement an LSJ major? What kinds of possibilities would be opened through an undergraduate-focused critical ecologies collaboration with the College of the Environment? What kinds of interdisciplinary yet deeply geographical teaching and learning connections might we imagine building in collaboration with the energetic cohort of geographers hired in the last decade at UW Tacoma and Bothell?

An important element of these efforts is carefully considering whether and how we need to refresh the way we articulate substantive concentrations in the major, both to reflect the tremendous innovation in our curriculum over the last 5 years. For instance, the *substance* of what we teach about digital ways of knowing and making space has also expanded well beyond the current imaginary of our GIS, Mapping and Society track. How might we need to reimagine this framing to reflect that plurality of approaches students can learn in our department, from digital humanistic ways of studying urban histories development, to geocomputational methods for analyzing population health or global socio-ecological relations, to GIScience methodologies for sustainability science? How might we articulate the pluralism in Geography's approaches to the digital and spatial, in ways that signal our more-than-GIScience orientation, while still keeping GIS in view since it remains a key factor in recruiting majors?

With respect to praxis-based learning in the Department, key developments for us in recent years are the expansion of creative digital pedagogies. Faculty teaching across all areas of our program use learning activities that rely on mapping, visualization, and web development software, and an ever-expanding range of qualitative and quantitative analysis software. These digital pedagogies are part of a sea change in *how* students learn with technologies, and our approach emphasizes exploration, collaboration, creation, and curation as ways of building students' aptitudes for creative new learning amidst rapid technological change. Going forward, we need to consider, as a community of the whole, our strategies for developing technological infrastructure that supports continued growth and creativity in digital teaching and learning: How might we reconfigure our labs to better support collaborative work and flexible student access? How might we systematize and streamline departmental support for

faculty uses of cloud-based services in their classrooms – as a way of making complex desktop software available to students via their laptops without need for complex local installations?

Our self study discussions also suggest it is time to undertake a systematic review of the structure and requirements of our undergraduate curriculum. Given the large number of course revisions and additions we have undertaken, we need to now ask some of the recurrent questions that arise in our undergraduate program: Are course sequencing, prerequisites, track and degree requirements achieving the range of goals we have for them (student identities/pathways as geographers, consistent preparation in upper division courses, efficient time to degree when students "discover" geography late, etc.)? Is there overlap and duplication in course content?

Finally, our self study underscores the urgency of systematic review of strategies for staffing our undergraduate curriculum, given major shifts in instructional resources: faculty losses to administration, growing reliance on graduate student instructors, and smaller graduate student body (See Appendices D.1-D.8). Continuing to offer an exciting, significant and high quality undergraduate education is a key priority for us. Maintaining instructional capacity (tenure stream faculty, lecturers, graduate instructors) and levels of TA support is critical to realizing this future. We are already making more-than-optimal use of all instructional resources. Any additional reductions in funding will have immediate impacts on the number of courses and sections we can offer and on our ability to mount the creative, experiential, research- and action-oriented pedagogies that define the Geography undergraduate experience at UW and our students' successes after graduation.

Within this context, addressing the staffing crisis in our GIS, Mapping & Society (GMS) courses is critical. In most years, *over half of our graduating majors concentrate in the GMS track*²⁰ and these courses routinely fill over capacity. Since our last program review, we have added an entirely new degree program (MGIS) and added new GMS courses essential to a cutting edge curriculum that prepares our students for professional success in web-based mapping, spatial big data, spatial humanities. We are no longer able to mount our full GIS/geovisualization curriculum across all degree programs with current faculty and graduate instructor capacity.²¹ We urgently need tenure stream faculty capacity in this area, with synergies to other areas of our undergraduate program. Finally, given our growing reliance on graduate student instructors we need to undertake full-faculty discussions of how to best support these instructors, particularly around ensuring continuity of course content and equity in assignment of teaching responsibilities.

2. Our graduate program has long been one of the top PhD granting Geography programs in the nation. Given shifts in the structure and resourcing of graduate education, nationwide and within our institution, how can we continue to attract top students and successfully prepare them to meet their professional and career goals?

As a historically successful and internationally significant PhD granting department in

²¹ Reduced teaching loads for administrative leadership is part of the issue, e.g. Elwood's service to the Arts & Sciences College Council.

 $^{^{20}}$ 56% in 2015-16; 62.8% in 2016-17 (calculated from student records of all graduating majors).

geography, we play a significant role in the future of our field. Sustaining the highest quality academic research and education in critical human geography remains one of our highest priorities. Yet the national and institutional contexts in which we operate have shifted significantly in the last decade, raising urgent challenges and opportunities for our graduate program. Massive loss of public funding for the University from 2008-2011, major increases in tuition and graduate assistant salaries, and flat instructional funding amounts from the College have created a fiscal climate that greatly limits our ability to recruit and fund graduate students (the size of our graduate program has dropped 27% since our last program review; Appendix D.8). Tenure-stream faculty positions in the social sciences have become increasingly competitive over the past few decades. Going forward, our PhD program needs to prepare graduates for a range of paths that includes tenure track employment in geography departments but extend beyond this. Research-based postdoctoral positions in the social sciences are on the rise and our recent PhDs have had success winning faculty positions in interdisciplinary programs, so these are areas to target. We identify three strategies to secure and expand our ability to recruit top graduate students and offer rigorous and creative graduate programs that graduates can leverage toward successful careers:

- 1. Undertake comprehensive planning for our graduate degree programs, coordinating with College- and University-level visions about the future of social science PhD programs. As various sections of this self study underscore, our graduate program has a sustained tradition of excellence, yet stands at a critical crossroads. The nature and structure of academic employment has changed. Research and teaching increasingly transcend disciplinary boundaries (as does program funding, as evidenced on our campus by initiatives such as Urban@UW or the Population Health Initiative). We prepare students for critical spatial thinking and integrative analysis of complex interconnected social and environmental problems. From the 'spatial humanities' to 'big data sciences', the diverse forms of spatial thinking we train students to do are at center stage. What we do and how we do it remains more important than ever. The urgent issue is how to both sustain our graduate program through difficult times while also doing the kind of deep, creative and collaborative strategic planning that will build the future of our graduation program. We need to be asking big questions about what social sciences PhD programs will look like in 10-20 years, while working closely with peer PhD-granting geography departments around the country and national initiatives that are creatively re-envisioning PhD programs and outcomes. We need the see clear signals from the University and College that it will continue to substantially invest in sustaining top-ranked graduate programs whose excellence have been built over many decades.
- 2. Redouble our efforts to expand graduate student funding. Identifying and developing new sources of revenue for the graduate program is urgent. Compared to our peer departments nationally, we have long been at disadvantage in funding we can offer to incoming graduate students. Peer departments typically offer 4-5 year contracts to incoming grad students. We can typically offer 2-3 years up front, with assurances of our commitment to funding PhD candidates after their initial contract. Our last 2 recruitment cycles evidence clearly show this is no longer sufficient. Over the last decade, we initiated several efforts to expand resources for graduate student support, such as incentive funds for faculty to ramp up submission of external grants and the formation of the MGIS program. These strategies have generated modest revenues.

To sustain our high quality, nationally significant graduate program, we need an active multifaceted strategy that expands graduate student funding to a level that allows us to successfully recruit 5 to 7 graduate students annually (Appendix D.8). Protecting and expanding existing funding streams is critical. Reductions in instructional funds from the College will have immediate detrimental impacts on our graduate program and quality of undergraduate instruction. Our instructional capacity is already insufficient (Appendix D.4). We need to redouble our efforts to win research grants that fund research assistants and postdocs and think about ways to further support our students' success in winning fellowships (though threats to NSF's Social, Behavioral and Economic Sciences directorate define a clear limit to this strategy). An urgent priority for our faculty in the coming decade is to work strategically with the College, other Social Science departments, and other units in the UW system to explore and build new approaches and partnerships around graduate student funding. For instance, how could we systematically expand our connections to research units (such as the Institute for Health Metrics and Evaluation) that consistently seek graduate research assistants who would also be a good fit for existing strengths in our department, such as population health? What kinds of partnerships might we forge with UW-Tacoma or UW-Bothell that could expand teaching opportunities for our senior PhD students while also supporting undergraduate education on their campuses? Should we build collaborations with other units to try to enroll professionals in new or revised paths within our MA program? Should we consider a 5-year BA/MA program, or move to direct admission to the PhD without an MA? Should we work with other units in the social sciences to craft a common core graduate curriculum that could share some graduate courses?

3. Continuing adjusting graduate program to address issues identified in self study. After our 2007 self study we: a) Revised our admissions process to ensure broad faculty support for incoming graduate students and successful committee formation, b) Formalized funding policies at all stages of the program (initial offer, 'banking' policies, transition from MA to PhD), c) Created a graduate program handbook, d) Revised program requirements, including reframing doctoral preliminaries²² as a review (not an exam) and introducing flexible options for the preliminary review, e) Expanded graduate student involvement in Colloquium, Diversity committee, graduate student orientation, graduation ceremony, and f) Introduced a professional masters degree (MGIS). We are proud of these activities and their positive impacts.

Our graduate program is working very well given massive structural changes of the last decade. Still, we identify several issues for attention. Some graduate students and faculty want to reexamine the scope and nature of our MA program – asking how we can more clearly demarcate pathways from MA to careers for those who are not continuing to a PhD program, whether we should consider a shorter course-based MA, and how we should think about the relationship of our MA program to our PhD program in changing times (size of each, should we be prioritizing resources in one or the other, etc. See Appendix D.9 for MA Graduates). Some faculty and graduate students would like to revisit doctoral requirements and the structure and timing of the preliminary review and generals exam. We need to evaluate our foundational requirements, research seminars, methodology courses, and professional development courses, to ensure our

²² The 'preliminary' review is an internal departmental evaluation followed later by the generals exam that qualifies a doctoral student for candidacy

smaller graduate student body still receives the highest quality education.

We are deeply committed to training outstanding PhDs who will do groundbreaking research in top geography departments. This said, the ever more diverse professional paths of our PhDs in the last decade prompts the need for explicit attention to how to we might adapt our doctoral program to best prepare them to compete successfully for faculty positions in interdisciplinary programs, diverse forms of academic employment ('alt-academic' positions such as academic advisors and university program administrators), and research positions outside the academy. Historically, our students have had success in all of these arenas (Appendices D.9 and D.10). But we want to explicitly consider what a 'next generation' PhD program should look like for the critical spatial thinking, trans-disciplinary methodologies, and engaged praxis that define our geographical research, and how our approach can reinvigorate graduate education in the social sciences, in a world that needs these modes of thought, analysis, and action more than ever

3. How can we foster collegiality and active engagement within the department?

Across the history of our department, we have done our best and most innovative work when we are deeply engaged with one another in pushing the department forward. We are proud of our accomplishments and optimistic about our future, but we recognize that all of us are overburdened. In research, teaching, administrative service, and all other aspects of departmental life, we are doing more than we were a decade ago, with fewer faculty, staff, and graduate students. We have added undergraduate majors, launched a new degree program, revitalized our Diversity committee, and expanded our leadership and service to the campus to unprecedented levels. We are overextended in ways that lessen our resilience from the inevitable differences of opinion that arise in departmental life. University and College support to grow our faculty and graduate student numbers are critical to addressing the underlying structural problem: we are doing too much with insufficient resources.

We are taking actions to deepen collegiality. In 2016, the chair organized two facilitator-led workshops (one for faculty, one for staff) in which we identified the core values that guide our work: care, commitment, respect, equity, and scholarship.²³ These values are posted in the department seminar room. We continue working to manifest these shared values every day, trying to build an inclusive community where everyone feels valued for their contributions.

We need to consider ways of restructuring faculty involvement in department governance and service. We already have difficulty fully staffing our existing committee structure, we have a large number of senior faculty in high demand for administrative leadership around campus, and there is much additional work to do. This self study points to some actions we could initiate in the near future, even though we are already over-extended. We need to make changes to cover all the bases, such as undertaking more planning and decision-making together rather than in committee, particularly around issues related to our graduate and undergraduate programs. Smaller Undergraduate and Graduate Program Committees could oversee implementation.

We also seek ways to deepen engagements among faculty and graduate students to ensure a

²³ Graduate students have expressed interest in their own workshop. We will support this whenever they are ready.

healthy department, advance graduate students' professional and intellectual development, and their knowledge of departmental governance. All this advances grad students' sense of departmental transparency and extends their contributions to building our best future. We might consider an annual or quarterly all-department summit meeting that brings us together to discuss big questions: What is most urgent on campus and how are we contributing? What is most exciting in the discipline right now and what does it mean for us? How are we doing with our efforts to build a stronger culture of engagement? Graduate students need intellectual engagement with faculty outside of seminars, advising and TA-ing, and this calls us to reinvigorate our participation in colloquium, public doctoral defense presentations, faculty meetings, and other aspects of departmental life.²⁴

Third, we are building a vibrant intellectual community by expanding undergraduate majors' engagement in the department. Our undergraduates are hungry for scholarly and professional contact with faculty and TAs outside of the classroom. Our most successful and rewarding activities are those that create these kinds of interactions. We are deepening undergraduate engagement with faculty and grads through activities like *Plenum* and the Geography Undergraduate Research Symposium. Our Director of Academic Services has been organizing new events for undergraduates, such as an excursion to the nearby Union Bay Natural Area. He recently surveyed undergraduates to target activities to their interests and availability (we are a commuter campus; many students work long hours and travel long distances).

4. What are the costs and benefits of the MGIS program to the Department? What is necessary to strategically build a sustained relationship between the fee-based MGIS program and the in-residence undergraduate and graduate programs?

This question is prompted by the 2016 MGIS program review report's suggestion that a thorough assessment of the relationship between MGIS program and the department as a whole is needed. Our brief reflections here are intended to *begin* that process. The MGIS program reviewers and Continuum College leaders recommended that the MGIS Program be structurally integrated into the Department, perhaps for example, by subsuming the MGIS program governance structure into that of the Department, moving admissions processes and curriculum development and design into other Geography Department standing committees and operations (See Appendices F.2 and F.3). Such changes would require careful consideration by the full faculty.

The MGIS Program has graduated 81 students to date and has received praise and high marks from its graduates. The program is a benefit to Geography in that it allows the department to provide graduate education to working professionals. Students are satisfied with the program, and it is a deeply rewarding educational and service activity for two of our dedicated colleagues. Revenues from the Program have allowed us to invest in key aspects of our mission, such as Diversity Fellowship stipends and staff and temporary instructor salaries.

Launching and sustaining this professional degree program has also presented several

²⁴ We can imagine new kinds of activities (such as brown bag faculty/grad research discussions or expanded faculty involvement in grad student orientation) but these need to carefully considered against our reserves of time and energy as we try to reinvigorate what we already do. It is a delicate balancing act.

challenges. At the outset, we saw the MGIS program not just as a chance to offer a professional degree, but also as a way to build new revenue streams for our in-residence degree programs. MGIS has generated some revenues toward this goal, allowing us to, for example, offer two Diversity Fellowships to incoming graduate students in our in-residence program. MGIS revenues also cover the salary of the MGIS Program's senior computer specialist, whose work in maintaining the Department's technology infrastructure benefits all our programs. However, revenues have been lower than envisioned. More recently, student attrition during the fifth year of the program meant no net revenues coming to the Department in 2016-17. We also know that there will be zero revenue coming to the Department in 2017-18, and we may receive little to no revenue in 2018-19.

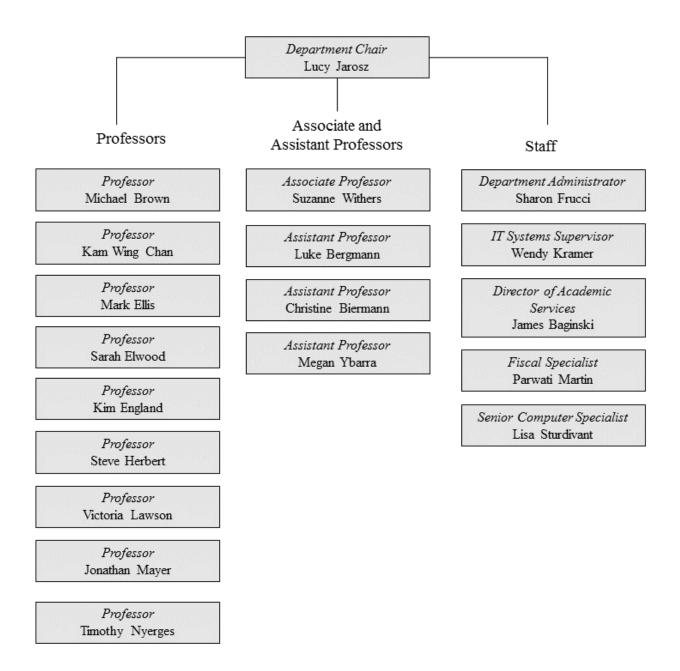
Adding a new degree program to the Department has significantly expanded the administrative demands of operating the Department. Since launching the program, our available tenure line faculty, staff, and graduate instructor resources have all declined, presenting significant workload and capacity challenges. The Department's administrative staff workloads had already functionally increased after we lost a full-time administrative position to budget cuts in 2010. MGIS program revenues do fund approximately 12% of the salaries of the Geography Administrator and the Fiscal Specialist. But it is clear that with increasing administrative demands of all our degree programs, staff workloads are unsustainably high. The MGIS Program is exploring tuition increases as a way to hire administrative assistance dedicated to their program, reducing the load on existing staff. Another option could be re-allocating administrative support for MGIS to another unit on campus. This is an urgent issue of retaining excellent staff members and ensuring sustainable workloads.

The MGIS curriculum is primarily taught by part-time lecturers who are hired on a quarterly basis, creating particular administrative and instructional challenges. The MGIS Self Study reports challenges in recruiting and retaining local professionals as lecturers because of private sector salary differentials, so the program also relies on recent MGIS graduates, and Professor Nyerges' current and former doctoral advisees. While they all have the necessary subject area knowledge and professional background, some coming from the private and nonprofit sectors have had limited teaching experience. Student evaluations are significantly lower than in the inresidence geography courses. The Program's staff is working to improve teaching quality through more active participation in the Center for Teaching and Learning.

The MGIS program faces a key transition in the near future. Professor Nyerges, who has spearheaded the program's intellectual and technological trajectory, plans to step down as director within the next 5 years. As we prepare for this transition, the Geography faculty as a whole must consider carefully the future of this professional degree program, how it can thrive going forward, and what sorts of programmatic or curricular innovations might foster broader integration with the Department as a whole in ways that are mutually beneficial.

Part C: Appendices

Appendix A.1: Geography Department Organization Chart



Appendix A.2 Geography Standing Committees

Executive Committee (Chair, Administrator, 2-3 elected faculty members) Advises the chair on department policy and procedures, and coordinates quarterly TA placement).

Graduate Program Committee (Graduate Program Coordinator, 3 faculty) Responsible for all aspects of graduate program: Admissions, recruitment, graduate student policy, graduate student research, writing, teaching and recruitment awards/funding. The Graduate Program Committee is supported by the Director of Advising Services, who coordinates administration of graduate student exams and maintains Geography Graduate Handbook among other responsibilities).

Undergraduate Program Committee (Undergraduate Program Coordinator, 2 faculty) Works with advising office on all aspects of the undergraduate program: Review and approval of new courses and course change applications, graduation/awards ceremony, undergraduate research symposium and undergraduate research journal, and in organizing events, discussions and workshops.

Diversity Committee (1-2 faculty, 2-4 graduate students) Organizes at least two diversity-related events for all members of the department and connects us to diversity and inclusion initiatives around campus (such as the UW Race & Equity Initiative) and maintains a website devoted to activities and resources.

Colloquium Committee (1 faculty, 3 graduate students) Arranges all aspects of our visiting speaker series and also invites speakers from the UW campuses, surrounding institutions and arranges for panel discussions about current teaching and research issues.

Safety Committee (1 faculty, 2 staff) Oversees publication of mandatory safety report and coordinates departmental action around safety issues.

Appendix A.3 Adjunct and Affiliate Faculty Appointments

Name Title Email Address

Anderson, Christian	Adjunct Assistant Professor	CAnderson2@uwb.edu
Aggarwal, Sunil	Affiliate Assistant Professor	sunila@uw.edu
Conway, Richard	Affiliate Associate Professor	dickconway@cs.com
Cram, Shannon	Adjunct Assistant Professor	scram@uw.edu
Dunbar, Matthew	Affiliate Assistant Professor	mddunbar@uw.edu
Gallardo, Gabriel	Affiliate Associate Professor	gabegms@uw.edu
Garcia, Maria Elena	Adjunct Associate Professor	meg71@uw.edu
Gardner, Ben	Adjunct Associate Professor	gardnerb@uw.edu
Goodchild, Michael	Affiliate Professor	good@geog.ucsb.edu
Hannah, Joseph	Adjunct Assistant Professor	jhannah@uw.edu
Jung, Jin-Kyu	Adjunct Associate Professor	Jkjung5@uw.edu
Knopp, Lawrence	Adjunct Professor	knoppl@uw.edu
Lopez, Santiago	Adjunct Assistant Professor	SLopez@uwb.edu
Lucero, José Antonio	Adjunct Assistant Professor	jal26@uw.edu
Moskal, L. Monika	Adjunct Associate Professor	lmmoskal@uw.edu
Ricker, Brita	Adjunct Assistant Professor	bricker0@uw.edu
Romero, Adam	Adjunct Assistant Professor	adrom@uw.edu
Thatcher, James	Adjunct Assistant Professor	jethatch@uw.edu
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Appendix B.1 Geography Budget Summary *

	Total Biennium 2011-2013	Total Biennium 2013-2015	Total Biennium 2015-2017
Permanent Budget	\$3,766,662	\$4,223,029	\$4,600,858
Carryover plus Temporary Budget	\$3,220,322	\$3,021,716	\$2,476,886
Revenue	\$110,792	\$274,778	\$160,885
Total Authority to Spend:	\$7,097,775	\$7,519,524	\$7,238,629
Direct Expenses			
01-10, INSTR/RES FACULTY SAL	-\$2,955,692	-\$3,298,572	-\$3,420,901
01-30/40/90, GRAD STD SAL	-\$662,203	-\$812,135	-\$907,062
01-60/70/80, STAFF SAL & HOURLIES	-\$618,015	-\$662,318	-\$607,837
01, SALARIES ALL	-\$4,235,909	-\$4,773,024	-\$4,935,801
02, CONTRACT PERS.SERVICES	-\$9,975	-\$8,200	-\$6,450
03, OTHER CONTRACTUAL SERV	-\$88,004	-\$141,544	-\$98,024
04, TRAVEL	-\$96,651	-\$119,980	-\$142,426
05, SUPPLIES AND MATERIALS	-\$121,872	-\$89,483	-\$36,380
06, EQUIPMENT	-\$67,036	-\$7,425	-\$2,644
07, RETIREMENT & BENEFITS	-\$1,084,412	-\$1,115,452	-\$1,193,205
08, GRANTS & SUBSIDIES	-\$83,448	-\$118,213	-\$58,684
21, COST TRANSFERS	\$17,200	\$15,367	\$22,500
22, COST SHAR.(G&C ACCTG.)	-\$350	\$0	-\$12
Direct Expense Subtotal:	-\$5,770,458	-\$6,357,955	-\$6,451,127
Indirect Expense	-\$155,828	-\$176,350	-\$74,071
Total Expenses:	-\$5,926,286	-\$6,534,306	-\$6,525,198
Remaining Balance:	\$1,171,489	\$985,218	\$713,431
Remaining Balances returned to source (GOF and STF):	-\$400,474	-\$70,196	-\$72,528
Remaining Balances available to carryover to next Biennium:	\$771,016	\$915,022	\$640,903
SALARIES & BENEFITS AS % OF TOTAL EXPENSES:	90%	90%	94%

Parameters: Period - July 2011 - June 2017, Biennium 2011-13 to 2015-17, Including Budgets from all Funding Sources. All OrgCodes under OrgDeptLevel Code(s): 2540752. *

^{*} Figures above DO NOT INCLUDE: Summer Quarter (19-0438), nor MGIS (09-8398)

Appendix B.2 General Operating Fund (GOF) Budget and Expenses by Biennium

Total Dispusions | Total Dispusions | Total Dispusions

	Total Biennium 2011-2013	Total Biennium 2013-2015	Total Biennium 2015-2017
Permanent Budget	\$3,766,662	\$4,223,029	\$4,600,858
Carryover plus Temporary Budget	\$1,482,997	\$1,376,659	\$1,443,181
Revenue	\$0	\$0	\$0
Total Authority to Spend:	\$5,249,659	\$5,599,688	\$6,044,039
Direct Expenses			
01-10, INSTR/RES FACULTY SAL	-\$2,698,461	-\$3,051,220	-\$3,311,289
01-30/40/90, GRAD STD SAL	-\$503,136	-\$656,178	-\$850,854
01-60/70/80, STAFF SAL & HOURLIES	-\$586,798	-\$622,158	-\$557,401
01, SALARIES ALL	-\$3,788,394	-\$4,329,557	-\$4,719,545
02, CONTRACT PERS.SERVICES	\$0	-\$700	-\$5,125
03, OTHER CONTRACTUAL SERV	-\$46,615	-\$68,223	-\$44,518
04, TRAVEL	-\$2,635	-\$17,360	-\$31,687
05, SUPPLIES AND MATERIALS	-\$24,777	-\$78,825	-\$23,579
06, EQUIPMENT	-\$3,610	-\$7,425	-\$2,644
07, RETIREMENT & BENEFITS	-\$983,155	-\$1,019,469	-\$1,144,413
08, GRANTS & SUBSIDIES	\$0	-\$6,200	\$0
21, COST TRANSFERS	\$0	-\$1,733	\$0
22, COST SHAR.(G&C ACCTG.)	\$0	\$0	\$0
Direct Expense Subtotal:	-\$4,849,187	-\$5,529,492	-\$5,971,511
Indirect Expense	\$0	\$0	\$0
Total Expenses:	-\$4,849,187	-\$5,529,492	-\$5,971,511
Remaining Balance:	\$400,472	\$70,196	\$72,528
Remaining Balances returned to source (GOF and STF):	-\$400,472	-\$70,196	-\$72,528
Remaining Balances available to carryover to next Biennium:	\$0	\$0	\$0
SALARIES & BENEFITS AS % OF TOTAL EXPENSES:	98%	97%	98%
	. '		
increase GOF salaries + benefits expenditures over prior biennium	n/a		10%
increase GOF budget over prior biennium	n/a	7%	8%
increase Grad Student (TA/RA/SA) salary rates over prior biennium ##	0%	21%	21%

Parameters: Period - July 2011 - June 2017, Biennium 2011-13 to 2015-17, Including General Operating Funds (GOF) Budget 06-0438

Grad Student salary monthly rates for pre-masters: FY10 - FY13 \$1575, FY14 \$1678, FY15 \$1846, FY16 \$2060, FY17 \$2228. Cummulative increase FY12 - FY17 equals 46%.

Appendix B.3.1 Biennium 2011-2013 Detailed Budgets by Source and Expenses by Category *

	General Operating Funds (GOF)	Local Fund Allocation	Research Cost Recovery	Student Technology Fee (STF)	Grants and Contracts	Gifts and Discretionary	Self Sust - Aux Ed	Total
Permanent Budget	\$3,766,662	\$0	\$0	\$0	\$0	\$0	\$0	\$3,766,662
Carryover plus Temporary Budget	\$1,482,997	\$211,008	\$124,373	\$131,406	\$1,028,929	\$191,483	\$50,126	\$3,220,322
Revenue	\$0	\$0	\$0	\$0	\$0	\$85,719	\$25,073	\$110,792
Total Authority to Spend:	\$5,249,659	\$211,008	\$124,373	\$131,406	\$1,028,929	\$277,201	\$75,199	\$7,097,775
Direct Expenses								
01-10, INSTR/RES FACULTY SAL	-\$2,698,461	-\$123,476	-\$7,778	\$0	-\$125,977	\$0	\$0	-\$2,955,692
01-30/40/90, GRAD STD SAL	-\$503,136	\$0	-\$1,046	\$0	-\$147,455	-\$10,566	\$0	-\$662,203
01-60/70/80, STAFF SAL & HOURLIES	-\$586,798	-\$2,027	-\$2,594	\$0	-\$22,015	-\$1,930	-\$2,651	-\$618,015
01, SALARIES	-\$3,788,394	-\$125,503	-\$11,418	\$0	-\$295,447	-\$12,496	-\$2,651	-\$4,235,909
02, CONTRACT PERS.SERVICES	\$0	\$0	-\$7,500	\$0	-\$275	-\$2,200	\$0	-\$9,975
03, OTHER CONTRACTUAL SERV	-\$46,615	-\$1,114	-\$6,909	\$0	-\$7,504	-\$25,241	-\$620	-\$88,004
04, TRAVEL	-\$2,635	-\$1,995	-\$14,750	\$0	-\$49,480	-\$25,369	-\$2,422	-\$96,651
05, SUPPLIES AND MATERIALS	-\$24,777	-\$10,761	-\$3,574	-\$76,843	-\$5,898	\$145	-\$165	-\$121,872
06, EQUIPMENT	-\$3,610	-\$3,835	\$0	-\$54,562	-\$5,029	\$0	\$0	-\$67,036
07, RETIREMENT & BENEFITS	-\$983,155	-\$33,738	-\$2,691	\$0	-\$62,031	-\$1,895	-\$901	-\$1,084,412
08, GRANTS & SUBSIDIES	\$0	\$0	\$0	\$0	-\$73,419	-\$10,029	\$0	-\$83,448
21, COST TRANSFERS	\$0	\$0	\$0	\$0	\$0	\$0	\$17,200	\$17,200
22, COST SHAR.(G&C ACCTG.)	\$0	\$0	-\$224	\$0	\$0	-\$126	\$0	-\$350
Direct Expense Subtotal:	-\$4,849,187	-\$176,946	-\$47,067	-\$131,405	-\$499,083	-\$77,212	\$10,441	-\$5,770,458
Indirect Expense	\$0	\$0	\$0	\$0	-\$155,828	\$0	\$0	-\$155,828
Total Expenses:	-\$4,849,187	-\$176,946	-\$47,067	-\$131,405	-\$654,911	-\$77,212	\$10,441	-\$5,926,286
Remaining Balance:	\$400,472	\$34,062	\$77,306	\$1	\$374,018	\$199,990	\$85,640	\$1,171,489
Remaining Balances returned to source (GOF and STF):	-\$400,472	\$0	\$0	\$0	\$0	\$0	\$0	-\$400,472
Remaining Balances available to carryover to next Biennium:	\$0	\$34,062	\$77,306	\$1	\$374,018	\$199,990	\$85,640	\$771,017
SALARIES & BENEFITS AS % OF TOTAL EXPENSES:	98%	90%	30%	0%	55%	19%	-34%	90%
TOTAL EXPENSES BY FUND SOURCE AS % OF TOTAL EXPENSES ALL BUDGETS:	82%	3%	1%	2%	11%	1%	0%	100%

Parameters: Period - July 2011 - June 2013, Biennium 2011-13, Including Budgets from all Funding Sources. All OrgCodes under OrgDeptLevel Code(s): 2540752.*

^{*} Figures above DO NOT INCLUDE: Summer Quarter (19-0438), nor MGIS (09-8398)

Appendix B.3.2 Biennium 2013-2015 Detailed Budgets by Source and Expenses by Category *

	General Operating Funds (GOF)	Local Fund Allocation	Research Cost Recovery		Grants and Contracts	Gifts and Discretionary	Self Sust - Aux Ed +	Total
Permanent Budget	\$4,223,029	\$0	\$0	\$0	\$0	\$0	\$0	\$4,223,029
Carryover plus Temporary Budget	\$1,376,659	\$232,963	\$107,087	\$0	\$1,019,378	\$199,990	\$85,640	\$3,021,716
Revenue	\$0	\$0	\$0	\$0	\$0	\$79,922	\$194,856	\$274,778
Total Authority to Spend:	\$5,599,688	\$232,963	\$107,087	\$0	\$1,019,378	\$279,912	\$280,497	\$7,519,524
Direct Expenses								
01-10, INSTR/RES FACULTY SAL	-\$3,051,220	-\$124,383	\$0	\$0	-\$121,187	\$0	-\$1,782	-\$3,298,572
01-30/40/90, GRAD STD SAL	-\$656,178	-\$19,091	\$0	\$0	-\$124,662	-\$12,204	\$(-\$812,135
01-60/70/80, STAFF SAL & HOURLIES	-\$622,158	-\$1,298	-\$330	\$0	-\$19,443	-\$2,633	-\$16,455	-\$662,318
01, SALARIES	-\$4,329,557	-\$144,772	-\$330	\$0	-\$265,292	-\$14,837	-\$18,237	-\$4,773,024
02, CONTRACT PERS.SERVICES	-\$700	\$0	\$0	\$0	-\$4,100	-\$2,275	-\$1,125	-\$8,200
03, OTHER CONTRACTUAL SERV	-\$68,223	-\$2,502	-\$4,489	\$0	-\$23,780	-\$30,369	-\$12,182	-\$141,544
04, TRAVEL	-\$17,360	-\$10,314	-\$9,114	\$0	-\$43,908	-\$32,859	-\$6,426	-\$119,980
05, SUPPLIES AND MATERIALS	-\$78,825	-\$4,191	-\$1,721	\$0	-\$1,816	-\$1,655	-\$1,276	-\$89,483
06, EQUIPMENT	-\$7,425	\$0	\$0	\$0	\$0	\$0	\$(-\$7,425
07, RETIREMENT & BENEFITS	-\$1,019,469	-\$33,027	-\$50	\$0	-\$55,777	-\$2,876	-\$4,252	-\$1,115,452
08, GRANTS & SUBSIDIES	-\$6,200	-\$13,785	\$0	\$0	-\$66,705	-\$18,999	-\$12,524	-\$118,213
21, COST TRANSFERS	-\$1,733	\$0	\$0	\$0	\$0	\$0	\$17,100	\$15,367
22, COST SHAR.(G&C ACCTG.)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Direct Expense Subtotal:	-\$5,529,492	-\$208,591	-\$15,704	\$0	-\$461,378	-\$103,869	-\$38,922	-\$6,357,955
Indirect Expense	\$0	\$0	\$0	\$0	-\$176,350	\$0	\$0	-\$176,350
Total Expenses:	-\$5,529,492	-\$208,591	-\$15,704	\$0	-\$637,728	-\$103,869	-\$38,922	-\$6,534,306
Remaining Balance:	\$70,196	\$24,372	\$91,383	\$0	\$381,650	\$176,042	\$241,575	\$985,218
Remaining Balances returned to source (GOF and STF):	-\$70,196	\$0	\$0	\$0	\$0	\$0	\$0	-\$70,196
Remaining Balances available to carryover to next Biennium:	\$0	\$24,372	\$91,383	\$0	\$381,650	\$176,042	\$241,575	\$915,022
SALARIES & BENEFITS AS % OF TOTAL EXPENSES:	97%	85%	2%	0%	50%	17%	58%	90%
TOTAL EXPENSES BY FUND SOURCE AS % OF TOTAL EXPENSES ALL BUDGETS:	85%	3%	0%	0%	10%	2%	1%	100%

Parameters: Period - July 2013 - June 2015, Biennium 2013-15, Including Budgets from all Funding Sources. All OrgCodes under OrgDeptLevel Code(s): 2540752.*

^{*} Figures above DO NOT INCLUDE: Summer Quarter (19-0438), nor MGIS (09-8398)

⁺ Self Sus - Aux Ed revenue for 2013-2015 biennium includes \$125,400 net revenue from first 3 years of MGIS program (distributed in October 2013), plus \$30,000 net revenue from year 4 of the MGIS program.

Appendix B.3.3 Biennium 2015-2017 Detailed Budgets by Source and Expenses by Category *

	General Operating Funds (GOF)	Local Fund Allocation	Research Cost Recovery	Student Technology Fee (STF)	Grants and Contracts	Gifts and Discretionary #	Self Sust - Aux Ed +	Total
Permanent Budget	\$4,600,858	\$0	\$0	\$0	\$0	\$0	\$0	\$4,600,858
Carryover plus Temporary Budget	\$1,443,181	\$24,372	\$132,516	\$0	\$459,200	\$176,042	\$241,575	\$2,476,886
Revenue	\$0	\$0	\$0	\$0	\$0	\$128,986	\$31,899	\$160,885
Total Authority to Spend:	\$6,044,039	\$24,372	\$132,516	\$0	\$459,200	\$305,028	\$273,474	\$7,238,629
Direct Expenses								
01-10, INSTR/RES FACULTY SAL	-\$3,311,289	\$0	-\$6,394	\$0	-\$69,861	\$0	-\$33,357	-\$3,420,901
01-30/40/90, GRAD STD SAL	-\$850,854	\$0	-\$9,106	\$0	-\$37,567	-\$9,534	\$0	-\$907,062
01-60/70/80, STAFF SAL & HOURLIES	-\$557,401	\$0	-\$575	\$0	-\$7,383	-\$26,140	-\$16,338	-\$607,837
01, SALARIES ALL	-\$4,719,545	\$0	-\$16,075	\$0	-\$114,811	-\$35,674	-\$49,695	-\$4,935,801
02, CONTRACT PERS.SERVICES	-\$5,125	\$0	\$0	\$0	-\$1,225	\$0	-\$100	-\$6,450
03, OTHER CONTRACTUAL SERV	-\$44,518	-\$1,859	-\$5,733	\$0	-\$10,759	-\$22,802	-\$12,354	-\$98,024
04, TRAVEL	-\$31,687	-\$2,925	-\$13,690	\$0	-\$65,404	-\$20,415	-\$8,306	-\$142,426
05, SUPPLIES AND MATERIALS	-\$23,579	-\$2,215	-\$4,152	\$0	-\$2,439	-\$3,952	-\$44	-\$36,380
06, EQUIPMENT	-\$2,644	\$0	\$0	\$0	\$0	\$0	\$0	-\$2,644
07, RETIREMENT & BENEFITS	-\$1,144,413	\$0	-\$3,230	\$0	-\$25,216	-\$7,146	-\$13,198	-\$1,193,205
08, GRANTS & SUBSIDIES	\$0	\$0	-\$4,917	\$0	-\$9,834	-\$23,933	-\$20,000	-\$58,684
21, COST TRANSFERS	\$0	\$0	\$0	\$0	\$0	\$0	\$22,500	\$22,500
22, COST SHAR.(G&C ACCTG.)	\$0	\$0	-\$12	\$0	\$0	\$0	\$0	-\$12
Direct Expense Subtotal:	-\$5,971,511	-\$6,998	-\$47,811	\$0	-\$229,688	-\$113,922	-\$81,197	-\$6,451,127
Indirect Expense	\$0	\$0	\$0	\$0	-\$74,071	\$0	\$0	-\$74,071
Total Expenses:	-\$5,971,511	-\$6,998	-\$47,811	\$0	-\$303,759	-\$113,922	-\$81,197	-\$6,525,198
Remaining Balance:	\$72,528	\$17,374	\$84,705	\$0	\$155,441	\$191,106	\$192,277	\$713,431
Remaining Balances returned to source (GOF and STF):	-\$72,528	\$0	\$0	\$0	\$0	\$0	\$0	-\$72,528
Remaining Balances available to carryover to next Biennium:	\$0	\$17,374	\$84,705	\$0	\$155,441	\$191,106	\$192,277	\$640,903
SALARIES & BENEFITS AS % OF TOTAL EXPENSES:	98%	0%	40%	0%	46%	38%	77%	94%
TOTAL EXPENSES BY FUND SOURCE AS % OF TOTAL EXPENSES ALL BUDGETS:	92%	0%	1%	0%	5%	2%	1%	100%

Parameters: Period - July 2015 - June 2017, Biennium 2015-17, Including Budgets from all Funding Sources. All OrgCodes under OrgDeptLevel Code(s): 2540752.*

^{*} Figures above DO NOT INCLUDE: Summer Quarter (19-0438), nor MGIS (09-8398)

[#] In biennium 2015-2017, the College deposited \$32,000 in gift funds to support the Interdisciplinary Writing Studio which supports 5 departments.

⁺ Self Sus - Aux Ed revenue for 2015-2017 biennium includes \$32,000 net revenue from year 5 and zero net revenue from year 6 of the MGIS program. Average net revenue was ~ \$31,000 per year in the first 6 years of the program. We also know that there will be zero net MGIS revenue to the Department in 2017-18 (from year 7, ending June 2017) and we may receive little to no MGIS revenue in 2018-19.

Appendix C.1: Geography Faculty

Bergmann, Luke. Assistant Professor; Affiliated with the Henry M. Jackson School of International Studies China Studies Program; Center for Studies in Demography and Ecology and the eScience Institute.

Biermann, Christine. Assistant Professor; Affiliated with the Center for Environmental Politics.

Brown, Michael. Professor; Adjunct Professor Gender Women and Sexuality Studies.

Chan, Kam Wing. Professor; Affiliated with the Henry M. Jackson School of International Studies China Studies Program; Center for Studies in Demography and Ecology and the Interdisciplinary Ph.D. Program in Design and Planning.

Ellis, Mark. Professor; Affiliated with the Center for Studies in Demography and Ecology (Director 2008-09; 2010-2015); Center for Statistics in the Social Sciences; current Director Northwest Census Research Data Center; Data Science Fellow eScience Institute.

Elwood, Sarah. Professor. Affiliated with the West Coast Poverty Center; Center for Studies in Demography and Ecology; Science, Technology, and Society Interdisciplinary Committee.

England, Kim. Professor; Adjunct Professor of Gender, Women and Sexuality Studies; Affiliated with The Henry M. Jackson School of International Studies Canadian Studies Center; the Center for Communications and Civic Engagement; The Harry Bridges Center for Labor Studies; The West Coast Poverty Center.

Herbert, Steve. Professor; Director, Law Societies and Justice Program.

Jarosz, Lucy. Professor and Chair; Adjunct Professor Gender, Women and Sexuality Studies; Affiliated with the Center for Environmental Politics; The Harry Bridges Center for Labor Studies; The Henry M. Jackson School of International Studies African Studies Program; UW Human Rights Center.

Lawson, Victoria. Professor; Director UW Honors Program. Faculty Advisory Board Member and Affiliate Professor, Comparative History of Ideas, Adjunct Professor Gender, Women and Sexuality Studies; Affiliated with the Comparative History of Ideas Program; The West Coast Poverty Center; Henry M. Jackson School of International Studies Latin American and Caribbean Studies Program, Executive Council Member, Population Health Initiative.

Mayer, Jonathan. Professor; Professor of Epidemiology; Adjunct Professor of Medicine, Division of Allergy and Infectious Diseases; Adjunct Professor of Global Health; Adjunct Professor of Family Medicine; Adjunct Professor of Health Services; Clinical consultant, Travel and Tropical Medicine Service, and Infectious Disease Clinic, UW Medical Center; Affiliations with WWAMI Rural Health Research Center; Center for Studies in Demography and Ecology: Center for AIDS and STD Research (CFAR); Program Director; Harborview Injury Prevention and Research Center, Harborview Medical Center; Institute for Translational Health Sciences;

President, Founder, and CEO, Health Improvement and Promotion Alliance (HIP)—NGO operating in Accra, Ghana.

Nyerges, Tim. Professor. Director, Master of GIS for Sustainability Management Program; Affiliated with the Interdisciplinary PhD in Urban Design and Planning; Center for Environmental Politics; Principal and owner, GeoInfo Consulting.

Withers, Suzanne. Associate Professor. Affiliated with Center for Demography and Ecology; West Coast Poverty Center; Interdisciplinary Ph.D. Program in Urban Design and Planning; Center for Statistics and Social Sciences; Associate Director and Core Faculty, Master of GIS for Sustainability Management Program.

Ybarra, Megan. Assistant Professor. Adjunct Assistant Professor Gender, Women and Sexuality Studies; Affiliated with Women Investigating Race, Ethnicity and Difference (WIRED); Comparative History of Ideas Program (CHID); Center for Human Rights; Center for Environmental Politics; Jackson School of Latin American and Caribbean Studies Program.

Appendix C.2 Geography Faculty CVs

Luke Bergmann:

https://faculty.washington.edu/lrb9/category/cv.html

Christine Biermann:

https://geography.washington.edu/sites/geography/files/documents/biermann-june2017.pdf

Michael Brown:

https://geography.washington.edu/sites/geography/files/documents/brown cv 05 2017.pdf

Kam Wing Chan:

https://geography.washington.edu/sites/geography/files/documents/chan-cv-2017.pdf

Mark Ellis: http://faculty.washington.edu/ellism/akjsfjdfuowojj.pdf

Sarah Elwood:

http://faculty.washington.edu/selwood/wordpress/wp-content/uploads/2017/08/elwoodcv.pdf

Kim England:

https://geography.washington.edu/sites/geography/files/documents/kim_england_cv_july_2017.pdf

Steve Herbert: https://lsj.washington.edu/people/steve-herbert

Lucy Jarosz: https://geography.washington.edu/sites/geography/files/cv/jarosz vita.pdf

Victoria Lawson: http://faculty.washington.edu/lawson/curriculum-vitae/

Jonathan Mayer: https://faculty.washington.edu/jmayer/Mayer%20CV%20March%202016.pdf

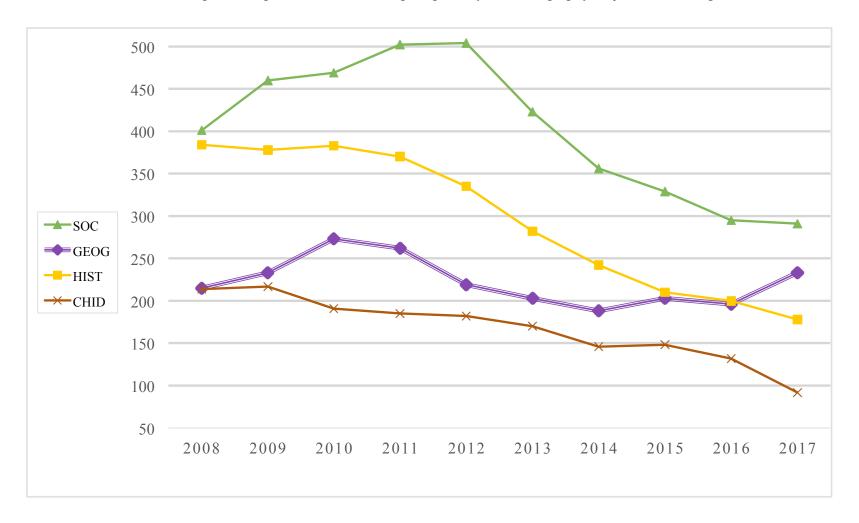
Timothy Nyerges: http://faculty.washington.edu/nyerges/nyerges_cv

Suzanne Davies Withers: https://tinyurl.com/y9ohtw79

Megan Ybarra: http://www.meganybarra.net/cv.html

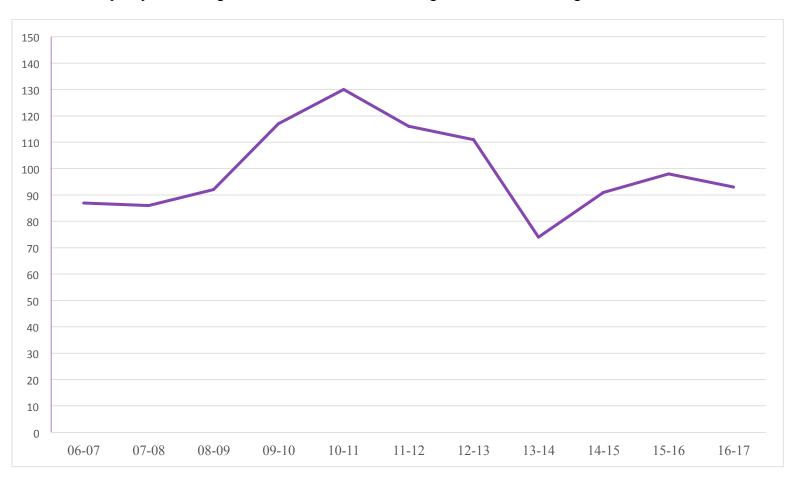
Appendix D.1 Undergraduate Geography Majors, 2008-2017 (with peer A&S units)

We have had two periods of growth in majors: 2008-2010 and 2014-present. Our major numbers declined from 2010-2014, when other A&S units were also experiencing declines, but not as precipitously, and Geography majors are once again on the rise.



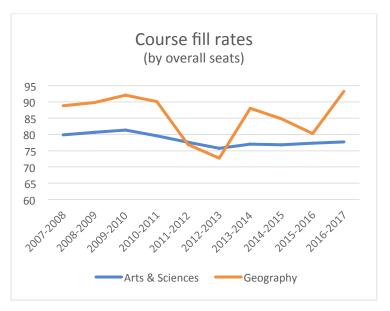
Appendix D.2 Geography Undergraduate Degrees Granted

Trends in our undergraduate degrees granted largely mirror trends in undergraduate majors: Rising in 2008-2010, a decline in 2010-2013, and rising again after that. The small decline in 2016-2017 may suggest that reductions in courses we can mount with current instructional capacity are making it more difficult for students to get classes needed for graduation.

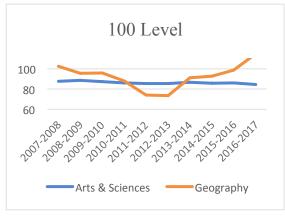


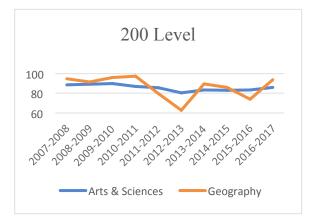
Appendix D.3 Average Course Fill Rates, 2007-2017 (Enrolled seats as % of available seats)*

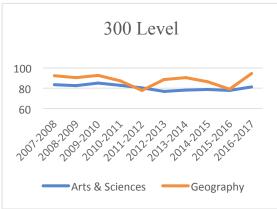
All Geography undergraduate courses, compared to Arts & Sciences undergraduate courses

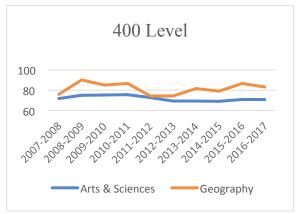


Geography 100-, 200-, 300-, 400-level undergraduate courses, compared to Arts & Sciences



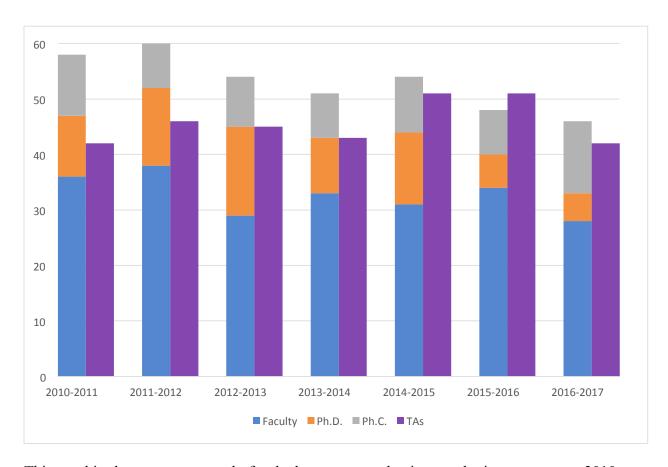






^{*} Calculated from quarterly Enterprise Data Warehouse data (Report ID: ACAD1048) since 2007, excluding Summer, by Luke Bergmann

Appendix D.4 Undergraduate Courses Taught by Instructor Type and TA Positions

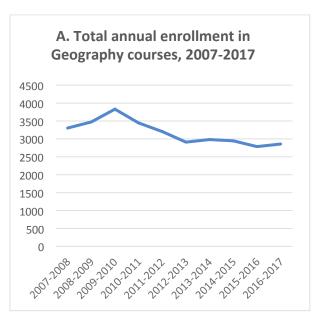


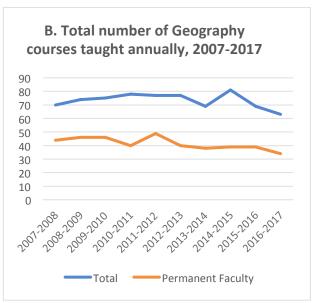
This graphic shows courses taught for the last seven academic years by instructor type, 2010-2017. The left stacked column for each year displays distribution of courses taught by faculty, Ph.D. instructors, and Ph.D. candidate instructors (Ph.C.). The total height of the left stacked column shows the total number of courses taught in that year. For instance, in 2010-2011, a total of 58 courses were taught: 36 by faculty, 11 by Ph.D. instructors, and 11 by Ph.D. candidate instructors. These courses were supported by 42 TA positions throughout the academic year. The right column (in purple) for each year shows the number of TA positions available that year.

These data reveal an overall decline in our instructional capacity over the last 7 years. As well, this figure points to two key factors driving this decline. We see a drop in number of TAs, caused by rising TA salary/benefits with no increase in the overall funds available to support TAs (increasing costs and flat revenue). We also see a decline in the number of courses taught by permanent faculty across the period. Significant numbers of our senior faculty have taken leadership and service roles across the university that reduce the number of courses they can offer in Geography's BA, MA and PhD programs (see also Appendix D.5.C detailing these faculty leadership activities and timeline).

Appendix D.5 Interpreting Geography Enrollments Over the Past Decade*

These graphics explore trends in our undergraduate enrollments, courses, and instructional capacity. We use enrollments as a proxy for student credit hours (SCH), which are central to College level budget allocations across the UW. Total enrollment in Geography courses began to decline in 2009 and stabilized in 2012, with a slight uptick in AY 2016-17. Annual course fill rates (Appendix D.3) help explain these trends, but not entirely. Our instructional capacity (total number of courses we can mount each year and total number taught by tenure line faculty) is also implicated. (B) below shows a decline in number of courses taught by faculty since 2011, and more recent decline in number of courses (a function of rising TA/instructor costs against flat revenues). (C) below explains why our faculty are teaching fewer undergraduate courses. Beginning in 2011, a high proportion of us are in leadership roles across the College and University. Given reductions in number of courses we can mount and faculty actually available to teach them, we are proud of the growth in majors (Appendix D.1) and success in stabilizing our enrollment numbers.





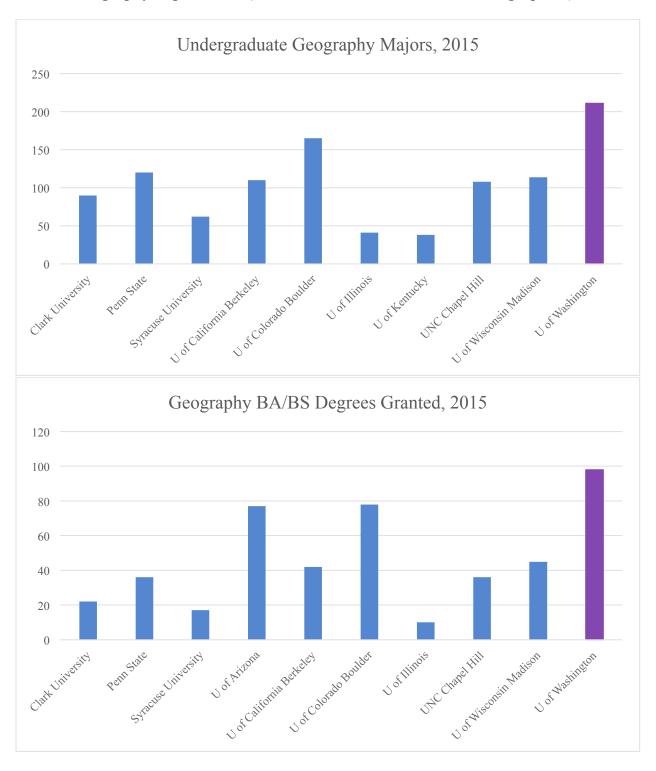
C. Key leadership roles by Geography faculty, 2009-present**

2010-11 7% of faculty	2011-12 20% of faculty	2012-13 20% of faculty	2013-14 33% of faculty	2014-15 38% of faculty	2015-16 44% of faculty	2016-17 38% of faculty	2017-18 36% of faculty
	CSDE Direc	ctor (Ellis)			>	•	
	Law, Societies and Justice Program Director (Herbert)>						
				UW Honors	Director (L	awson)	>
N							
			ISS Director	(Sparke, left	UW Aug 20	17)	
			MGIS Assoc Director (Withers)>				
					A&S Colle	ge Council (Elwood)>

^{*}Enrollment data calculated from quarterly Enterprise Data Warehouse data (Report ID: ACAD1048) since 2007, excluding Summer, by Luke Bergmann.

^{**}Percentage of faculty in key leadership roles calculated on total number of faculty, not FTE.

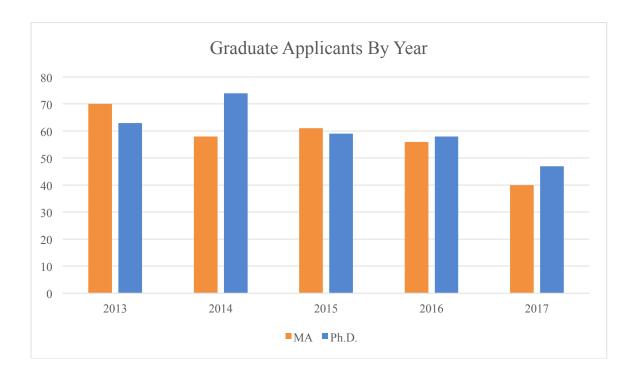
Appendix D.6 Geography Majors and Degrees Granted 2015, in Comparison with Peer Geography Departments (Source: American Association of Geographers)*



^{*} Several peer departments (UCLA, Ohio State) could not be included because the AAG data combined Geography majors with other majors (e.g. Aeronautics).

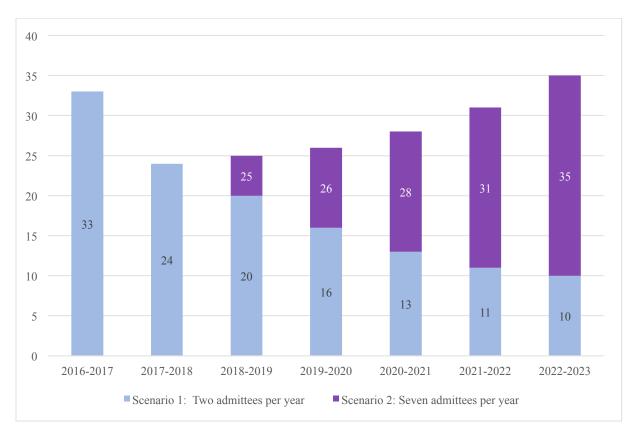
Appendix D.7 Applicants to Geography MA and PhD Programs, 2013 to Present*

These data show overall decline in number of applicants to our grad programs over the last 5 years. We think downward pressure on applicant numbers is coming from the limited funding packages that we offer to incoming grads (2-3 years), compared to those offered by nearly all peers in North America (4-6 years). We must re-examine how we structure offers to incoming students and seek new revenues.



^{*}Note: The UW Graduate School was only able to provide data for the previous five years, rather than the full decadal period.

Appendix D.8 Size of Geography MA/PhD Program, 2016-2023 (projected via two future enrollment scenarios)



The first 2 bars above show the number of active MA & PhD students for academic years 2016-2017 and 2017-2018. The stacked bars in years 2018-2019 through 2022-2023 illustrate the effects that two different graduate admissions scenarios will have on the size of our graduate program over the next 5 years. In the future projections, for students already in our program, we use their stated graduation date. For students admitted in the future, we assume a time to degree of 6 years (MA students finish in an average of 2 years and many continue on to our PhD program, while PhD students average 5 years to degree).

Scenario 1 (in blue) presents the projected size of our graduate program if we continue on our current trend of admitting only 2 students per year. In this scenario, the next 5 years would see an over 66% reduction in the size of our graduate program to a total of 10 students – a trend that has catastrophic implications. We will no longer be a viable or internationally significant PhD granting program in Geography under Scenario 1 (and dwindling size of TA pool will erode our high quality undergraduate program).

Scenario 2 (in purple) shows the projected size of our graduate program if we admit 7 students per year. This scenario will bring our graduate program back to a sustainable size and allow us to adequately staff our undergraduate courses.

Appendix D.9 MA Graduates and Placements

Michalis Avraam	2007	Nyerges	Enters PhD program
Jesse Ayers	2007	Beyers	Modeling Analyst III
Rebecca Burnett	2007	Lawson	Enters PhD program
			Director, Community Alliance for Global
Heather Day	2007	Lawson	Justice
(Charles) Todd Faubion	2007	Mayer	Enters PhD program
Juan Galvis	2007	Jarosz	Enters PhD Program
David Jensen	2007	Beyers	Barista, Starbucks
David Moore	2007	Withers	Unknown
Tricia Ruiz	2007	Withers	Enters PhD Program
			High School Social Studies Teacher,
Anneliese Steuben	2007	Mitchell	Pittsburgh
			Lawyer, Public Counsel Services,
Charu Verma	2007	Herbert	Malden, MA
Michelle Bilodeau	2008	Mayer	Environmental Health Specialist, CA
Elizabeth Underwood-		•	Assoc. Planner, Puget Sound Regional
Bultmann	2008	Herbert	Council
Zhong Wang	2008	Nyerges	Unknown
Mike Babb	2009	Ellis	Enters PhD program
Patricia Lopez	2009	Mitchell	Enters PhD program
Anna Mccall-Taylor	2009	Withers	Stay at Home Mother
Jack Norton	2009	Jarosz	PhD Candidate CUNY
Milissa Orzolek	2009	Elwood	Graphic Artist
Gary Simonson	2009	Brown	Enters PhD program
-			Scrum Mstr. & Release Mgr. Voyager
Tim Stiles	2009	Elwood	Search
Josef Eckert	2010	Herbert	Academic Advisor, UW iSchool
Kathryn Gillespie	2010	Jarosz/Lawson	Enters PhD Program
Cindy Gorn	2010	Brown	Affil. Faculty, Hunter College
Tiffany Grobelski	2010	ZumBrunnen	Enters PhD program
Amy Piedalue	2010	England/Lawson	Enters PhD program
Monica Farias	2011	Lawson	Enters PhD program
Christopher Lizotte	2011	Mitchell	Enters PhD program
Margaret Ramirez	2011	Lawson	Enters PhD Program
Allison Schultz	2011	Jarosz	Student, Harvard Law School
Theron Stevenson	2011	Sparke	Small business owner
Stefano Bettani	2012	Brown/England	Enters PhD program
Elyse Gordon	2012	Elwood	Enters PhD program
Skye Naslund	2012	Mayer	Enters PhD program
Natalie White	2012	Lawson	Unknown
Jason Young	2012	Elwood	Enters PhD program
Lynda Turet	2013	Mitchell	Small business owner
Annie Crane	2014	Brown	Asst. Farm Mgr. & Community Coll.

			Instructor
Lila Garcia	2014	England	Software Engineer
William McKeithen	2014	Brown	Enters PhD program
Yolanda Valencia	2014	Lawson	Enters PhD program
Kidan Araya	2015	Jarosz	Food and Environ. Policy Assistant
Meredith Krueger	2015	Lawson	Unknown
Key Macfarlane	2015	Mitchell	Enters PhD program
Margaret Wilson	2015	Sparke	Enters PhD program
Lee Fiorio	2016	Ellis	Enters PhD program
Phillip Neel	2016	Bergmann	Enters PhD Program
Rob Anderson	2017	Biermann	Enters PhD Program
			United Nations High Commissioner for
Olivia Hollenhorst	2017	Mayer	Refugees Program
Rod Palmquist	2017	Sparke	Labor Union Organizer
Rebecca Stubbs	2017	Ellis	Institute for Health Metrics & Evaluation
Edgar Sandoval	2017	Ybarra	Enters PhD Program

Thesis titles for all MA graduates available at: https://geography.washington.edu/theses-dissertations-archive#masters_theses

Appendix D.10 Ph.D. Graduates and Job Titles

Chris Fowler	2007	Ellis	Asst. Professor, Penn. State University
Joseph Hannah	2007	Jarosz	Acad. Counselor, Integ. Soc. Scis. UW
Joshua Newell	2007	ZumBrunnen	Asst. Prof. Univ. MI
Greg Simon	2007	ZumBrunnen/Jeffrey	Assoc. Prof. Univ. CO Denv.
Jie Wu	2007	Nyerges	Unknown
Nicholas Velluzzi	2007	Harrington	Administrator, Community College
Britt Yamamoto	2007	Jarosz	Faculty, Antioch University, Seattle
Sunil Aggarwal	2008	Mayer	Palliative Med. Physician & Hospice Dir.
Mona Atia	2008	Mitchell	Asst. Prof. George WA University
Anne Bonds	2008	Lawson	Assoc. Prof. Univ. WI-Milwaukee
Astrid Cerny	2008	Chan	small business owner, Germany
John Carr	2008	Herbert	Asst. Prof. Univ. New Mexico
Courtney Donovan	2008	Brown	Assoc. Prof. San Francisco State U.
Kris Erickson	2008	Herbert	Fellow in Soc. Sci., Univ. Glasgow
Jonathan Glick	2008	Withers	Lead Statistician, Location, Wash. DC
Tony Sparks	2008	Sparke	Asst. Prof. San Fran. State Univ.
Sarah Starkweather	2008	England	Tableau Software, Seattle
Andrew Wenzl	2008	Beyers	Real Estate Agent, Puget Sound
Guirong Zhou	2008	Nyerges	GIS Engineer, Google
Rowan n	2009	Mitchell	Lecturer, Univ. of Edinburgh
Caroline Faria	2009	Jarosz	Asst. Prof. Univ. TX-Austin
Amber Pearson	2009	Mayer	Asst. Prof. Michigan State Univ.
Kevin Ramsey	2009	Nyerges	Senior Assoc. BERK Consulting, Seattle
Matthew Wilson	2009	Nyerges	Assoc. Prof. Univ. of Kentucky
Jean Carmalt	2010	Herbert	Asst. Prof. John Jay College
Dominic Corva	2010	Lawson/Sparke	NGO director
Maureen Hickey	2010	Lawson	Instructor, Portland State Univ.
Sarah Paige	2010	Mayer	Health Geographer, USAID
Stephen Young	2010	Sparke	Asst. Prof. Univ. WI-Madison
Michalis Avraam	2011	Nyerges	Maps Test Engineer, Apple
Ann E Bartos	2011	Brown	Lecturer, Univ. of Auckland
Todd Faubion	2011	Jarosz	Immuniz. Mgr., Within Reach
Juan Pablo Galvis	2011	Lawson	Asst. Prof. SUNY-Old Westbury
Jaime Kelly	2011	Chan	Unknown
Kacy Mckinney	2011	Jarosz	Asst. Prof. Marylhurst Univ.
Arnisson Andre	2011	Withers	Former Asst. Prof. Univ. of

Ortega			Philippines
Tricia Ruiz	2011	Ellis	Presidential Management Fellow, US Dept Housing
Ron Smith	2011	Sparke	Asst. Prof., Bucknell Univ.
Man Wang	2011	Chan	Small business owner
Dena Aufseeser	2012	Lawson	Asst. Prof. Univ MD-Baltimore County
Elise Bowditch	2012	Withers	Research Assoc. Research for Action, PA
Hong Chen	2012	Chan	Asst. Prof., South China Normal Univ.
Agnieszka Leszczynski	2012	Elwood	Lecturer, University of Auckland
Leonie Newhouse	2012	Mitchell	Researcher, Max Planck Instit. Germany
Rebecca Burnett	2013	Lawson	Lecturer, Metropolitan Comm. Coll., MI
Muthatha Ramanathan	2013	Jarosz	Research Assoc., India
William Buckingham	2014	Chan	Lecturer, Univ. WA
Kathryn Gillespie	2014	Brown	Postdoctoral Fellow, Wesleyan Univ.
Patricia Lopez	2014	Mitchell/Sparke	Asst. Prof. Dartmouth
Guilan Weng	2014	Chan	Unknown
Ryan Burns	2015	Elwood	Asst. Prof. Univ. of Calgary
Srinivas Chokkakula	2015	Sparke	Senior Researcher, New Dehli
Spencer Cohen	2015	Chan	Senior Economist
Brandon Derman	2015	Herbert	Asst. Prof. Univ. IL-Springfield
Michelle Daigle	2015	Sparke	Asst. Prof. Univ. British Columbia
Amy Piedalue	2015	Lawson	Postdoc Scholar, Univ. of Melbourne
Wilawan Thanatemaneerat	2015	Nyerges	Unknown
Eloho Basikoro	2016	Sparke	
Stefano Bettani	2016	Brown	Software Manager, Zurich
Monica Farias	2016	Lawson	Lecturer, Univ. WA
Tiffany Grobelski	2016	Herbert	Asylum Officer, The United States Department of Homeland Security, U.S. Citizenship and Immigration Services, New Orleans
Yanning Wei	2016	Chan	Visiting Asst. Prof. Grand Valley State
Andrew Childs	2017	Brown	Unknown
Elyse Gordon	2017	Elwood	Program Manager, Philanthropy NW
Chris Lizotte	2017	Mitchell	Post-Doc, University of Helsinki

Magie Ramirez	2017	Lawson	Lecturer, Univ. WA
Jason Young	2017	Elwood	Senior Rsch Scientist, Univ of Washington School of Information

Dissertation titles for all Ph.D. graduates available at: https://geography.washington.edu/theses-dissertations-archive#dissertations

Appendix E Self Study Methodology

We conducted our self study over a 12 month period (Sept 2016-Sept 2017), involving all members of the department in activities designed to elicit feedback on all aspects of our academic programs and departmental life. All activities, writing, and revision were led Self Study Committee members Christine Biermann, Sarah Elwood and Lucy Jarosz. At last year's autumn Geography Faculty Retreat, the Self Study Committee briefly outlined the process and timeline for the self study, and convened small group discussions to begin crafting unit-defined questions and identifying potential reviewers and chairs for the program review. We circulated relevant materials (Grad School procedures for self studies, our 2007 Self Study and reviewer recommendations, and sample unit-defined questions from previous social science reviews) as background for this workshop.

During Fall 2016, Biermann, Elwood and Jarosz conducted one-on-one semi-structured interviews with all faculty members, focusing on the department's unique contributions and seeking their assessment of the department's strengths and challenges and their input on how to strengthen our academic programs in a time of increasing faculty and staff workloads, public university financial challenges and a difficult academic job market. Input gathered from these conversations was critical in finalizing our self study questions and formulating the first draft of our Self Study narrative (in Winter 2017). We also convened a faculty workshop and a staff workshop, led by an external facilitator and aimed at articulating our mission and values. This work is important to our work together day to day, but also generated ideas and priorities that are incorporated into our self study.

Over the course of the 2016-17 academic year, we gathered feedback and responses from Geography MA and PhD students through three town hall style meetings²⁵: One focused on fielding their questions about the Program Review and Self Study processes, a second eliciting their feedback on our MA and PhD programs, and a third seeking their feedback on our undergraduate program. To ensure students could contribute even if they could not attend or did not feel comfortable speaking at these meetings, we provided an anonymous online form.

During Spring 2017, we circulated a draft of the Self Study to the full faculty and graduate students for review and comment. We held a work session with faculty to gather further feedback and discuss priorities for revision. At a second faculty work session, we discussed our priorities for the future, which the Committee used in drafting the Future Directions section. The Committee spent Spring and Summer 2017 revising the Self Study narrative and finalizing the appendices. James Baginski, Luke Bergmann, and Mateo Espinoza led data analysis and visualization for the appendices. We shared a revised, completed draft with faculty, staff, and graduate students in late summer, for a final round of revisions.

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²⁵ MGIS program students were deeply involved in the MGIS program's review in 2015-2016.

Appendix F.1: MGIS Program Self Study

To read the full MGIS self-study report, please visit:

 $\underline{https://geography.washington.edu/sites/geography/files/documents/appendix_f.1_mgis_self-study \ report \ 20160915.pdf$

Appendix F.2: MGIS Program Review

Please visit the following url to read the full report of the MGIS review committee:

 $\frac{https://geography.washington.edu/sites/geography/files/documents/appendix_f.2_mgis_program_review_report_2016.pdf$

Appendix F.3: MGIS Program Response

Please visit the following link to read the MGIS program's response to the report of the Program Review Committee:

https://geography.washington.edu/sites/geography/files/documents/appendix_f.3-mgis response to review committee report 20170116 final.pdf