DEPARTMENT OF GEOGRAPHY  
PROGRAM REVIEW COMMITTEE REPORT

The first self study was completed in 1997 for the 1998-1999 academic year. The Department of Geography prepared its second self study following program review guidelines in 2004. This second program review was completed at the end of a six–as opposed to a seven–year period at the request of the Dean of the College of Arts & Sciences. On November 14-16, 2004, a two-person external review team visited the campus and read the 2004 program review documents. They interviewed unit personnel, university administrators, and undergraduate students. At the conclusion of this process, the team submitted an external review report. The Program Review Committee (PRC) studied all written materials. The PRC liaison for the Department discussed the self-study materials with the department chair and faculty. The PRC then discussed the Department with the Dean of the College of Arts & Sciences. This document reflects the PRC’s findings and recommendations.

SUMMARY OF THE SELF STUDY

Introduction

Mission. The following mission statement was drawn from the Department’s 2004 self study.

“The Department of Geography seeks to provide a sound geography program for our students and contribute to the general education and interdisciplinary programs, as well as other program majors at the University. We also promote the advancement and dissemination of knowledge through research; encourage the performance of service to the Department, College, University, and profession; and provide professional expertise through consultation and outreach to both the private and public sectors of the community (p. 1).”

History. The Geography and Geology Department became independent departments in 1952. The Department of Geography transferred from the College of Business Administration to the College of Arts & Sciences in 1967. The Department completed its first program review in 1998-1999. As noted above, the second program review was scheduled in the sixth year following the previous review. At the request of the Dean, discussions for the creation of a school began in 2004 with representatives from the Center for Environmental Programs, the Department of Geography, and the Department of Geology.
Description of the Unit

Program identification. The Department of Geography resides in the College of Arts & Sciences.

Programmatic and curricular offerings. The Department currently offers a major leading to a Bachelor of Arts degree and a minor. The major is organized around the focus of spatial analysis of regional change and development. The Department also offers an Individualized Planned Program minor in broadcast meteorology for Journalism majors and Telecommunications majors. A specialized minor in GIS is offered to Computer Science majors and an interdepartmental GIS minor (with Geology) is offered to Journalism majors. Three online geography courses were available at the time the self study was written. (Four will be offered in summer 2005.)

Faculty resources. At the beginning of the 2004-2005 academic year, the Department consisted of six tenured, three probationary, and two non-tenure track faculty. The two instructors replace two tenured 2004 retirees. Three of the nine tenured and tenure-track positions are joint appointments: one is 67% in Geography and 33% in Environmental Programs; a second is funded by the Graduate College, resides in the Center for Regional Development, and includes teaching two courses a year for Geography, which is the tenuring unit; and the third involves Geography as the tenuring unit while teaching, research, and service responsibilities are in the Center for Environmental Programs. At the writing of this review the status of this third position is unclear.

One faculty member in the Department served as the Interim Director for the Center of Regional Development for the 2004-2005 year, at the request of the Graduate Dean. The rank of the eleven faculty members is currently one full professor, six associate professors, two assistant professors and two instructors. Nine of the faculty are male and two are female; two are Asian, seven White, and two African-American. Three faculty members (one full professor and two associate professors) plan to retire in the next three years.

Staff resources. Two staff positions are identified by the Office of Institutional Research: the chair and the secretary.

Student credit hour production. The Department is serving the University’s student body with classes that range from general education large lectures to smaller online and values classes. The Department’s courses are included in the natural sciences, social and behavioral sciences, cultural diversity, and international perspectives aspects of the BG Perspective curriculum. Geography courses are included in the social sciences, natural sciences, and earth science areas in the College of Education and Human Development and in interdisciplinary majors, minors, and specializations such as Asian Studies, International Studies, Environmental Studies, International Business, Tourism, Journalism, Telecommunications, and Demographic Studies. Geography provides courses
and instructional resources to Partnership in Context and Community and CITE’s Gear-Up grant initiatives.

The Department served more undergraduate students per faculty member (SCH per FTE) than any other department at the University, from 1993-2003. This high total was achieved without the assistance of a graduate program.

Recruitment and retention efforts. In addition to participating in University programs such as Major Mania and President’s Day, Department faculty contact interested students by mail or phone. The Department is currently completing discussions with Rhodes State College to work out a plan for a seamless transfer of their students to the Department. A focus of the retention efforts is through the Department’s advising, internship, and job placement activities. The Department works with the Study Skills Lab, in identifying student mentors; the faculty provide the lab with course materials to increase student success in geography courses.

Facilities and equipment. The Department is located in Hanna Hall. All faculty offices are in the building as are many geography classes, with the exception of large lectures. The Department has a cartography/GIS laboratory (Hanna 203), a meteorology laboratory (Hanna 202), a laboratory/lecture room (Hanna 205), a weather observation deck between Hanna and University Halls, and a map storage room (Hanna 304B).

The cartography/GIS laboratory is used for cartography, GIS, and remote sensing classes. It is also being used by other geography courses that require computer equipment. Information Technology Services (ITS) plays a major role in managing the laboratory and maintaining the equipment. The meteorology laboratory is used for hands-on experience for students in the weather and climate courses. In addition, the Department maintains weather data gathered from the instruments in the laboratory and on the weather observation deck. These data are frequently requested and used for faculty and student projects across campus as well as by the public and private sectors of the community (e.g., commencement ceremonies). Most computers in this lab are antiquated and not adequate.

Hanna Hall is an old building in need of repairs. The two most important problems include heating/cooling and the supply of electricity. There are faculty offices without heat during the winter and some without cooling during the summer. The electrical supply is inadequate to support the demands of modern technology, causing fuses to blow out frequently. The building clearly needs renovation.

Information resources and services. Fast-moving changes in technology make ITS, CTLT, and IMS “helpful and vital” to teaching and research functions in the Department. ITS support and maintenance for the labs and the faculty offices are invaluable. The Center for Teaching, Learning, and Technology (CTLT) is a campus resource that faculty members in the Department have come to rely on in keeping pace with changing technology and teaching methodologies. Instructional Media Service (IMS) provides the necessary audio-visual equipment to support instruction.
The Department deems the internship experience to be a part of the program for its majors and encourages its use. Using internships to assess student learning outcomes has proven to be effective. The Cooperative Education Office provides support in developing internships and cooperative education sites.

Financial resources. In addition to its personnel and operating budgets, the Department has two Foundation accounts. One is the Geography Development Fund consisting of money from friends of the Department. Funds from this budget are used for student achievement awards and to support Department events and activities beyond the purview of the operating budget. The second is the Geography Research and Information account. Money accumulated in this fund is used to support research and information activities such as equipment and software acquisition and student assistant help for the large lecture classes.

Currently the Department has two academic awards: the Joseph C. and Zola R. Buford Geography Scholarship and the Helen and Lyle Fletcher Scholarship. These are awarded annually by the faculty to deserving students. During October 2004, the Department received notification that Zola R. Buford provided an initial endowment for geography and music scholarships with a starting gift of $62,000. Provision was also made in Mrs. Buford’s will with her final estate. A year earlier in October 2003, the Department received notification that provision was also made in General Niles J. Fulwyler’s estate to endow a $50,000 Fulwyler Geography Scholarship. This scholarship will be awarded when the money becomes available.

Faculty quality and productivity. In the years since the program review in 1998-99, faculty members have presented their research at international, national, and regional meetings. During that period, there were sixteen peer-reviewed articles. Of these, fourteen were in major journals and two in regional ones. In addition, there was one book, nine peer-reviewed proceedings articles, and six peer-reviewed book chapters.

Two faculty members have received support from external funds in the last six years. One faculty member received support when he was part of a team that secured a $247,412 grant titled OhioTrek: A Focus on Learning, from the Ohio Educational Telecommunications Network Commission, 2001. A second received external funding from the Canadian Embassy in the amount of $4,410 for content development of his course on the “Aboriginal Peoples of North America.” In addition, the Department benefited when a third faculty member received an “in-kind” software grant from Intergraph that provides the University with site licenses for GeoMedia (GIS software) and GeoMedia Web Map licenses. Two other faculty members partnered with the members of the Department of Economics to receive a Department of Agriculture grant to assist greenhouse growers. In 2004, the total value of this USDA grant was $667,000 and in 2005 its total value is $726,000, of which approximately $210,000 comes to the University. The team that secured these grants comes from the Ohio State University, the University of Toledo, Indiana State University, and the Toledo Botanical Gardens. In 2004 a geography faculty member and an economics faculty member were co-PI's on a
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$84,000 grant from the Economic Development Administration to provide technical assistance to communities in northwest Ohio.

As a result of their professional activities, geography faculty members are acknowledged by their colleagues through election or invitation to serve on national committees of the field’s main disciplinary organization, the Association of American Geographers (AAG). One faculty member was selected by the AAG to represent the discipline of geography in the Institutional Review Board Best Practices Workshop sponsored by the Social and Behavioral Science Working Group on Human Research Protection of the National Institutes of Health. Another faculty member serves as a member of the Employment Opportunities and Career Development Committee, 2003-2005. Another serves as the Director of the Climate Special Group of the AAG. Dr. Bruce Smith was presented, in 2002, with the James W. Wilson Award for Leadership in Research by the Cooperative Education and Internship Association. This is an international award that requires a nomination and a peer review process.

**Student entry attributes.** Undergraduate students tend to become majors after their freshman year. The quality of these majors echoes the performance of the incoming students with classroom performances that range from exceptional to poor.

**Assessment of student learning outcomes.** The student learning outcomes for geography majors are:

1. to know and apply geographic concepts in identifying, analyzing, and explaining spatial/global issues and processes;
2. to identify and analyze the past and present processes that contribute to the world’s constantly changing cultural and physical environments;
3. to ascertain the interrelationships and interactions between and among regions;
4. to collect, integrate, analyze, display, and communicate spatial information and data sources by using mapping skills, Geographic Information Systems (GIS), and other tools and techniques such as air photo interpretation, remote sensing, statistics, and computers;
5. to apply spatial dimensions in analyzing issues and determining how human perceptions and actions contribute to distinct global identities and regional variations.

**Curriculum, instruction, and support services.** Responding to the recommendations from the first program review, the Department identified spatial analysis of regional change and development as its focus. In addition, all of the course offerings were reviewed, and those that were not central to the teaching mission were deleted. Based on the review of the curriculum and student demand, an important goal of the Department was to integrate components of GIS into the curriculum.

Requirements for the undergraduate major in geography were revised to take results from the assessment of student learning outcomes and the recommendations from the last program review into account. The changes include requiring GEOG 225, “The
Geography of the Global Economy,” GEOG 325, “Population Geography,” and GEOG 424, “Geographic Information Systems” to bring the requirements in line with the focus of the unit. A regional geography requirement was added as a response to the suggestion of increasing global content in the curriculum. An internship experience (GEOG 489) or independent research project (GEOG 490) is now required for the assessment of student learning outcomes.

Comparative advantage and program distinctiveness. Geography is unique in terms of the quantity of undergraduate students it serves. The Department is distinct in that it is one of two departments to offer formal GIS instruction. The second department is Geology. The research questions addressed in the two departments using GIS as a tool are distinct.

Demand. Demand for GIS is increasing across all of the colleges with the exception of the College of Musical Arts. For example, geography professors are offering workshops in the Center for Regional Development, the Center for Family and Demographic Research, and the School of Communication Studies.

Connection to the mission. The Department responds to its mission with a two-pronged approach. First the Department offers courses that that emphasize skills in high demand in the social sciences and that lead to paid internships and full-time employment upon graduation. The second prong focuses on the Department’s support to the BG Perspective curriculum, with courses that fulfill both social science and natural science requirements.

Financial considerations and adequacy of resources. As noted earlier, the computers in the GIS lab and the software are dated. The last three of the four additions made to the tenure-track lines in the Department are shared appointments. As a consequence, the number of full-time tenure-track faculty has decreased. The pending retirements raise the question as to whether or not the Department can continue with a heavy teaching load and also continue to increase scholarship.

Doctoral programs. The Department is currently serving doctoral programs in four ways. The Department offers courses cross-listed for both undergraduate and graduate students. The second way the Department serves doctoral students is that seven faculty have graduate faculty status and they serve as dissertation committee members. The third way in which the Department is serving doctoral students is that faculty members are offering GIS workshops for the Department of Sociology and for the School of Communication Studies. The fourth way in which doctoral students are being served is that geography faculty are co-authoring original research grants and publications.

Unit planning (next 7 years)

Goals and strategies; timetable and implementation plan.

a. Faculty resources. Two members of the faculty retired at the end of the 2003-04 academic year. Three additional retirements are anticipated in the next three years. The
Department seeks to replace the five retirees. These replacements’ expertise is needed to address a void in the Department’s cartography/GIS capabilities, terrestrial physical geography (soils, vegetation, and landforms), atmospheric sciences (meteorology/climatology), human geography, and regional geography. The Department plans to devote one position each to cartography/GIS, terrestrial physical geography, and meteorology/climatology; and two positions to human and regional geography. Given the integral role of GIS in the discipline, all new faculty will be expected to have a strong foundation in GIS as both a teaching and research tool.

b. Curriculum development. The Department wants to expand cartography/GIS courses to keep pace with the rapidly evolving technology and the increase in spatial analysis capabilities. Specifically, attention will be devoted to web-based mapping and web-based GIS courses. GIS is merely a tool and the value lies in its application. The Department, therefore, wants to emphasize the innovative application of GIS tools and techniques in spatial analysis. Geography is also interested in cooperating with the Department of Geology in developing a certificate program in geotechnology.

A deficiency in the curriculum for the geography majors is in terrestrial physical geography. When the Department is able to have a physical geographer on its faculty, this will be remedied so that all geography majors will have some background in this area. The Department attracts strong student interest in its weather and climate courses. It also receives a number of inquiries each year from students interested in a major in atmospheric science. At present the Department offers courses but not a full-fledged program. It wishes to further develop this part of the curriculum with the goal of establishing an inter-university atmospheric science degree program with the Department of Geography at the University of Toledo. Collaboration is necessary in light of the budgetary realities and the encouragement of inter-university cooperation by the Ohio Board of Regents. Preliminary discussions were held with colleagues at the University of Toledo revealing a mutual desire to move forward with the development of the program. An undergraduate degree program in atmospheric science will be nearly unique in the State of Ohio. Currently, the Department of Geography at the Ohio State University is the only one that offers an undergraduate degree (B.S.) in atmospheric sciences. However, in reality, Ohio State emphasizes its atmospheric science curriculum and research resources almost exclusively at the Ph.D. level. Thus, a market exists for an undergraduate atmospheric sciences program in Ohio.

In human geography, the Department needs to maintain and develop new applied areas, such as rural development and land use, recreation, emerging industries and regions, technology innovations, research methodology, and human migration, so that related courses reinforce each other to create depth in the curriculum. The concepts and knowledge of data sources taught in human geography courses are important for the application of the GIS tools and techniques. The Department wants to recover some of the expertise in world regions that was lost through retirements. The replacement lines allow the Department to seek people who possess such expertise.

There is a demand for geography students in internships. The Department concludes that service learning opportunities exist for geography students with their knowledge of spatial analysis. The Department intends to explore ways of integrating service learning
into geography course projects, the capstone experience through internships, and research projects. The Department intends to increase participation in undergraduate research by encouraging them to expand their class projects into research ideas that they can pursue as a means of satisfying the required capstone experiences. Service learning opportunities and internships can also provide the bases for student research projects. The research results will be presented at a university or department sponsored research conference or at professional conference and possibly published. The possibility of establishing a department honor for students who graduate with a senior thesis will be explored.

There are now three (four by summer 2005) distance learning geography courses. In the next seven years, the Department hopes to create and offer more distance learning courses. The number of courses and the time frame depends on the availability of personnel resources.

c. BG Perspective (General Education). The Department supports the University’s effort to strengthen general education. Toward this end, all the current geography courses that receive BG Perspective credit will be reviewed and necessary improvements made. New courses in human geography and terrestrial physical geography are under consideration. The learning outcomes will include intellectual skills and the geographic mode of inquiry. This mode involves the spatial dimension in understanding, analyzing, and solving problems; in consideration of values; and in making decisions. Attention will also be paid to methods of assessing student learning outcomes in geography BG Perspective courses. It is the Department’s goal to introduce and begin offering the new human geography course within three years. The new terrestrial physical geography course will depend on the ability of the Department to secure a replacement position in physical geography.

d. Student assessment. In its assessment of geography majors, the Department intends to institute electronic portfolios so that the work from the time a student becomes a major through the capstone experience will be available for use in evaluating learning throughout his/her college career. The planning and experimentation will be done in 2004-05; this will be required for all incoming majors in the 2005-06 academic year.

e. Advising, internships and cooperative education, and job placement information. In the next seven years, the Department will continue with its successful effort in several ways: actively reaching out to students, advising and helping them devise an integrated program of study and a foundation for life-long learning; constantly monitoring trends in the marketplace; developing and maintaining an alumni and employer network to increase internship and job opportunities; incorporating information from various sources to improve advising and curriculum; and encouraging participation in internship assignments.

f. Partnerships with community colleges. The community colleges in the region are starting or contemplating the start of GIS majors. As mentioned before, GIS is merely a tool–its application requires knowledge of geographic concepts and data sources. Therefore, community colleges are interested in forming partnerships that will allow their students to transfer and complete a baccalaureate degree.
g. Research and external funding. The Department in the past five years has raised its research expectations and these changes are contributing to a change in departmental culture. Research productivity has concomitantly increased. In the next seven years, the goal is to maintain the level of research productivity in respect to quantity and quality. It is the goal of the Department in the next seven years to continue submitting grant proposals and increase the amount of outside funding. In the past five years, faculty members have gradually laid the groundwork that should improve chances for future success. These include experiences gained from grant submissions, publications in topical areas connected with grant proposals, and networking.

Another means of securing external funding is to explore opportunities to market the Department’s expertise and get contracts from governmental agencies and businesses. Success requires the Department to generate contacts and nurture relationships. This takes time, effort, commitment, and patience. The discipline of geography offers expertise and skills that are needed and marketable.

h. Service--community outreach activities and partnerships. The goals involving outreach and partnership include exploring opportunities to market the Department’s expertise to governmental agencies and businesses, developing and maintaining alumni and employer networks to increase internship and career opportunities, and establishing partnerships with community colleges.

**Relationship to the Academic Plan.** “The goals of the Department are in accordance with the Academic Plan. The cooperative effort with units such as PCC and CITE; a curriculum for geography majors that provides a foundation for life-long learning, internships, increase in undergraduate research and exploring ways to include service learning; planned efforts towards improvements in general education courses; participation in BGeXperience and integrating discourse of values into our courses, especially ones for general education; all fits into the Leadership in Learning and Critical Thinking of Values themes of the Academic Plan. The goals of emphasizing innovative application of GIS tools and techniques in spatial analysis fit well into the New Media and Emerging Technologies theme. Our goals for human and regional geography will contribute importantly to the interdisciplinary themes of Understanding Cultures and Nations. The research, external funding, partnership with community college, joint meteorology program with the University of Toledo, and community service and outreach goals contribute to community engagement that is emphasized in the Academic plan” (p. 25-26).

**Questions for the external team.** The Dean of the College of Arts & Sciences asked the team to consider the implications of the Department joining a school with the Department of Geology and the Center for Environmental Programs. The Department posed three questions for the external reviewers. One question asked for ideas for integrating GIS and electronic portfolios into the classrooms. A second question asked for the team’s thoughts on staffing courses. The third question asked for creative means for integrating undergraduate student input with original scholarship.
RESULTS OF PREVIOUS REVIEWS

Listed below are the recommendations from the 1998-1999 PRC report, followed by the Department’s responses to the recommendations.

Department Chair Leadership

1998 PRC Recommendation: The PRC recommended that leadership in the Department should be considered critically, with the possibility of identifying a new chair. The context for this recommendation included the finding that faculty in the Department were not providing leadership typical of faculty in many departments, nor sharing the burden of multiple administrative tasks. They noted, for instance, “If an outside Chair had to work with a faculty reluctant to change or reluctant to share the leadership, the outside Chair alone could not bring about the necessary reform.”

2005 Update: The same individual continues to serve as chair. The department culture is one that continues to rely on the chairperson for leadership; department faculty are not actively serving in significant leadership roles.

Department Focus

1998 PRC Recommendation: The PRC recommended that “the Department reorganize its programs around one or two foci.” The rationale for this recommendation included the idea that the Department “... concentrate its efforts and resources that develop those areas that build the Department’s distinctiveness and reputation while trading off areas of lower priority and promise.”

2005 Update: The Department has identified spatial analysis of regional change and development as its focus.

Teaching

1998 PRC Recommendation: The Department needs to form an ad hoc committee to evaluate the entire curriculum so as to highlight the new focus.

i.) With support of the Dean, provide consulting and professional development so that the redesigned curriculum represents current ideas.

ii.) Reassess regional courses and add global content, quantitative methods, and diversity issues.

iii.) Consider the external program reviewers’ recommendations and incorporate those identified.

iv.) Be responsive to the needs of other units in the design of the GIS courses.

v.) Interface with faculty in other units such as Journalism, Telecommunications, Physics, and Chemistry so that certification in meteorology and broadcast meteorology can be developed.

2005 Update: Although additional GIS courses were added, the curriculum and course content need to be reviewed to assure that the class material is cutting-edge while highlighting
the selected focus.

i.)  About half of the faculty have attended workshops and conferences on topics that have been incorporated into their course curriculum (e.g., “Mapping the News,” “GIS,” “Terrorism”).

ii.)  Although begun, a rigorous assessment and implementation of these issues need to be implemented across the curriculum. These topics have only been implemented by some of the faculty.

iii.)  Individual courses have been revised. However, an overall, holistic review and revision of the curriculum has not been undertaken.

iv.)  GIS workshops are supported by the Department for Marketing, Journalism, and Sociology but demand is greater than the number of seats available at both the undergraduate and graduate levels.

v.)  Collaborations with faculty in other units have been effective, with a GIS emphasis in Computer Science and an Individualized Planned Program minor in Journalism being created.

Research

1998 PRC Recommendation: A departmental research program needs to be created and one or more of the following collaborations should be pursued:

i.)  applied research and service with units on campus, such as the Center for Regional Development;

ii.)  graduate students and regional teachers in northwestern Ohio;

iii.)  geography faculty at the University of Toledo;

iv.)  East Lake Division of the Association of American Geography; and

v.)  National Geographic Society’s Geography Alliance for Ohio.

2005 Update: The Department’s response to the research recommendation is bifurcated. Two faculty generated additional resources with GIS software and a Canadian Studies grant. Four other faculty successfully completed research collaborations with the following:

i.)  applied research and service on campus with the Center for Policy Analysis and Public Service;

ii.)  graduate students and regional teachers in northwestern Ohio; and

iii.)  geography faculty at the University of Toledo

Merit system

1998 PRC Recommendation: The merit system needs to be revised to reward scholarly efforts.

2005 Update: The merit system was revised by a subcommittee in the Department as requested. Although the revised merit system does indeed reward scholarship in the form of grants, refereed presentations, and publications, the faculty noted during their discussion that loopholes remain that allow faculty to take advantage of the current point system (e.g., compensation for multiple independent studies) at the cost of an organizational climate that focuses on refereed scholarship.
Teaching Loads

1998 PRC Recommendation: A differential teaching load needs to be created and implemented.

2005 Update: A differential teaching load based on scholarly activity was not enacted.

Assessment

1998 PRC Recommendation: “The Department should continue to develop its procedures for assessment of student learning. Assessments should be updated to keep pace with changes in the curriculum. The Department should submit an annual assessment report to the Student Achievement Assessment Committee. The ‘assessment cycle’ includes strengthening the curriculum in areas where student outcome assessment finds weaknesses. Assessment is an ongoing process, and so should be a recurring, annual recommendation.”

2005 Update: The Department’s assessment proposal was selected by SAAC as one of the top 40 assessment proposals on campus. Although the PRC applauds this recognition, we also note that the Department has not implemented the recursive process it outlined.

Viability Report

1998 PRC Recommendation: ”During the spring semester, 2002, the Department should complete a viability report to the Dean of Arts & Sciences to justify its continuation.”

2005 Update. A viability report was submitted. A formal decision was not made.

Summary of Progress since the Last Review

Although the external review team judged that the Department is making “measurable progress” in meeting the recommendations coming from the previous review (see below), the Department appears not to have made progress on recommendations dealing with “leadership” and “teaching loads,” and still have major issues to address on recommendations dealing with “teaching,” “research,” “merit system,” and “assessment.” This mixed progress on recommendations from the previous review will be addressed in the findings and recommendations to follow.

SUMMARY OF THE EXTERNAL REPORT

Dr. Florence Margai of the Geography Department of Binghamton University (SUNY) and Dr. Larry Knopp of the Geography Department of University of Minnesota-Duluth visited the University November 14-16, 2005.

The external review team reported that they found a department that is on the rebound and making measurable progress towards the goals and objectives that it was asked to accomplish during the first program review. The reviewers reported that the Department
has made significant strides overall. The improvements in the quality and quantity of research undertaken by faculty, the collaborative ventures with other units on campus, the student enrollments that produce the highest SCH per FTE on campus, the distinctly applied focus in GIS with a strong internship program, and the ongoing efforts to restructure its curriculum are advanced as the factors contributing to this rebound. Areas that need to be addressed include a need for additional resources in terms of tenure-track faculty lines that are sensitive to diversity issues; a proactive plan to recruit majors and minors; and an expanded assessment program. Regarding the formation of a school, the team was skeptical, expressing concern about negative effects on the intellectual integrity and coherence of the program, on its identity and planning, and on recruiting high-quality faculty.

PROGRAM REVIEW COMMITTEE
FINDINGS AND RECOMMENDATIONS

The Department has made progress towards the goals of increased research productivity as represented by grants, refereed articles, and presentations. This is an accomplishment worthy of note because the Department maintained the heaviest SCH/FTE on campus. The increase in grants and publication productivity, however, has been the result of four faculty in a nine-member department. We also acknowledge the efforts of several of the faculty to revise their courses. The imminent creation of a new, shared GIS lab will add to the Department’s potential in teaching, research, and service. The Department reports that one hundred percent of students graduating with a geography major have been hired into positions appropriate to their training. The market demand for qualified graduates appears to exceed supply.

1. Creation of a School

Findings. During the course of the review, an idea was put forward to create a school that would include the Department of Geography, the Department of Geology, and the Center for Environmental Programs. There was little mention of the proposed school in the self study from the departments, although the external reviewers for Geography and Geology both commented on the idea. The PRC was also aware of the proposal through meetings between the PRC liaisons and department faculty. However, the clearest picture of what a school might look like emerged during the PRC’s meeting with the Dean, which occurred late in the review process. Because these ideas were just taking form as the review progressed, the PRC does not feel prepared to make a recommendation about whether or not a school structure should be pursued. However, we do have enough information to recommend that the idea of a school should be explored.

It is clear that the Department of Geography, the Department of Geology, and the Center for Environmental Programs (which underwent a program review a year ago), all face problems, as any unit does. It is also clear that the three units share overlapping academic interests – the challenges they must solve might be met more effectively through collaboration. If the existing problems are considered in the light of a new structure,
possibilities for new solutions are opened up. It is for this reason that the PRC encourages
the faculty in the three units to explore a school structure.

Several new problems introduced by the creation of a school structure can be anticipated
on the basis of the experiences of other schools at the University, and must be addressed
at the outset if a school structure is to be successful.

1. The three units must occupy shared space. No synergy of ideas or efficiency of
resource sharing will develop if the three units continue to occupy separate spaces
at dispersed locations.

2. There is a delicate balance between the unity of the school and the autonomy of
the constituent departments, especially regarding administrative authority for
planning, hiring, promotion and tenure, merit, and operating budgets. Should
authority for these administrative functions be held by the school or by the
constituent departments/programs? On the other hand, it is important that faculty
retain their identity as geographers, geologists, and environmentalists. In a school
structure where should primary responsibility for curriculum and research lie?
Duplicating responsibilities at the school and department level certainly does not
make sense. In answering the questions posed above, the faculty and
administration should make clear what the role of the school is, and how the
addition of this new level of administration (beyond that already provided by the
college and departments) will improve the ability of the units to achieve their
missions.

3. The proposed school faces a challenge in that it would span the social and
physical sciences. This is particularly evident in looking at the “ends” of the
continuum – sedimentology, say, compared to human geography. However, all
three units have a history of interdisciplinarity. In fact, their common experience
with interdisciplinary approaches to problem solving is a tremendous strength on
which they can all draw as they explore the possibilities of a new school.

4. The PRC finds that the units’ culture and expectations differ around issues such as
promotion and tenure standards, merit, research productivity, and workload. A
challenge for a school would be to develop school-wide policies in these various
areas that accommodate or reconcile these differences without lowering standards.

If the problems of creating a school can be solved, several new possibilities and
opportunities will be created. For instance,

1. The school would be in a position to create a new, interdisciplinary master’s
degree. At the undergraduate level, there is undeniable student interest in the
interdisciplinary approach provided by environmental studies, as evidenced by the
number of majors. By contrast, Geography and Geology have both struggled to
attract students as majors. It is reasonable to expect that student interest in a
broadly-based interdisciplinary degree is present at the graduate level as well. An
interdisciplinary master’s degree would have obvious benefit to Geography and
Environmental Studies, which do not currently have a graduate program; it might
also benefit Geology’s ongoing recruitment efforts.

2. At the outset, it is reasonable to think that the school would continue to offer the
same set of undergraduate majors that are currently available through the separate
departments and program. However, if an interdisciplinary master’s degree is created and offered, the faculty should be able to take what they learn from that experience and apply it to the undergraduate majors. Geography and Geology might even experience an immediate benefit through closer interaction with students in Environmental Programs. In the longer term, the curricula in the undergraduate majors might undergo an evolution informed by student interest from across the programmatic range within the school.

3. It has been evident for some time that all three units have a keen interest in GIS. The PRC does not want to overemphasize this common ground, as we see a danger in basing a deep collaboration on a shared tool. On the other hand, a school structure would make it easier to develop and manage a modern facility devoted to GIS. The combined interest and expertise in GIS also opens up the possibility of a minor in GIS (at the undergraduate level) or a certificate program in GIS (at the graduate level). This might be another way to tap into student interest and attract students to study the different geographical, geological, and environmental problems that can be solved with this tool.

4. It is difficult to assign duties and evaluate achievements of faculty taking on dual appointments. A school structure holds the potential for a smoother handling of these positions.

5. Research collaboration is a topic that is frequently raised as a positive benefit of a school structure. The PRC would like to temper this expectation with some cautionary comments. We note, for instance, that collaboration across department boundaries can be (and has been) achieved without a school structure. Why have such collaborations not developed previously among these three units, and how will those impediments to research collaboration be changed by a school structure? If the school is well-designed, the potential for research collaboration and synergy may be increased by a school structure. However, realizing this potential is likely to take many years and require intentional planning and concerted effort. We also note that a school structure has the potential for increasing territoriality and animosity across department lines. How will this negative potential of a school structure be avoided? Will realizing one, but not the other, of these two potential outcomes require infusion of additional resources? If so, then we cannot simultaneously argue that a school structure will improve efficiency and collaboration.

However, moving beyond the cautionary comments, the PRC acknowledges that developing collaborations and synergies among these three units is an attractive possibility. A school would be in a stronger position to propose hiring priorities designed to support innovative, interdisciplinary, and collaborative programs.

**Recommendation.** The Department of Geography, the Department of Geology, and the Center for Environmental Programs should explore the possibility of joining together to create a new school. They should attempt to develop a proposal for a school that addresses the problems anticipated in the Findings, above; the proposal should, of course, also attempt to take full advantage of the collaborative and interdisciplinary possibilities created by the school structure. The faculties of the three units, their chairs
and director, and the Dean should come to agreement by the end of the 2005-2006 academic year whether or not to pursue the creation of a school.

In relation to the recommendations in the previous program review, progress has not been adequate. The PRC believes we still face the decision to eliminate the Department or to invest more vigorously in its development–continuation of the status quo is not advised. In the current environment, the additional opportunities provided by a school enrich the options under consideration. The Dean, with the concurrence of the Provost, should reach a decision about which of these alternatives to pursue.

2. Number of Majors

Finding. The number of majors has not increased since the 1998-99 program review. The number varied from 15 to 24 during that interval. The PRC believes that an increase in the number of majors is an important goal for the Department.

Recommendation. The Department should develop a detailed plan to increase the number of majors. The plan should move beyond the University’s traditional venues for recruiting majors. It could, for instance, encourage undergraduate contributions to faculty research projects and spotlight senior students’ portfolios, internships, and research projects in the introductory level classes. The plan should be presented to the Dean for his review and approval by the end of spring semester, 2006.

3. Curriculum

Finding. The Department needs to rigorously and systematically review the curriculum. The curriculum review should be attentive to the diversification of course offerings. In light of the defined areas of focus, the limited number of faculty, and the small number of majors, coverage of a full range of physical, cultural, and human geography topics may not be advisable, or even possible. The curriculum should be designed to take full advantage of the Department’s identified focus in “spatial analysis of regional change and development.” Furthermore, decisions about curriculum revisions should be based on data about student learning.

Recommendation. A comprehensive review of the curriculum should be undertaken that includes a clear definition of the course requirements for the geography major and takes full advantage of the departmental focus. The review should be fully informed by results of assessment of student learning. The curriculum needs to include an expansion of the opportunities for student learning in a research context such as developing a senior research seminar, an additional field experience, or integrating students in faculty-led, externally-funded research projects. Revisions to the curriculum should be targeted for implementation in fall, 2007.
4. Assessment

Finding: The Department was recognized for its assessment plan; the GIS projects in particular hold promise for a cutting-edge assessment program. A systematic and rigorous assessment procedure needs to be implemented for the major as a whole and for the online courses. Implementation of the electronic portfolio system and related mechanisms in the assessment of all educational outcomes will make a substantial contribution to our students’ education.

Recommendation: The faculty needs to implement its assessment plan across the curriculum. The results of the Department’s assessment of student learning outcomes should be used to inform discussions about curriculum revisions. Annual reports to the Student Achievement Assessment Committee should report progress on this implementation.

5. Workload Policy

Finding: Research productivity has increased in the areas of refereed publications and grants. Unfortunately this increase in research is not uniform across the Department. The Department is bifurcated, with four of the nine faculty generating 90% of the research. Teaching loads are the same for all faculty members despite the differences in the amount and quality of scholarly productivity in the form of grants, conference papers, and publications.

Recommendation: The Department should develop a policy allowing differential workload assignments. The policy should allow faculty who are productive in research to devote more time to that activity. A workload policy should be presented to the Dean for his review and approval by spring, 2006.

6. Department Focus

Finding: The Department’s focus on spatial analysis of regional change has begun to influence research efforts and curriculum. The focus coincides with the purposes of the Center for Regional Development; there is thus a research opportunity the Department could exploit. A recent grant from the Department of Agriculture and research on terrorism achieved with support from the Center are exemplars of what can be achieved. Although the curriculum has begun to be updated, a rigorous implementation of the new focus has not been highlighted in the content of the courses being offered. Overall, it is not yet clear whether the identified focus is defined tightly enough to be effective.

Recommendation: The Department should review its focus, making sure it can be used effectively to guide research efforts and make the curriculum distinctive. A new statement of the Department’s focus should couple the focus directly to particular research initiatives and curriculum revisions. The statement should be presented to the Dean for his review and approval by the end of the 2005-06 academic year.
7. Department Leadership

Finding: Faculty are apparently willing to become more involved in the governance of the Department. However, structures and processes still rely heavily on the chair.

Recommendation: The Department needs to engage in a more participatory style of management. The faculty should develop a plan for redistribution of departmental responsibilities among the faculty. The plan should be presented to the Dean for his review and approval by the end of fall semester, 2005.

8. Merit system

Finding: The merit system was revised as recommended in the preceding program review, but loopholes remain. Thus, the standards for merit and for promotion and tenure need to be addressed in order to create an organizational culture that embraces scholarly research.

Recommendation: The Department should revise the merit system to close the loopholes that emerged in the new merit criteria. For example, there is currently no maximum number of independent studies for which faculty can earn the full value of points allotted. The promotion and tenure document should be reviewed as well to make sure it is consistent with the merit system.

9. Visibility

Finding: The Department is not well known to campus constituents beyond its general education courses. Some of this is due to the fact that the Department has not been highly productive in research and attracts relatively few students to its major. As the faculty members are more successful in research and as the Department attracts more majors, some of its accomplishments—such as the vigorous and successful use of internships and co-ops, and the growing demand for GIS courses—deserve to be more widely appreciated.

Recommendation: The Department could improve its visibility on campus and in the larger community through more deliberate efforts to communicate successes. The Department should consider organizing events during National Geography Awareness Week and updating its website. A journalism intern could assist with the production of a Department newsletter.

The Department of Geography should report annually to the Dean of the College of Arts & Sciences, with a copy to the Provost, on the implementation of these recommendations.