

***CAL STATE FULLERTON
DEPARTMENT OF GEOGRAPHY
2015 PROGRAM PERFORMANCE REVIEW
SELF-STUDY***

Prepared by

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2 March 2015

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I – MISSION, GOALS, AND ENVIRONMENT

I.a. Mission and Goals

Briefly describe the mission and goals of the unit and identify any changes since the last program review. Review the goals in relation to the university mission, goals and strategies.

The Department of Geography provides students with a well-rounded education that bridges the social and natural sciences and provides geotechnical training. Students take courses in human, environmental, and physical geography. In addition, we offer applied courses in geographic information systems (GIS), remote sensing, and urban planning. The Geography degree prepares students for different career paths, including education, environmental analysis, government, planning, and resource management and conservation. We prepare students for critical challenges of the 21st century by promoting global understanding and environmental stewardship.

Learning Goals for the Undergraduate Program

In 2007, the Department established the following learning goals for the undergraduate program:

Personal, civic, educational, and career

- Students' interests reflect the diversity of the discipline
- Students are prepared to thrive in a world of shrinking distances and global economies
- Students have access to courses that prepare them for graduate school and careers in planning, environmental analysis, education, and geospatial technologies

Intellectual inquiry and effective communication

- Understand the patterns and processes of human and physical geography, including the interaction between humanity and the earth's environments
- Appreciate the value of intellectual inquiry involving both synthesis and analysis
- Develop skills of observation and measurement needed for geographic inquiry
- Communicate with maps as well as text and graphics

Technology

- Solve problems using advanced Geographic Information Systems and remote sensing technology
- Understand the role of the Internet for accessing geographic information

Multi-cultural environments

- Develop a strong global perspective
- Understand the diversity of the earth's peoples and environments

Collaborative experiences

- Experience substantial involvement with small group learning
- Interact with faculty outside of classroom

Learning Goals for the Graduate Program

In 2007, the Department established the following learning goals for the graduate program:

The M.A. degree in Geography will:

- Enable students to achieve advanced competency in human geography, physical geography and geographic research techniques.
- Provide students with access to advanced geotechniques.
- Enable students to achieve excellence in research, writing and presentation skills.
- Provide students with an opportunity to work in multicultural, international and collaborative environments.
- Provide students with the opportunity to:
 - Prepare for advanced study in Ph.D. programs.
 - Prepare for careers in planning, environmental analysis, GIS and mapping.
 - Prepare for careers in education including community college teaching.

New Learning Outcomes for the Undergraduate Program

In addition to these learning goals, the Department developed specific student learning outcomes for the undergraduate program in October 2014. These learning outcomes will be evaluated as part of our new assessment strategy (see Section III). Table 1 identifies the new Geography Student Learning Outcomes, and their relation to the five University Learning Goals.

Table 1
Geography Student Learning Outcomes and University Learning Goals

GEOGRAPHY LEARNING OUTCOMES	UNIVERSITY LEARNING GOALS
<p>Students are able to articulate the definitions of, connections between, and differences among fundamental concepts, models and theories in geography.</p>	<p>I. Demonstrate intellectual literacy through the acquisition of knowledge and development of competence in disciplinary perspectives and interdisciplinary points of view.</p> <p>II. Think critically, using analytical, qualitative and quantitative reasoning, to apply previously learned concepts to new situations, complex challenges and everyday problems.</p> <p>V. Evaluate the significance of how differing perspectives and trends affect their communities.</p>
<p>Students are able to identify and explain patterns and processes of human and physical geography, including the diversity of the earth's peoples and environments, and the interactions between humanity and the earth's environments.</p>	<p>I. Demonstrate intellectual literacy through the acquisition of knowledge and development of competence in disciplinary perspectives and interdisciplinary points of view.</p> <p>VI. Recognize their roles in an interdependent global community.</p>
<p>Students can apply mapping and geospatial technologies to analyze geographic data and solve geographic problems.</p>	<p>II. Think critically, using analytical, qualitative and quantitative reasoning, to apply previously learned concepts to new situations, complex challenges and everyday problems.</p>
<p>Students can critically assess, interpret, and analyze geographic research.</p>	<p>II. Think critically, using analytical, qualitative and quantitative reasoning, to apply previously learned concepts to new situations, complex challenges and everyday problems.</p>
<p>Students can clearly and effectively communicate geographic knowledge and research in writing, orally, and/or visually.</p>	<p>III. Communicate clearly, effectively, and persuasively, both orally and in writing.</p>

I.b. Changes and Trends in Geography and External Factors

Briefly describe changes and trends in the discipline and the response of the unit to such changes. Identify if there have been external factors that impact the program.

Since the 1960s, environmental problems have received growing attention by scholars, officials, and the general public. In the 21st century, there is growing concern about global climate change, land use change, and the loss of biodiversity.

Geographers are perfectly situated to study these problems and explore solutions. Human-environment interaction is one of the core themes in geography. Geographers are using sophisticated geospatial technologies, including Geographic Information Systems (GIS) and remote sensing, to explore questions related to environmental change. We also study the economic, cultural, and political dimensions of human-environment relations.

The Geography Department has responded to these trends by introducing remote sensing into the curriculum, and increasing other offerings in environmental geography.

In 2005, we obtained a \$750,000 congressional earmark from the National Aeronautics and Space Administration (NASA) to develop a Remote Sensing Laboratory (see Section VI). The Department hired a faculty member specializing in remote sensing applications in climatology, Dr. Jindong Wu.

In addition, we have increased our course offerings in environmental geography, adding nine courses since 2007:

GEOG 328	Global Change and Environmental Systems
GEOG 422	Global Climate Change
GEOG 424	Desert Landscapes
GEOG 427	Mountain Environments
GEOG 462	Natural Resources
GEOG 480	Field Mapping
GEOG 486	Environmental Remote Sensing
GEOG 489	Digital Image Processing
GEOG 530T	Monitoring Ecosystem Processes

External factors impacting the program include (1) the new B.A. in Earth Sciences offered by the Geological Sciences Department; (2) California's cyclical budget problems and the impacts of the Great Recession, and (3) students' lack of awareness of Geography as a field of study.

The Geology Department's new B.A. in Earth Sciences has had some impact on the number of Geography majors. While this degree incorporates a number of Geography

courses as electives, it has attracted students who might have majored in Geography in the past.

Since 2007, the economy has experienced the Great Recession (2007-2009) and the post-recession recovery. The severity of the recession aggravated the cyclical cutbacks in state funding for the CSU system. Full-time faculty and staff saw their salaries stagnate, while part-time lecturers were offered fewer sections. The Geography Department absorbed these economic restrictions with the rest of the university system.

One consequence of the recession is the development of a highly qualified applicant pool for faculty positions. This is the result of restricted or frozen hiring during the recession, combined with the emergence of newly graduated Ph.D. students. In our job search during 2013-2014, we obtained a highly qualified group of applicants from which two excellent candidates were recruited (see Section IV below).

A broader cultural factor influencing all Geography departments in the United States is the lack of awareness of Geography as a field of study. Very few high schools offer Geography courses; those that do offer Geography tend to provide it as an elective class. To the extent that grade school students receive any geographic education, it is incorporated within history or social studies classes. This is manifested in the ways in which the Department gains its majors. Almost all of our majors are transfer students who had good experiences with geography instructors and classes at community colleges, or native students who decide to major in Geography in their junior year after a favorable experience in one or more Geography classes (our General Education (GE) classes are especially important in this regard). (Between 2002 and 2010, only seven incoming freshmen declared a major in Geography. See Appendix Table 3). Trends and challenges in recruiting majors are addressed in Section II.D.

I.c. Long-Term Priorities

Identify the unit's priorities for the future.

The Department has identified 15 long-term goals for 2015-2022. These are presented and discussed in Section VII. While all of these goals are important, we identified the following as top priorities:

- Create and Implement a Student Outreach Plan to Attract Majors
- Change the Department Name to *Geography and Environmental Studies*

- Improve Student Recruitment, Thesis Advising, and the Curriculum in the Graduate Program
- Continue to Promote Faculty Scholarship, and Increase External Research Funding
- Hire New Faculty in Environmental and Physical Geography

II. DEPARTMENT DESCRIPTION AND ANALYSIS

II.a. Substantial Curricular Changes

Identify substantial curricular changes in existing programs, new programs (degrees, majors, minors) developed since the last program review. Have any programs been discontinued?

The Geography Department has not made any substantial curricular changes (e.g. degree programs or concentrations) since 2007.

II. b. Structure of the Degree Program

Describe the structure of the degree program (e.g. identify required courses, how many units of electives) and identify the logic underlying the organization of the requirements. How does the structure of the degree program support student achievement of learning goals?

The Geography Department offers a Bachelor of Arts (B.A.) degree in Geography, with an option for an Emphasis in Environmental Analysis. The Department also offers a Minor in Geography, and a Master of Arts (M.A.) degree in Geography.

B.A. in Geography

The B.A. in Geography requires 39 units of coursework:

- 15 units – Lower-Division Core Courses
- 3 units – Physical Geography (300-level)
- 3 units – Environmental Geography (300-level)
- 3 units – Human Geography (300-level)
- 3 units – Regional Geography (300-level)
- 6 units – Advanced Geography (400-level) (includes 3-unit capstone course)
- 3 units – Elective (100-400 level)
- 3 units – Writing Course Requirement (GEOG 300A)

This program structure provides students with a breadth of 300-level geography courses, leading to a choice of more advanced 400-level courses in their fields of interest. One of the 400-level courses must be a capstone course, which typically involves researching and writing a significant research paper.

Since 2007, the Department has added 17 courses to the curriculum:

GEOG 300A	Geographic Thought
GEOG 300B	Geographic Methods
GEOG 328	Global Change and Environmental Systems (GE)
GEOG 342	Middle East (GE)
GEOG 345	China (GE)
GEOG 353	Geography of Illegal Drugs (GE)
GEOG 355	Global Cuisines (GE)
GEOG 375	Population Geography
GEOG 422	Global Climate Change
GEOG 424	Desert Landscapes
GEOG 427	Mountain Environments
GEOG 456	Geography of the Future
GEOG 462	Natural Resources
GEOG 480	Field Mapping
GEOG 486	Environmental Remote Sensing
GEOG 489	Digital Image Processing
GEOG 530T	Monitoring Ecosystem Processes

Several new courses are in environmental geography. GEOG 300A fulfilled a need for a course on geographic thought, covering major themes and concepts in geography. This course also meets the university's undergraduate writing requirement.

Emphasis in Environmental Analysis

Students opting for the Environmental Analysis emphasis take six units of 300-level physical geography, and no elective. In addition, the six units of advanced geography must be courses in physical and environmental geography, including a capstone course.

Minor in Geography

Students complete 21 units of Geography for the minor. This includes:

- GEOG 100 (Global Geography)
- 3 units of lower-division Geography (GEOG 110, 120, 160, or 281)
- 15 additional units of Geography (at least 12 upper-division units)

The minor is a very flexible option for students. Most minors select from the variety of 300-level courses for most of their units. They can create a minor covering the breadth of geography, or focus on a specialty area (e.g. environmental geography, GIS, regional geography).

M.A. in Geography

The M.A. in Geography requires 30 units of coursework:

GEOG 500 – Seminar in Geographic Research
GEOG 520 – Seminar in Physical Geography
GEOG 530T – Selected Topics in Geography
GEOG 550 – Seminar in Human Geography
GEOG 598 – Thesis (3 units - Plan B only)
GEOG 599 – Independent Geographic Research
Electives (15 units – Plan A; 12 units – Plan B)

To complete the degree, students choose between a comprehensive exam (Plan A) or a thesis (Plan B). In recent years, the Department has encouraged students to opt for the thesis option. Completing a master's thesis builds skills in problem identification, research, analysis, and writing.

II.c. Student Demand

Using data provided by the office of Analytic Studies/Institutional Research discuss student demand for the unit's offerings; discuss topics such as over enrollment, under enrollment, (applications, admissions and enrollments) retention, (native and transfer) graduation rates for majors, and time to degree.

In this section, I discuss student admission rates, retention, graduation rates, number of majors, and enrollment trends. Where appropriate, trends in Geography are compared with the College of Humanities and Social Sciences and the University.

Two significant caveats need to be kept in mind regarding admission and graduation rates for the Geography Department. First, the Department has a relatively small number of majors (70 undergraduate majors in 2013-2014), creating very small annual cohorts. It is problematic to compare rates for Geography cohorts with the rates for the comparable University or College cohorts. Second, the data generated by Institutional Research and Analytical Studies (IRAS) considers initial cohorts of first-time freshmen and upper-division transfers. This leaves out about 75 percent of Geography majors, who entered CSUF as freshmen or transfers and later declared a major in Geography, or changed majors.

Based on data in Appendix Tables 1.b. and 2.b., the number of upper-division transfers as a share of undergraduate majors was in the 20-30 percent range between 2007-2014. The exception was 2010-2011, when there was a large number of transfer students following the restricted enrollment during the recession. During this year, the transfer share of majors was 46 percent. In 2013-14, the transfer share was 26 percent.

Admission Rates for Upper-Division Transfers

Department admission rates for upper-division transfers were similar to University admission rates. Between Fall 2011 and Fall 2014, the number of upper division transfer applicants to the University grew from 16,771 to 22,263, an increase of 32.7 percent. As a result, University admission rates fell from 44.4 percent in Fall 2011 to 38.9 percent in Fall 2014. The Department's admission rates fell from 51.6 percent to 43.4 percent during the same period (Appendix Table 1.b.).

Retention of Upper-Division Transfers

The Geography Department has an excellent track record of retaining transfer majors. Between 2002 and 2010, 90 of the 127 Fall semester transfers who entered the Geography program graduated within four years. Of these 90 graduates, 86 (95.6%) graduated with a degree in Geography (Appendix Table 3.b.).

Retention is important because it reduces students' time to degree. Changing majors increases the likelihood that students will take extra units to complete their degree. Students who decide on a major and stick with it can benefit from streamlined course schedules, department-level advising, familiarity with the Department's faculty and course offerings, and the experience of being part of a smaller cohort of students.

Undergraduate Majors

Since the early 1990s, the number of Geography majors has declined. At its peak in 1993, there were 112 undergraduate majors. During the previous PPR period (2000-2007), the number of undergraduate majors varied between 68 and 75 (average = 71). During the current PPR period (2007-2014), the number of undergraduate majors has varied between 69 and 86 (average = 75) (Appendix Table 2.b.).

This concerns the Department for a number of reasons:

- (1) At the very least, the Department should be maintaining the same share of majors over time. However, our number of majors has mostly been in the 70-75 range since 2000, while university enrollment has grown considerably. This has resulted in a declining share of majors.
- (2) Building the number of majors is the key to maintaining a strong program with diverse course offerings at the 300- and 400-levels.
- (3) The stagnation in number of majors since 2000 has created an incentive to attract more non-majors to our G.E. course offerings. This has resulted in the

creation of a number of online sections of G.E. courses that routinely fill up, thus boosting the Geography Department's FTES number. However, this detracts from our ability to offer more majors-oriented courses, and it has absorbed a significant amount of teaching by full-time faculty.

The division of Geography FTES between majors and non-majors is found in Appendix Tables 2.a. and 2.b. The share of Geography majors in total Geography FTES varied between 19.3% in 2012-13 and 28.9% in 2010-2011. In 2013-2014, the share was 20.9%. Therefore, in a given year, about three in every four students taking Geography classes does not major in Geography.

If this trend continues, we run the risk of becoming a department focused on servicing the needs of non-majors for G.E. courses, instead of a department whose primary mission is to educate geographers. While the Department would like to increase the numbers of both majors and non-majors taking its classes, we intend to increase the FTES major to FTES non-major ratio over the next seven years, to levels consistently above 30%. This requires increasing the number of undergraduate geography majors.

Graduation Rates

In the University's 2013-2018 Strategic Plan, Goal 2 is to "Improve student persistence, increase graduation rates university-wide, and narrow the achievement gap for underrepresented students".

The four-year graduation rates for Geography transfer students between Fall 2002 and Fall 2010 ranged from a low of 56.3% (Fall 2003 cohort) to a high of 86.7% (Fall 2002) (Appendix Table 3.b.). The 4-year graduation rates for the most recent cohorts (Fall 2007–Fall 2010) were 52.9%, 66.7%, 85.7%, and 80.8% respectively. This compares favorably with the University graduation rates of 63.8%, 67.7%, 71.0%, and 71.5% for the same cohorts. The Department's graduation rate of 80.8% for the Fall 2010 cohort was more than ten percentage points above the 66.7% graduation rate for the Fall 2008 cohort.

Graduation rates for M.A. students are shown in Table 7. A priority for the Department is to increase the 3-year graduation rate for M.A. cohorts. We can get some sense of a trend in the M.A. graduation rate by comparing the 2002-2006 cohorts with the 2007-2011 cohorts. Of the 34 students entering the M.A. program between 2002 and 2006, 29% graduated within three years. Of the 46 students entering the M.A. program between 2007 and 2011, 39% graduated within three years.

While this shows some progress, the Department would like to see significant improvement in the 3-year graduation rate for M.A. students during the next seven years (2015-2022). At a minimum, we would like at least 50% of incoming M.A. students

graduate within three years. The Department will review the graduate program to identify ways to increase the 3-year graduation rate.

II.d. Enrollment Targets (FTES), Faculty Allocation, and Student-Faculty Ratios

Discuss the unit's enrollment trends since the last program review, based on enrollment targets (FTES), faculty allocation, and student faculty ratios. For graduate programs, comment on whether there is sufficient enrollment to constitute a community of scholars to conduct the program.

The Great Recession of 2007-2009 and the related budget crisis had a significant impact on overall enrollment targets in the Department (see Table 2.a. in Appendix 1). The FTES target fell from 266 in 2007-2008 to 214 in 2008-2009, a decline of 19.5%. FTES grew to 273 in 2012-2013, and increase of 27.5%. The most recent FTES was 268 (2013-2014). FTES enrollments have been between 95-98% of the FTES target since 2006-07 (Appendix Table 9).

Since 2007, the Department has had between eight and ten tenured, tenure-track, and Faculty Early Retirement Program (FERP) faculty (Appendix Table 9). In 2014-2015, we have seven tenured faculty, two tenure-track faculty, and no FERP faculty. With respect to total FTES, we have maintained a Student-Faculty ratio around 25.

The M.A. program in Geography has been growing in recent years. Between 2000 and 2007, the number of graduate students varied between 13 and 27 students (average = 18). During the current PPR period, the number of graduate students has varied between 21 and 31 students (average = 25) (Table 6.b. in Appendix 1). Our goal is to keep the number of majors in this range, which is sufficient to maintain the program.

II.e. Plans for Curricular Changes

Describe any plans for curricular changes in the short (three-year) and long (seven-year) term, such as expansions, contractions or discontinuances. Relate these plans to the priorities described above in section I.c.

In Fall 2014 and Spring 2015, the Geography Department reviewed the structure of the undergraduate and graduate programs and developed plans for curricular changes during the next seven years. These plans are discussed below in Section VII, in the Long-Term Plan. They include:

- *Add Degree Programs in Environmental Studies*
- *Create Course Categories for all Upper-Division Requirements*

- *Revise the Capstone Course Requirement*
- *Add Concentrations to the Geography Major*

III. ASSESSMENT OF STUDENT LEARNING

Because student learning is central to our mission and activities, it is vital that each department or program includes in its self-study a report on how it uses assessment to monitor the quality of student learning in its degree program(s) and/or what plans it has to build systematic assessment into its program(s). Assessment, in this context, refers to whatever combination of means the department or program employs to provide evidence to answer the following questions:

- A. How well are our students learning what the program is designed to teach them?*
- B. What direct strategies or systematic methods are utilized to measure student learning?*
- C. Are the assessment strategies/measures of the program changing over time?*
- D. What modifications should we make to the program to enhance student learning? (And after having made changes, how have these changes affected student learning and the quality of the department or program as a learning community?)*
- E. How have assessment findings/results led to improvement or changes in teaching, learning and/or overall departmental effectiveness? Cite examples.*
- F. What quality indicators have been defined/identified by the department/program as evidence of departmental effectiveness/success other than assessment of student learning, e.g. number of students who pursue graduate or professional education programs in the field, job placement rates, graduation rates, student-faculty research/creative collaborations, etc. (See also Appendix VI)*
- G. Many department/programs are offering courses and programs via technology (on-line, video conferencing etc.) and at off campus sites and in compressed schedules. How is student learning assessed in these formats/modalities?*

In this section I will discuss (1) the Department's assessment of student learning between 2007 and 2014, (2) the results of an alumni survey conducted in February 2015, and (3) the new Assessment Strategy for the Geography Department.

III.a. Student Assessment, 2007-2014

After the 2000 PPR, the Department created the 400-level capstone courses designed to showcase Geography majors' "critical understanding" of geographic processes. Since then, we have periodically evaluated the research papers and field projects completed by students in the capstone courses.

However, this has not been done on an annual basis, and there was no feedback loop built into the assessment. In large measure, this is because there was little direction provided to the Department about assessment – What is it? How do we implement it? How do we use it to improve our curriculum? The recent appointment of Dr. Su Swarat as the university’s Director of Assessment has resulted in much needed clarity regarding the purpose of assessment, and steps to take in creating an ongoing assessment program.

In the 2012-2014 Geography Assessment Report, we identified student products that could be used for assessment. These include research papers in capstone courses; essays in GEOG 300A, which meets the university writing requirement; master’s theses. Moving forward, we plan to use these and other student products (e.g. maps created in GIS classes) to evaluate student learning and identify adjustments to our curriculum. Our new assessment plan will be discussed in Section III.c.

III.b. 2015 Geography Alumni Survey

What do Geography alumni think of the program? What are its strengths and weaknesses, and what changes should be made? Do alumni feel that they have attained competency in geography? Has the geography degree help alumni in the early stages of their careers?

Using the Qualtrix program provided by the university, the Geography Department conducted a survey of 218 alumni (2007-2014 graduates) in February 2015. The alumni e-mail list was provided by the College of Humanities and Social Sciences (H&SS) Director of Development. Efforts were made to update e-mail addresses, replacing the CSUF e-mail addresses with those used today by alumni. After two e-mail distributions, we received 57 responses (a 26% response rate).

Alumni were asked whether or not their Geography degree helped them to understand nine geographic themes (Table 2). Most respondents strongly agreed or agreed that their degree helped them to understand the different themes. For example, 98 percent strongly agreed or agreed that their degree helped them to understand the natural processes shaping the Earth’s physical landscapes. Eighty-seven percent strongly agreed or agreed that they understood the economic, political, and technological processes shaping the global economy.

Table 2
Alumni Survey: Geographic Understanding

<i>My undergraduate degree in Geography at CSUF enabled me to understand:</i>	STRONGLY	AGREE	UNDECIDED	DISAGREE	STRONGLY	<i>n</i>
	AGREE	AGREE	UNDECIDED	DISAGREE	DISAGREE	
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	
Fundamental concepts, models, and theories in Geography	74.5	25.5	0.0	0.0	0.0	55
The natural processes shaping the Earth's physical landscapes	50.0	48.1	1.9	0.0	0.0	54
The natural processes creating weather patterns and climates	44.4	48.1	5.6	1.9	0.0	54
The diversity of the earth's ecosystems	54.7	37.7	3.8	3.8	0.0	53
Important connections between the natural environment and human activity	78.8	19.2	1.9	0.0	0.0	52
The development and transformation of diverse cultural landscapes	53.7	40.7	3.7	1.9	0.0	54
The geography of population and processes of population change	53.7	44.4	1.9	0.0	0.0	54
The economic, political, and technological processes shaping the global economy	53.7	33.3	13.0	0.0	0.0	54
Urbanization and the spatial structure of cities	70.4	20.4	9.3	0.0	0.0	54

Source: 2015 Geography Alumni Survey

A second question asked about the acquisition of specific knowledge and skills in their Geography program (Table 3). More than 90 percent of respondents strongly agreed or agreed that the Geography degree enabled them to communicate effectively with maps; critically evaluate, interpret, and analyze geographic research and understand geographic processes or phenomena at different spatial scales. Between 80 and 89 percent strongly agreed or agreed that their degree enabled them to solve geographic problems using GIS, conduct research, communicate effectively in writing and orally, and work well in multi-cultural environments. Also, 72 percent of alumni stated that their Geography degree has helped them to achieve their career goals.

We also asked alumni to rate the quality of teaching in the Geography Department, assigning grades of A to F for nine indicators of teaching quality (Table 4). Student responses were converted to the standard 4.0 scales used for GPA. The highest grades (3.67-4.00) were given to (1) the quality of teaching by Geography faculty, (2) the Geography Department as an intellectually stimulating learning environment, (3) access to equipment and facilities in the Geography Department, and (4) the availability of Geography faculty outside of class. Grades in the B+ to A- range (3.33-3.67) were given to (1) the quality of Geography advising, and (2) opportunities to develop research

Table 3
Alumni Survey: Knowledge and Skills

<i>The knowledge and skills I acquired in the Geography Department enabled me to:</i>	STRONGLY AGREE		UNDECIDED	STRONGLY DISAGREE		<i>n</i>
	AGREE	AGREE	UNDECIDED	DISAGREE	DISAGREE	
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	
Solve geographic problems using Geographic Information Systems (GIS)	39.6	47.2	13.2	0.0	0.0	53
Understand geographic processes and phenomena at different spatial scales	52.8	39.6	5.7	1.9	0.0	53
Critically evaluate, interpret, and analyze geographic research	49.1	43.4	5.7	1.9	0.0	53
Conduct my own research to address geographic questions	49.1	37.7	9.4	1.9	1.9	53
Communicate effectively in writing	58.5	30.2	5.7	5.7	0.0	53
Communicate effectively orally	39.6	47.2	9.4	1.9	1.9	53
Communicate effectively with maps	54.7	41.5	3.8	0.0	0.0	53
Work well in multi-cultural environments	52.8	30.2	15.1	0.0	1.9	53
Achieve my career goals	41.5	30.2	20.8	5.7	1.9	53

Source: 2015 Geography Alumni Survey

projects. The lowest grades (3.00-3.33) were given to (1) opportunities to collaborate with faculty on research projects, (2) the diversity of courses offered by the Geography Department, and (3) the availability of courses offered by the Geography Department.

These results were reinforced in the open-ended comments. We asked alumni to describe the Department’s strengths and weaknesses, and make suggestions for improvement.

Two strengths stand out from their comments: the quality of the faculty, and the sense of community in the Department. Faculty members are described as “passionate”, “approachable”, and “knowledgeable”. In addition, the experience of working and interacting with students and faculty in our 4th floor home, being involved with the active Geography Club, and going to conferences with other students created a strong sense of community for many of the alumni.

Table 4
Alumni Survey: Quality of Teaching in the Geography Department

Using letter grades, where A=Excellent, C=Average, and F=Failing, please rate each of the following aspects of instruction in the Geography Department:

	A	B	C	D	F	n
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	
The quality of teaching by Geography faculty	80.8	15.4	1.9	1.9	0.0	52
The availability of Geography faculty outside of class	73.1	25.0	0.0	0.0	1.9	52
Opportunities to develop research projects	53.8	36.5	5.8	1.9	1.9	52
Opportunities to collaborate with faculty on research projects	51.0	33.3	9.8	3.9	2.0	51
The quality of advising by Geography advisors	61.5	32.7	3.8	0.0	1.9	52
The diversity of courses offered by the Geography Department	38.5	46.2	13.5	0.0	1.9	52
The availability of courses offered by the Geography Department	30.8	48.1	15.4	3.8	1.9	52
Access to equipment and facilities in the Geography Department	75.0	21.2	3.8	0.0	0.0	52
The Geography Department as an intellectually stimulating learning environment	82.7	11.5	3.8	0.0	1.9	52

Source: 2015 Geography Alumni Survey

However, there were also a couple of suggestions for improvement. First, several alumni commented on the lack of career preparation in their Geography degree. While a few students take advantage of internships, these are not well promoted in the Department. They thought that the Department could do a better job of incorporating career preparation into the curriculum. One of our lecturers, Dr. Peggy Smith, recently developed and taught GEOG 464, Geography for Teachers. For many alumni, this type of class could be beneficial for making the transition from college into a challenging post-recession economy.

A second concern was related to the curriculum. Several alumni thought that we should increase the number and frequency of applied and geotechnical classes, including GIS, remote sensing, and environmental analysis. This connects with their concerns about career preparation. A number of alumni thought that we could do a better job of offering a greater diversity of courses, rather than rely on the same “workhorses” each

semester. However, we need to offer high-enrollment GE classes to meet our enrollment targets each semester, limiting our ability to offer more majors-oriented classes.

The Alumni Survey was illuminating and helpful. In a nutshell, our alumni think highly of the Department and the time that they spent doing their Geography degrees. However, they think that we should offer more applied majors-oriented courses each semester, and do a better job of preparing students for life after college.

We plan to conduct annual exit surveys of graduates and follow-up surveys of our alumni.

III.c. New Geography Department Assessment Strategy

The Geography Department plans to follow the CSUF six-step assessment process for continuous improvement of student learning.

We have revised and updated our Student Learning Outcomes (SLOs). Specifically, we brainstormed, reviewed, synthesized and prioritized a list of things that an ideal geography major should know, understand and value (see Table 1). We then generated a measurable and manageable list of SLOs that are most important to our program at the present time and are aligned with University missions and goals. We have communicated this to all full-time and part-time faculty, and encouraged them to align their course learning outcomes with the program SLOs.

This semester (Spring 2015) we are conducting a curriculum mapping exercise to ensure that our SLOs are adequately addressed in the curriculum, and that the objectives of all components of our program are reflected in the SLOs. Using the assessment maps for the SLOs as guides, we will develop a multi-year assessment plan, which prioritizes the SLOs and determines which SLOs will be assessed in each year of the assessment cycle. (For example, in academic year 2014 – 2015, SLO 1 is assessed.) We will also revise our methods for assessing the SLOs as well as develop and implement new assessment methods involving direct measures (such as embedded exam questions, term papers, capstone projects, and lab reports) and indirect measures (such as alumni survey and student self-reflections).

For each of the SLOs we will determine the corresponding criteria for success, or the level of proficiency that students are expected to demonstrate. Rubrics, in the form of a matrix table, will be used to describe the dimensions of student work or response at various levels of performance. We will collect evidence of student learning with multiple methods and data sources, and carefully review and analyze the assessment data on the SLOs. The data will be used to evaluate the effectiveness of our courses and curriculum in promoting student learning, and to provide feedback for improving our

teaching and learning practices. SLOs may then be revised and updated as appropriate. Finally, we will document our assessment and improvement activities.

By doing the 6-step cycle of assessment, we will make sure that our assessment process is manageable and sustainable over time, leading to continuous improvement of student learning.

IV. FACULTY

IV.a. Faculty Changes

Describe changes since the last program review in the full-time equivalent faculty (FTEF) allocated to the department or program. Include information on tenured and tenure tract faculty lines (e.g. new hires, retirements, FERP's, resignations, and how these changes may have affected the program/department's academic offerings. Describe tenure density in the program/department and the distribution among academic rank (assistant, associate, professor).

The Geography Department has experienced several faculty changes since 2007:

- Dr. Jason Blackburn was hired (2007), and resigned (2009) to take a faculty position at the University of Florida
- Dr. John Carroll was hired as CSUF Director of Academic Technology (2014-15)
- Dr. Dydia DeLyser was hired (2014), after teaching at Louisiana State University for 18 years
- Dr. Mark Drayse received tenure (2007) and was promoted to Professor (2013)
- Dr. Wayne Engstrom participated in FERP (2007-2010) and retired (2011)
- Dr. James Miller was hired (2007) and received tenure (2013)
- Dr. Zia Salim was hired (2014)
- Dr. Jonathan Taylor was promoted to Professor (2012)
- Dr. Jindong Wu was hired (2008) and received tenure (2014)
- Dr. Lei Xu received tenure (2014)
- Dr. Robert (Ray) Young participated in FERP (2010-2013) and retired (2014)

In 2014-2015, there are nine full-time faculty members in the Department (including John Carroll). With three faculty achieving tenure in 2013 and 2014, the Department has a high *tenure density*. Due to hiring restrictions during and after the recession, the Department did not hire new faculty between 2008 and 2014. Since 2007, four faculty received tenure. Current faculty members include:

Tenured Faculty

- John Carroll (Associate Professor)
- Mark Drayse (Professor and Department Chair)
- James Miller (Associate Professor)
- Jonathan (Jon) Taylor (Professor)
- Robert (Bob) Voeks (Professor)
- Jindong Wu (Associate Professor)
- Lei Xu (Associate Professor)

Tenure-Track Faculty

- Dydia DeLyser (Assistant Professor)
- Zia Salim (Assistant Professor)

IV.b. Faculty Accomplishments, 2007-2014

The Geography Department is actively engaged in teaching, research, and service.

Teaching

The Geography Department is committed to maintaining high expectations and performance with respect to our primary mission, teaching. Geography faculty members consistently receive summary scores on the Student Opinion Questionnaires (SOQs) higher than 3.50 (for tenure and promotion, 3.00 is the minimum SOQ score required by the Department Personnel Standards). As discussed in Section II.b., we continually refresh our curriculum with new courses, adding 17 between 2007 and 2014. New faculty members are encouraged to develop their own courses, which adds to the diversity of the curriculum.

Research

Between 2007 and 2014, the faculty published 59 peer-reviewed articles and book chapters and one book. Faculty members have published in some of the leading journals in Geography and affiliated fields, including *Climate Research*, *Environmental Conservation*, *GeoJournal*, *Geopolitics*, *Human Ecology*, *Professional Geographer*, *Regional Studies*, *Remote Sensing*, and *Transactions of the Institute of British Geographers*. During the same period, faculty presented 105 papers at conferences and universities.

To support our research, we received eight external grants worth \$951,300, and 33 internal grants worth \$252,300. The external grant total includes 50% of the \$750,000 NASA allocation for the Remote Sensing Lab (2005-2009). In addition, Dr. Voeks received a Fulbright Fellowship to Mozambique in 2013-2014 (\$172,000).

Service

Being a small department, all faculty members are engaged in service to the Department. We normally constitute a “committee of the whole” for departmental business such as hiring and curriculum.

Geography faculty members are also active in service outside of the Department. Drs. Carroll and Taylor have served on the Academic Senate. Faculty members have served

on the General Education, Graduate Education, and Information Technology university committees, as well as the President's Sustainability Taskforce.

Outside of the university, Dr. Voeks was President of the California Geographical Society (CGS) from 2009 to 2011. He has also been Editor-in-Chief of *Economic Botany* since 2009. Dr. Carroll is a CGS board member, and serves on the City of Fullerton's Transportation and Circulation Commission.

Our new faculty members are actively involved in service activities. Dr. DeLyser is co-editor of *cultural geographies*, and is on seven editorial boards and four museum boards (the latter related to her research). Dr. Salim is actively involved in regional geography associations, and has taken the lead in advising the Geography Club.

IV.c. Faculty Hiring Priorities

Describe priorities for additional faculty hires. Explain how these priorities and future hiring plans relate to relevant changes in the discipline, the career objectives of students, the planning of the university, and regional, national or global developments.

In 2014, the Geography Department hired two exceptional faculty members, Dr. Dydia DeLyser and Dr. Zia Salim. Dr. DeLyser (Ph.D. Syracuse, 1998) is a well-known cultural geographer who taught at Louisiana State University between 1998 and 2014. We were fortunate to benefit from her desire to return home to Southern California. Dr. Salim (Ph.D. UC Santa Barbara and San Diego State, 2014) is a highly promising teacher and researcher, with interests in social geography and global urbanization.

While these hires have strengthened the teaching and research *capabilities* of the Department, along with other faculty changes they have created an imbalanced distribution of faculty in terms of research and teaching *interests*. One of the strengths of Geography is its diversity. Of the nine current faculty, six are human geographers (Drs. Carroll, DeLyser, Drayse, Salim, Taylor, and Xu), two are physical geographers (Drs. Miller and Wu), and one is an environmental geographer (Dr. Voeks). We lost one physical geographer to retirement (Dr. Engstrom), and one biogeographer/medical geographer to resignation (Dr. Blackburn). Thus at the moment we are 'top-heavy' in terms of human geographers. This informs our hiring priorities for the next seven years.

A central goal of our 2015-2022 Strategic Plan is to position Geography as a strong, viable option for students interested in environmental careers. To accomplish this, we need to increase our faculty specializing in environmental and physical geography.

A top priority for our next hire is a specialist in *Water Resources*. Water resource use and conservation is a critical challenge facing California in the 21st Century.

IV.d. Lecturers and Graduate Assistants

Describe the role of full-time or part time faculty and student assistants in the program/department's curriculum and academic offerings. Indicate the number and percentage of courses taught by part-time faculty and student teaching assistants. Identify any parts of the curriculum that are the responsibility of part-time faculty or teaching assistants.

Lecturers

Part-time faculty members fulfill an important role in the Geography Department. In any given semester, they teach roughly half of all classes. For example, in Fall 2014, lecturers taught 23 of 45 Geography classes (51%). In Spring 2015, lecturers are teaching 17 of 41 Geography classes (40%). The role of lecturers is especially important in face-to-face teaching. All classes taught by lecturers are in person, while about one in three classes taught by full-time faculty is online. Therefore, lecturers taught 23 of 37 face-to-face classes in Fall 2014, and teach 17 of 33 face-to-face classes in Spring 2015.

The main curricular responsibility of lecturers is to teach sections in G.E. courses, especially GEOG 100 (Global Geography) and GEOG 110 (Introduction to Natural Environment). G.E. courses account for most of the sections taught by lecturers in a given semester. In Fall 2014, lecturers taught seven sections of GEOG 100, six sections of GEOG 110, four sections of GEOG 332 (United States and Canada), and three additional sections of G.E. courses.

A second focus for lecturers is teaching classes in urban planning and Geographic Information Systems (GIS). With the retirement of Dr. Young, the Department does not have a full-time faculty member capable of teaching GEOG 478 (Urban Planning Principles) or GEOG 484 (Urban Planning Methods). These courses are now taught by Orange County planners. We also rely on lecturers to teach GEOG 281 (Introduction to GIS) and GEOG 485 (GIS: Principles and Applications).

Graduate Assistants

If the budget permits, the Department hires up to five or six graduate assistants each semester. The graduate assistants perform several tasks in support of faculty teaching and research. Teaching-related duties include assistance with course preparation, grading, and student GIS projects. The graduate assistants are not responsible for any teaching or curricular development. Research-related duties include bibliographic assistance and GIS support for faculty.

V. STUDENT SUPPORT AND ADVISING

V.a. Student Advising

Briefly describe how the department advises its majors, minors, and graduate students.

The Department of Geography places a high priority on student advising. We have a designated Undergraduate Advisor (Dr. Lei Xu) and Graduate Advisor (Dr. Jonathan Taylor). The advisors receive a course release each semester. We find it advantageous to have two faculty members specializing in advising. The advisors are knowledgeable about the procedures required for advising (e.g. graduation checks, form processing, and graduate study plans). Students know whom to talk to regarding any questions pertaining to classes, schedules, and program requirements.

The Undergraduate Advisor is responsible for meeting with students to answer questions related to courses and program requirements, processing all forms related to undergraduate students, and reviewing student Titan Degree Audits (TDAs) and completing graduation checks. As part of our Program Performance Review, we identified the need to have a faculty member act as Assessment Coordinator. The Undergraduate Advisor will fill this role.

The Graduate Advisor is responsible for reviewing graduate applications and selecting applicants for the M.A. program, meeting with students to develop a study plan, processing all forms related to graduate students, organizing graduate exams, and meeting with students to go over any questions with courses and program requirements. The graduate advisor acts as an overseer for the M.A. program, identifying any issues that need to be brought to the attention of the Department.

In addition, graduate students selecting the thesis option identify a thesis advisor. The thesis advisor works closely with the graduate student, reviewing and discussing the thesis topic, research questions, and thesis chapters. As a result of faculty discussions in the Program Performance Review, we will work to distribute advising responsibilities more evenly among the faculty, and to encourage M.A. students to select a thesis advisor earlier in the program.

V.b. High-Impact Practices

Describe opportunities for students to participate in departmental honors programs, undergraduate or graduate research, collaborative research with faculty, service learning, internships, etc. How are these opportunities supported? List the faculty and students participating in each type of activity and indicate plans for the future.

The Geography Department endeavors to provide students with high-impact learning experiences inside and outside of the classroom. Several high-impact practices in the Department are discussed below.

Master's Theses

During the review period, the Department encouraged master's students to opt for Plan B in the graduate program, the thesis option. A main goal of a master's program is to prepare students for professional careers. The thesis demonstrates a student's ability to identify a research problem and research questions, perform original research, and communicate the results of the research in a thesis that is generally 80-120 pages in length.

Between 2007 and 2014, 36 master's theses were completed. This represented three in four master's degrees awarded by the Geography Department. Two geography theses were selected for the university's prestigious Giles T. Brown Outstanding Thesis Award: Zia Salim's 2007 thesis on the impacts of Downtown Los Angeles revitalization on the homeless, and Aline Gregorio's 2010 thesis on the conflicts between biodiversity conservation and the livelihoods of indigenous people in the Atlantic Coastal Rainforest of Brazil.

Research Projects for Undergraduate Classes

Several undergraduate geography classes require students to research and write a significant research paper. This is the usual practice in 400-level capstone classes, as well as some 300-level classes. The goal is to build students' ability to identify a research problem and related research question, conduct research, and communicate the research results in narrative, graphics, and oral presentations. For example, students in Dr. Drayse's GEOG 462 (Natural Resources) write a 12-15 page research paper on a topic selected by the student, and related to one or more of the course themes (resources and economic development, resource governance and conflict, and resources and the environment).

Research Collaboration with Faculty

The Department recognizes the value of collaborative research with students. This can be illustrated with a few examples of faculty-student collaboration since 2012. Dr. Voeks has co-authored articles with students that were published in *California Geographer* and *Ethnobiology and Conservation*, and recently collaborated with two students on a book chapter published in *Medicinal Plants and the Legacy of Richard E. Shultes*. Dr. Taylor and a student co-authored an article in *Geographical Review*, and Dr. Wu and a student co-authored an article in *California Geographer*. Dr. Miller has collaborated with two

students whose presentations won awards for best undergraduate and best graduate papers in physical geography at the 2014 Association of Pacific Coast Geographers (APCG) conference in Tucson, Arizona.

Participation in Conferences

Since 2007, Geography majors have been active participants in conferences. This includes both undergraduates and graduates. An important venue for student research presentations is the Department's annual All Points of the Compass (APC) conference, organized by the student Geography Club. This conference is now held annually in November, to coincide with National Geography Awareness Week. In addition, students have presented papers and posters at annual Geography conferences held by the Los Angeles Geographical Society (LAGS), the California Geographical Society (CGS), the Association of Pacific Coast Geographers (APCG), and the Association of American Geographers (AAG).

Between 2007 and 2014, there were 157 Geography student presentations at conferences. Most of the presentations were papers (111) or posters (41) (see Table 5). Of these presentations, 61 were delivered at CGS conferences, 48 at APC conferences, 18 at APCG conferences, 13 at LAGS conferences, and 11 at AAG conferences. The high level of student participation in conferences reflects (1) faculty encouragement and collaboration, (2) the Geography Club's hard work in organizing the APC conference each year, and (3) the Geography Club's organization of student travel to conferences, which includes applying for funding from the Inter-Club Council (ICC).

Many of our students have received awards for their conference presentations. For example, nine students have received a Tom McKnight Best Paper Award at the CGS conferences since 2007. At the 2014 APCG conference, one of our undergraduates won the Christopherson Geosystems Award for Best Undergraduate Student Paper in Earth Systems Science, and one of our M.A. students won the Harry and Shirley Bailey Award for the Outstanding Paper in Physical Geography.

Table 5
CSUF Geography Students
Conference Presentations, 2007-14

	AAG	APCG	CGS	LAGS	All Points	Other	TOTAL
2014	0	2	10	n/a	8	6	26
2013	3	nd	12	0	5	0	20
2012	0	1	8	2	6	0	17
2011	1	2	3	1	11	0	18
2010	0	nd	4	3	n/a	0	7
2009	3	5	8	4	13	0	33
2008	1	nd	5	3	nd	0	9
2007	3	8	11	nd	5	0	27
TOTAL	11	18	61	13	48	6	157

nd= no data, n/a= not applicable

AAG = Association of American Geographers

APCG = Association of Pacific Coast Geographers

CGS = California Geographical Society

LAGS = Los Angeles Geographical Society

Field Projects

Field projects are an important aspect of physical geography. Our Mountain Field Class (GEOG 483), offered most summers, takes students on two-week hiking and camping trips to the Sierra Nevada or Cascade mountains. Students are responsible for making presentations about different natural phenomena in mountain environments, and conducting field research to address a research question. The results of student field projects are often presented at the Department's All Points of the Compass Conference. In our Field Mapping class (GEOG 480), students spend some time at the CSU Desert Studies Center in Zzyzx, where they do surveying and other mapping exercises in the field.

Internships

Geography majors can enroll in Geography 495, Internship in Geography. Between 2007 and 2014, 32 students enrolled in the internship class (about two students per semester). Internships were usually for jobs in which students used Geographic Information Systems (GIS), or jobs related to the environment.

We will endeavor to be more active in promoting internships. One strategy is to develop a list of potential internship opportunities in the Orange County region, relying on our alumni network. Keeping in contact with potential employers will also benefit students, by making the Department aware of existing internships.

Study-Abroad Programs

Geography faculty have organized and led study abroad programs that directly benefit geography majors, as well as students from other disciplines. For example, Dr. Voeks has organized and led several study-abroad programs since 2007, in Brazil and Costa Rica. Drs. Carroll and Miller have led study-abroad programs to South Africa in 2009 and 2014. However, each year only a small number of Geography majors participate in study-abroad programs. The recent establishment of the less expensive study-away option by the College of Humanities & Social Sciences should enable more Geography students to participate in these important programs.

VI. RESOURCES AND FACILITIES

VI.a. State Support and Non-State Resources

Itemize the state support and non-state resources received by the program/department during the last five years.

Table 6 shows the state-supported budget for the Geography Department between 2009 and 2014, and the current value of non-state-supported resources.

**Table 6
Geography Resources
2009-2014**

	STATE SUPPORT		
	Salaries and Wages	Operating Expenses	Total
2013-2014	\$1,126,596	\$39,304	\$1,165,900
2012-2013	\$1,085,960	\$76,288	\$1,162,248
2011-2012	\$1,316,727	\$111,483	\$1,428,210
2010-2011	\$1,185,204	\$122,335	\$1,307,539
2009-2010	\$1,077,191	\$55,219	\$1,132,410

	NON-STATE SUPPORT		
	Geography Excellence Fund	Geography Student Research Endowment	Geography Student Research Endowment - Distribution Account
2014-2015	\$66,383	\$25,000	\$1,029

Sources: College of Humanities & Social Sciences and Department of Geography

VI.b. Special Facilities and Equipment

Identify any special facilities/equipment used by the program/department such as laboratories, computers, large classrooms, or performance spaces. Identify changes over last five years and prioritize needs for the future.

Geographic Learning Center

The Geographic Learning Center is a multi-function, open floorplan instructional space that contains a 30-seat lecture space and a 30-workstation GIS computer lab. A similar instructor computer is connected to a projector serving the lecture space and also can control the 30 workstations using LanSchool classroom management software.

The computers in the GIS lab have been on a 3-year refresh cycle supported by the College. The GIS computer lab consists of:

31 Dell Precision 1700 workstations

Intel Core i7 @ 3.40GHz, 8GB SDRAM, 256GB Solid State Drive, 500 GB SATA hard drive, Nvidia Quadro K600 graphics card, 24" monitor, Windows 7 – 64-bit

Printers, Scanners, and Plotters

1 B&W Laser Printer (networked)

1 Color Laser Printer (networked)

1 Desktop Flatbed Scanner

1 Large Format Plotter (HP DesignJet T790 42")

Global Positioning Systems (GPS) Equipment

1 Trimble GeoExplorer GeoXT 2008/3000 series handheld GPS/field computer

1 Trimble GeoExplorer GeoXT 2005 series handheld GPS/field computer

20 Trimble Juno SB Handheld GPS units

12 Handheld GPS units

Various Garmin and Magellan units

Other Equipment

2 Laser Technology TruPulse 360B Range Finders

Center for Remote Sensing and Environmental Analysis

The Center for Remote Sensing & Environmental Analysis (CRSEA) was established in 2007 with the help of a \$750,000 grant from the National Aeronautics and Space Administration (NASA). It consists of a 16-workstation teaching lab and a separate research lab with 3 high-end workstations. The following equipment is in the Remote Sensing lab:

Data Storage Server

Dual Core Xeon Processor 5130 4MB Cache, 2.00GHz, 1333MHz FSB, 4 GB RAM, 1.8 TB Hard Drive storage.

3 High-End Workstations

Dell Precision T1650 Tower Workstation with Intel® Core™ i7-3770 (8M, 3.4GHz, w/HD4000 Graphics), 8GB RAM, 250 GB Solid State Drive + 500GB HDD, 16X DVD +/- RW SATA, and Dell High Color 30 inch UltraSharp Widescreen Digital Flat Panel.

16 Teaching Workstations

Dell OptiPlex 9010 Minitower with 3rd Gen Intel® Core™ i7-3770 (Quad Core, 3.40GHz, 8MB w/HD4000 Graphics), 8GB RAM, 500GB HDD, 16X DVD +/- RW SATA, and Dell 20 inch UltraSharp Dual Flat Panel.

Qualitative Research Lab

Dr. DeLyser has established a Qualitative Research Lab in the Department, in H-429F. This new lab has one dedicated workstation with specialized transcription equipment and software.

Classrooms

Our classroom spaces leave something to be desired. Most of our classes are in two rooms, H-409 and H-412. These are old classrooms that haven't been remodeled since the 1950s. H-412 is consistently stuffy and uncomfortable, despite the recent HVAC repairs on the 4th floor. While several Geography classes are now taught as seminars, we do not have a good classroom for seminars, where 10 to 20 students can sit around a large table or a circle of chairs and desks.

For large sections, we use classrooms in other buildings (e.g. LH-318). However, these classrooms have poor projection equipment where projected images are too small to read, blocked by lamps, or impaired by room lighting. Not one classroom has lights in the front that do not impede the viewing of projected images; students in the front several rows, therefore, must take notes in the dark (and faculty members must read lecture notes in the dark as well).

VI.c. Databases, Software and Other Resources

Describe the current library resources for the program/department, the priorities for acquisitions over the next five years and any specialized needs such as collections, databases etc.

Our campus participates in a CSU system-wide site license for ESRI GIS products. Dr. John Carroll is the CSUF site license administrator. He is responsible for:

- maintaining the campus license server
- distributing single use licenses to departments, faculty, and staff
- representing CSUF on system-wide GIS Specialty Center Board

Departments, faculty, staff and students are currently using ESRI products in the following areas:

College of Humanities and Social Sciences (various departments)
College of Natural Sciences and Mathematics (various departments)
Mihaylo College of Business and Economics (various departments)
College of Engineering and Computer Science (various departments)
College of Health and Human Development (various departments)
University Extended Education (GIS Certificate Program)
Facilities Operations
Campus Police
Center for Demographic Research

The following software is used in the GIS and Remote Sensing labs:

- ERDAS Imagine 2013 Full-Suite with ATCOR ENVI 5.0 + IDL 8.2
- Geospatial Modeling Environment 0.7.2.*RC2
- Adobe CS6 Design and Web Premium
- ArcGIS 10.2 and other ESRI products
- Microsoft Office 2013
- Adobe Creative Cloud
- FRAGSTATS 4.2
- SPSS 21

TerraSync, GPS Correct, and Pathfinder Office software is used on our GPS units.

The Department intends to maintain hardware capabilities and software currency for the GIS and Remote Sensing laboratories.

VII. LONG-TERM PLANS

Summarize the unit's long-term plan, including refining the definitions of the goals and strategies in terms of indicators of quality and measures of productivity.

Explain how long-term plan implements the University's mission, goals and strategies and the unit's goals.

Explain what kinds of evidence will be used to measure the unit's results in pursuit of its goals, and how it will collect and analyze such evidence.

Develop a long-term budget plan in association with the goals and strategies and their effectiveness indicators. What internal reallocations may be appropriate? What new funding may be requested over the next seven years?

VII.a. Previous Long-Term Plan (2007-2014)

The previous Long-Term Plan was implemented in Fall 2007. In this section I highlight the 24 goals in the previous Long-Term Plan, and steps taken to meet these goals.

Preparing students to achieve their personal, civic, educational and career goals

- Carefully revise the program course offerings to reflect the specializations of newly hired faculty while maintaining an efficient path to graduation for students. → Tenure-track faculty hired between Fall 2007 and Spring 2014 included Professors Blackburn, Miller, Wu, and Xu. Each of these faculty members developed new courses based on their specializations. Professor Blackburn developed courses in spatial epidemiology, which were taught during his brief time in the department. Current courses developed by Professors Miller, Wu, and Xu include:*

GEOG 300B	Geographic Methods (Miller)
GEOG 328	Global Change and Environmental Systems (GE) (Wu)
GEOG 345	China (Xu)
GEOG 375	Population Geography (Xu)
GEOG 422	Global Climate Change (Miller)
GEOG 424	Desert Landscapes (Miller)
GEOG 427	Mountain Environments (Miller)
GEOG 486	Environmental Remote Sensing (Wu)
GEOG 489	Digital Image Processing (Wu)
GEOG 530T	Monitoring Ecosystem Processes (Wu)

- 2 *Expand the number of upper division courses to provide greater topical depth in the areas of GIS and remote sensing.* → We added two courses in remote sensing: GEOG 486 (Environmental Remote Sensing) and GEOG 489 (Digital Image Processing).
- 3 *Hire an additional faculty member specializing in applied remote sensing.* → We hired Professor Jindong Wu in 2008.
- 4 *Develop two new courses, one in geographic writing and one in geographic research methods.* → Both courses were developed: GEOG 300A (Geographic Thought) and GEOG 300B (Geographic Methods). GEOG 300A has become a staple offering in the department. It is now the only course that meets the University Writing Course Requirement for geography majors. However, GEOG 300B was only taught once. We continue to discuss the need for a research methods class for geography majors.
- 5 *Strengthen links between academic study and the world outside academia by expanding internship opportunities and by integrating additional real-world examples and field work into new and existing courses.* → See the discussion of High-Impact Practices in Section V.b.

Helping students develop the habit of intellectual inquiry and the ability to communicate effectively

- 6 *Maintain teaching loads consistent with university policies and faculty union contracts.* → The Department would like to maintain a 3-3 teaching schedule (“load”) for faculty. We believe that this is appropriate, given the demands for faculty research and service. The Department provides course releases each semester to the graduate and undergraduate advisors. However, with seven tenured faculty and two new hires, the Department will need to identify ways to keep most if not all faculty on a 3-3 teaching schedule.
- 7 *Develop courses in remote sensing and digital image processing to leverage the department’s new remote sensing facility.* → We added two courses in remote sensing: GEOG 486 (Environmental Remote Sensing) and GEOG 489 (Digital Image Processing).
- 8 *Expand the Department’s General Education offerings.* → The Department offers 15 G.E. courses in four G.E. categories. These courses are very important sources of enrollment each semester. Between 2007 and 2014, five new G.E. courses were added:

G.E. Category B.5 – Implications and Explorations in Mathematics and Natural Sciences

GEOG 328 Global Change and Environmental Systems

G.E. Category D.5 – Explorations in Social Sciences

GEOG 342 Middle East

GEOG 345 China

G.E. Category E – Lifelong Learning

GEOG 353 Geography of Illegal Drugs

GEOG 355 Global Cuisines

In addition, we have identified other courses that could be added to our G.E. curriculum. These include GEOG 330 (California), GEOG 344 (Africa), and GEOG 352 (National Parks).

- 9 *Increase the level of faculty grant activity to provide support for research, student assistants, and faculty travel.* → Between 2001 and 2007, faculty obtained 24 grants totaling \$760,000 (this includes 50% of the \$750,000 NASA grant). Between 2007 and 2014, faculty received 41 grants worth \$1,203,600 (including 50% of the NASA grant).
- 10 *Request increases in basic operating budgets to meet the needs of expanded enrollments and the increased use of educational technology.* → Enrollment and budgets were impacted by the Great Recession. At the same time, we have been able to refresh our technological hardware and software, as described in Section VI.
- 11 *Revise the culminating experience for undergraduate students. This is currently met through the capstone course requirement.* → The culminating experience for geography majors is the capstone class. This is a 400-level class in which students “must demonstrate a critical understanding of the major processes that shape the earth’s landscapes, regions, and places, and that influence human interaction with the earth’s cultural and physical environments” (CSUF Course Catalog). Several courses are listed as capstone courses.

During the review period, the Department had numerous discussions about the capstone requirement. There is general dissatisfaction with the capstone requirement among the faculty. There are three main reasons for this:

- (1) There are no uniform requirements for capstone courses. Although the unwritten practice is to have students write a substantial research paper, the requirements for research paper assignments vary considerably between capstone courses.

- (2) The list of capstone courses in the catalog is always out of date, forcing the undergraduate advisor to submit several TDA Exceptions each year to allow new courses to be used for the capstone requirement.
- (3) Although one of the stated purposes of the capstone requirement is to provide a basis for assessment of student learning, such assessment has been done infrequently on an ad hoc basis.

We have not reached a conclusion about the capstone requirement, or what it might be replaced with. This is one of the goals of our new Long-Term Plan.

Providing students with access to state-of-the-art technology

- 12 *Seek funding for a department technical support specialist to maintain the increasing equipment resources and assist faculty and students.* → We did not seek and obtain funding for a technical support specialist.
- 13 *Expand the capabilities of the department to include support for mobile G.I.S. training and applications through the acquisition of portable computers and GPS units.* → The Department acquired two Trimble GeoExplorer GeoXT hand-held GPS/field computers, 32 hand-held GPS units, and two laser range finders.
- 14 *Seek funding to establish a climate monitoring station for instruction, research, and publicity uses.* → The Department obtained funding for a climate monitoring station from Miscellaneous Course Fees. The weather station was installed on the roof of Humanities and Social Sciences building in September 2009. Current weather data and weekly, monthly, and annual trends can be retrieved through the following link: <http://hss-geogwebservr.fullerton.edu/weather/>
- 15 *Seek funding for additional graduate assistants to provide increased support for faculty and students working in the department lab and to expand the number of hours when the lab is available for student use.* → Most semesters we are able to fund between four and six graduate assistants.
- 16 *Continue to support the use of site licenses to maintain software currency.* → We have maintained our site license for ESRI ArcGIS, and maintain software currency in the GIS and Remote Sensing Labs.
- 17 *Avoid the threat of technological obsolescence by seeking internal and external sources of support for on-going hardware upgrades.* → We are on a three-year refresh cycle for computer hardware in the GIS lab.

Encouraging learning within a multi-cultural environment

- 18 *Hire an additional faculty member specializing in the area of Cultural Geography.* → This goal was met with the hiring of Dr. Dydia DeLyser in 2014. We were fortunate to bring on an experienced teacher and scholar with an extensive record of publication in cultural geography.
- 19 *Clearly articulate for students the nature of the link between the program's breadth and their educational and career goals, so that they can better understand the internal logic of the degree program and its intended outcomes.* → We could do a better job of emphasizing our learning goals and connecting the geography program with students' career goals. We plan to accomplish this with our new assessment strategy.
- 20 *Increase opportunities for greater depth and specialization in student's course of study while maintaining appropriate breadth requirements within the major.* → This goal has been met. We improved our offerings in geotechniques by hiring Dr. Wu, who created three courses in remote sensing and environmental monitoring.

Providing students with experience working in collaborative settings

- 21 *Reaffirm course and program learning goals and discuss those goals with students as a frequent, normal component of the learning process.* → The minimum requirement of this goal has been met with statements of student learning goals on course syllabi, and posting of student learning goals on the Geography Department website. We plan to improve the communication of student learning goals through the new assessment process.
- 22 *Establish explicit links between assessment measures and learning goals and communicate those links to students in a timely manner.* → This remains an ongoing goal, which we plan to meet with our new assessment plan.
- 23 *Establish a mechanism for the ongoing monitoring of learning outcomes that takes into account actual evidence of student learning and student needs.* → While we did occasional reviews of capstone projects, there was no ongoing annual assessment of student learning during the review period. This will be addressed with our new assessment plan.
- 24 *Communicate our learning goals to major transfer institutions and, where appropriate, work to integrate their goals with ours.* → We embarked on a couple of initiatives to build better connections with community colleges. For a few years, we held regular lunch meetings with local community colleges

instructors as part of our BRIDGES initiative (Building Relationships with Departments of Geography and Environmental Studies). We did not work with our community college partners to integrate learning goals. This will be addressed with our new outreach plan.

VII.b. New Long-Term Plan (2015-2022)

The overarching goal of our new Long-term Plan is to increase the number of Geography majors. We plan to do this by building on our capacities in environmental and applied geography, while at the same time maintaining a diverse curriculum covering all areas of Geography. In addition, the faculty will continue to create high-impact learning practices for students, in part by involving them in collaborative research projects.

FIRST-TIER PRIORITIES

1 *Create and Implement a Student Outreach Plan to Increase Majors*

Increase the number of Geography majors. Many of the goals in the Long-Term Plan are designed to help us achieve this goal, by improving our visibility to prospective majors and improving our program offerings. We intend to build on our connections with community colleges, and implement an outreach plan to attract transfer students to the Geography Department. Also, we will use our revised website to increase our visibility.

2 *Change the Department Name*

Change the name of the Department to *Geography and Environmental Studies*. The purpose of this change is to better reflect our mission statement and goals, and improve the visibility of the department to prospective students.

3 *Improve Student Recruitment, Thesis Advising, and the Core Curriculum in the Graduate Program*

The graduate program is significantly healthier than it was a decade ago. We have maintained annual enrollment between 20-25 students, which is a sustainable level. Between 2007-2014, 54 students graduated from the program (Appendix Table 8).

In a faculty review of the graduate program in February 2015, we identified the following areas for improvement:

(1) *Recruitment*: Appendix Table 5 shows the wide annual fluctuation in graduate applicants and admissions. We will work to recruit high-quality students in sufficient numbers to maintain the program.

(2) *Thesis Advising*: Graduate thesis advising is unevenly distributed amongst the faculty. This will be addressed by encouraging

(3) *Core Courses*: The Department has discussed the frequency with which the graduate core courses are offered, and the content of GEOG 500 - Seminar in Geographic Research.

In addition, the graduate advisor (Dr. Taylor) will develop a graduate “road map” to help guide students through the program and avoid common mistakes that reduce time to degree or prevent the completion of the degree.

4 *Promote Faculty Scholarship and Increase External Research Funding*

Continue to promote faculty publishing and conference participation. The Department will work to establish a standard 3-3 teaching schedule (load) for full-time faculty to create more time for research. We will increase external funding for faculty research projects.

5 *Hire New Faculty in Environmental and Physical Geography*

Hire new faculty to meet department needs in environmental and physical geography. Highest priority: water resources, with expertise in GIS.

SECOND-TIER PRIORITIES

6 *Continue to Develop High-Impact Practices for Students*

Increase the use of high-impact practices across the curriculum. These include (1) M.A theses, (2) student research projects in Geography classes, (3) student-faculty research collaboration, (4) student participation in conferences, (5) field classes and field trips, (6) internships, and (7) study-abroad and study-away programs.

7 *Continue to Improve Student Advising*

Continue to improve the effectiveness of our student advising for undergraduate and graduate students. Work with the college and university to reduce the time to degree for Geography majors, increase graduation rates, and promote student learning.

8 *Add Degree and Concentration Options*

Explore adding undergraduate and graduate programs in Environmental Studies. The rationale is twofold. First, the human-environment relation is one of the core themes in geography. We would like to become the “go-to” department for students interested in environmental issues and preparing for environment-related careers. Second, the Geography Department needs to increase the

number of undergraduate majors so that we can offer more specialized majors-oriented courses and rely less on General Education courses for enrollment.

Explore adding concentrations to the major. This reflects the desire of many students to combine the breadth of a geography degree with specialization. Potential concentrations include Physical Geography, Environment and Society, and Geospatial Analysis.

9 *Continue to Develop Geospatial Technologies Program*

Continue to develop our capabilities and programs in Geographic Information Systems (GIS) and Remote Sensing (RS). Explore the creation of a Geospatial Technologies concentration, a Geospatial Technologies minor, and/or a Geospatial Technologies master's program. Develop a suite of applied GIS courses (e.g. GIS for Business, GIS for Health Sciences).

In addition, we would like to bring the existing CSUF GIS Certificate Program into the Department, where it should be housed.

10 *Continue to Build Relationships with Geography Alumni*

Through our annual All Points of the Compass conference and other activities, continue to build relationships with alumni and others in the extended Geography community.

THIRD-TIER PRIORITIES

11 *Reorganize the Undergraduate Curriculum and Revise the Capstone Requirement*

The current major requires students to take courses listed in the following categories: Physical Geography, Environmental Geography, Human Geography, and Advanced Geography. We plan to change each of these requirements to a range of courses (e.g. the current Regional Geography requirement, which is three units of courses numbered 330 to 347). This will allow the Department to add new courses to a specific requirement by numbering it accordingly. This will reduce the number of TDA Exceptions that need to be submitted by the Undergraduate Advisor each year, and make it easy for students to know which classes meet each of the program requirements.

As discussed above (p. 38), all Geography majors need to complete a 400-level capstone course. However, the Department has not developed specific guidelines for the capstone courses and the ways in which students will be evaluated. We have discussed dropping the capstone requirement, which will not be needed once we implement our new assessment plan.

- 12** ***Enhance Geography Research and Scholarship Funds***
Increase funding for the two Geography research and scholarship funds. Develop a strategy to use Geography scholarship funds to reward and promote student success. Use the funds to help fund M.A. student fieldwork for the thesis.
- 13** ***Identify and Develop Ways to Engage with Local Communities***
Identify and develop ways to engage with communities in Orange County and other parts of Southern California. For example, this might involve using our capabilities in GIS and remote sensing to work on collaborative projects with community constituents.
- 14** ***Create and Implement an Assessment Strategy***
Develop and implement an assessment strategy to evaluate the effectiveness of our courses in promoting student learning, and provide feedback for improving our curriculum.
- 15** ***Build Connections with Other Departments and Universities***
Increase collaboration between Geography and other university departments on research and curriculum. Continue to collaborate with other departments and universities on research projects.

Table 7 lists the 15 goals in the Geography Long-Term Plan, their relation with the four goals in the University Strategic Plan, and qualitative and quantitative indicators of progress.

Table 7
Department Goals, University Goals, and Indicators of Progress

Department Goals	Related University Goals	Indicators of Progress
<i>FIRST-TIER PRIORITIES</i>		
Create and Implement a Student Outreach Plan to Increase Majors		Number of Majors and Annual Change in Number of Majors
Change the Department Name		Official Name Change
Improve Student Recruitment, Thesis Advising and the Core Curriculum in the Graduate Program	GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.	Curriculum Revision in Catalog
Promote Faculty Scholarship and Increase External Research Funding	GOAL 3 Recruit and retain a high-quality and diverse faculty and staff. GOAL 4 Increase revenue through fundraising, entrepreneurial activities, grants, and contracts.	Number of faculty publications Number of faculty conference presentations External funding (number of grants and total value)
Hire New Faculty in Environmental and Physical Geography	GOAL 3 Recruit and retain a high-quality and diverse faculty and staff.	Hiring and Retention of New Faculty
<i>SECOND-TIER PRIORITIES</i>		
Continue to Develop High-Impact Practices	GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.	Numbers of students completing the following high-impact practices each year: --Master's Theses --Undergraduate Research Papers --Research with Faculty --Conference Presentations

		--Field Class Projects --Internships --Study-Abroad Programs Quality of Student Theses and Research Papers, as Determined by Assessment
Continue to Improve Student Advising	GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs. GOAL 2 Improve student persistence, increase graduation rates, and narrow the achievement gap for underrepresented students.	Improved Graduation Rates
Add Degree and Concentration Options	GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.	New Degree and Concentration Options Added to Catalog
Continue to Develop the Geospatial Technologies Program	GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.	New Geospatial Courses and Program Changes Added to the Catalog
Continue to Build Relationships with Geography Alumni	GOAL 4 Increase revenue through fundraising, entrepreneurial activities, grants, and contracts.	Alumni Participation in Department Events Alumni Contributions to Geography Research and Scholarship Funds

THIRD-TIER PRIORITIES		
Reorganize the Undergraduate Curriculum and Revise the Capstone Requirement	<p>GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.</p> <p>GOAL 2 Improve student persistence, increase graduation rates, and narrow the achievement gap for underrepresented students.</p>	Curriculum Changes Published in the University Catalog
Enhance Geography Research and Scholarship Funds	<p>GOAL 4 Increase revenue through fundraising, entrepreneurial activities, grants, and contracts.</p>	<p>Value of Research and Scholarship Funds</p> <p>Number of Student Recipients</p>
Engage with Local Communities	<p>GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.</p>	Specific Projects or Events Involving Local Community Members or Organizations
Create and Implement an Assessment Strategy	<p>GOAL 1 Develop and maintain a curricular and co-curricular environment that prepares students for participation in a global society and is responsive to workforce needs.</p>	Annual Indicators of Student Achievement
Build Connections with Other Departments and Universities		Specific Research Collaboration or Other Connection (e.g. Cross-Listed Courses) with another Department or University.

APPENDIX TABLES

Table 1.a.
First-time Freshmen
Program Applications, Admission, and Enrollments

	<i>Applied</i>	<i>Admitted</i>	<i>% Admitted</i>	<i>Enrolled</i>	<i>% Enrolled</i>
2007-2008	11	6	55%	0	0%
2008-2009	9	5	56%	1	20%
2009-2010	11	4	36%	1	25%
2010-2011	16	8	50%	1	13%
2011-2012	18	6	33%	2	33%
2012-2013	17	10	59%	2	20%
2013-2014	20	7	35%	1	14%
2014-2015	13	3	23%	0	0%

Source: CSUF Office of Institutional Research and Analytical Studies

Table 1.b.
Upper Division Transfers
Program Applications, Admission, and Enrollments

	<i>Applied</i>	<i>Admitted</i>	<i>% Admitted</i>	<i>Enrolled</i>	<i>% Enrolled</i>
2007-2008	72	38	53%	20	53%
2008-2009	51	31	61%	21	68%
2009-2010	42	17	40%	14	82%
2010-2011	119	66	55%	39	59%
2011-2012	93	48	52%	20	42%
2012-2013	79	46	58%	16	35%
2013-2014	114	56	49%	18	32%
2014-2015	76	33	43%	11	33%

Source: CSUF Office of Institutional Research and Analytical Studies

Table 2.a.
Undergraduate Program Enrollment in FTES

	<i>Lower Division</i>	<i>Upper Division</i>	<i>Total</i>
2006-07	170.0	85.5	255.5
2007-08	178.2	88.2	266.4
2008-09	134.0	80.3	214.3
2009-10	137.1	94.0	231.1
2010-11	133.4	89.3	222.7
2011-12	154.8	98.5	253.3
2012-13	164.6	108.1	272.7
2013-14	155.9	112.0	267.9

Source: CSUF Office of Institutional Research and Analytical Studies

Table 2.b.
Undergraduate Program Enrollment (Headcount)

	<i>Lower Division</i>		<i>Upper Division</i>		<i>Post Bacc.</i>		<i>Total</i>	
	<i>Annualized Headcount</i>	<i>AY FTES</i>	<i>Annualized Headcount</i>	<i>AY FTES</i>	<i>Annualized Headcount</i>	<i>AY FTES</i>	<i>Annualized Headcount</i>	<i>AY FTES</i>
2006-2007	6.0	5.7	68.5	49.9	1.0	0.2	75.5	55.8
2007-2008	6.0	5.2	73.0	56.3	1.0	0.2	80.0	61.7
2008-2009	4.5	4.0	66.0	47.1	1.0	0.1	71.5	51.2
2009-2010	4.0	3.4	64.5	48.7	0.5	0.0	69.0	52.1
2010-2011	5.0	4.3	80.0	59.9	0.5	0.1	85.5	64.3
2011-2012	7.5	5.8	68.0	52.3	0.5	0.1	76.0	58.2
2012-2013	7.0	6.0	64.0	46.7	0.0	0.0	71.0	52.7
2013-2014	7.5	6.8	62.5	49.3	0.0	0.0	70.0	56.0

Source: CSUF Office of Institutional Research and Analytical Studies

Table 3.a.
First-time Full-Time Freshmen: Graduation Rates for Majors

		<i>Graduated within 4 Years</i>		<i>Graduated within 5 Years</i>		<i>Graduated within 6 Years</i>		<i>Graduated within 6 Years or Enrolled in Fall Yr 7</i>	
	<i>Initial Cohort</i>	Geography	Other Major	Geography	Other Major	Geography	Other Major	Geography	Other Major
Fall 2002	1	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
Fall 2003	0	---	---	---	---	---	---	---	---
Fall 2004	1	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
Fall 2005	1	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%
Fall 2006	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fall 2007	0	---	---	---	---	---	---	---	---
Fall 2008	1	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%		
Fall 2009	1	0.0%	0.0%	0.0%	0.0%				
Fall 2010	1	0.0%	0.0%						

Source: CSUF Office of Institutional Research and Analytical Studies

Table 3.b.
Transfer Students: Graduation Rates for Majors

		<i>Graduated within 3 Years</i>		<i>Graduated within 4 Years</i>		<i>Graduated within 5 Years</i>		<i>Graduated within 6 Years</i>		<i>Graduated within 6 Years or Enrolled Fall Yr 7</i>	
	<i>Initial Cohort</i>	Geography	Other Major	Geography	Other Major	Geography	Other Major	Geography	Other Major	Geography	Other Major
Fall 2002	15	86.7%	0.0%	86.7%	0.0%	86.7%	0.0%	86.7%	0.0%	86.7%	0.0%
Fall 2003	16	50.0%	0.0%	56.3%	0.0%	62.5%	0.0%	62.5%	0.0%	62.5%	0.0%
Fall 2004	8	75.0%	0.0%	75.0%	0.0%	75.0%	0.0%	75.0%	0.0%	75.0%	0.0%
Fall 2005	8	50.0%	12.5%	62.5%	12.5%	62.5%	12.5%	62.5%	12.5%	62.5%	12.5%
Fall 2006	17	47.1%	0.0%	70.6%	0.0%	70.6%	0.0%	70.6%	0.0%	70.6%	0.0%
Fall 2007	17	52.9%	0.0%	52.9%	5.9%	58.8%	5.9%	58.8%	5.9%	58.8%	5.9%
Fall 2008	6	66.7%	0.0%	66.7%	0.0%	66.7%	0.0%	66.7%	0.0%	66.7%	0.0%
Fall 2009	14	78.6%	0.0%	85.7%	0.0%	92.9%	0.0%				
Fall 2010	26	76.9%	7.7%	80.8%	7.7%						
Fall 2011	13	61.5%	0.0%								
Fall 2012	15										

Source: CSUF Office of Institutional Research and Analytical Studies

Table 4
Undergraduate Degrees Awarded

	Number
2004-2005	30
2005-2006	33
2006-2007	26
2007-2008	23
2008-2009	32
2009-2010	29
2010-2011	24
2011-2012	31
2012-2013	28
2013-2014	28

Source: CSUF Office of Institutional Research and Analytical Studies

Table 5
Graduate Program: Applications, Admissions, and Enrollment

	<i>Applied</i>	<i>Admitted</i>	<i>% Admitted</i>	<i>Enrolled</i>	<i>% Enrolled</i>
2007-2008	15	11	73%	5	45%
2008-2009	28	19	68%	16	84%
2009-2010	18	14	78%	9	64%
2010-2011	30	23	77%	15	65%
2011-2012	24	14	58%	12	86%
2012-2013	14	9	64%	6	67%
2013-2014	24	18	75%	12	67%
2014-2015	7	7	100%	4	57%

Source: CSUF Office of Institutional Research and Analytical Studies

Table 6.a.
Graduate Program Enrollment in FTES

	<i>Number</i>
2006-07	8.2
2007-08	6.1
2008-09	8.8
2009-10	6.7
2010-11	9.7
2011-12	10.7
2012-13	9.9
2013-14	6.9

Source: CSUF Office of Institutional
Research and Analytical Studies

Table 6.b.
Graduate Program Enrollment

	<i>Masters Degree</i>	
	<i>Annualized Headcount</i>	<i>AY FTES</i>
2006-2007	25.5	10.8
2007-2008	21.0	9.4
2008-2009	25.0	11.9
2009-2010	23.0	10.1
2010-2011	27.5	12.8
2011-2012	31.0	14.4
2012-2013	27.5	11.1
2013-2014	20.5	8.9

Source: CSUF Office of Institutional Research
and Analytical Studies

Table 7
Graduation Rates for M.A. Students

		<i>Graduated within 3 Years</i>	<i>Graduated within 4 Years</i>	<i>Graduated within 5 Years</i>	<i>Graduated within 6 Years</i>	<i>Graduated within 6 Years or Enrolled Fall Yr 7</i>
	<i>Initial Cohort</i>	Geography	Geography	Geography	Geography	Geography
Fall 2002	7	0.0%	14.3%	28.6%	28.6%	28.6%
Fall 2003	5	20.0%	40.0%	60.0%	60.0%	60.0%
Fall 2004	4	25.0%	25.0%	25.0%	50.0%	50.0%
Fall 2005	6	50.0%	83.3%	100.0%	100.0%	100.0%
Fall 2006	12	41.7%	58.3%	58.3%	58.3%	58.3%
Fall 2007	3	33.3%	33.3%	33.3%	33.3%	33.3%
Fall 2008	14	42.9%	50.0%	57.1%	57.1%	57.1%
Fall 2009	9	22.2%	22.2%	33.3%		
Fall 2010	11	45.5%	63.6%			
Fall 2011	9	44.4%				
Fall 2012	6					

Source: CSUF Office of Institutional Research and Analytical Studies

Table 8
Masters Degrees Awarded

	<i>Number</i>
2004-2005	0
2005-2006	2
2006-2007	6
2007-2008	7
2008-2009	6
2009-2010	10
2010-2011	6
2011-2012	6
2012-2013	7
2013-2014	6

Source: CSUF Office of Institutional
Research and Analytical Studies

Table 9
Full-Time Instructional Faculty, FTEF, FTES, SFR

<i>YEAR</i>	<i>Tenured</i>	<i>Tenure Track</i>	<i>FERP at 0.5</i>	<i>FTEF Allocation</i>	<i>FTES Target</i>	<i>Actual FTES</i>	<i>Budgt SFR</i>
2005-2006	5	2	2	10.6	265	264.9	25.0
2006-2007	5	1	3	10.5	264	263.7	25.1
2007-2008	5	3	2	10.8	273	272.5	25.3
2008-2009	4	4	2	10.3	223	223.1	21.7
2009-2010	4	3	2	9.3	238	237.8	25.6
2010-2011	4	3	2	9.5	232	232.4	24.4
2011-2012	4	3	1	10.8	264	264.0	24.6
2012-2013	4	3	1	11.4	287	287.4	25.2

Tenured and tenure track totals include faculty on leave, PRTBs and administrators with retreat rights (if any).

FTEF and FTES counts are supplied by the Dean's office.

Source: CSUF Office of Institutional Research and Analytical Studies