

Academic Program Review BA Geography

Table of Contents

[Recommendation to Faculty Senate BA Geography](#)

[Self-Study](#)

[External Review](#)

[Internal Review](#)

[Action Plan](#)

APRC Recommendation to Faculty Senate
BA Geography

The Academic Program Review Committee (APRC) affirms that the Department of Geography has completed program review as per policy, including self-study, external review, internal review, and action plan submission for the BA Geography. APRC recommends that the next program review be scheduled for six years from Faculty Senate approval; or, should the College of Natural Sciences and Mathematics decide to schedule a college-wide program review, the next program review will occur at that time.

APRC Chair: Jeffrey Brodd, Professor of Humanities and Religious Studies

Geography Department Self-Study

Fall, 2021



Sacramento State University

Program Review 2021-22

Date of Last Review — 2013

Table of Contents

I. Element One: Mission and Context.....	3
A. University, college, and academic unit missions.....	3
B. Degrees offered.....	3
C. Minors offered.....	4
D. Service to other departments, degree programs, and general education.....	4
E. External educational partnerships.....	6
II. Element Two: Learning Outcomes and Assessment.....	6
A. Program learning outcomes.....	6
B. Summary of data for each learning outcome.....	6
C. Analysis for each learning outcome.....	7
D. Other relevant data.....	9
E. Comprehensive assessment plan.....	10
III. Element Three: Student Success.....	11
A. Admission data disaggregated by gender and ethnicity.....	11
B. Retention data disaggregated by gender and ethnicity.....	13
C. Graduation data disaggregated by gender and ethnicity.....	14
D. Analysis of admission, retention, and graduation data.....	15
E. Current partnerships in success.....	17
IV. Element Four: Developing Resources to Ensure Sustainability.....	18
A. Key strategic initiatives.....	18
B. Hiring needs.....	20
C. Other major budget concerns.....	21
D. Revenue opportunities.....	22
V. Element Five: Maintain Success and Engage in Continuous Improvement.....	23
A. Summary of areas of concern and means of improving.....	23
Appendix A: Geography Department Strategic Plan.....	25
Appendix B: Geography Five-Year Hiring Plan.....	29

I. Element One: Mission and Context

A. University, college, and academic unit missions.

The Geography Department at Sacramento State University provides students with a high-quality education in geography that spans the breadth and depth of the discipline, and fosters geographical awareness and understanding in the region through teaching, service, and scholarship.

This mission statement, articulated in Geography's strategic plan, aligns in many ways with that of the College of Natural Sciences and Mathematics, which "prepares students for future success, produces meaningful scholarship, and engages with broader communities to promote quantitative, scientific, and spatial literacy." It also complements the mission of Sacramento State: "As California's capital university, we transform lives by preparing students for leadership, service, and success." Through this alignment with college and university missions, the Geography Department seeks to operationalize student-centered education, scholarship, and service to our community by leveraging geography's strength as an inherently integrative discipline.

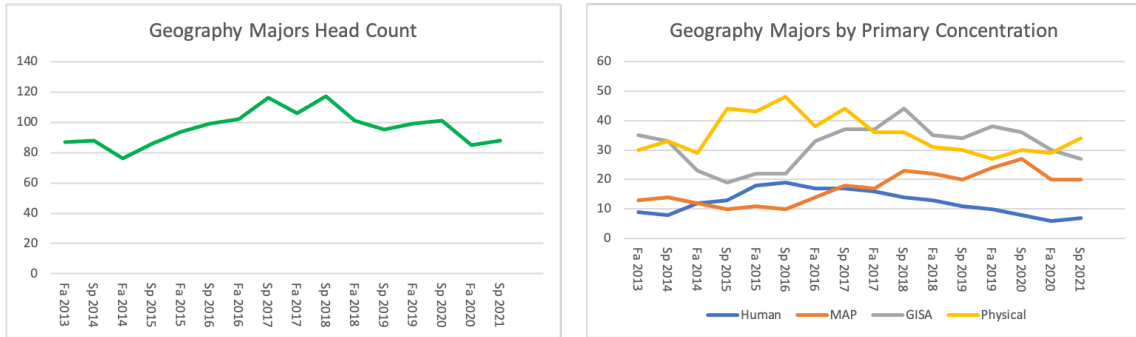
B. Degrees offered.

The Geography Department offers a B.A. in Geography with four areas of concentration:

- Geographic Information Systems and Analysis (GISA) (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/ba-in-geography-geographic-information-systems-and-analysis/>)
- Human Geography (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/ba-in-geography-human-geography/>)
- Metropolitan Area Planning (MAP) (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/ba-in-geography-metropolitan-area-planning/>)
- Physical Geography (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/ba-in-geography-physical-geography/>)

The B.A. consists of 19 units of core requirements, 12 units of breadth electives requiring students to take at least one course from four different thematic categories, and 15 units of electives within an area of concentration. The Geography degree program is designed to ensure students receive instruction across the breadth of the discipline while they gain more extensive skills in an area of focus. There is considerable overlap in the course requirements among the concentrations, and many students complete the requirements of multiple concentrations before graduating. There have been no major structural changes in the program (new or discontinued degrees, concentrations, or minors) since the last program review in 2013.

Trends in student enrollment since Geography’s last program review are shown in the following graphs.



While there has been significant fluctuation in student numbers since Fall 2013, Physical Geography and GISA have consistently remained the most popular concentrations. The number of MAP students has risen over the period while the number of Human Geography students has fallen. Overall, the number of Geography majors peaked in 2017-2018 and has returned to pre-2016 levels in the last two years.

C. Minors offered.

Geography offers two options for minors:

- Minor in Geography (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/minor-in-geography/>)
- Minor in Geographic Information Systems (<https://catalog.csus.edu/colleges/natural-sciences-mathematics/geography/minor-in-geographic-information-systems/>)

The Geography minor maintains significant flexibility in course options to allow students from other majors to tailor their coursework to complement their primary majors, while the Geographic Information Systems minor is more rigidly structured to ensure technical competence.

D. Service to other departments, degree programs, and general education.

General Education: Geography offers classes that fulfill several General Education categories. These courses are summarized below:

General Education Category	Geography Courses
B1—Physical Science	GEOG 1 (Physical Geography) GEOG 5 (Violent Weather)
B3—Lab	GEOG 11 (Laboratory in Physical Geography)
B5—Further Studies in Physical Science, Life Forms, and Quantitative Reasoning	GEOG 111 (Elements of Meteorology) GEOG 113 (Climate) GEOG 115 (Biogeography) GEOG 116 (Global Climate Change)

	GEOG 119 (Visualizing Global Environments)
D—The Individual and Society	GEOG 2 (Cultural Geography) GEOG 145 (Population Geography)

Although most of these courses also serve the Geography B.A. program, the majority of students enrolled are non-majors. Two courses, GEOG 5 and GEOG 119, do not fulfill any requirements for the Geography major and are offered strictly for General Education students.

Liberal Studies B.A. Program: GEOG 100 is a required course for all concentrations in Pre-Credential tracks in the Liberal Studies B.A. program.

History Pre-credential B.A. Program: This program, designed for history majors interested in teaching careers, requires two Geography courses: GEOG 100 and GEOG 121. GEOG 100 does not fulfill any requirements for the Geography B.A. and is offered strictly to serve pre-credential programs. GEOG 121 also fulfills breadth or concentration requirements for the Geography B.A.

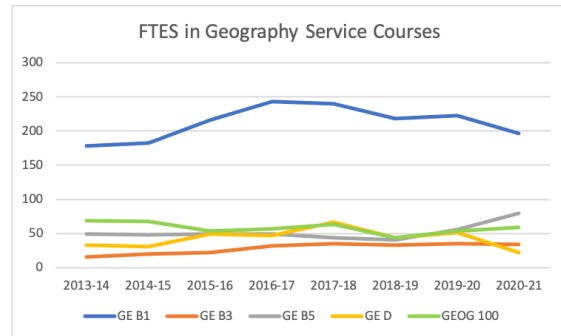
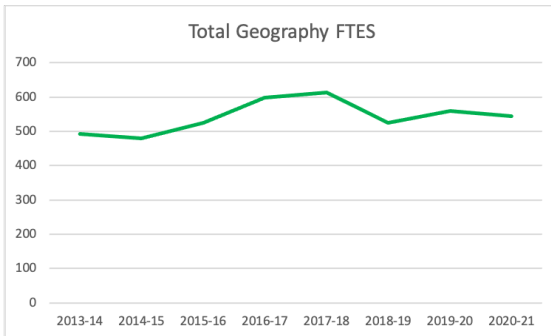
Social Sciences B.A. Program: GEOG 100 and GEOG 121 are both core requirements for this interdisciplinary program. In addition, GEOG 127, GEOG 128, GEOG 145, and GEOG 131 satisfy elective requirements. With the exception of GEOG 100, the all of these courses also fulfill breadth or concentration requirements for the Geography degree.

Environmental Studies: Several Geography courses serve as interdisciplinary elective courses for the Environmental Studies B.A. and B.S. programs:

Program	Interdisciplinary Elective Courses in Geography
B.A. in Environmental Studies	GEOG 147 (Urban Geography) GEOG 148 (Urban and Regional Planning) GEOG 149 (Transportation Geography) GEOG 161 (California’s Water Resources)
B.S. in Environmental Studies	GEOG 107 (Remote Sensing) GEOG 109 (Geographic Information Systems) GEOG 110 (Advanced GIS) GEOG 111 (Elements of Meteorology) GEOG 113 (Climate) GEOG 115 (Biogeography) GEOG 116 (Global Climate Change) GEOG 118 (Earth Transformed) GEOG 161 (California’s Water Resources)

All of the listed courses also fulfill geography degree requirements.

Total Geography full-time equivalent students (FTES) and FTES in predominantly services courses are shown on the following graphs. During the period since the last program review, FTES in predominantly service courses have accounted for 70% to 75% of total Geography FTES.



E. External educational partnerships.

Transforming Outcomes Project at Sacramento State (TOPSS): Geography contributes two course sections to the B.A. in Communication Studies offered to incarcerated students at Folsom and Mule Creek State Prisons. These courses, GEOG 113 (Climate) and GEOG 145 (Population Geography), satisfy General Education requirements for the degree.

II. Element Two: Learning Outcomes and Assessment

A. Program learning outcomes.

A student who graduates with a B.A. in Geography from Sacramento State will:

1. Demonstrate ability to identify and describe basic concepts and patterns in physical and human geography.
2. Display knowledge of the history of Geography as an academic discipline and a familiarity with its contemporary models, approaches, and theories.
3. Demonstrate competency in one or more of the basic geographic tools/techniques for data collection, display, and analysis.
4. Demonstrate graphic literacy in the use and analysis of maps, graphs, and spatial data sets.
5. Show written competency in the description and analysis of geographic subject matter.
6. Analyze and evaluate scholarly writing within the discipline.
7. Synthesize geographic models, data, and methodologies in research design.
8. Acquire the overall competencies necessary to success in graduate school and post-graduation careers.

B. Summary of data for each learning outcome.

Most of the assessment data available for this self-study come from analysis of student projects completed in GEOG 190 (Senior Capstone Research Seminar) in Spring 2021. Each

instructor of the course evaluated projects using an assessment rubric that rates particular components of the students' work on a 5-point scale. Each component is thought to be broadly representative of one of the geography program learning outcomes. The rubric items used are:

- a. Statement of Research Questions or Hypotheses
- b. Review of Academic Literature
- c. Discussion of Significance of Project
- d. Methodology Choice and Description
- e. Discussion of Results
- f. Quality and Appropriateness of Graphics
- g. Overall Written Expression

All sections of GEOG 190 were taught entirely online in Spring 2021, and student research projects were necessarily done virtually. This necessitated changes to our regular project rubric, and these changes were not entirely aligned between sections. One result is that not all projects had their graphics evaluated in the rubric; thus the sample number for Program Learning Outcome 4 is smaller than for the others.

In addition to the capstone project analysis, a survey of recent alumni was done in October 2021 to evaluate Program Learning Outcome 8. Assessment data from the capstone projects are summarized below; data from the alumni survey are presented and discussed in section **II.D**.

Program Learning Outcome	Data Source	Summary
1	Capstone project rubric item a , Spring 2021	4.3 average (out of 5) (n=35)
2	Capstone project rubric item c , Spring 2021	4.1 average (out of 5) (n=35)
3	Capstone project rubric item e , Spring 2021	3.9 average (out of 5) (n=35)
4	Capstone project rubric item f , Spring 2021	3.7 average (out of 5) (n=22)
5	Capstone project rubric item g , Spring 2021	4.3 average (out of 5) (n=35)
6	Capstone project rubric item b , Spring 2021	4.1 average (out of 5) (n=35)
7	Capstone project rubric item d , Spring 2021	4.1 average (out of 5) (n=35)
8	Alumni survey, October 2021	Discussed in section II.D .

C. Analysis for each learning outcome.

Learning Outcome 1: Senior capstone students must contextualize their research project by demonstrating an understanding of the basic processes and patterns informed by their work; rubric **item a** is designed to assess this ability. Overall students scored well on this item (tied for highest rubric score with an average of 4.3/5), suggesting that they are gaining basic knowledge of geographic concepts in their curriculum. It should be noted that the concepts covered by this item are self-selected by the students as it relates to their research topic; there is no current assessment of concepts outside of the students' research project area.

Learning Outcome 2: Student understanding of the geography discipline history (including models, approaches, and theories) is assessed through their discussion of the significance and

meaning of their project results (rubric **item c**); students are asked to ground the discussion in a disciplinary context. Historically this has been one of the lowest-scoring rubric items, but for the most recent assessment students did fairly well (near the median rubric score with an average of 4.1/5). The improvement may be a reflection of the virtual mode of instruction which necessitated a greater emphasis on analysis of academic literature rather than data collection, or it may reflect more emphasis on theoretical frameworks in classes taught by newer faculty in recent years.

Learning Outcome 3: The assessment of student competence in data tools is done through the discussion of their research results (rubric **item e**). For this assessment cycle student scores were below the median for rubric items (average of 3.9/5). Most of the students had had their techniques-oriented classes (GIS, quantitative/qualitative methods, remote sensing) in the virtual environment; also, no field courses have been taught in Geography since Fall 2019. These pandemic-related instructional limitations may have played a role in relatively poor scores in this category. If so, this should be corrected as we move instruction back to in-person and with field classes.

Learning Outcome 4: Graphic literacy is assessed through maps and data displays produced by students in their capstone projects (rubric **item f**). For the most recent assessment cycle this was the lowest-scoring rubric item (average of 3.7/5). This has not been the case historically; students have done rather well in this category in the past. Once again this may be pandemic-related (sub-optimal virtual instruction in techniques) or it may reflect instructional personnel changes with techniques courses taught by newer (sometimes temporary) faculty. This item bears critical examination in future assessment cycles.

Learning Outcome 5: Student writing competency tied for the highest rubric score in this assessment cycle (rubric **item g**; average of 4.3/5). This area has traditionally scored well, and it seems that the Geography program's emphasis on writing throughout the curriculum continues to be effective.

Learning Outcome 6: Discipline-specific writing is assessed by student literature reviews in their capstone projects (rubric **item b**). For this assessment cycle students performed fairly well (average 4.1/5), scoring near the median for rubric items. This item has generally scored below the median in the past, and improvement in this category may reflect greater emphasis on use of literature in the virtual instruction mode (similar to Learning Outcome 2).

Learning Outcome 7: Students demonstrate competence in synthesizing concepts in geographic research methodologies by introducing and contextualizing methods used in their capstone projects; this is assessed in rubric **item d**. For the latest assessment cycle students scored near the median for rubric items (average 4.1/5), suggesting that students perform fairly well in this category.

Learning Outcome 8: Discussed in section **II.D**, below.

D. Other relevant data.

Alumni Survey: The Geography Department solicited input from all Geography graduates who completed the degree since our last program review in 2013 through an anonymous survey administered through Qualtrics in October 2021. An invitation to complete the survey was sent to the email addresses on file for 333 graduates of the program. 90 students completed the survey, for a response rate of 27%.

The survey was designed to gauge the graduates’ overall impression of the effectiveness of the Geography B.A. program in preparing them for post-graduate employment or further education. The survey also included an open-ended question that allowed graduates to reflect on their post-graduate experience and suggest ways in which the Geography Department could strengthen the B.A. program. The survey also serves to assess Learning Outcome 8. The following is a summary of the data that have most bearing on this self-study.

Question 3— What is your current employment status? (n=89)		
	Employed full-time	78.65%
	Employed part-time	12.36%
	Currently on leave (e.g. maternity, sabbatical, health-related)	0.00%
	Looking for employment	5.2%
	Not employed and not looking for employment	3.37%

Question 6— How well did your Sacramento State Geography degree prepare you for your current career? (n=76)		
	Extremely well	13.16%
	Very well	36.84%
	Moderately well	32.89%
	Slightly well	13.16%
	Not well at all	3.95%

Question 8— How well did your Sacramento State Geography degree prepare you for your graduate program? (n=19)		
	Extremely well	26.32%
	Very well	31.58%
	Moderately well	21.05%
	Slightly well	10.53%
	Not well at all	10.53%

Question 9— Overall, how satisfied are you with your undergraduate education in Geography? (n=88)		
	Extremely satisfied	57.95%
	Somewhat satisfied	34.09%
	Neither satisfied nor dissatisfied	5.68%
	Somewhat dissatisfied	2.27%
	Extremely dissatisfied	0.00%

Overall, the survey paints a picture of recent graduates who are highly employed and largely satisfied with how their Geography B.A. program prepared them for career and graduate school; only 5.2% of respondents are searching for employment, and around 80% of respondents believe that the program prepared them for post-graduate life at least moderately

well. In the comments section, most perceived shortcomings of the program were related to inadequate technical skills and career-related training.

Common specific suggestions for strengthening the Geography program include offering more advanced GIS courses (11 comments), stressing internships and other networking opportunities (8 comments), and providing more career guidance to students within the program (4 comments). It is important to note that most of the respondents (54%) graduated prior to the 2017-2018 academic year. Since that year, the Geography Department has added four new tenure-track faculty (with a fifth search currently underway in Fall 2021), all of whom bring new methodological approaches to the curriculum. Three of the four (four of five including the search now underway) have brought advanced skills in geospatial technology such as GIS and remote sensing, and the Geography curriculum has added many of the courses recommended by the respondents; we now offer coursework in coding and database management, for example. Finally, we added a new methods course (GEOG 182- Qualitative Methods) to our curriculum in Spring 2019.

Even with these improvements to our technical curriculum it is clear that Geography can improve the range of technical skills (by adding field surveying, for example), work toward systematizing career guidance for students, and create more opportunity for student internships. At the same time, we want to preserve and improve our strengths in theoretical training, which can be particularly valuable for students in graduate degree programs; 41.57% of respondents have either earned a graduate degree (8.99%), are currently enrolled in a graduate program (7.87%), or plan to enroll in one in the future (24.72%).

E. Comprehensive assessment plan.

The Geography program assessment plan is summarized in the table below. This plan has been in place since our last program review, although several elements previously present have been dropped or inconsistently administered: we no longer administer a baseline quiz to gauge incremental increase in basic knowledge, we have not systematically collected graduate exit interview data in recent years, and the alumni survey was not done for several years prior to 2021.

In addition, we have lost two faculty who have been instrumental in designing and operationalizing our assessment plan; Robin Datel and Michael Schmandt both abruptly retired at the end of Spring 2020. While we are still able to perform assessment of our program learning outcomes, our assessment plan is probably due for a comprehensive review and revision

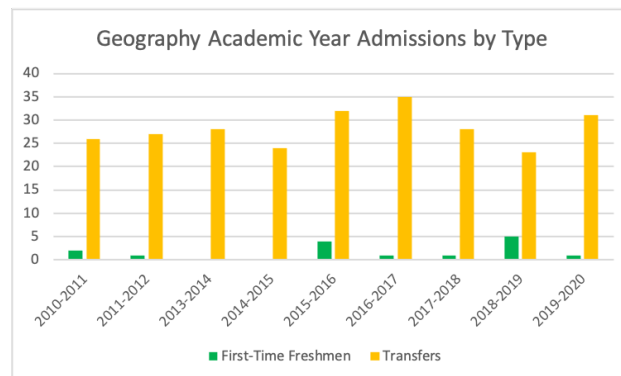
Learning Outcome	Relevant Course(s)	Assessment activity	Assessment tool	Assessment schedule	Reporting method	Personnel responsible	Dissemination schedule	Closing the loop strategies
1	GEOG 1, GEOG 2, GEOG 11, upper-division breadth courses	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item a)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review

2	GEOG 102, GEOG 190, upper-division breadth and concentration requirements	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item c)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
3	GEOG 3, upper-division techniques requirement	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item e)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
4	GEOG 3, upper-division techniques requirement	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item f)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
5	GEOG 102, GEOG 190	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item g)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
6	GEOG 102, GEOG 190	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item b)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
7	GEOG 190	Senior capstone project (GEOG 190)	GEOG 190 project rubric (item d)	Annually	Annual assessment report	GEOG 190 instructors, Chair	Annually	Department retreat consultation/ curricular review
8	The major as a whole.	Alumni survey	Alumni survey	Every three years	Annual assessment report	GEOG 190 instructors, Chair	Every three years	Department retreat consultation/ curricular review

III. Element Three: Student Success

A. Admission data disaggregated by gender and ethnicity.

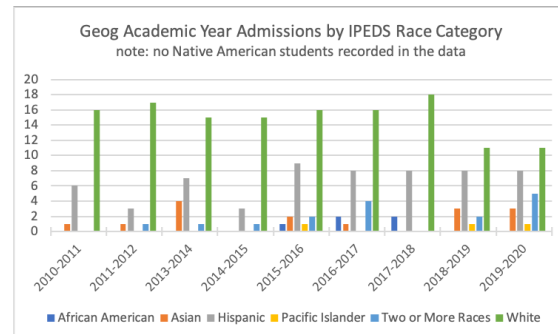
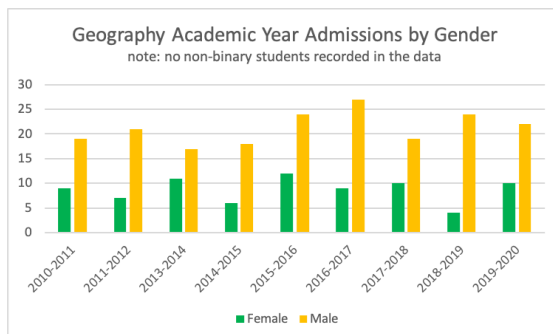
The numbers of first-time freshmen and transfer admissions to the Geography program are shown by academic year in the following graph. Note that academic year 2012-2013 data are missing; this represents a gap in data present in the Sacramento State Office of Institutional Research, Effectiveness, and Planning (OIREP) source.

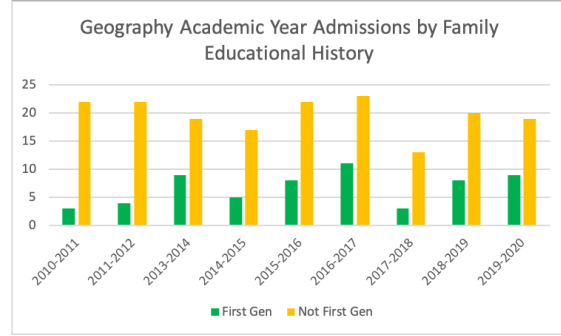
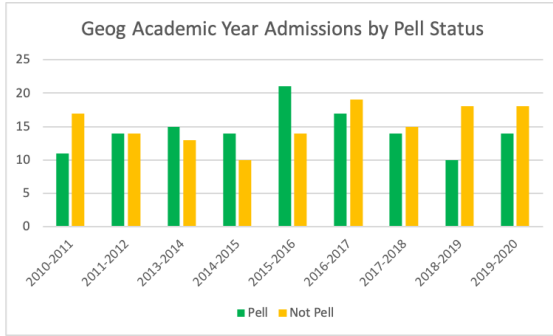


Transfer admissions to geography far outnumber first-time freshman admissions. For this reason, data on retention and graduation rates (sections III.B and III.C) use transfer rather than first-time freshman data. It is also important to note that these data do not include students who change major to Geography after entering the university as first-time freshmen or transfers. Data for this category are incomplete, but of students who entered the university as first-time freshmen (not transfers) and graduated with a Geography degree in 2018-2020 only two students entered as Geography majors while the following switched majors:

Major at Entry	Major at Graduation 2018-2020	Number of Students
Undeclared	Geography	4
Biology	Geography	3
International Business	Geography	2
Economics	Geography	1
Civil Engineering	Geography	1
Anthropology	Geography	1
Pre-Nursing	Geography	1
Environmental Studies/Science	Geography	1
Computer Science	Geography	1
Sociology	Geography	1
Kinesiology/Physical Education	Geography	1
Criminal Justice	Geography	1
Business Administration	Geography	1
Mechanical Engineering	Geography	1
Geology	Geography	1
	Total	22

Admissions data disaggregated by demographics are found in the following graphs.

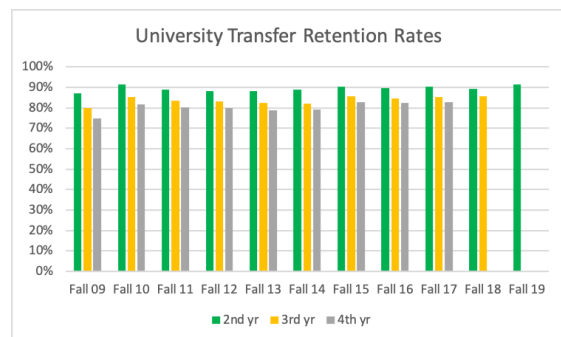
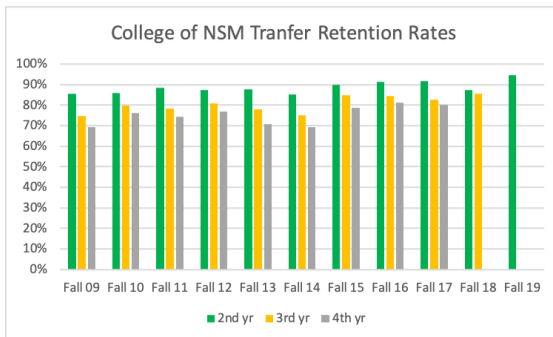
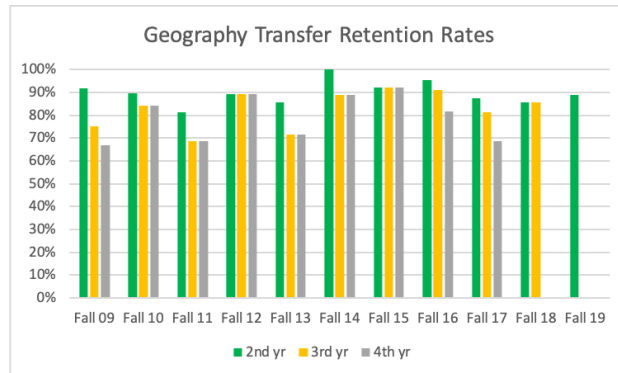




Analysis of the admissions data is found in section III.D.

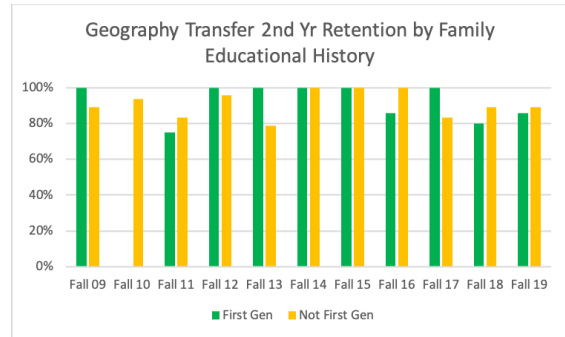
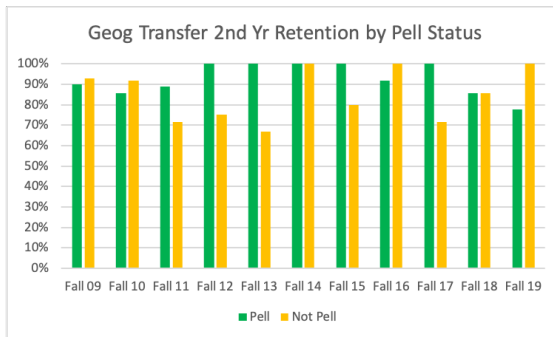
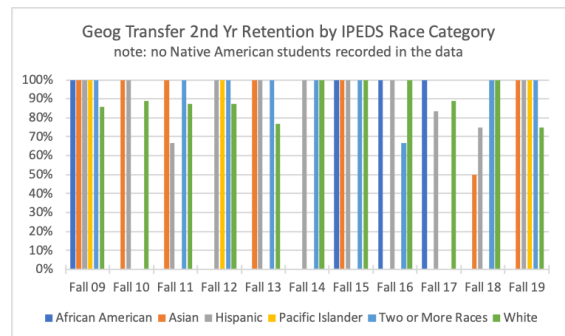
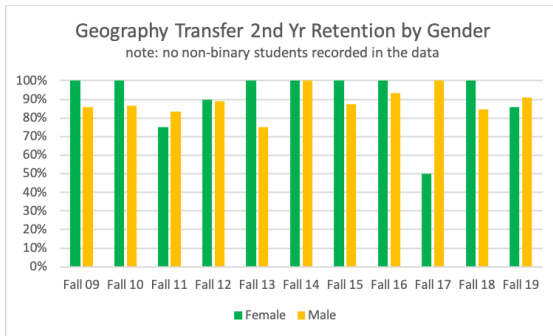
B. Retention data disaggregated by gender and ethnicity.

Retention data for Geography transfer students, with College of Natural Sciences and Mathematics and University transfer retention data for comparison, are shown in the following graphs.



Overall, the largest drop in retention rates for Geography transfers occurs in the second year; for this reason further data focuses on second year retention rates.

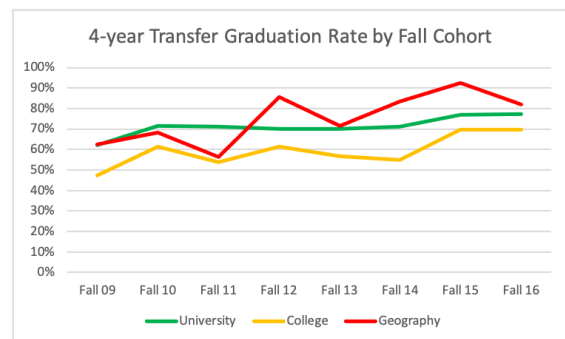
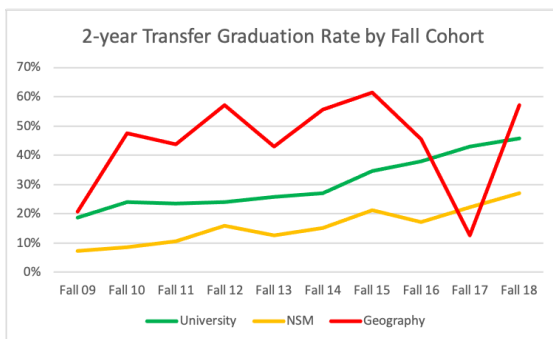
Second-year Geography transfer retention rates disaggregated by demographics are shown in the following graphs.



Analysis of the retention data is found in section **III.D**.

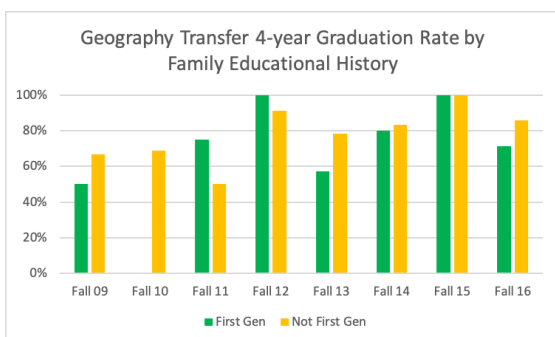
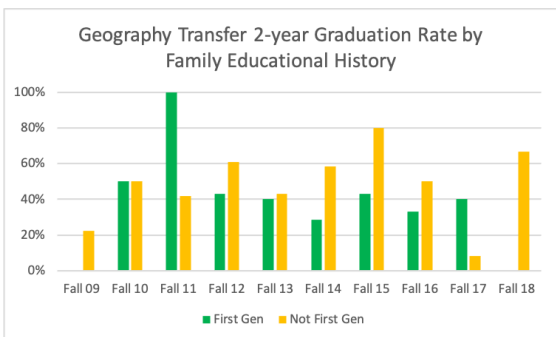
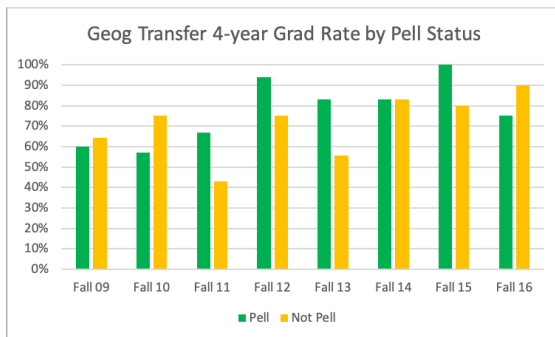
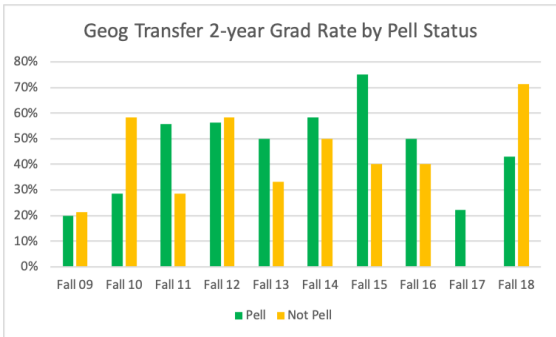
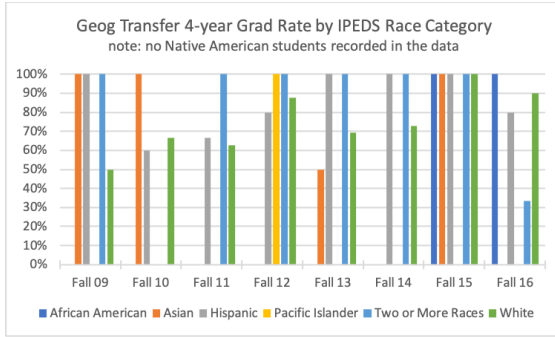
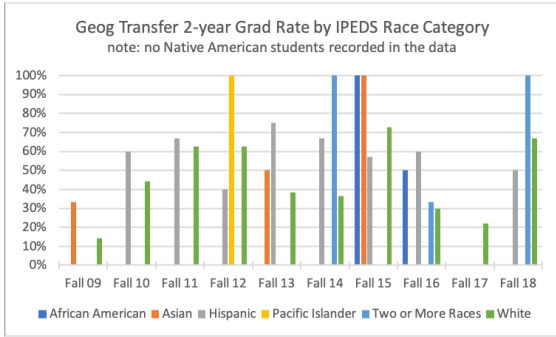
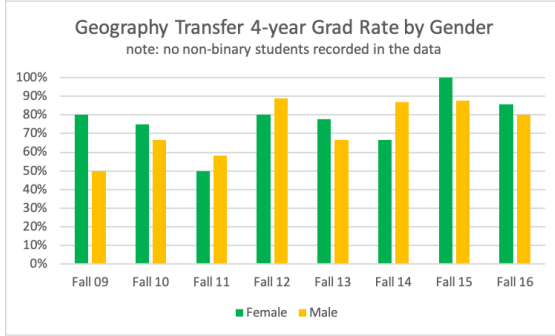
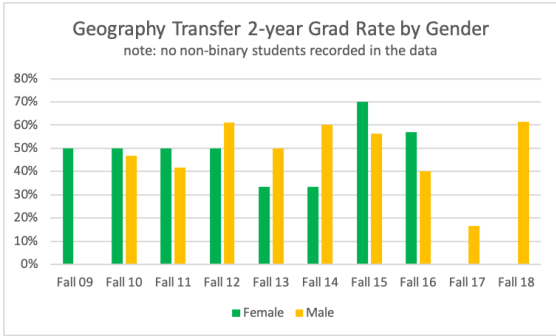
C. Graduation data disaggregated by gender and ethnicity.

Two- and four-year transfer graduation rates (fall cohorts) in Geography, the College of Natural Sciences and Mathematics, and the University are shown in the following graphs.



Note that the two-year transfer graduation rate for the Fall 2017 cohort is anomalously low; this may reflect an error in the Sacramento State OIREP data source.

Two- and four-year transfer graduation rates disaggregated by demographics are shown in the following graphs.



Note that missing values represent gaps in data present in the Sacramento State OIREP data source and not actual 0% graduation rates. Analysis of the graduation rate data is found in section **III.D**.

D. Analysis of admission, retention and graduation data.

Geography admissions data. Geography transfers outnumbered first-time freshman admits by a factor of 17 over the period of analysis. Male admits outnumbered female admits by a factor of 2.45. Pell recipients (130) were slightly outnumbered by non-Pell recipients (138). First generation college students were outnumbered by non-first generation students by a factor of nearly 3. Nearly 58% of the students self-identified as white, with Hispanic students constituting the second largest group at 26%. 7% of admits self-identified as two or more races, 6% as Asian, 2% as African American, and 1% as Pacific Islander.

The picture here of Geography admits is one of a group that is largely male, mostly white, and largely not first-generation college students. The proportion of male and female students has remained relatively constant over the period covered by the data. The proportion of white students has declined since 2011, from 61% to 39 %, while the proportion of Hispanic students has risen from 15% to 27%.

It is worth noting again that these data do not include students who switched to Geography after entering the university, so we are unable to evaluate the impact of our faculty's Geography major recruitment efforts on the total gender and racial makeup of our graduates.

Geography transfer retention data. Over the period covered by the data, Geography transfer students had similar 2nd, 3rd, and 4th year average annual retention rates (90%, 83%, 79% respectively) as the College of Natural Sciences and Mathematics (89%, 80%, 75% respectively) and the university (89%, 84%, 80% respectively). Because the average 10% loss in Geography transfers in year 2 is higher than year 3 (7%) and year 4 (4%), the remainder of this analysis focuses on 2nd year retention rates.

There were similar average annual rates of retention for women (91%) and men (89%) over the period, as well as similar rates between first generation students (93%) and non-first generation students (91%). Pell recipients had a somewhat higher retention rate (93%) than non-Pell recipients (85%). From a race standpoint, white students had a somewhat lower retention rate (90%) than other students (students in other racial categories varied between 93% and 100% average annual 2nd year retention). This last difference may be in part due to the substantial differences in totals between the racial categories, with white students consistently outnumbering students in other categories by large margins.

It appears that 2nd year retention of Geography transfer students is not significantly different between genders, races, and family educational backgrounds. However, there appears to be a larger difference in retention outcomes between Pell and non-Pell students, with Pell recipients retained at a higher rate.

Geography transfer graduation rate data. Two-year graduation rates for Geography transfers were higher on an average annual basis than those of the College of Natural

Sciences and Mathematics and the university for the period covered by the data (44%, 16%, and 30% respectively). Four-year transfer graduation rates were more similar between Geography, the college, and university on an average annual basis (75%, 59%, and 71% respectively). As with the college and university, Geography two- and four-year transfer graduation rates rose over the period of record.

Both two- and four-year annual average transfer graduation rates were very similar across gender, socioeconomic, and family educational history categories. The largest difference mirrored that of the retention data, with not-Pell students having a somewhat lower four-year rate (77%) than Pell students (71%). Also mirroring the retention data, white students had lower two- and four-year rates than students of other racial categories; again, this may be partly an artifact of the consistently larger numbers of white students in the data.

Similar to the retention data, there does not seem to be a significant difference in transfer graduation rates between genders, races, and family educational backgrounds.

E. Current partnerships in success.

Geography has an ongoing partnership with Bill Kristie, the Geography librarian. Students in our capstone seminar utilize library resources at Dr. Kristie's direction to complete a project literature review; this particularly feeds into Learning Outcomes 2 and 6.

Our majors have mandatory annual advising in which they meet with a Geography faculty mentor to review their path to degree. For this reason, closer systematic ties with college or university advising partners may not produce much in the way of added benefit for our students. Our graduation rate data (discussed in section **III.D**) suggest that existing advising is successful in moving our students toward the degree.

The Geography program could benefit from partnerships with two campus programs designed to pair undergraduate majors with students in large-enrollment lower-division courses: the university's Supplemental Instruction program and the college's Peer-Assisted Learning program. Participation in one or both of these programs could facilitate Program Learning Outcomes 1 and 8 for our majors by reinforcing core concepts and providing training for student facilitators. It could also benefit the Geography program as a whole by offering additional opportunities for recruitment of new majors. GEOG 1, our high-enrollment general education course, would be a logical course to include in either peer-learning program.

IV: Element Four: Developing Resources to Ensure Sustainability

A. Key strategic initiatives.

Geography's Strategic Plan can be found in **Appendix A**. In this plan, we identify several initiatives:

- **Build a stronger Human Geography program**

To support this initiative, we have hired three tenure-track faculty in human geography in the last three years. On the other side of the coin, two faculty in human geography abruptly retired in spring 2020 (they were teaching 50% time under the FERP program). This rapid turnover of the human geography faculty demands a reanalysis of our Human Geography and Metropolitan Area Planning concentrations to ensure that our curriculum reflects the expertise of our current faculty, provides the theoretical and methodological tools necessary for contemporary career and academic paths, and meets the existing needs of the university and the Sacramento community.

- **Maintain and build our other concentrations**

Our Geographic Information Systems and Analysis concentration is currently undergoing a substantial revision to include core instruction on coding and database management as well as to better sequence courses so that higher levels of technical proficiency are achieved by all graduates. This rebuilding has been made possible by the recent hiring of three tenure-track faculty with expertise in GIS, and the updated concentration should be active for the 2022-23 catalog year.

The Physical Geography concentration is anchored by three long-standing tenure-track faculty and has not been critically examined in a long time. One recognized area of need in the concentration is for courses in field techniques. An informal survey of physical geography graduates working in resource management done by Dr. James Wanket in 2016 uncovered a desire for more instruction in field mapping (using GPS to map points, tracks, and polygons while collecting data), experience with protocol surveys (surveys applied to specific resources, particularly plant and animal species), and work with a wide variety of field instrumentation (soil probes, weather loggers, hydrologic instruments, etc.).

- **Create a GIS initiative**

The Geography Department is raising the profile of our GIS specialty in two primary ways. First, we have established a GIS Centroid to serve as a nexus between faculty research, hands-on student learning, and community needs. The Centroid is currently under the direction of Dr. Anna Klimaszewski-Patterson with Dr. Patrick Oberle and is involving Geography faculty and students in projects funded by the US Fish and Wildlife Service and the Sacramento State

Center for Community Engagement. Second, we are in the process of creating a graduate minor in GIS in order to serve graduate students across the campus. Other elements of the GIS initiative—a professional GIS certificate, establishing a “Community Geographer” position, and establishing a presence at the Sacramento State Downtown Center—will require more resources to develop.

- **Strengthen our position as an integrative discipline**

Several Geography faculty are actively engaged in interdisciplinary work both within the university and through collaboration with other institutions. Since arriving at Sacramento State in 2020, Dr. Hanieh Haji Molana has collaborated extensively with faculty across the university on projects ranging from creating a new textbook on the Middle East, offering community workshops for teachers, and organizing a webinar on the history and politics of Afghanistan. Dr. Anna Klimaszewski-Patterson and Dr. James Wanket are involved in a multi-agency research group that includes Environmental Science, Geology, and Ecology. We anticipate that these types of integrative collaborations will continue to develop with the new faculty who have joined our department in the last few years.

Our academic plans, however, remain entirely populated with courses in Geography. We offer many courses that serve other departments’ degree programs, but do not have any non-Geography courses in our program (except through case-by-case substitution).

- **Build partnerships with alumni, employers, and community organizations**

Geography has an enthusiastic base of alumni that could be better leveraged to benefit our current students. In the last two years we have been more active on social media to keep alumni informed of current activity in our department, and we recently completed a survey of graduates (summarized in Element Two— Learning Outcomes and Assessment).

In past years we have used our end-of-year research symposium (“Poster-Palooza”) to showcase senior capstone projects to invited alumni and key employers (such as URISA). The campus shutdown due to COVID-19 precluded our in-person symposium in 2020 and 2021, and we were unable to replicate the outreach aspect of Poster-Palooza in an online format. We expect to re-engage alumni and employers through 2022 Poster-Palooza which we hope to hold in face-to-face format.

We have recently made strides in increasing our community engagement, after losing two highly engaged faculty through retirement. Dr. Patrick Oberle is working with the Sacramento State Community Engagement Center to create a web-GIS interface that will make access to community partner information much easier. We also hired Dr. Jasmine Arpagian in 2021; Dr. Arpagian has expertise in

community-based planning and is expected to enhance our connections to community organizations.

- **Recruit and maintain a diverse student body**

Geography is largely a “discovery” major (most majors don’t declare Geography before taking their first course in the subject), and as such the student classroom experience is critical to recruiting new majors. The cultivation of new student enthusiasm for Geography was very difficult during the COVID-19 campus shutdown, when all Geography classes were held via Zoom. Compounding the challenge was the difficulty in maintaining continuing Geography student enthusiasm when normal modes of geographic interaction—field trips, Geography Club activities—were suspended. Fortunately, our return to campus in Fall 2021 has coincided with the arrival of a particularly enthusiastic cohort of new majors. To leverage this enthusiasm, Dr. Patrick Oberle is serving as club advisor and is overseeing a very active calendar of events in the hope that we can broaden the appeal of the Geography program to a wider group of students.

In 2021 the Geography department established its first-ever Diversity, Equity, and Inclusion Working Group under the leadership of our new faculty member Dr. Hanieh Haji-Molana. It is our hope that the working group can help the department operationalize best practices in recruiting and maintaining a diverse set of students. One step in this effort has been to create a Geography Department Equity Statement, agreed to by every faculty member and posted on the department home page, to send a clear message of welcome and safety to current and prospective students of all backgrounds, identities, and experiences.

B. Hiring needs.

The Geography Department has experienced a rapid turnover in faculty over the last several years. The timeline below summarizes the changes in Geography permanent faculty (including their areas of specialty) since our last program review.

This turnover in faculty has allowed us to begin the process of updating our curriculum to reflect contemporary approaches in the subfields of geography; in particular, we have been able to remodel our Geographic Systems/Analysis concentration to add new courses and to restructure our course offerings to provide majors with a higher-level skillset at graduation. We have recently added three faculty with expertise that will allow us to similarly restructure our Human Geography and Metropolitan Area Planning concentrations. As of Fall 2021, Geography has eight non-FERP tenure track faculty, the same number it had in Fall 2013 (although we are currently searching for a ninth permanent faculty).

	AY 2013-2014	AY 2014-2015	AY 2015-2016	AY 2016-2017	AY 2017-2018	AY 2018-2019	AY 2019-2020	AY 2020-2021	Fall 2021	
Marsha Dillon (Human, Physical)	Full									
Tom Krabacher (Human, Physical)	Full					Full/Chair		Full		
Miles Roberts (GISA)	Full								FERP	
Robin Dattel (Human, MAP)	Full/Chair			Full		FERP				
Bruce Gervais (Physical)	Associate		Full							
Jim Wanket (Physical)	Associate			Full				Full/Chair		
Michael Schmandt (Human, MAP, GISA)	Full		Full/Chair		Full		FERP			
Matt Schmidlein (GISA, Human)	Assistant		Associate				Full			
Anna Klimaszewski-Patterson (GISA, Physical)	Assistant								Associate	
Pat Oberle (Human, GISA, MAP)	Assistant									
Hanieh Molana (Human, MAP)	Assistant									
Jasmine Arpagian (MAP, Human, GISA)	Assistant									

While the last several permanent faculty hires have largely been replacements for retiring faculty, the Geography department is now at a point where we can identify hiring needs to strengthen our program by expanding the area of expertise covered by our faculty in all areas of specialty. Our hiring plan for the next five years is found in **Appendix B**. In summary, we wish to improve our program by hiring additional faculty in several areas:

Geomorphology: We will request a position for a physical geographer specializing in the relationship between climate change and surficial processes with substantial expertise in field techniques. Filling this position will fill a gap in faculty expertise and strengthen the climate change focus of the Physical Geography concentration.

Political Ecology: We will ask for a position for a human geographer focusing on political ecology and international development with a regional focus on Latin America. This position would fill a gap in existing faculty expertise and a long-standing need for a regional specialist in Latin America.

Geographic Information Scientist: We have need for a broadly-trained GIScientist to provide overlap in coverage for our core GIS courses and to help us develop a professional certificate in GIS. The faculty filling this position would teach a range of courses in our GIS curriculum which would allow us to offer more sections of existing courses and/or offer a professional GIS certificate.

Replacement for Tom Krabacher: We anticipate the retirement of Dr. Krabacher in the next five years. While his deep institutional memory could not be replaced with a new position, we will need to fill substantial gaps in our core curriculum upon his departure.

C. Other major budget concerns.

The Geography Department moved from Amador Hall to Sequoia Hall in Spring 2020 (before the COVID-19 campus shutdown). With the move (and with the support of the

College of Natural Sciences and Mathematics), Geography gained significant facilities space that had long been a cause for concern: we have increased office space for permanent and temporary faculty; we now have a dedicated teaching laboratory space for GEOG 11 (Physical Geography Lab) whereas it used to share space with GIS classes; we now have space for a GIS Centroid; we now have research labs for paleoecology and geo-visualization; and we have additional equipment use and storage space. This increase in space, coupled with an augmentation in our baseline operating expenses a few years ago, have greatly alleviated the chronic shortage of resources that we operated under previously.

One additional facility change has yet to be realized but is planned for 2022. Our GIS teaching laboratory remains in Amador Hall as the last Geography facility in that building. Although we have used that space for our GIS classes for more than twenty years, it has become a challenging facility for two reasons: it is now remote from the rest of Geography (requiring students and faculty to cross campus to use it); and what used to be occasional and minor roof leaks in the room have become regular and severe, with each of the last two semesters experiencing a loss of use of the lab for portions of the academic term. We are expecting to move our GIS lab into Humboldt Hall (next to Sequoia Hall) in 2022 on a temporary basis (perhaps for several years) until a new permanent lab can be established in Sequoia Hall.

A major remodel of Sequoia Hall is part of the Campus Master Plan 2015. We hope to have the opportunity to provide input into the planning process so that we can have a GIS facility that integrates the functions that are now widely separated. A thoughtful arrangement of the GIS lab, student lab, and GIS Centroid facility can help us further integrate our teaching, research, and service in GIS and help move our GIS Initiative forward.

D. Revenue opportunities.

Gifts: Geography has been very successful in gaining donations to support students; our Jack Mrowka Memorial endowment fund has grown to more than \$100,000 in the last several years. This fund supports up to four Geography majors per year through the Jack Mrowka Memorial Scholarship and is also available to Geography students who study internationally, which should become commonplace when COVID-19 travel restrictions ease. Geography could potentially increase the numbers of students served by this fund (or new funds) by soliciting gifts from emeritus faculty and alumni.

Contracts: Geography's GIS Centroid is planned, in part, to support student research experience through paid work on contracts solicited by participating faculty. The Centroid's first student assistant supported by contract (with U.S. Fish and Wildlife Service) is currently working in Fall 2021. We anticipate supporting more students through GIS Centroid contracts in the future.

Sponsorships: In the past, the Geography Department has received funding through sponsorships from outside organizations. For example, our annual Geography research

symposium has had costs offset through the participation of the Urban and Regional Information Systems Association (URISA). The department could explore additional revenue opportunities with sponsorship of future events.

V: Element Five: Planning to Maintain Success and Engage in Continuous Improvement

A. Summary of areas of concern and means of improving.

Recruitment of Geography majors: Student success data (discussed in section **III.D**) suggest that the Geography program has done well in serving the students in our program. The main area of concern is the size and diversity of our Geography student body; the total number of majors has begun to decline after reaching an all-time high in 2017, and the gender and racial diversity of our students remains low. The need to recruit a larger and more diverse body of Geography majors is recognized in our strategic plan, where we identified some broad approaches to address the issue (summarized in section **IV.A.**). Here we outline specific strategies that we plan on using over the next five years to increase both the overall number of majors and the diversity of the body of majors.

- To increase the overall number of geography majors:
 - Engage with high schools to increase the visibility of Geography to first-time freshmen; work with College of Education to support training for AP Human Geography instructors.
 - Emphasize recruitment of new Geography majors in lower-division general education classes like Geography 1 and Geography 2.
 - Raise the profile of Geography on the Sacramento State campus by emphasizing participation in campus-wide orientation and career events.
 - Engage with local community colleges on recruitment and strengthening the “pipeline” of geography students from community college to Sacramento State.
 - Raise the profile of Sacramento State Geography in the California Geographical Society to draw community college transfer students from across the state.
 - Explore how we might organize and market our program by highlighting themes with direct relevance to students (e.g., climate change, urban studies).
 - Collect and examine data on opportunities for Sacramento State students to add Geography as a second major.

- To increase the diversity of the body of geography majors:
 - Collect data on “converts” to Geography among existing Sacramento State students to better assess the success of our diversity efforts.
 - Recruit a diverse faculty, both tenure-track and temporary.

- Emphasize career options in Geography; organize a panel of Geography graduates to discuss post-graduate opportunities.
- Consider ways to leverage existing and/or new scholarships to attract diverse students.
- Address course-level equity gaps in GPA and DFW rates.
- Consult with the Sacramento State Office of Inclusive Excellence on recruitment strategies with an eye on diversity.

Curricular Changes: The Geography department has experienced a large turnover in tenure-track faculty in recent years; by Fall 2022 we will have hired five new faculty in six years while losing at least four existing long-time tenured faculty (discussed in section **IV.B.**). This sea change necessitates an examination of our curriculum to ensure that it matches the expertise of our faculty, includes modern techniques and approaches, and is positioned for appropriate future growth. Over the next several years we will evaluate (through the analysis of other geography programs nationwide) our entire curriculum, down to the existing basic structure of the major (the core/breadth/concentration model). In the near term (next three years), we will focus on updating the following concentrations:

- Physical Geography
 - Consider new courses to address curricular gaps (e.g., physical geography seminar, field techniques, paleoecology).
 - Create new courses specifically designed for general education B5 students to reduce the reliance on general courses for students in the concentration and create curricular space for higher-level courses.
 - Consider rebranding the concentration to take advantage of the climate change focus of much of the curriculum.

- Human Geography/Metropolitan Area Planning
 - Evaluate the overlap between these two concentrations and decide whether to collapse them into a single concentration or develop curricula to better differentiate the pathways.
 - Reach out to other colleges (Education, A&L, SSIS, HHS) to find ways to make human geography courses better serve other majors.
 - Explore opportunities to cross-list human geography courses with GE and/or offer new GE courses to bolster enrollment and create more opportunities for major recruitment.
 - Identify university-wide thematic gaps that could be used to rebrand the human geography concentrations to increase their appeal (Urban Studies, for example).

Appendix A: Geography Department Strategic Plan

Geography Strategic Plan

Fall, 2019

The Geography Department at California State University, Sacramento commits itself to an ambitious program: sustaining the qualities that have served us and our students so well, while adapting to current challenges and taking on new opportunities. This plan outlines our path.

MISSION STATEMENT

Geography Program provides students with a high-quality education in geography that spans the breadth and depth of the discipline and to foster geographical awareness and understanding in the region through teaching, service, and scholarship.

VISION

The Geography Program will provide a strong, innovative, and intersectional geographical education by equipping our students and our community with the cognitive and technical skills necessary to address the world's growing spatial and environmental challenges.

VALUES

- Commitment to all major subfields of geography
- Student success
- Quality teaching
- Creativity, research, and scholarship
- Serving and engaging our community
- Inclusion, diversity, and collaboration among students and faculty

GOALS

1. Continue to prepare our students to work with spatial information, become critical thinkers, be more informed citizens, and find success after graduation.
2. Strengthen our human geography program while maintaining our current strengths in physical geography, geotechniques, and urban planning.

3. Develop a GIS initiative that makes us a recognized resource for teaching, service, and scholarship on campus and across our region.
4. Engage more strongly in multidisciplinary initiatives that emphasize geography's deep-rooted integrative approach to analysis, understanding, and problem-solving.
5. Strengthen the department's partnerships with alumni, regional employers, and community organizations.
6. Make geography more accessible to diverse students and communities.

STRATEGIES

BUILD A STRONGER HUMAN GEOGRAPHY PROGRAM (academic program review) and increase human geography majors (number of majors, retention and graduation data, and class enrollment data) (relates to portions of goals 1 and 2):

- Fill existing (and near future) faculty positions by hiring full-time, tenure track human geographers.
- Analyze strong human geography programs at similar institutions, and review our existing human and regional geography courses and possibly add, subtract, and reconfigure them.
- Integrate our human geography program (and our regional geography courses where appropriate) with other department concentrations; academic programs, departments, colleges, and institutions across campus; government and community organizations; and the job market.
- Work with Enrollment and Student Services to recruit high school seniors who have taken AP Human Geography.
- Provide more sections of Geography 2 (Cultural Geography), and within them, actively recruit freshman, transfer, and change of major students and promote upper-division human geography courses.
- Make our students aware of global learning opportunities by working with the Office of International Programs and Global Engagement.
- Fund appropriate equipment and infrastructure.
- Develop or modify at least one human geography course so that it meets the GE Race and Ethnicity criteria.

MAINTAIN AND BUILD OUR OTHER CONCENTRATIONS and their courses (relates to portions of goals 1 and 2):

- Hire tenure-track professors and lecturers to contribute to these programs.
- Offer a broader scope of technique courses.
- Continue to offer a broad range of courses in general education.

- Develop and maintain an innovative (relevant, agile, and topically current) curriculum in response to current problems or needs.
- Assess our interest and feasibility in offering a planning certificate.
- Fund appropriate equipment and infrastructure.

CREATE A GIS INITIATIVE (relates to goal 3 and a portion of goal 5):

- Support the Initiative’s teaching, research, service, and staffing through reassigned time, infrastructure funding, and increasing access to quality teaching and research space.
- Craft a consultative process with campus and regional community groups by empaneling an advisory board/committee to prioritize the Initiative’s initial direction and its possible future directions to best serve campus and community needs.
- Develop teaching and research relationships with potential campus partners that have geospatial needs (e.g. Center for California Studies, interdisciplinary GIS courses, CCE, etc.)
- Explore the possibility of a “Community Geographer” position as part of the Initiative to provide pro bono spatial analysis and map making aimed at understanding and addressing significant social, economic, and environmental problems and opportunities in our region.
- Create student opportunities through internships, research assistantships, short courses, possible certificates, and a possible master’s degree minor.
- Have a possible presence at Sacramento State Downtown to serve the professional development needs of state employees through GIS (and perhaps planning courses and a planning certificate) and to provide a forum for community partnership.
- Use the center to promote geography’s intrinsic wide intellectual spectrum.

STRENGTHEN OUR POSITION as an integrative discipline (relates to goal 4 and portions of goals 3 and 5):

- Cross list our courses in non-Geography programs; cross list non-Geography courses in our academic plans.
- Encourage faculty to work on multidisciplinary research and teaching teams.
- Encourage faculty to engage in multidisciplinary programming offered by the Center for Teaching and Learning.
- Encourage faculty to participate in community engagement projects involving faculty and students from multiple disciplines.
- Conduct outreach to other departments to get on their notification lists regarding talks and other special events.

BUILD PARTNERSHIPS with alumni, employers, and community organizations (relates to goal 5 and a portion of goal 3):

- Update the department’s alumni database and consider creating an alumni advisory board.
- Create and update employer, alumni, and graduating senior surveys.

- Conduct networking events that link the department with alumni.
- Fund appropriate events and costs.
- Consistently engage with the campus's Anchor University initiatives.

RECRUIT AND MAINTAIN a diverse student body (relates to goal 6):

- Recruit diverse students from all geography classes to better represent the communities/populations we serve.
- Participate in programs that encourage a diverse student body (e.g. McNair Program).
- Promote/embrace different points of view in the classroom.
- Maintain a student computer lab space to foster a deep sense of student community.
- Continue to provide and enhance opportunities (scholarships, research incentives, and professional development opportunities) for students.
- Increase collaboration and outreach to regional community college and high school geography programs/partners
- Maintain a strong geography club.
- Fund appropriate events, costs, and infrastructure.
- Review and follow up on the diversity recommendations of our national organization, the American Association of Geographers.
- Plan student events.
- Recruit diverse faculty.

Appendix B: Geography Five-Year Hiring Plan

Geography 5-year Hiring Plan

Fall, 2021

Over the next five years, the Department of Geography anticipates requesting four tenure-track faculty positions. Three of these positions will expand the range of concepts, techniques, and/or experiential learning opportunities for students in each of our major subdisciplines. The fourth position is an anticipated replacement for a faculty member nearing retirement who teaches several core courses in our Geography B.A. program. These positions **are not listed in ranked order**; an ongoing faculty search and curricular redesign efforts will have bearing on the relative necessity of the positions. We will rank them at the time faculty position requests are submitted to the Dean of the College of Natural Sciences and Mathematics.

Position	Area(s) of Specialty	Justification	Existing courses served	Potential new courses
Geomorphologist (Physical Geography)	Climate change and its impact on geomorphic systems Field techniques	Gap in existing expertise among faculty Strengthens climate change focus of department	GEOG 1 GEOG 11 GEOG 116 GEOG 117	Physical field techniques Other courses in area of specialty
Political Ecologist (Human Geography)	International development Latin America	Gap in existing expertise among faculty Fills a need for regional expertise	GEOG 2 GEOG 100 GEOG 141 GEOG 145 GEOG 147	Lower division world regional geography Geography of Latin America Geopolitics
Geographic Information Scientist	Broadly trained in GIScience	Provide overlap in coverage for core GIS courses Serves potential future GIS certificate program	GEOG 3 GEOG 109 GEOG 110 GEOG 150 GEOG 155 GEOG 181	Courses in area of specialty
Replacement for Tom Krabacher	Human/environmental interactions International specialty History of geographic thought	Replace current faculty Teach both physical and human geography courses	GEOG 1 GEOG 102 GEOG 113 GEOG 145 GEOG 190	Courses in area specialty Regional course

External Review Process and Report

Department Name: Geography

Degrees: B.A. in Geography with four concentrations (GISA, Human Geography, MAP, Physical Geography)

Site Visit Dates: March 28-29 (virtual visit)

STAGE	DESCRIPTION
Initial	The program is at a preliminary stage in this practice. The program shows the need for additional policies, resources, or practices in order for it to provide the education program to which it is committed or aspires. Insufficient data is available to make determinations.
Emerging	The program partially satisfies the criterion. Some data is available documenting this dimension. The program has many, but not all, of the policies, practices, and resources it needs to provide the educational program to which it is committed or aspires.
Developed	The program satisfies this criterion, with developed policies and practices. The program has the availability of sufficient resources to accomplish its program goals in this dimension. Data demonstrates accomplishment of this criterion.
Highly Developed	The program fully satisfies this criterion. The program may serve as a model and reference for others on campus. The program's practices, policies, and/or its resources contribute to program excellence in this dimension.

Element One: Department Mission and Institutional Context	
Inquiry	Stage
Does the department have a mission statement or statement of program goals that is appropriate?	Highly Developed
Is the department mission and its programs aligned with CSUS and college missions and strategic priorities?	Highly Developed

<p>Is the department supportive of the CSUS general education program and/or general graduate learning outcomes?</p>	<p>Highly Developed</p>
<p>Does the department engage key constituencies and campus partners in academic and strategic planning, including faculty, professional colleagues, current and prospective students, and the community?</p>	<p>Highly Developed</p>
<p>Does the program have policies and procedures that facilitate articulation with community colleges and/or other external educational partners?</p>	<p>Highly Developed</p>
<p>Comments:</p> <p>The Geography Department has an appropriate mission, and the Geography Department supports the mission of the university. The Geography Program supports the General Education Program, especially in Area B. We also recognize that the Geography Department has developed connections with the community through Center for Community Engagement, student internships, and alumni. It could serve as a model for other CSU Geography programs.</p>	
<p>Recommendations:</p> <p>As Sacramento State emphasizes the role as a regional anchor university, we encourage the Geography department to continue to further develop internship and other practical, applied opportunities with community partners. One consideration of a formal way in which students are encouraged to seek internship, volunteer, or other opportunities could be through a professional experience course that applies to their major. Additionally, the development of a GIS Initiative/Centroid could increase ties with the community.</p> <p>We support the department's goal to revitalize the Human Geography Concentration. The concentration enhances the college's curriculum on human and social perspectives. We would encourage Geography to look at expanding GE footprint with select classes in Area E and Area A (Critical Thinking). The department could also consider strengthening their GE Area D offerings by developing a course that meets both the Area D & the Race and Ethnicity in American Society Graduation Requirement.</p>	

Element Two: Learning Outcomes and Assessment to Maintain Success and Engage in Continuous Improvement

Inquiry	Stage
Does each degree program have appropriate and measurable learning outcomes that reflect current standards in the discipline?	Highly Developed
Does each course have appropriate and measurable learning outcomes that allow students to achieve program learning outcomes?	Highly Developed
Are the curriculum and graduation requirements for each degree reflective of current standards in the discipline?	Highly Developed
Does each degree's curriculum and graduation requirements appropriate for the degree level and reflect high expectations of students?	Highly Developed
Is the assessment loop regularly being closed for each of the degree's program learning outcomes?	Uncertain
Is the learning assessment data being used to make maintain Success and Engage in Continuous Improvement?	Developed
Do students feel connected to academic support services (writing, math, tutoring, library, etc.)?	Uncertain
Comments:	

The Geography Department has robust learning outcomes and curriculum that are reflective of the current state of the discipline and high expectations of students. The recent changes to the GIS curriculum are a highlight of the program. Given the retirement of senior Geography faculty and the COVID disruption to university, we commend the department for its assessment efforts. The fall 2021 assessment efficiently examined the program learning outcomes using the capstone research project.

Recommendations:

We recommend that junior faculty be supported in revising courses and developing new curriculum in the areas of Human Geography and the Metropolitan Area Planning (MAP) concentrations. Revisions would incorporate on-going developments in the discipline. The faculty could also consider adding additional applied components to upper-division Physical Geography and MAP courses. Such revisions should be informed by direct and indirect assessment of current courses and student learning outcomes.

We encourage the department to develop an on-going assessment plan that supports the development of their curriculum. The Geography department could develop an assessment of learning outcomes tied to a specific class. For instance, they could examine the geographic tools/techniques competency (PLO 3) in an upper-division GIS course (e.g. GEOG 109). Alternatively, they could longitudinally compare progress on learning outcomes between students in junior courses (e.g. GEOG 102) and students in graduating senior courses (e.g. GEOG 190). Faculty could also gather feedback from industry partners, alumni, and affiliated disciplines to inform changes to the curriculum. We used the term “uncertain” in the stage column when we did not have the information to assess the Inquiry.

Element Three: Student Success and Assessment to Maintain Success and Engage in Continuous Improvement

Inquiry	Stage
Does each degree program use aggregated and disaggregated data to understand admission trends and manage enrollment with an eye to diversity, impactation, or address program specific concerns?	Highly Developed
Does each degree program use aggregated and disaggregated data to consider ways to improve retention?	Highly Developed

<p>Does each degree program use aggregated and disaggregated data to consider ways to improve time to degree or close graduation gaps?</p>	<p>Highly Developed</p>
<p>Does the program provide appropriate opportunities for students to participate in curricular-related activities, such as research and creative opportunities, service learning experiences, performances, and internships?</p>	<p>Developed</p>
<p>Does the program provide or partner with other entities to provide appropriate co-curricular activities for its students, such as clubs, fieldtrips, lectures and professional experiences?</p>	<p>Developed</p>
<p>Does the program provide adequate student advising?</p>	<p>Highly Developed</p>
<p>Do students feel connected to student success support services?</p>	<p>Uncertain</p>
<p>Comments:</p> <p>We appreciate that the Geography Department used aggregated and disaggregated enrollment information to develop the self-study and highlighted trends by gender, ethnicity, and Pell status. The department has similar graduation rates to the college and university.</p> <p>Experiential learning and co-curricular activities can be highlights of a geography student's successes. The move to Sequoia Hall, with the establishment of the dedicated Physical Geography Lab and the outdoor proximity to the river pathway, has significantly improved the experiential learning in the Physical Geography classes. The Paleo-Lab serves as a modern space for student research. The establishment of a GIS Centroid also has the potential to also serve as a space for students to participate in community research.</p> <p>Students report successful major advising and access to support services. One of the most important services is the availability of the student GIS lab.</p>	
<p>Recommendations:</p>	

To increase the ethnic and gender diversity of their student body, we recommend that the Geography Department continue to support the hiring of a diverse faculty pool, work with local community colleges to encourage demographically diverse transfer cohorts, and examine how curriculum can support a diverse student body. We recommend that the Geography Department request that OIREP provide demographic information on Sac State students who change to the Geography major. We applaud the addition of the *Geography Department Equity Statement* to the department website.

To expand on experiential learning and co-curricular activities for the human geographers we encourage the department to develop the GIS Centroid, increased community engagement projects in human geography courses, and stronger ties with regional internship partners.

Element Four: Developing Resources to Ensure Sustainability

Inquiry	Stage
Does the program have faculty in sufficient number, and with appropriate rank, qualification, and diversity to allow students to meet the program learning outcomes and deliver the curriculum for each degree program?	Developed
Does the program employ professional staff and/or appropriately partner with campus partners (graduate studies or College of Continuing Education) to support each degree program?	Developed
Are its facilities, including offices, labs, practice and performance spaces, adequate to support the program?	Developed
Does the program have access to information resources, technology, and expertise sufficient to deliver its academic offerings and advance the scholarship of its faculty?	Highly Developed

Does the program seek and receive extramural support at the appropriate level, including grants, gifts, contracts, alumni funding?	Uncertain
Has the program identify other concerns that impact budget and resource planning?	Highly Developed
<p>Comments:</p> <p>We commend the department for strategically developing the following initiatives: 1) building a stronger human geography program; 2) developing the GIS centroid, which is an exciting opportunity for students and faculty to develop applied experiences, projects, and services with community partners. We also appreciate that the recent move to the new building enhanced the connection of the department to other college departments, increased space, and added some lab facilities. We also understand the dire need for the GIS teaching facility to be developed in order for the program and students to be successful in their academic degree programs. We also commend the department for a long history of supporting their faculty and recognizing the importance of collegiality and a healthy working environment that supports program success.</p>	
<p>Recommendations:</p> <ol style="list-style-type: none"> 1. College support for securing the Humboldt Hall lab for the GIS teaching facility that has adequate space and the least financial impact compared to other possible locations. The issues surrounding the GIS teaching facility were mentioned by students, faculty and administration. The GIS teaching facility should be closer to the department offices and teaching spaces. Each student workstation needs to have a clear line of sight to the teaching station and white board. 2. Increase in tenure-track/tenured faculty to support the revitalization of the Human Geography Concentration and the GIS Initiative/Centroid. 3. College support to develop resources for the GIS centroid. Several CSUs have self-sufficient GIS centers that connect the university to the region, such as CSU Chico and CSU Northridge. To develop into a self-sustaining center, Sacramento State will need to support faculty or staff time to direct the center. 	

Element Five: Planning to Maintain Success and Engage in Continuous Improvement	
Inquiry	Stage

<p>Does the academic unit engage in planning activities which identify its academic priorities and their alignment with those of the college and the University?</p>	<p>Highly Developed</p>
<p>If appropriate, does the program have an advisory board or other links to community members and professionals? Does the program use community professional input for program improvement? Does the program maintain a relationship with its alumni?</p>	<p>Developed</p>
<p>Does the academic unit have a strategic plan, and other long-term plans (5 year hiring, facilities, etc)?</p>	<p>Highly Developed</p>
<p>Does the academic unit have regular processes to revise plans and timelines.</p>	<p>Developed</p>
<p>Do plans include engagement with needed campus partnership and external entities to accomplish goals?</p>	<p>Highly Developed</p>
<p>Comments:</p> <p>We commend the self-study that was analytical and highly reflective that allowed for evaluation of the programmatic history and also future planning. The alumni survey provided important information related to the effectiveness of the B.A. program in preparing students for post-graduate employment or further education. We were not clear from the self study how the assessment loop is regularly being closed for each of the degree's program learning outcomes, which was a question we were asked to address.</p>	
<p>Recommendations:</p> <p>We recommend regular evaluation of assessment loops for each of the degree's program learning outcomes (LO) through evaluation of LOs in multiple courses as mentioned previously. We also recommend additional questions for existing students and the alumni surveys in the future that include some of the prompts requested for in the self study and in this external review. For example, additional information on the following would allow the department to enhance their understanding of student needs while carrying out their undergraduate studies.</p>	

- Opportunities for internships, volunteer and/or work experiences relevant for post-graduate employment or further education; and if none, their feedback on opportunities they would have liked to have had.
- Student connection to student success and academic support services, and specifically what services did they feel well supported in and what services would they have liked to have had.
- Skill-based questions (i.e., what skills did students feel were adequately acquired, and what skills would they have liked to have had from their undergraduate studies)

We also recommend communicating with other CSU geography departments for cross-campus collaborations for certificates etc. to further support students given that each campus does not have the capacity to oversee myriad programs that could be beneficial for students.

Commendations: Please see the comments in each section above.

External Reviewer One Name and Affiliation:

Peggy Hauselt, Department of Anthropology, Geography, and Ethnic Studies

California State University, Stanislaus

Signature:



External Reviewer Two Name and Affiliation:

Rosemary Sherriff, Department of Geography, Environment & Spatial Analysis

Cal Poly Humboldt

Signature:



Internal Review Report

Internal Review Report:	Department of Geography
College:	Natural Sciences and Mathematics
Degree Programs:	BA in Geography
Concentrations:	Geographic Information Systems and Analysis, Human Geography, Metropolitan Area Planning, and Physical Geography
Internal Reviewers:	Sharon Furtak, Department of Psychology, SSIS Clint Collins, Department of Biological Sciences, NSM
Date Submitted:	May 31, 2022

I. Self-Study:

The Department of Geography submitted its self-study in Fall 2021. It consisted of a 29-page document that included five sections that described their mission and context, outlined program learning outcomes and assessments, analyzed student success in their programs, described strategies to develop resources to ensure sustainability, and addressed areas of concerns to maintain success and continue improvement. The Department offers a Bachelor's degree in Geography with one of four possible concentration areas (Geographic Information Systems and Analysis, Human Geography, Metropolitan Area Planning, or Physical Geography) and two minor options (Geography and Geographic Information Systems). The undergraduate major focuses on building a foundation in core concepts in Geography and builds breadth through required coursework in four thematic categories of Geography prior to five additional course requirements within the student's area of concentration. There are approximately 100 majors, ranging from ~80-120 over the past seven years.

The Department of Geography is a large-scale service department with 70-75% of its full-time equivalent students (FTES) from service courses. The Department supports 10 courses that fulfill GE Areas B or D requirements. The Department also serves several majors outside Geography by offering courses required by several majors on campus. For example, the Department offers GEOG 100, which is not required for the major, that serves B.A. programs in Liberal Studies, History Pre-Credential, and Social Sciences. In addition, the Department contributes two Geography courses that serve as GE coursework to the B.A. in Communication Studies offered to incarcerated students at two local prisons.

Student learning: The B.A. in Geography program has a total of eight Program Learning Outcomes (PLOs). These eight PLOs were assessed through two means. First, student capstone research projects completed in GEOG 190 during the spring of 2021 were analyzed as assessments of PLO1-7, which focus on competencies in content, analysis, graphic literacy, writing, evaluation of scholarly writing and synthesis of geographic models, data, and methodologies. Instructors rated projects on a 5-point scale according to a set of characteristics that aligned with the PLOs. As noted in the self-study, one weakness in the strategy of using this one project as the means of assessment is that the breadth of knowledge can't be assessed since the project is focused on a specific research topic chosen by the student. In particular, this makes it challenging to fully assess PLO1. Ratings from the student capstone project suggest that students are doing relatively well at PLO1, PLO2, PLO5, PLO6 and PLO7, where average ratings were above 4 on a 5-point scale. Students appear to be struggling with PLO 3 and PLO4, which

focus on graphic literacy, use of basic geographic tools/techniques, analysis of maps or data sets. The self-study suggests these are pandemic related; however, without more than one sample point in spring 2021 it should be taken with caution to reach this conclusion.

The second mean of assessing the PLOs was to survey recent alumni to assess overall competencies to succeed in post-graduation careers. This strategy specially aligned with assessment of PLO8. Surveys were conducted with 90 recently graduated alumni. Results indicate that the majority of alumni felt their degree prepared them for their current career or a graduate program very well. Alumni did express a desire to have more advanced Geographic Information Systems course offerings. The department hired four new tenure-track faculty and has added new courses to their curriculum. These new courses address coding, database management, and qualitative methods. Roughly 60% felt satisfied with their undergraduate education in Geography.

The Department has a robust assessment plan developed. However, due to changes in course structure (i.e., elimination of baseline quizzes) and attrition of faculty (i.e., retirement) who were responsible for implementing the plan, the full assessment plan was not administered consistently. This is noted in the self-study as an area for future growth.

Student Success: The Self-Study noted that the large majority of Geography majors are transfer students, accounting for approximately 85-95% of their total majors over a ten-year period from 2010 to 2020. Thus, retention and graduation rates focused specifically on transfer students during this time period. Overall, the presentation of retention and graduation rates found no large-scale differences between gender, ethnicity, or family educational history. It was noted that there were slightly higher retention rates in transfer students for Pell recipients compared to non-Pell recipients, 93% and 85%, respectively. Conversely, four-year graduation rates of transfer students with Pell status were lower compared to non-Pell students, 71% and 77%, respectively. In retention rates, White majors were slightly lower 90% compared to non-White majors (93-100%). A similar pattern was observed in two- and four-year graduation rates. Current strategies to support student success include a partnership with the Geography librarian to aid students in the completion of their capstone seminar project and mandatory annual advising meeting with faculty mentors.

Operations: The Self-Study notes the addition of three new faculty to help expand offerings in Human Geography program. However, it was noted that a need to develop further the number of faculty within these areas exist due to two faculty retiring. In addition, there is a need to build the technical skills of students in coding and database management, two areas the Department has already increased curriculum offerings. Future plans include building a professional certificate through partnership with Sacramento State Downtown, creating more integrative discipline presence through collaboration with other institutions, and building more partnerships with alumni, employers, and community organizations. In alignment with campus priorities, the Department has an emphasis on building a more diverse student body and has already begun prioritizing events for majors that have broad appeal to more students. Hiring priorities are built around the expertise the Department views as their future direction including geomorphology, political ecology, and geographic information science. Major concerns for operation include the lab classroom that remains in Amador Hall even though the Department has moved to Sequoia Hall. Revenue streams continue to build successfully through gifts, contracts and sponsorships.

II. External Review:

The external reviewers were appropriate given their positions within geography departments at other CSUs. Dr. Rosemary Sherriff is a professor in the Department of Geography and also serves the Environmental Studies Program at Cal Poly Humboldt. Dr. Peggy Hauselt is a professor in the Department of Geography at Stanislaus State. A two-day visit occurred virtually March 28-29, 2022. The visit agenda allocated time with the Chair, the Dean, full-time and part-time faculty, and students. The resulting report was thoughtful and provided useful context in the evaluation of the Self-Study. In particular, the external review noted the Geography program has an appropriate mission that aligns with the University and significantly supports GE offerings at the University. The external review also highlighted the development of partnerships the Geography program had with alumni and the Center for Community Engagement, and recommended building additional high-impact opportunities for students through internships and volunteer opportunities. It was noted that current experiential learning built within the curriculum helped to support the success of Geography majors, and these opportunities have been strengthened since the physical move of the Department to Sequoia Hall, which is closer to the American River. Particular attention in the external report was drawn to the need for Geographic Information Systems lab teaching facility to be closer to the new location of the Department offices and teaching spaces. This was a repeated concern voiced by students, faculty, and administration. In addition, it was noted that the Department's strategic plan to focus on building a stronger Human Geography program and Geographic Information Systems program will naturally expand opportunities for students and faculty to build applied experiences and projects. The external review recommended additional surveying of alumni to collect information on whether students felt connected to academic and success support services as well as whether they adequately acquired skills.

The external review emphasized the importance of the Department's efforts to revitalize the Human Geography concentration and in particular how it could aid in the expansion of Department to GE offerings. Attention was concentrated on the process of revising and expanding of the curriculum within Human Geography and Geographic Information Systems by the external review, which suggested that the process be guided by assessment and junior faculty be supported in the endeavor. The external review noted that assessment of the capstone research project sufficiently examined the Program Learning Outcomes (PLOs) in the Self-Study but encouraged further development of an assessment plan. Retention and graduation rates of transfer Geography majors were noted to be similar to the University. However, the external report emphasized the importance of increasing ethnic and gender diversity of their student body through hiring diverse faculty, working with local community colleges, and examining how curriculum can support diverse students. Of note, the external review commended the Department for their efforts to build a collegial and healthy working environment.

III. Internal Feedback:

The internal review is based on the consideration of the Self-Study and the external review report. Many of the recommendations outlined by the external review were routed in contextual impressions from the visit. This allowed the internal reviewers a broader understanding of the Department from the viewpoint of students and faculty. Here, the internal review offers feedback that at times reiterates external reviewers' recommendations, while also extending to provide feedback on some seemingly immediate needs. Of note, assessment results conveyed in the Self-Study supports that the overall curriculum for the major is effectively supporting students' ability to accomplish the stated Learning Outcomes. As part of the program review the Department of Geography will develop an Action Plan for

the next six years to outline priorities and next steps most relevant to the future success of the Department.

- 1) To maintain student success, the Department is encouraged to explore additional external educational partnerships that could extend support and resources to students in foundational geography courses. For example, the Department may consider collaborations with the Supplemental Instruction program or Peer & Academic Resource Center.
- 2) To increase ethnic and gender diversity in Geography majors, examine which community colleges are the largest contributor to transfer students that major in Geography. Build partnerships and opportunities with the community colleges that will have the largest likelihood of impacting diversity. For example, seek opportunities to speak with students, to recruit students, or to have students shadow current Geography students.
- 3) To increase necessary skillsets for post-graduate success, seek out additional opportunities for internships and volunteer experiences for Geography majors. Alumni vocalized a desire to have more opportunities in the community to gain hands-on experience. This is one pathway to support competitiveness in either a post-graduate employment market or application process for graduate education programs.
- 4) To improve assessment of the Program Learning Outcomes (PLOs), revisit your assessment plan of the eight PLOs. As stated in the Self-Study, original assessment strategies were not implemented due to disruption from retirement of faculty and the pandemic. While using the capstone project as an assessment tool is an asset, additional assessment would benefit a more global understanding of whether the curriculum supports students' successful accomplishment of all the PLOs. The Department is encouraged to create a plan on how to implement data collection needed for the assessment in the next review cycle.
- 5) To improve operational effectiveness, begin conversations with the Dean regarding the need for the relocation of the teaching lab currently in Amador Hall to a location closer to the Department.
- 6) To advocate for additional faculty hires to support the growth within the Human Geography program and Geographic Information Systems programs. The hiring plan should highlight the role that these particular programs play in building community partnerships, increasing GE offerings that likely will lead to increased Geography majors, and the potential it has for increasing diversity among the student population of Geography majors.
- 7) Support grant funding to build community pipelines among community colleges, undergraduates, private business, and alumni to enhance the diversity of practicing geographers in the community.

MOU/Action Plan

Program: **Geography B.A.**

College: **Natural Sciences and Mathematics**

Date: **July 1, 2022**

Program Review

Program Review Finding	2 YR	4 YR	6 YR
To Maintain Success			
<p>1. Explore educational partnerships on campus to support student success in foundational classes (suggested by self-study, external review, and internal review)</p>		<p>Goal: Assess benefit of a PAL cohort for GEOG 1; Assess benefit of engaging in PARC supplemental instruction for GEOG 1.</p> <p>Success indicators: Trial PAL cohort; trial PARC SI</p> <p>Responsibility: Current GEOG 1 faculty</p> <p>Resources: Faculty time; potentially funding for PAL facilitator(s)</p>	
<p>2. Evaluate curriculum in the Human, Metropolitan Area Planning (MAP), and Physical concentrations and make changes as needed to reflect current faculty expertise, trends in the field, and necessary/desired skills for employment and graduate school (suggested by self-study)</p>			<p>Goal: Revise Human Geography, Metropolitan Area Planning, and Physical Geography concentrations</p> <p>Success indicators: Form B approval for Human, Metropolitan Area Planning, and Physical concentrations</p> <p>Responsibility: Faculty</p> <p>Resources: Faculty time</p>

To Improve Student Learning			
<p>3. Revise Geography assessment plan to improve ability to track student learning and implement curricular changes (suggested by self-study, external review, and internal review)</p>		<p>Goal: Revisit Geography BA program learning outcomes</p> <p>Success indicators: Program learning outcomes that are amenable to operationalized assessment.</p> <p>Responsibility: Geography assessment coordinator; Chair; faculty</p> <p>Resources: Faculty time</p>	<p>Goal: Develop and implement revised assessment plan.</p> <p>Success indicators: Meaningful assessment data used to improve curriculum for student success.</p> <p>Responsibility: Geography assessment coordinator; Chair; faculty</p> <p>Resources: Faculty time; Office of Academic Excellence support</p>
To Improve Student Success			
<p>4. Increase the number of majors in the Geography B.A. program (suggested by self-study and external review)</p>	<p>Goals: a) Hold workshops on recruitment strategies for faculty teaching lower-division service courses. b) Ensure that Sacramento State Geography faculty are represented at meetings of statewide academic organizations (e.g. the California Geographical Society).</p> <p>Success indicators: Increase in the number of Geography majors.</p> <p>Responsibility: Faculty</p> <p>Resources: Faculty time; funding support for faculty conference travel.</p>		

<p>5. Increase the ethnic and gender diversity of majors in the Geography B.A. program (suggested by self-study, external review, and internal review)</p>	<p>Goals: a) Continue to strive for diverse applicant pools in tenure-track and temporary faculty hiring. b) Continue to share best practices for inclusive pedagogy in faculty workshops.</p> <p>Success indicators: Increase in the gender and ethnic diversity of Geography majors</p> <p>Responsibility: Faculty</p> <p>Resources: Faculty time</p>		
--	---	--	--

To Build Partnerships and Resource Development to Enhance the Student Experience

<p>6. Better integrate internship and volunteer opportunities into the Geography B.A. program (suggested by self-study, external review, and internal review)</p>	<p>Goal: Inventory existing internship and volunteer positions filled by current and recently graduated Geography students.</p> <p>Success indicators: Updatable database of internships and volunteer opportunities</p> <p>Responsibility: Faculty; chair</p> <p>Resources: Faculty time; staff time; student assistant time</p>		<p>Goal: Increase opportunities for students to participate in internships and volunteer positions.</p> <p>Success indicators: More students in internships and volunteer positions; more students aware of opportunities</p> <p>Responsibility: Faculty; chair</p> <p>Resources: Faculty time; staff time; student assistant time</p>
---	---	--	--

<p>7. Seek to strengthen connections with community colleges, alumni, and employers (suggested by self-study, external review, and internal review)</p>	<p>Goals: a) Re-engage with local community college Geography departments by encouraging the resumption of annual workshops in January. b) Develop ongoing surveys of alumni and employers. c) Use Geography student research symposium for community outreach.</p> <p>Success indicators: a) Robust attendance at workshops. b) High response rates to surveys. c) Increased attendance at research symposium by off-campus partners and alumni.</p> <p>Responsibility: Chair; Faculty</p> <p>Resources: Faculty time; hosting expenses (room, catering) some years.</p>		
<p>8. Build a self-supporting Geospatial Centroid to serve as a regional community-serving GIS center (suggested by self-study and external review)</p>		<p>Goal: Self-supporting Geospatial Centroid.</p> <p>Success indicators: Assigned time for Centroid administrator and staff funded through grants and contracts.</p> <p>Responsibility: Faculty Geospatial Centroid administrator</p> <p>Resources: maintain internally funded assigned time as needed to develop grants and contracts</p>	

To Improve Strategic & Budget and Operational Effectiveness and to Insure Sustainability			
<p>9. Revise department hiring plan to support strategic goals in light of recent changes in faculty (suggested by self-study, external review, and internal review)</p>	<p>Goal: Revise faculty hiring plan Success indicators: Hiring plan that clearly links new faculty requests to gaps in curriculum, scholarship, and community service Responsibility: Chair, faculty Resources: Faculty time</p>		
<p>10. Establish a new GIS teaching laboratory facility (suggested by self-study, external review, and internal review)</p>	<p>Beginning in Fall 2022, Geography's GIS teaching laboratory will be housed in TSC 5027. The need for a new facility, strongly emphasized at all levels of program review, has been filled.</p>		

Department Chair Name/Signature

James Wanket



College Dean Name/Signature

Lisa Hammersley

