

PROGRAM ABSTRACT - Form A

Proposed Degree Title: B.A. in Geography
B.A., B.S., M.A., M.S., etc. Discipline

COLLEGE CHABSS Proposed Implementation Date Fall 2019

About the A-Form.

Background: New baccalaureate and graduate-level degrees must be approved by the Chancellor’s Office. Every January, CSU campuses send updated University Academic Master Plans (or UAMPs) to the Chancellor’s Office, which are then approved by the Board of Trustees at their March meeting. When the Board of Trustees approves a campus request to add a new program to the UAMP, it authorizes the campus to submit a formal proposal to the Chancellor’s Office for establishing such a degree program.

Purpose: The A-Form is used to propose the addition of a new baccalaureate or graduate degree to the UAMP.

Process: After review by the appropriate college curriculum or planning committee in the Spring semester, A-Forms are sent to Academic Programs at the beginning of the Summer. The forms are distributed to key University officers (including all members of Provost’s Council and the President’s Cabinet) over the Summer for information dissemination, review and feedback. The feedback received as a result of this distribution is provided to proposers as it is received during the Summer (to inform development of the program proposal) and to the Budget and Long-range Planning Committee (BLP) at the beginning of the Fall semester.

Outcomes: BLP reviews the A-Forms and the feedback collected by Academic Programs, and makes recommendations as to whether programs should be added to the next UAMP. Placement of a program on the UAMP is the campus-level authorization to proposers to submit a complete new program proposal (via a P-Form). Comments from BLP are sent back to the proposal originator to inform the final design and plan for the proposed program. The A-Form, Summer reviewer feedback, and BLP comments are additionally used to prepare a summary statement for the Chancellor’s Office, which is required for any addition to the UAMP.

Directions.

- Fill in the degree title, college and implementation date above.
- Attach a program abstract addressing items 1-5 to this form.
- Identify the program proposer and obtain the department chair or program director signature below.
- Submit the abstract and the Form A to the college curriculum or planning committee. (Check with the college for submission deadlines.)

1. Description: Briefly describe the essential features of the curriculum that will be developed.

- If the new degree is currently offered as an option in an existing degree program, give a rationale for the conversion.
- If the new degree program is not commonly offered as a bachelor’s or master’s degree, provide a compelling academic rationale explaining how the proposed subject area constitutes a coherent, integrated degree major that has potential value to students.

2. Mission: How will this program benefit the college, university, region and/or state? How is it aligned with the College and University Mission and Vision?



Tracker
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3. Demand: What evidence is there of adequate student demand for this program?

[Note that Board of Trustees classifies Anthropology, Art, Biology, Chemistry, Economics, English, Foreign Languages, Geography, Geology, History, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Speech/Communication and Theatre Arts/Drama as "Broad Foundation Programs" for which societal need and student demand are not "the preeminent criteria" for offering baccalaureate programs.]

Preliminary evidence of adequate student demand for the proposed program should include

- (i) A list of other CSU campuses currently offering the proposed degree major program (see the CSU Mentor website at <http://www2.assist.org/browseAreas.do>),
- (ii) A list of neighboring institutions, public or private, currently offering the proposed degree major program,
- (iii) Information indicating substantial regional demand for individuals who have earned this degree (contact the Career Center for assistance), and
- (iv) Information indicating adequate student interest in the proposed program (e.g., numbers of minors, existing programs at feeder community colleges, or results of student surveys).

Graduate degree program proposals must also include the number of declared undergraduate majors and the degree production over the preceding three years for the corresponding baccalaureate program.

4. Resources: Give preliminary estimates of the following resources needed to implement the program:



- Additional faculty positions;
- Additional resources required for program administration (e.g., release time for a Chair or Director);
- Additional staff support;
- Additional space requirements; and
- Additional specialized equipment and materials other than those expected to be provided by the Library and Instructional and Information Technology Services (IITS).

Note that in the course of reviewing the A-Form over the Summer, the Library and IITS will estimate additional library, information technology and academic computing resources needed for implementation. Indicate whether there are any unusual aspects of the curriculum design that need to be taken into account in the preparation of the Library and IITS estimates.

If there are recognized accrediting bodies in the program area, what are the accreditation criteria and how necessary is accreditation?

5. Relation to Existing Programs: Describe the potential effect on existing programs (e.g., enrollment changes, opportunities for collaboration, resources).

REVIEW PROCESS

<p>1.  Originator (Please Print and Sign) <u>Greg Gutley</u> <u>2/27/17</u> Date</p>	<p>2. <u>Kim Knowles-Jay</u> <u>2/27/17</u> Program/Department Director/Chair* <u>Kim Knowles-Jay</u> <u>2/27/17</u> Date - if applicable</p>
<p>3.  College Curriculum/Planning Committee* <u>HAPC Chair</u> <u>4/21/17</u> Date <u>3/15/17</u></p>	<p>4. <u>Martin Stoddard Henry</u> <u>10/17/17</u> College Dean (or Designee)* <u>Martin Stoddard Henry</u> <u>10/17/17</u> Date</p>

5. _____
Date received in Academic Programs

* Signature indicates support that the proposed program move forward for consideration for placement on the UAMP.

Geography Program A Form

The Department of Liberal Studies proposes to offer a major in geography. The geography degree will be created by consolidating the Border Studies Option in the Liberal Studies major, the Border Studies Minor, and the Geography Minor, leveraging existing departmental expertise in urban planning, border studies, economic geography, and interdisciplinary social science, and building on a new tenure line faculty in physical geography, in support of a new degree option that has system-wide and broad societal recognition and support. Geography is considered by the Board of Trustees to be a “Broad Foundation Program”, “for which societal need and student demand are not ‘the preeminent criteria’” determining its potential viability. In this A form, we discuss the discipline of geography, the reasoning behind our proposed consolidation of Border Studies and Geography, student demand for the major, regional service opportunities, and anticipated program impacts.

1. **Description:** Briefly describe the essential features of the curriculum that will be developed.

Geography is the study of the earth and its landscapes, places, and environments. The field includes both social science and physical science. Geographers examine the interaction of people with their social, physical and biological environments across space and time, and at different scales. Some geographers work in communities, or analyze industries and regions, while others study environmental change, weather, gender, or geopolitics. With this range of topics and geography’s spatial analytic approach, the field can equip students with foundational knowledge, concepts and theories that explain the world around them, and help them become broadly-trained informed global citizens prepared to assess and address contemporary problems and solutions within rural, urban, regional and global contexts. The plan is to offer focus areas in the major that will allow students to develop specializations in areas of faculty strength, such as borders, food, climate, and G.I.S., an occupation expected to see 16% growth through 2022, according to the U.S. Bureau of Labor Statistics. As a program, the major will provide students the opportunity to explore the origins, transformation, and evolution of natural landscapes, as well as cultural, economic, political, and social institutions and patterns connected to human understandings, lifestyles, beliefs, and land-uses within our service region and around the world.

2. **Mission:** How will this program benefit the college, university, region and/or state? How is it aligned with the College and University Mission and Vision?

Apart from its status as a foundation program, or maybe because of it, Geography fulfills many dimensions of the CSU system, campus and college missions both in the broadest sense of the various institutional mission statements, and in the specific and technical terms specified in these documents. We discuss below five different documents: The CSU System Goals, the CSUSM Long-Range Academic Master Plan (LAMP), CSUSM Mission, and the College of Humanities, Arts, Behavioral and Social Sciences (CHABSS) Mission and Goals, and College Academic Master Plan (CAMP).

CSU Systemwide Goals

The CSU mission is explained on the following website: <http://www.calstate.edu/explore/missions.shtml> and has the following goals:

- To advance and extend knowledge, learning, and culture throughout California,
- To provide opportunities for intellectual, personal and professional development,
- To prepare significant numbers of educated, responsible people to contribute to California,

- To encourage and provide access to an excellent education to all who are prepared for and wish to participate in collegiate study,
- To prepare students for an international, multi-cultural society, and
- To provide public services that enrich the university and its communities.

A new geography degree would address many of these objectives. At the general level, geographers teach about the places in which we live, the regions of which we are a part, and the world. As a result, learning about geography enables students to develop balanced knowledge about their world, achieve personal understandings of it, and gain important hard and soft skills to navigate through it.

Geographers focus on issues that are important and will have an impact on the State of California. For example, geographers conduct research in climate science. The state's Mediterranean climate is one of the reasons for its phenomenal development over the years; it has grown as a tourist destination, an agricultural powerhouse, an innovation center, and a place to call home in part because of its climate. Climate change therefore poses significant challenges to this development, specifically with respect to water management, agriculture, and urban planning and recreation. The state also stands to experience significant transformation of its natural landscape as patterns of precipitation and heat make the region inhospitable for certain species of plants and animals. Thus climate change has long-term implications for environmental planning, sustainable development, hazards and natural resource management and the cultural landscape in the state. Geographers advance and extend knowledge in each of these areas and we have a physical geographer, Dr. Elizabeth Ridder, who specializes in the effects of climate change on the biogeography of Mediterranean climates. We can and do provide an important service to our region by training students about the human and natural dimensions of climate change as a general matter, as a topic of interest, and as a professional field they might consider entering. We can extend this impact by offering a geography B.A.

But geography is not just about climate science. Geography majors provide diverse analytical lenses through which to view the world, with economic, urban, and cultural geography serving as only a few examples of geography's analytical approaches. As a result, it also provides many different points of entry for people to pursue their own personal and professional development goals. The multidimensional and interdisciplinary nature of geography places the discipline in a position to train CSUSM students to become educated responsible citizens of the state. And, because it has a broad appeal, it will inspire on-going learning about the world among many CSUSM students who are looking for a degree that illuminates the world and their place in it. The citizens and communities in CSUSM's service region will benefit from the global understanding developed through such program development. Geography majors often possess specific technical skills that augment regional workforce skill and provide California with additional, more competitive employment skills. Geography is also a degree that has been long on the list of future programs to be offered on the campus.

CSUSM Long-Range Academic Master Plan

The CSUSM Long-Range Academic Master Plan Task Force Report is available at <http://www.csusm.edu/LAMP/Minutes%20and%20Agendas/documents/LAMP%20Report%202015%20Final.pdf>

Geography has been on the Campus Academic Master Plan (CAMP) for well over a decade. Recognizing this fact, the 2014-2015 Long-Range Academic Master Plan task force recommended launching a

geography program. This recommendation was based on the 2014-2015 LAMP task force's review of the campus's curriculum in the context of existing university planning documents and regional workforce needs, and developed a list of programs that the university should consider implementing. The task force argued that geography aligns with the CSUSM LAMP. Geography also has a role in the further development of key industry sectors and academic study areas identified in the task force report. Fields relating to biomedical/biotech, computer/software engineering, and the environment can all benefit from spatial analysis skills and the soft skills gained through geographic study. One way that geographers may contribute to these fields is through training in advanced technologies like GIS and remote sensing. By preparing analysts in GIS and spatial technologies, the campus can contribute to the support and regional development of these sectors. These areas of employment are also identified as ranked employment sectors that the university should support. Beyond technical training, the holistic approach of the field provides substantial opportunities to reinforce and extend exactly the sort of interdisciplinary training and global focus for which CSUSM has been recognized and that employers desire.

CSUSM Mission and Goals

Geography imparts a range of technical skills and intellectual tools and understandings that are important to the campus's own public objectives and goals. A primary aspect to CSUSM's Mission is to provide students with the knowledge, skills, competencies and experiences needed in a global society experiencing accelerated technological, social and environmental change. Similar to California as a whole, the CSUSM service region faces diverse pressures from population growth and resultant urban and fringe development. There are significant obstacles to understand and overcome with respect to urban-wildland interface issues, cross border issues and farmland conversion. The state's large immigrant population raises perennial questions about the relationships between the eighth largest economy in the world and the rest of the world, but San Diego and the rest of our service region struggle with these exact issues on a more frequent basis because of our proximity to the border. These questions are geographic questions and a geographic lens on these issues and others can fertilize new understandings, insights, and innovations *among our students and in our service region*.

One example of the potential synergies that may be leveraged through the development of a geography major is suggested from parallel areas of interest among regional community organizations and geography. Economic geographers are fascinated by cross border economic regions. The non-profit group Lead San Diego has an aligned interest in this topic. This organization spends significant effort training San Diego's future leaders about the Mega Region in which we live – the greater San Diego-Tijuana region. Their effort suggests that additional training in economic, environmental and political geography will be a core benefit of additional program development in geography. Our students largely remain in our service region upon graduation. Yet they lack a deep understanding of where they live. In other words, there are unmet regional needs for better understanding of our region, and untapped synergies for our campus and community that can be used and further developed by building a geography program attuned to regional needs.

With respect to technical skills, The Department of Liberal Studies is developing a certificate program in GIS that is soon to be offered through Extended Learning. GIS and its output data are increasingly pervasive in society and spatial science is leading to new insights about the relationships between people and their environments in historical, contemporary and future contexts. GIS is being used to understand changes in historical climate patterns, on-going land uses and developments and likely future scenarios for species distributions and urban growth. In this way, geography sits at the

intersection of social and natural sciences and is in a unique position to inspire STEM-related learning through geospatial training that is relevant in a wide range of careers and crosses over the boundaries between the social and natural sciences. In this way, the discipline helps achieve the college mission as well.

College of Humanities, Arts, Behavioral and Social Sciences Mission

The College of Humanities, Arts, Behavioral and Social Sciences aims to provide education rooted in the liberal arts tradition while being responsive and attuned to new ideas and the diversity of human experience. With its spatial perspective, geography is deeply concerned with the diversity of human experiences. Key features of the college mission include understanding the multiple pathways to exploring ideals, visions and values, a global perspective, and comprehensive integrated and transformative knowledge. These are all dimensions of the discipline of geography, which seeks to identify multiple relationships between people and the land, communities and the environment, to explore the changing topography of world development and to understand the changing planet at all scales from local development disputes to international trade disputes while also again providing students opportunities to learn technical skills in GIS. And the discipline places emphasis on the integration of these diverse areas of study into a holistic geographic understanding and worldview. Developing a geography major can thus fulfill many of the strategic goals found in a variety of institutional planning documents. Doing so also fills a regional unmet demand discussed in the next section.

3. **Demand:** What evidence is there of adequate student demand for this program?

The Liberal Studies Department is proposing to reorganize several of its degrees in order to develop the geography program. The geography program will include a geography major and border studies and geography minors. The border studies major option within the Liberal Studies B.A. will be eliminated and the content absorbed into the new major. The reason to consolidate the programs is to seek out efficiencies in curricular offerings and development, promote collaboration, and create clearer, more recognizable degree pathways for CSUSM students so that we can maximize degree recognition, increase enrollment, and improve degree completion rates. Table 1 charts the enrollments of all three programs over five years. For the past 8 years, the border studies program has offered an option in the Liberal Studies major as well as a border studies minor; enrollment has been limited to between 4 and 7 majors over 10 semesters, and, at present there are 11 minor students. For about the same time, the geography program’s minor has shown consistent growth. As of Fall 2015, there are 10 minors in the program.

Table 1. Enrollment in Geography and Border Studies Degrees, Fall 2011-2015

<i>Degree</i>	<i>Fall 2011</i>	<i>Fall 2012</i>	<i>Fall 2013</i>	<i>Fall 2014</i>	<i>Fall 2015</i>
Liberal Studies B.A., Border Studies Option	0	4	4	5	7*
Border Studies Minor	3	1	3	5	11
Geography Minor	6	3	5	7	10
Total Enrollment	9	8	12	17	28

Sources: CHABSS Dean’s Office, HAPC, and Department of Liberal Studies; *=data from SPR 2016.

Students enrolled in the geography minor have repeatedly expressed interest in taking more geography courses or inquired about the option of majoring in geography. But there has been no avenue for them

to easily pursue that option. Currently, the program has two students pursuing special majors in the absence of an actual major. Taking into account these two students in the program planning, there are 30 students enrolled across three programs. We can increase this number through offering a geography major. Estimates based on enrollment data reported to the Chancellor's office suggest an average of 48 majors in 2019 given current enrollment trends.

There are other reasons to launch a geography major beyond program efficiencies and student demand. Geography is considered a "broad foundational program" by the CSU Board of Trustees. This designation recognizes that "certain academic programs at the undergraduate level were so fundamental to the University they should not be required to meet the 'need and demand' criteria established as prerequisites for offering other programs" (CSU's Program Planning Resource Guide: Academic Programs and Faculty Development, Fall 2014, p. 116, as quoted in the CSUSM LAMP Task Force End of Year Report). As such, student demand for the baccalaureate in geography is not considered to be a primary criterion in program evaluation. Geography is considered to be an integral part of a functioning university that provides a full complement of degree programs to the citizens in its service region.

Geography is offered as a baccalaureate degree on 19 of the 23 CSU campuses. Most community colleges in ours and neighboring regions offer transfer degrees in geography. Few institutions in our region however offer degrees in geography at the B.A., M.A. or beyond.

(i) CSU Campuses with Geography Majors

1. California Polytechnic University, Pomona
2. CSU Chico
3. CSU Dominguez Hills
4. CSU East Bay
5. CSU Fresno
6. CSU Fullerton
7. CSU Long Beach
8. CSU Los Angeles
9. CSU Monterey Bay
10. CSU Northridge
11. CSU Sacramento
12. CSU San Bernardino
13. CSU San Luis Obispo
14. CSU Stanislaus
15. Humboldt State University
16. San Diego State University
17. San Francisco State University
18. San Jose State University
19. Sonoma State University

(ii) Neighboring Institutions Currently Offering a Geography Degree

- a. Palomar College, A.A.-T in Geography for Transfer, A.S. in Geographic Information Science, and an online B.A. through collaboration with Marshall University.

- b. Mira Costa College, Associate Degree
- c. Mount San Jacinto College, A.A.-T in Geography for Transfer, A.S. in Geographic Information Science
- d. Grossmont College, A.S.-T in Geography for Transfer, A.S. in Geography
- e. City College, Associate Degree
- f. Mesa College, Associate Degree, A.A.-T in Geography for Transfer, A.S. in Geographic Information Science
- g. Saddleback College, A.A.-T in Geography for Transfer
- h. Irvine Valley Community College, A.A. or A.A.-T in Geography for Transfer
- i. San Diego State University, Minor, B.A., M.A., and Ph.D. (joint with UC Santa Barbara)
- j. CSU Fullerton, Minor, BA and MA Degrees (note: Fullerton is not really a neighboring campus of CSUSM. But it is the next closest CSU campus that offers geography degrees other than SDSU which is impacted.)

(iii) Regional Demand for Geography

In San Diego County, only San Diego State University offers a B.A. in Geography. It is the eighth largest major in the College of Arts and Letters and its program is impacted. Impacted programs are so designated because there are more students seeking to declare a major than can be accommodated. Thus from a regional perspective, there is significant demand for geography. While UC Riverside, UC Irvine, and UC San Diego offer similar degrees to geography, there are no UC campuses actually offering geography south of UCLA.

Feeder institutions such as Palomar College, Mount San Jacinto College, and Mira Costa College offer an array of geography courses and Geography as Associates Degrees. At Palomar College, their most recent census data indicates that 1,400 students are enrolled in geography courses. But these students find no pathway to completion of a major within our region because CSUSM does not offer a degree pathway for them. Their faculty consider that this demand is diminished by limited degree pathways in our region. Given this situation, Palomar College has sought out relationships with Marshall University in West Virginia, which offers an online geography degree, in order to provide students with at least one pathway to completion of a Bachelor's degree in geography. There are approximately 11 students enrolled in this online degree program. Personal communication with professors at Palomar College indicate that some students seek out degree programs at UC Santa Barbara as one alternative proximate institution. CSUSM could provide a pathway to degree completion for these transfer students and our native students that allows them to complete a rich course of study in geography that is both state of the art and local. The plan is to develop a geography program that closely articulates with the community colleges.

(iv) Student interest in Geography

To understand the CSUSM student demand for a major in geography, it is important to look at the range of programming in the Liberal Studies Department. First, consider the department's minors. The Geography minor at CSUSM has been quite successful in the short time it has been available on the campus. The other program in the department is the

Border Studies Option in the Liberal Studies major, which shows very little growth with 7 majors in 2015-2016. The Border Studies Minor has a similar pattern of growth to the Geography Minor with 11 minors. The Department of Liberal Studies sees significant synergies and efficiencies to be gained by consolidating these programs into geography. Between the programs, there are 30 students in total.

There are indications that the major could be of interest for many students. The potential of providing a degree pathway in geography is significant as we know that there are hundreds of Palomar students taking introductory geography courses each year. Creating pathways for them to complete geography degrees in our service region will both attract these students to the major and enable transfer students to choose CSUSM over more distant institutions easily. One geography professor at Palomar College stated that having a major in the region means that they could send them across the street to complete their degrees. Another Palomar professor noted, "Geography has the potential to be a fast-growing major at CSUSM because of the GEOG AA-T degree and because of the fact that SDSU (with a large geography department) is impacted." Students working toward various A.A. Geography degree programs at City College and Mesa College can also benefit from a degree-completion pathway at CSUSM due to SDSU's impacted status.

Finally, we conducted a statistical analysis of geography programs on other campuses in order to estimate the likely results of offering a major at CSUSM. First, we developed a general rate of Geography Majors by dividing Declared Geography Majors on selected campuses by the Total Enrollment of each campus in Fall 2015. The data was taken from the systemwide data for each campus. Using this method, we have been able to develop an average rate of geography majors in the CSU system that provides a baseline from which to estimate the likely number of majors at CSUSM. The model estimates that on average we would expect 42 majors for a student population of 15,000. That is not a large number, however, we feel that given the small number of faculty a small program is the place to start. Secondly, it is important to note that these data have a lot of variability. The likely range of majors is somewhere between 18 and 65 given a student population of about 15000. Table 2 provides an estimate of likely increases in headcount with average, low and high estimates of Geography Majors with a 95% confidence level over the first five years of the program. If the campus continues its growth pattern of the past several years, there could be close to 100 geography majors on campus in five years.

The opportunity exists to combine forces between border studies and geography to offer students a more robust degree program that has institutional and societal recognition. GIS analyst jobs, for example, suggest that a major in geography is an important degree to have to competitively position oneself in the job market. Average pay starts at around \$50,000.00 annually. Geography is a well-established field for training students for careers in planning, government, higher education, meteorology, international development and research. The opportunity exists to offer transfer students and native CSUSM students face-to-face and regionally relevant education in geography. The other degree-completion options, Marshall University located at the opposite side of the country and San Diego State University's impacted status, coupled with no other regional geography degree options, signals that CSUSM can be the program to meet the student's educational and career training needs in geography. The enrollment growth model only includes new enrollments

and would therefore represent new FTES and new revenue to academic affairs and the college.

Table 2. Projected Number of Geography Majors at CSUSM by Estimated Campus Enrollment, 2019-2024

	CAMPUS SIZE	AVERAGE	LOW	HIGH
2019	17364	48	21	76
2020	18232	51	22	79
2021	19144	53	23	83
2022	20101	56	24	88
2023	21107	59	26	92
2024	22162	62	27	97

Note: The population numbers are based on Fall 2016 headcounts of approximately 15,0000 and an annual enrollment increase of 5% in subsequent years.

Sources: CSU Office of the Chancellor, Analytic Studies Division, 2015 Fall Term Enrollment Studies and CSU Enrollment in Degree Programs, Fall 2015 Profile. The reports are available at http://www.calstate.edu/as/stat_reports/2015-2016/f_maj15toc.shtml. Data tables are in the appendix.

4. Resources: Give preliminary estimates of the following resources needed to implement the program:

Additional Faculty Positions:

The department anticipates needing two additional faculty lines in physical or human geography and geographic techniques over a period of 5 years in order to be able to effectively deliver the curriculum. The start-up costs are low because we plan to consolidate two existing programs and develop synergies with existing programs, such as liberal studies, economics, global studies, environmental studies, and anthropology. In the initial years of the major, adjunct faculty will be required to offer some courses but these faculty are already present in our programs; we typically have at least 18 WTU apart from TT WTU allocated annually to lecturers within the department for GE geography and border studies classes. Based on program growth, we would expect to request additional hires through the regular HAPC process. See Appendix.

Additional Staff Support

The Department anticipates servicing the major with the existing staff in Liberal Studies. In the past, the academic coordinator in Liberal Studies was shared with Anthropology and we already serve students in

the various programs we aim to consolidate. Thus using our existing staff seems to be a good fit for the medium term. Were the program to grow substantially, we would request additional staffing through the HAPC process.

Additional Space Requirements

CHABSS is experiencing growing pains already with the limited amount of building space on campus. As new faculty members join the department, one new office space would be required to accommodate them.

Additional Specialized Equipment and Materials

If the department hires another physical geographer, they will need additional equipment and start up costs similar to those associated with the new physical geographer starting in Fall 2016. However, those costs would not be for at least three years as we recently hired a new physical geographer on the tenure track for Fall 2016, and the department is prioritizing other hiring requests for the next few years. Other geographers on the social science side of the field would not require significantly different start up costs or equipment from other similar faculty lines.

There are no costs associated with accreditation because there is no accrediting body for geography degrees.

- 5. Relation to Existing Programs:** Describe the potential effect on existing programs (e.g., enrollment changes, opportunities for collaboration, resources)

A new major in geography presents a number of opportunities for program collaboration that will balance out impacts on programs across the college and university. First, offering a geography degree will fulfill a longstanding need for the program on the campus as expressed in the CAMP and LAMP, and fulfill a core element of the Board of Trustee's vision of a balanced set of degree options on CSU campuses since geography is a foundational program.

The degree will likely attract some students similar to those now enrolled in other majors in sociology, global studies, biology, communication, anthropology, economics, environmental studies, and liberal studies. The anticipated impacts are likely comparable to other new programs like Child and Adolescent Development offered through the Department of Psychology. At the same time however, a degree in geography will provide significant synergies with these same programs and as the university continues to grow a geography degree will provide students with related interests the opportunity to pursue a field that has employment opportunities and societal worth. In addition, the college will begin to receive transfer students interested in pursuing a geography degree in our service region (rather than online at Marshall University or at UCSB or another school). We anticipate the bulk of students to come from new transfers to the college.

In order to create synergies across the college, students will be encouraged to complement the major with an applicable related minor in fields such as economics, biology, anthropology, global studies, environmental studies, etc. We anticipate allowing students to take up to 15 units outside the major at the upper division to allow them to tailor their degrees to their interests, which should facilitate increases in allied departments minor programs and promote the sort of interdisciplinary thinking and research that is at the core of geography and an important part of the CHABSS Mission and Goals. Because geography is also a physical science, we believe that a geography B.A. and minor will provide

avenues for students in the College of Science and Math to find relevant and interesting course options that will complement and extend their major fields as well. For example, there will be lower division and upper division physical geography courses in the GE Program on the campus. We plan to work with other departments to encourage their majors to consider completing the more robust geography minor that will result through our plan for program consolidation and additional curriculum development in geography.

As for resources, we believe there are many opportunities for sharing resources. For example, there are at present two gardens on this campus – the Ethnobotany Garden run by Anthropology, and the Sustainable Food Project run by Liberal Studies. In Fall 2016, CHABSS will have three professors with strong interests in these gardens: Dr. Bonnie Bade in Anthropology, Dr. Greig Tor Guthey in Liberal Studies, and Dr. Gabriel Valle who has been selected as the new tenure track professor in Environmental Studies. In the College of Science and Math, Dr. Tracy Brown is also interested in collaborating with Dr. Guthey to provide plant starts for the Food Project. Thus collaboration already exists across a number of programs on this campus. Additional program development in geography can only encourage additional collaboration across these programs with respect to resource sharing, program and curricular development that will benefit these departments, the colleges, and most importantly, the students at CSUSM. We anticipate additional synergies will emerge as the program develops; we plan to cultivate these opportunities as we develop the P Form, and expect to capitalize on them in the future as they arise.

Appendix:

Rates of Geography Majors at selected CSU campuses, Fal 2015

CSU CAMPUS	Fall 2015		GEOG Major Rates by Campus
	Undergraduate Headcount by campus	Fall 2015 Geography Majors by headcount	
Humboldt State University	8790	61	0.69%
CSU Stanislaus	9282	16	0.17%
Sonoma State University	9408	45	0.48%
CSU Dominguez Hills	14635	15	0.10%
CSU East Bay	15528	18	0.12%
CSU Chico	17220	45	0.26%
CSU San Bernardino	20024	25	0.12%
California Polytechnic University, Pomona	23717	60	0.25%
CSU Fresno	24136	29	0.12%
San Francisco State University	30256	88	0.29%
CSU Sacramento	30284	95	0.31%
CSU Long Beach	37446	195	0.52%
AVERAGES		57.66666667	0.28%
		MEAN	0.28%
		STDEV	0.001882911
		Sig. Level (95%)	0.05
		Con. Inter.	0.001575532
		HIGH	0.44%
		LOW	0.12%

Projected Geography Majors at CSUSM 2015-2023

	CAMPUS SIZE	AVERAGE	LOW	HIGH
2015	12793	36	15	56
2016	15000	42	18	65
2017	15750	44	19	69
2018	16538	46	20	72
2019	17364	48	21	76
2020	18233	51	22	79
2021	19144	53	23	83
2022	20101	56	24	88
2023	21107	59	26	92
2024	22162	62	27	97

Note: The data for Fall 2015-2017 are only for projection purposes given the projected 5% growth of CSUSM through 2022. We don't expect geography majors prior to the end of AY 2019-2020

	Support Costs				
	Year 1	Year 2	Year 3	Year 4	Year 5
FY	10	10	10	12	14
SOPH	0	9	9	9	11
JUNIOR	10	10	19	19	19
SENIOR	0	10	10	19	19
TOTAL	20	39	48	58	62
FTES	17	34	41	50	54
Revenue to Academic Affairs	\$69,333.33	\$135,200.00	\$164,840.00	\$201,413.33	\$214,586.67

Planning Assumptions

1. 10% attrition from FY to SOPH
2. 5% attrition from Soph to Junior
3. By year 5, program at steady state
4. FTES assumes 13 unit average undergraduate load
5. Under normal budgetary conditions, Academic Affairs requires approx. \$4,000 per FTES. Might require UBC request.

Anticipated Additional Program Costs (This model is based on existing program consolidation which costs are not included here)

	Year 1	Year 2	Year 3	Year 4	Year 5
Personnel					
TT Faculty w/benefits			1 101520	1 101520	2 203040
Lecturers w/ benefits	0	0	0	0	0
Staff w/benefits	0	0	0	0	0
Space					
Construction					
Renovation					
Library Resources					
Acquisition					
Subscription					
Equipment/Materials					
Durable					
Expendable					
Program Costs	0	0	101520	101520	203040

Planning Assumptions: 1. Starting Faculty Costs = \$68,000 (Salary) + 41% benefits; 2. Average Lecturer Costs = \$1777/wtu+41% benefits if timebase at .4; 3. Staff costs = salary+ 41% benefits; 4. Salary costs estimate new TT base salary per Tentative Agreement (less SSI's Year 3 which don't apply to new TT faculty).