Geography & Geographic Information Systems (GIS) Program Review
2011-2012

1. Program Description

A. Description

Geography is a dynamic discipline that it is concerned with where things are located on the surface of the Earth, why they are located where they are, and how places are similar and/or different. Geographers further examine our interactions with the environment and how physical and cultural landscapes change through time. There are two main branches of geography: physical geography, which focuses on the processes that drive Earth's climate, create landforms, and govern the distribution of plants and animals; and human geography, which focuses on cultural phenomenon such as population, development, agriculture, language and religion. In addition to these main branches, Geographic Information Systems (GIS) is an integrating technology of various geospatial technologies (including digital mapping, spatial database management, remote sensing imagery, global positioning systems and route finding) that utilize cartographic, geographic, and discipline specific techniques and knowledge to support decision making and analysis in a wide array of career fields. Geography students are trained to examine the spatial organization of physical features and human activities at a variety of spatial scales from local to global. A background in geography is a necessity for careers involving business, economics, planning, education, history, international relations, cartography, conservation, GIS, demography, transportation, tourism and others.

B. Program Student Learning Outcomes   -   Successful students in the program are able to:

1. Students will Identify Key Physical Geography Processes at Multiple Levels of Crustal Activity and Surface (Geomorphologic) Detail
2. *Students will Analyze the Location and Distribution of Processes in Their Spatial Context*

C. College Level Student learning Outcomes

1. Critical Thinking and Problem Solving
2. Communication
3. Information Competency

D. Estimated Costs (Required for Certificate of Achievement ONLY)

	Cost
Enrollment Fees	
Books	
Supplies	
Total	

E. Criteria Used for Admission

There are no prerequisites for any class in the department; however, there are two lab courses that are co-requisites for the lecture.

F. Vision

Geography & Geographic Information Systems (GIS) Program Review

Ventura College will be a model community college known for enhancing the lives and economic futures of its students and the community.

G. Mission

Ventura College, one of the oldest comprehensive community colleges in California, provides a positive and accessible learning environment that is responsive to the needs of a highly diverse student body through a varied selection of disciplines, learning approaches and teaching methods including traditional classroom instruction, distance education, experiential learning, and co-curricular activities. It offers courses in basic skills; programs for students seeking an associate degree, certificate or license for job placement and advancement; curricula for students planning to transfer; and training programs to meet worker and employee needs. It is a leader in providing instruction and support for students with disabilities. With its commitment to workforce development in support of the State and region's economic viability, Ventura College takes pride in creating transfer, career technical and continuing education opportunities that promote success, develop students to their full potential, create lifelong learners, enhance personal growth and life enrichment and foster positive values for successful living and membership in a multicultural society. The College is committed to continual assessment of learning outcomes in order to maintain high quality courses and programs. Originally landscaped to be an arboretum, the College has a beautiful, park-like campus that serves as a vital community resource.

H. Core Commitments

Ventura College is dedicated to following a set of enduring Core Commitments that shall guide it through changing times and give rise to its Vision, Mission and Goals.
- Student Success
- Respect
- Integrity
- Quality
- Collegiality
- Access
- Innovation
- Diversity
- Service
- Collaboration
- Sustainability
- Continuous Improvement

I. Degrees/Certificates

Program's courses are designed to articulate to UC and CSU for transfer students.

Proficiency Award – GIS – Basic Competency.

There is intent to create a degree based on the Transfer Model Curriculum currently being developed.

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J. Program Strengths, Successes, and Significant Events

A strength of our program is the large number of students served, especially those for whom the physical science requirement is a barrier to college completion. In addition we have high retention rates and very high enrollment in all of our classes (e.g. all of the 9 Physical Geography classes are at or over the cap of 50.) At census in Fall 2011 there were only **TWO** classes with one available seat each with all other classes either full or over-filled! We have overloaded our classes to help the students out who can't get classes. This semester this is by 107 seats department-wide (Geography, Geology, ESRM). This represents unremunerated extra work. This semester, our department is serving 1184 students. This represents a slight uptick in students, but we have consistently served over 1000 students in recent years. We do this while only being at around 50% of our FTEF level (we have 3 FT faculty, but have classes for 6 FT).

We have a highly dedicated group of faculty members, both part-time and full-time. Many of the part-time instructors teach 4 courses (3 labs and a lecture) and also give of their own time to help with departmental tasks (since we don't have enough FT faculty to meet our obligations and necessary tasks.)

GISDAY is our regional Geographic Information Systems Conference that we host at Ventura College. We have hosted this all day meeting for 12 years. Steve Palladino and the Channel Islands Regional GIS Collaborative (CIRGIS) organize it. Attendance is usually between 120-150, with a high of 180. The primary attendees are local GIS professionals, but we also get interested community members, students, and faculty from other areas. Over the years we have brought in internationally recognized keynote speakers and set up a vendor area with over a dozen local and national geospatial technology companies (including our consistent primary vendor, Esri, whose software we use in the GIS classes). GIS professionals and other specialists make half hour presentations in 2 or 3 tracks. We have a GIS Map Poster competition entered by both the GIS professionals and our own students in our GIS projects course. Vendor fees pay for a hosted lunch prepared by our campus cafeteria staff.

Our GIS program has helped found and sustain CIRGIS, which is a vital organization of GIS managers and practitioners in our area. We help in organizing and hosting meetings, providing training, and housing the CRIGIS servers (which our students get to learn on.)

Our GIS program has been successful in giving students skills and credentials (Proficiency Awards) that have helped them land jobs in this field. We have former students working at various government agencies, environmental consulting firms, and as independent contractors. One student is the GIS specialist for the Tejon Ranch Company. Another is geospatial analyst for the National Geospatial-Intelligence Agency (NGA). One student worked for a GIS contractor in Afghanistan. Geospatial careers have weathered the recession well and thus we do our students an important service by providing a gateway to these careers.

K. Organizational Structure

President: Robin Calote
     Executive Vice President: Ramiro Sanchez
          Dean: David Oliver
               Department Chair: Steve Palladino

Instructors and Staff

Name	William Budke
Classification	Associate Professor
Year Hired	2004
Years of Work-Related Experience	
Degrees/Credentials	A.A., B.A, M.S.

Name	Luke Hall
Classification	Professor
Year Hired	1991
Years of Work-Related Experience	12 years of job experience with Ventura County Water Resources Dept.
Degrees/Credentials	A.A., B.S., M.S.

Name	Steve Palladino
Classification	Professor
Year Hired	1999
Years of Work-Related Experience	11 years prior educational experience
Degrees/Credentials	B.A., M.A.

Name	
Classification	
Year Hired	
Years of Work-Related Experience	
Degrees/Credentials	

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2. Performance Expectations

A. Program Student Learning Outcomes   -   Successful students in the program are able to:

1. Students will be able to identify key geographic features.
2. Students will analyze the location and distribution of geographic processes and concepts in their spatial context

B. Student Success Outcomes

1. The program will increase its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
2. The program will increase its retention rate from the average of the **college's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
3. The program will increase the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of c or better.
4. The program will increase the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of C or better.
5. Students will complete the program earning certificates and/or degrees.

C. Program Operating Outcomes

1. The program will maintain WSCH/FTEF above the 525 goal set by the district.
2. Inventory of instructional equipment is functional, current, and otherwise adequate to maintain a quality-learning environment. Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5,000 will be budgeted if funds are available.

D. Courses to Student Learning Outcomes Map

Course to Program-Level Student Learning Outcome Mapping (CLSLO)

   I: This program-level student learning outcome is **INTRODUCED** is this course.

   P: This program-level student learning outcome is **PRACTICED** in this course.

   M: This program-level student learning outcome is **MASTERED** in this course.

   Leave blank if program-level student learning outcome is not addressed.

| Courses	PLSLO #1	PLSLO #2	PLSLO #3	PLSLO #4
GEOG V01	I	I		
GEOG V01L	P	P		
GEOG V02	I	I		
GEOG V05	I	M		
GEOG V06	I	I		
GEOG V08	I	I		
GEOG V22			M	I
GEOG/GIS V24			M	
GEOG/GIS V26			M	P
GEOG/GIS V28			M	M
GEOG/GIS V88				
GEOG/GIS V89				
GEOG/GIS V90				
GEOG/GIS V95				
GEOG/GIS V96				

3. Operating Information

A1: Budget Summary Table

To simplify the reporting and analysis of the Banner budget detail report, the budget accounts were consolidated into nine expense categories. The personnel categories include employee payroll expenses (benefits). The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 expenses. The "FY11 College" expense percentages are included to provide a benchmark to compare the program's expenses to the overall college expenses.

Category	Title	FY08	FY09	FY10	3 Year Average	FY11	FY11 Program	FY11 College
1	FT Faculty	238,034	262,393	293,323	264,583	249,792	-6%	12%
2	PT Faculty	131,930	124,075	133,972	129,992	119,116	-8%	-10%
7	Supplies	522	484	294	433	13,460	3006%	24%
8	Services	-	131	175	153	-	-100%	-17%
9	Equipment	-	-	275	275	-	-100%	-42%
	Total	**370,486**	**387,083**	**428,039**	**395,203**	**382,368**	**-3%**	**0%**

A2: Budget Summary Chart

This chart illustrates the program's expense trends. The data label identifies the FY11 expenses (the last bar in each group). The second-to-last bar is the program's prior three year average.

Geography & GIS: Budget Expenditure Trends

Legend: FY08, FY09, FY10, 3 Year Average, FY11

Data labels: FT Faculty 249,792; PT Faculty 119,116; Supplies 13,460; Services -; Equipment -
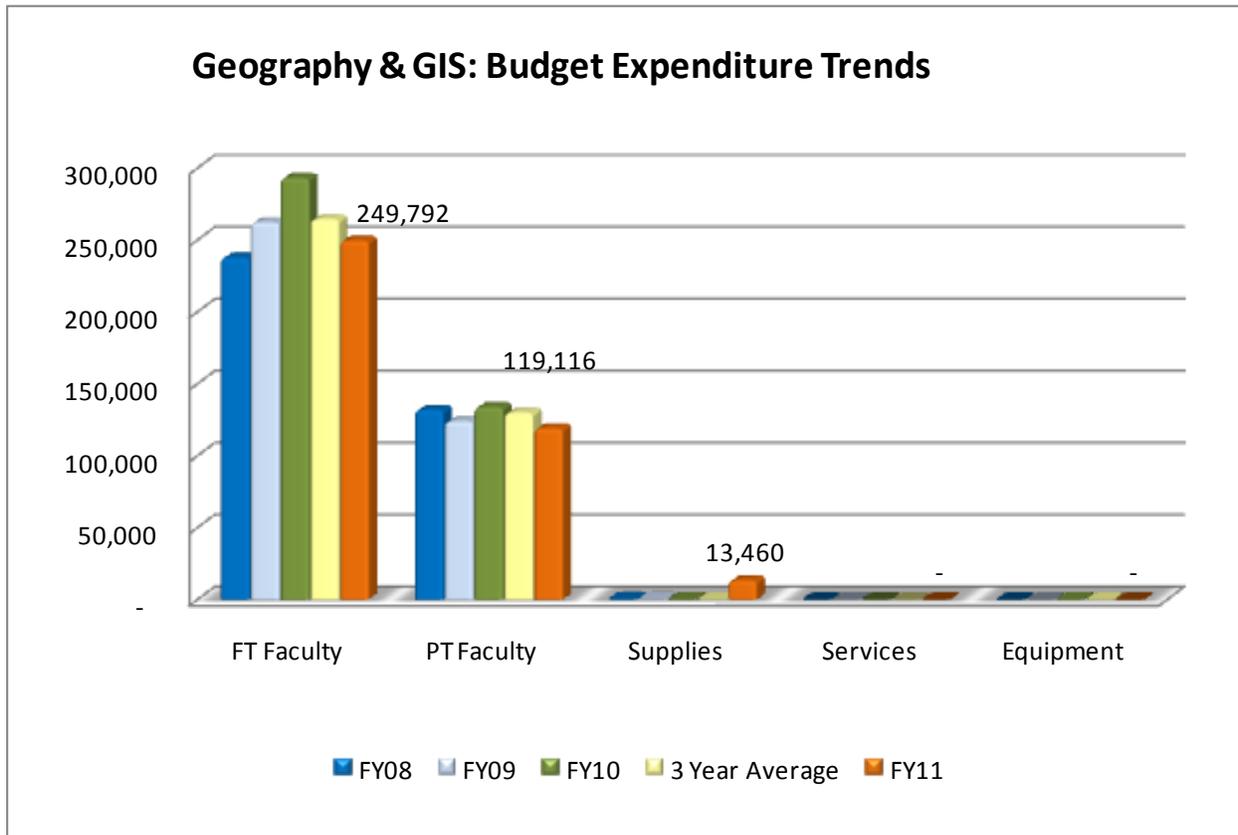
A3: Comparative Budget Changes Chart

This chart illustrates the percentage change from the prior three year average expense to the FY11 expenses. The top bar for each budget category represents the program's change in expenses and includes the data label. The second bar represents the college's change in expenses.

Geography & GIS: Comparative Budget Changes

Category	FY11 Program Change	FY11 College Change
FT Faculty	-6%	
PT Faculty	-8%	
Supplies		
Services		
Equipment		
Total	-3%	

■ FY11 Program Change from Prior Three Year Average
■ FY11 College Change from Prior Three Year Average
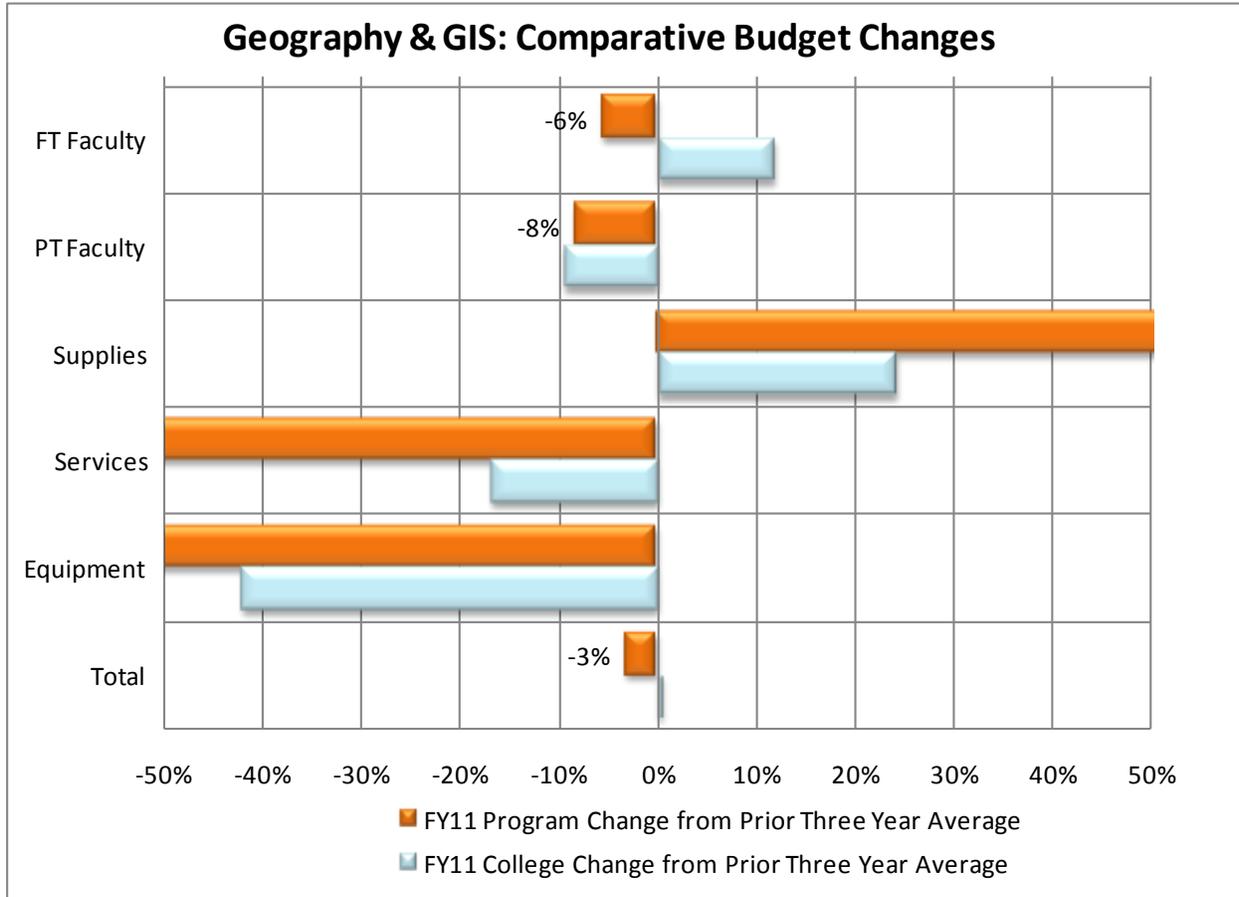
A4: Budget Detail Report

The program's detail budget information is available in *Appendix A – Program Review Budget Report*. This report is a PDF document and is searchable. The budget information was extracted from the District's Banner Financial System. The program budget includes all expenses associated to the program's Banner program codes within the following funds: general fund (111), designated college equipment fund (114-35012), State supplies and equipment funds (128xx), and the technology refresh fund (445). The *Program Review Budget Report* is sorted by program (in alphabetical order) and includes the following sections: total program expenses summary; subtotal program expenses for each different program code; detail expenses by fund, organization and account; and program inventory (as posted in Banner). To simplify the report, the Banner personnel benefit accounts (3xxx) were consolidated into employee type benefit accounts (3xxx1 = FT Faculty, 3xxx2 = PT Faculty, 3xxx3 = Classified, etc.).

A5: Interpretation of the Program Budget Information

The program shows a slight decrease in average FT and PT faculty expenditures over the last three years paralleling the college average expenditures over the same period. Three factors account for this change; changes in release time, and changes in assignment for one geography instructor with the old Lifetime Community College Teaching Credential that covers both Geography and Geology changing from geography to help cover geology in the absence of a FT Geology faculty member. Decreases in full-time do not reflect the college trends; FT faculty expenditures are significantly lower than the college as a whole by 18%, pointing to a need for full-time faculty.

The supplies budget shows a one-time increase of $13,000 from program review fund over our paltry $460. This was due to a one-time increase to help fund new chairs for our rooms.

B1: Program Inventory Table

This chart shows the inventory (assets) as currently posted in the Banner Financial System. This inventory list is not complete and will require review by each program. Based on this review an updated inventory list will be maintained by the college. A result of developing a complete and accurate inventory list is to provide an adequate budget for equipment maintenance and replacement (total-cost-of-ownership). The college will be working on this later this fall.

Item	Vendor	Org	Fund	Purchased	Age	Price	Perm Inv #	Serial #
No equipment inventory in the Banner Asset system								

B2: Interpretation of the Program Inventory Information

The equipment list provided by Banner is incomplete and does not accurately reflect the program's holdings. An inventory is underway to provide an accurate equipment list.

C1: Productivity Terminology Table

Sections	A credit or non-credit class. Does not include not-for-credit classes (community education).
Census	Number of students enrolled at census (typically the 4th week of class for fall and spring).
FTES	Full Time Equivalent Students. A student in the classroom 15 hours/week for 35 weeks (or two semesters) = 525 student contact hours. 525 student contact hours = 1 FTES. Example: 400 student contact hours = 400/525 = 0.762 FTES. The State apportionment process and District allocation model both use FTES as the primary funding criterion.
FTEF	Full Time Equivalent Faculty. A faculty member teaching 15 units for two semesters (30 units for the year) = 1 FTE. Example: a 6 unit assignment = 6/30 = 0.20 FTEF (annual). The college also computes semester FTEF by changing the denominator to 15 units. However, in the program review data, all FTE is annual. FTEF includes both Full-Time Faculty and Part-Time Faculty. FTEF in this program review includes faculty assigned to teach extra large sections (XL Faculty). This deviates from the district practice of not including these assignments as part of FTEF. However, it is necessary to account for these assignments to properly produce represent faculty productivity and associated costs.
Cross Listed FTEF	FTEF is assigned to all faculty teaching cross-listed sections. The FTEF assignment is proportional to the number of students enrolled at census. This deviates from the practice of assigning load only to the primary section. It is necessary to account for these cross-listed assignments to properly represent faculty productivity and associated costs.
XL FTE	Extra Large FTE: This is the calculated assignment for faculty assigned to extra large sections (greater than 60 census enrollments).The current practice is not to assign FTE. Example: if census>60, 50% of the section FTE assignment for each additional group of 25 (additional tiers).
WSCH	Weekly Student Contact Hours. The term "WSCH" is used as a total for weekly student contact hours AND as the ratio of the total WSCH divided by assigned FTEF. Example: 20 sections of 40 students at census enrolled for 3 hours per week taught by 4.00 FTEF faculty. (20 x 40 x 3) = 2,400 WSCH / 4.00 FTEF = 600 WSCH/FTEF.
WSCH to FTES	Using the example above: 2,400 WSCH x 35 weeks = 84,000 student contact hours = 84,000 / 525 = 160 FTES (see FTES definition). Simplified Formulas: FTES = WSCH/15 or WSCH = FTES x 15
District Goal	Program WSCH ratio goal. WSCH/FTEF. The District goal was set in 2006 to recognize the differences in program productivity.

C2: Productivity Summary Table

This table is a summary of the detail information provided in the *Program Review Productivity Report*. The "3 Year Average" was computed to provide a trend benchmark to compare the results of the prior three years to the FY11 results. The "FY11 College" percentages are included to provide a benchmark to compare the program's percentages.

Geography

Title	FY08	FY09	FY10	3 Year Average	FY11	Program Change	College Change
Sections	59	53	54	55	52	-6%	-13%
Census	1,619	1,748	1,797	1,721	1,789	4%	-2%
FTES	159	173	177	169	176	4%	-1%
FT Faculty	1.50	1.62	1.50	1.54	1.88	22%	5%
PT Faculty	3.01	2.61	2.85	2.82	2.34	-17%	-12%
XL Faculty	-	-	0.05	0.02	-	-100%	29%
Total Faculty	4.51	4.23	4.39	4.38	4.21	-4%	2%
WSCH	529	613	605	579	627	8%	-2%

GIS

Title	FY08	FY09	FY10	3 Year Average	FY11	Program Change	College Change
Sections	8	6	6	7	6	-10%	-12%
Census	68	77	64	70	66	-5%	0%
FTES	5	6	4	5	4	-12%	-1%
FT Faculty	0.14	0.19	0.03	0.12	0.05	-60%	3%
PT Faculty	0.11	0.11	0.19	0.14	0.17	26%	-11%
XL Faculty	-	-	-	-	-	0%	5%
Total Faculty	0.25	0.30	0.21	0.25	0.22	-14%	-4%
WSCH	300	300	286	300	273	-9%	3%

C3: Comparative Productivity Changes Chart

This chart illustrates the percentage change from the prior three year average productivity to the FY11 productivity. The top bar for each budget category represents the program's change in productivity and includes the data label. The second bar represents the college's change in productivity.
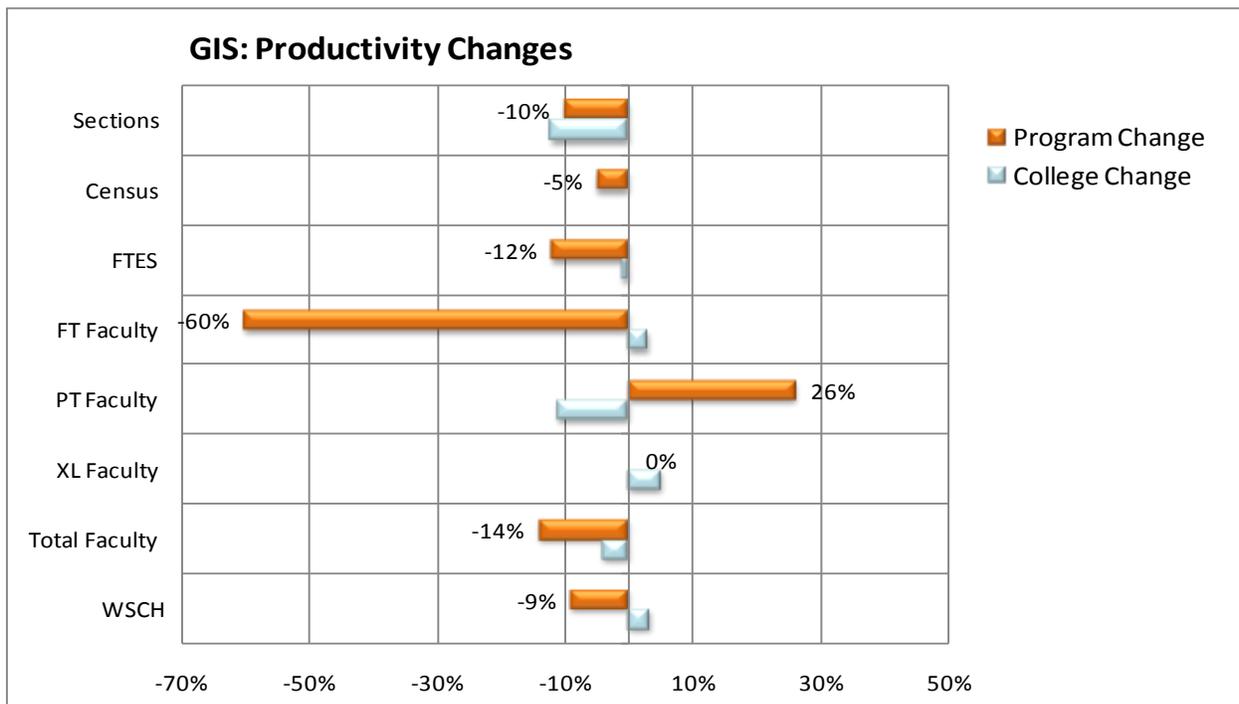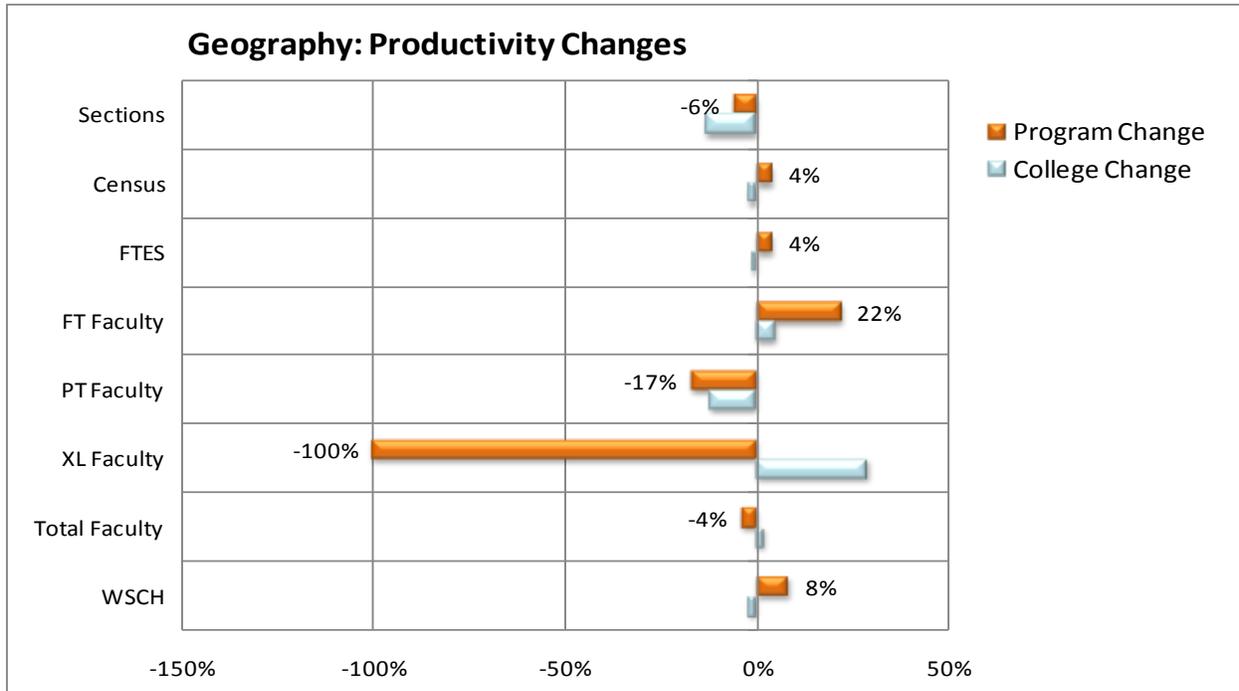
Geography: Productivity Changes

Sections: -6%
Census: 4%
FTES: 4%
FT Faculty: 22%
PT Faculty: -17%
XL Faculty: -100%
Total Faculty: -4%
WSCH: 8%

Legend: Program Change, College Change

GIS: Productivity Changes

Sections: -10%
Census: -5%
FTES: -12%
FT Faculty: -60%
PT Faculty: 26%
XL Faculty: 0%
Total Faculty: -14%
WSCH: -9%

Legend: Program Change, College Change

C4: Interpretation of the Program Productivity Information

For Geography and GIS, the C2 Charts and the C3 Graphs indicate that the program offerings decreased by 1 section over the prior three years average while the number of sections offered by the college has decreased by 11% over the same period. The Geography WSCH/FTEF ratio has been trending upward since FY08 and is currently at 627, which is above the district goal of 525, again indicating a need for more faculty.

GIS is a very small discipline with small numbers of students. A re-sequencing of the course offerings and a single cancelled section causes the drop in WSCH/FTEF ratio. Our program has never offered an extra large course in Geography, so the erroneous data in FY10 caused the 3-year average to be finite while FY11's value was zero.

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D1: District WSCH Ratio Productivity Table

This table shows the District WSCH ratio (WSCH/FTEF) for each course by year for this program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table distributes FTEF to all cross-listed sections (proportional to census enrollment) but does not include the associated faculty costs of extra large assignment.
District WSCH Ratio = WSCH / (PT FTE + FT FTE).

Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
**District WSCH Ratio: Weekly Student Contact Hours/(FT FTE+PT FTE)**
GEOGV01	Elements of Physical Geography	681	750	771	734	792	8%	525	151%
GEOGV01L	Physical Geography Laboratory	434	481	473	462	489	6%	525	93%
GEOGV02	Intro to Human Geography	330	645	443	473	675	43%	525	129%
GEOGV05	Introduction Weather & Climate	-	-	480	480	600	25%	525	114%
GEOGV06	Geography of California	270	225	-	248	495	100%	525	94%
GEOGV08	World Regional Geography	180	-	435	308	443	44%	525	84%
GEOGV22	Fundamentals: Mapping & GIS	288	329	-	303	302	0%	525	57%
GEOGV24	Global Positioning Syst (GPS)	133	219	172	160	144	-10%	525	27%
GEOGV26	Introduction to GIS Software	232	242	290	252	288	14%	525	55%
GEOGV28	GIS: Project Development	345	348	317	336	350	4%	525	67%
TOTAL	**Annual District WSCH Ratio**	**528**	**612**	**610**	**582**	**628**	**8%**	**525**	**120%**

Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
**District WSCH Ratio: Weekly Student Contact Hours/(FT FTE+PT FTE)**
GISV22	Fundamentals of Mapping & GIS	288	329	-	311	302	-3%	375	80%
GISV24	Global Positioning Syst (GPS)	191	219	175	190	181	-5%	375	48%
GISV26	Introduction to GIS Software	257	216	241	235	268	14%	375	71%
GISV28	GIS: Project Development	371	347	322	346	350	1%	375	93%
TOTAL	**Annual District WSCH Ratio**	**290**	**287**	**267**	**283**	**288**	**2%**	**375**	**77%**

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D2: District WSCH Ratio Productivity Chart

This chart illustrates the course level District WSCH ratio. The top bar shows the program's three year average. The second bar shows the program's FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart.

Geography: District WSCH Ratio by Course   **District Goal = 525**

GIS: District WSCH Ratio by Course

District Goal = 375
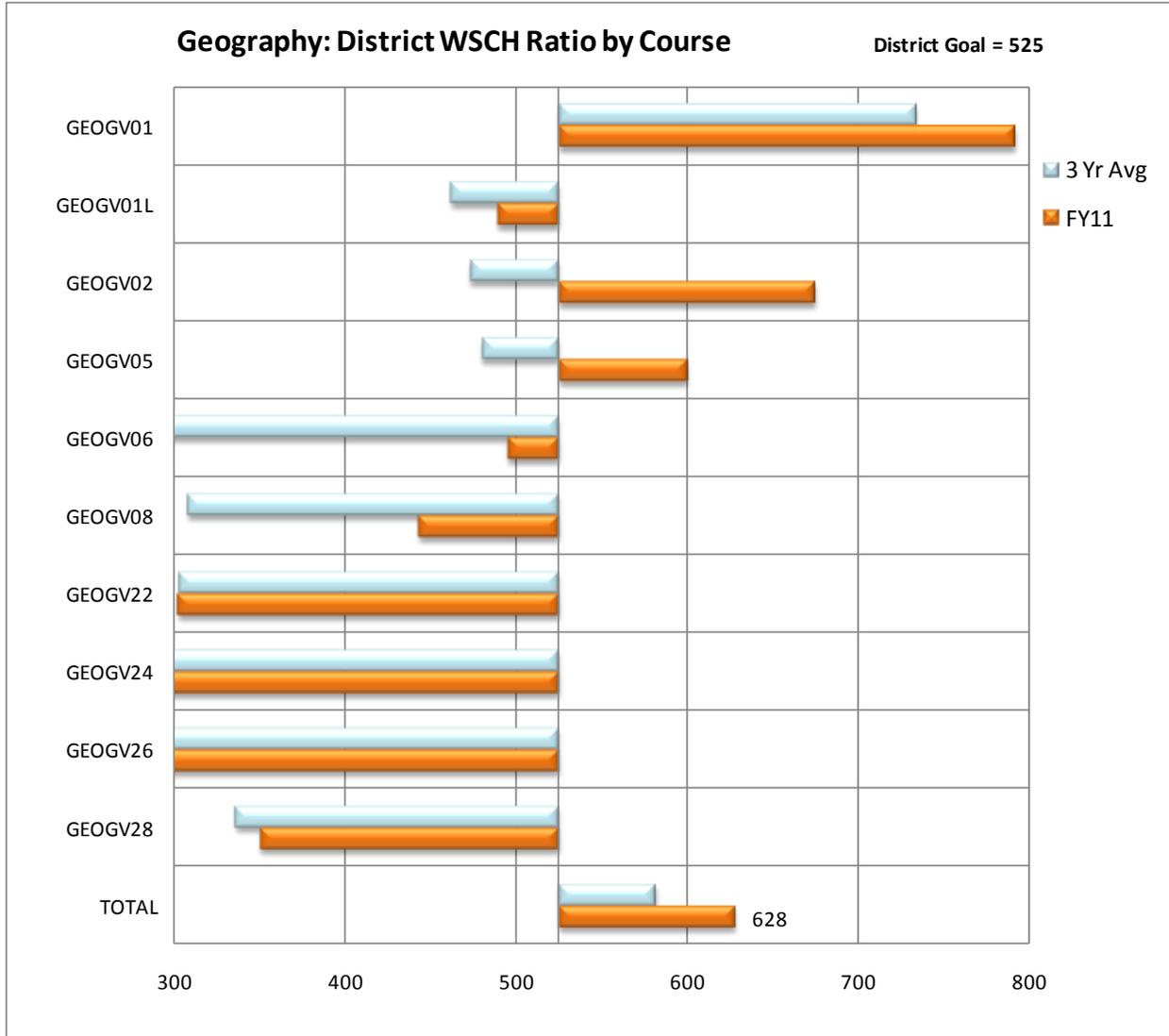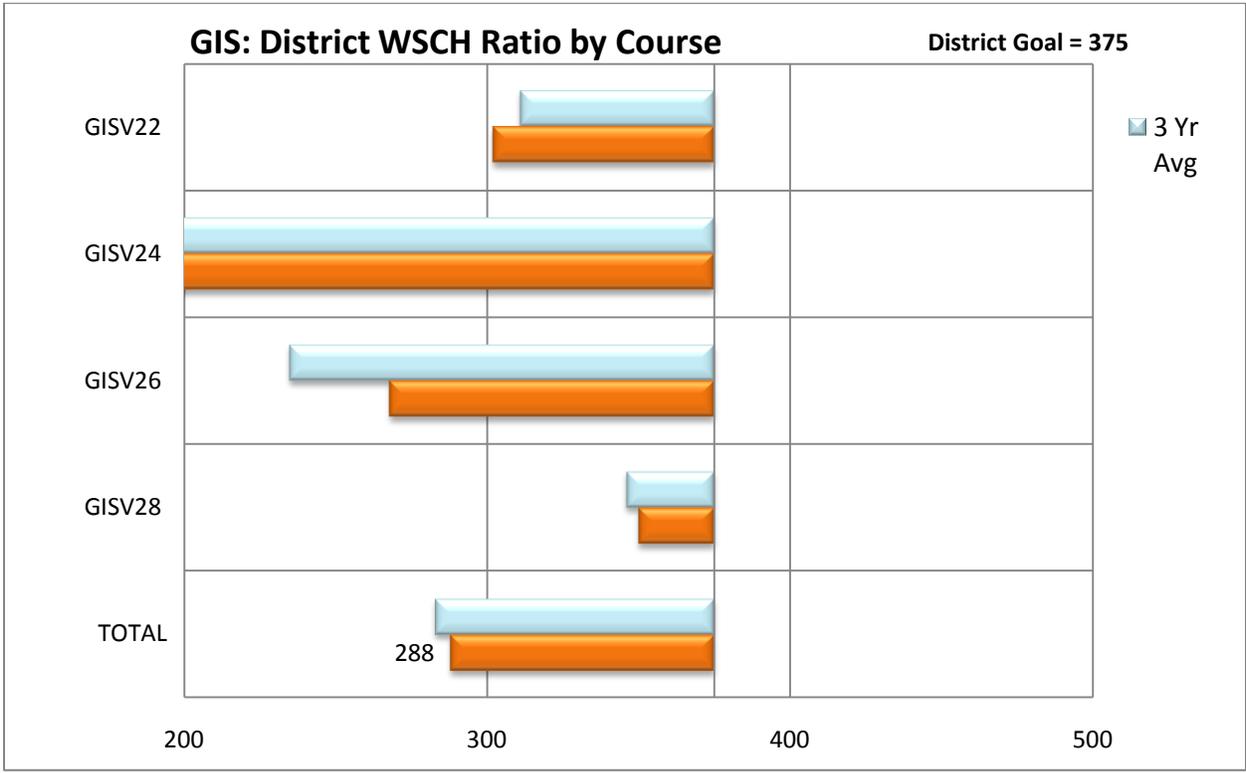
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D3: College WSCH Ratio Productivity Table

This table shows the College's WSCH ratio (WSCH/FTEF) for each course by year for the program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table includes the associated faculty costs of extra large sections. Faculty teaching extra large sections are paid stipends equal to 50% of their section FTE assignment for each group of 25 students beyond the first 60 students (calculated in this table as XL FTE). This College WSCH Ratio is a more valid representation of WSCH productivity. The College WSCH Ratio will be used in the program review process.

College WSCH Ratio = WSCH / (PT FTE + FT FTE + XL FTE)

College WSCH Ratio: Weekly Student Contact Hours/(FT FTE + PT FTE + XL FTE)									
Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
GEOGV01	Elements of Physical Geography	681	750	753	728	792	9%	525	151%
GEOGV01L	Physical Geography Laboratory	434	481	473	462	489	6%	525	93%
GEOGV02	Intro to Human Geography	330	645	443	473	675	43%	525	129%
GEOGV05	Introduction Weather & Climate	-	-	480	480	600	25%	525	114%
GEOGV06	Geography of California	270	225	-	248	495	100%	525	94%
GEOGV08	World Regional Geography	180	-	435	308	443	44%	525	84%
GEOGV22	Fundamentals: Mapping & GIS	288	329	-	303	302	0%	525	57%
GEOGV24	Global Positioning Syst (GPS)	133	219	172	160	144	-10%	525	27%
GEOGV26	Introduction to GIS Software	232	242	290	252	288	14%	525	55%
GEOGV28	GIS: Project Development	345	348	317	336	350	4%	525	67%
TOTAL	Annual College WSCH Ratio	528	612	603	580	628	8%	525	120%

College WSCH Ratio: Weekly Student Contact Hours/(FT FTE + PT FTE + XL FTE)									
Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
GISV22	Fundamentals of Mapping & GI	288	329	-	311	302	-3%	375	80%
GISV24	Global Positioning Syst (GPS)	191	219	175	190	181	-5%	375	48%
GISV26	Introduction to GIS Software	257	216	241	235	268	14%	375	71%
GISV28	GIS: Project Development	371	347	322	346	350	1%	375	93%
TOTAL	Annual College WSCH Ratio	290	287	267	283	288	2%	375	77%

D4: College WSCH Ratio Productivity Chart

This chart illustrates the course level College WSCH ratio. The top bar shows the program's three year average. The second bar shows the FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart. The computation used for the College WSCH Ratio includes XL FTE (extra-large sections) and the assignment of FTEF to all cross-listed sections (proportional to census enrollment).
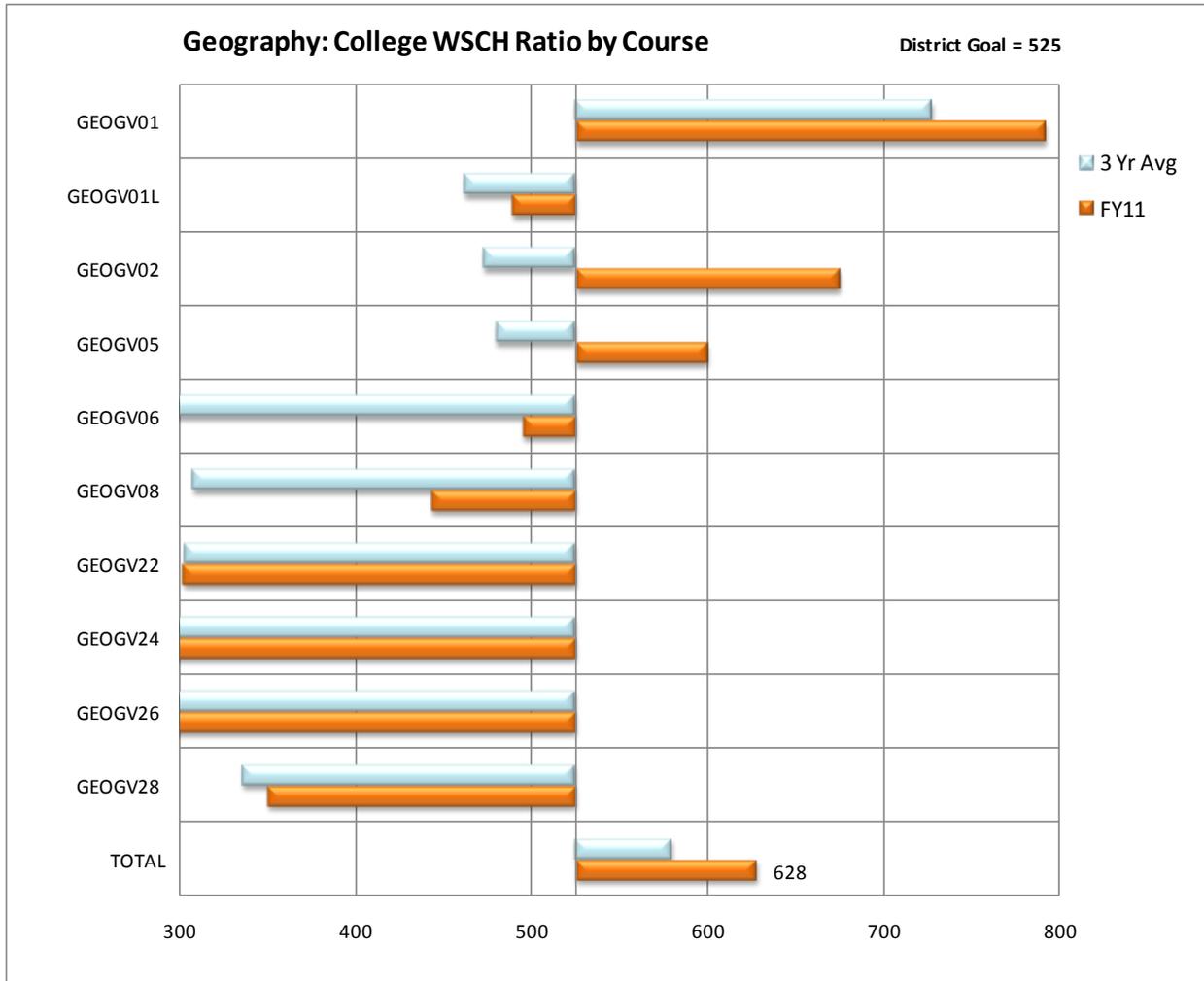
GIS: College WSCH Ratio by Course

District Goal = 375

Legend: 3 Yr Avg, FY11

- GISV22
- GISV24
- GISV26
- GISV28
- TOTAL — 288

X-axis: 200, 300, 400, 500
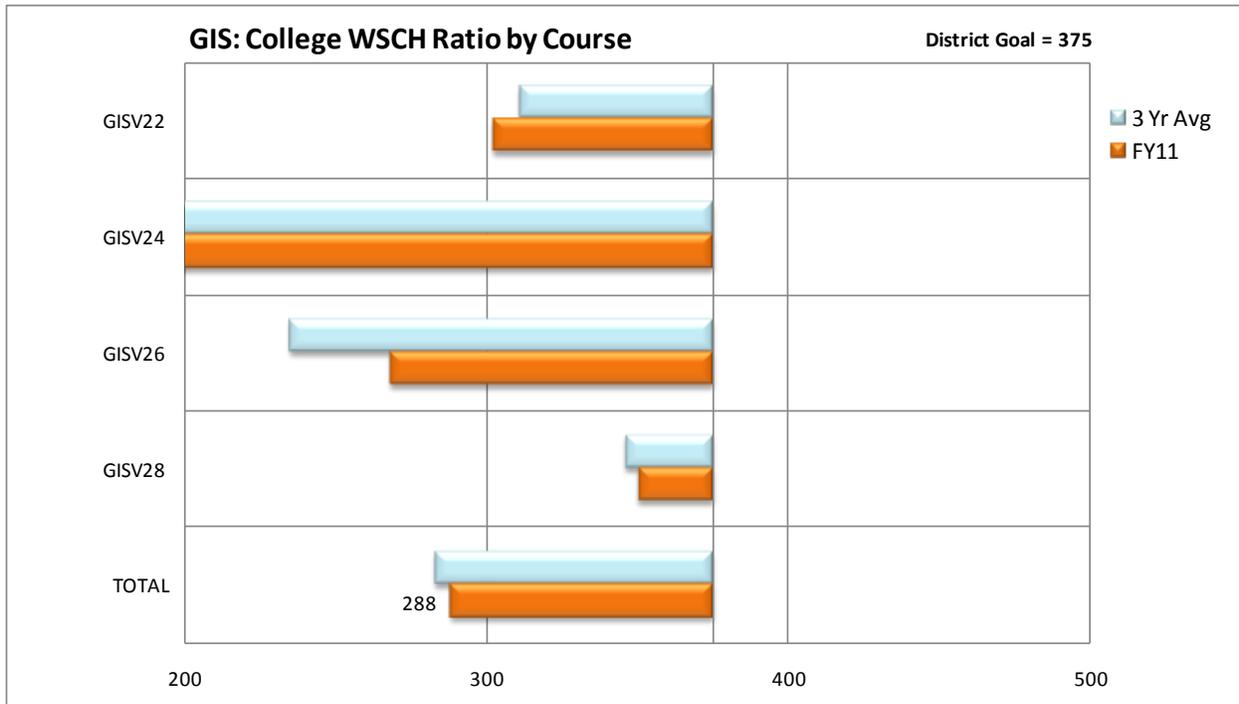
D5: Productivity Detail Report

The program's detail productivity information is available in *Appendix B – Program Review Productivity Report*. This report is a PDF document and is searchable. The productivity information was extracted from the District's Banner Student System. The productivity information includes all information associated with the program's subject codes. The *Program Review Productivity Report* is sorted by subject code (alphabetical order) and includes the following sections: productivity measures and WSCH ratios by course by year.

D6: Interpretation of the Program Course Productivity Information

The Geography D2 Chart shows mixed WSCH/FTEF ratios with the average at 628, which is above the district 525 goal; most of the productivity is due to the GEOG V01 which offers 18 sections per year. Considering 22 sections of GEOG V01L laboratory are offered per year, with size limited to 24 students due to seating and limited equipment, 93% is a remarkable efficiency. Inefficiencies are noted for GEOG/GIS V22, 24, 26, and 28 are computer-based single-section courses that are by necessity are small since the number of computers available to students is limited. There is a fundamental error in how the efficiency values are calculated for co-listed GIS and GEOG courses, and the differing district expectations for the co-listed classes. For instance GEOG V24 and GIS V24 are co-listed have and efficiency of 144 and 181, respectively; however, they are the same class. The district expectation for these co-listed classes is also 525 and 375 respectively. Clearly there is an error.

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E1: Student Success Terminology

Census	Number of students enrolled at Census (typically the 4th week of class for fall and spring). Census enrollment is used to compute WSCH and FTES for funding purposes.
Retain	Students completing the class with any grade other than W or DR divided by Census Example: 40 students enrolled, 5 students dropped prior to census,35 students were enrolled at census, 25 students completed the class with a grade other than W or DR: Retention Rate = 25/35 = 71%
Success	Students completing the class with grades A, B, C, CR or P divided by Census Excludes students with grades D, F, or NC.

E2: Student Success Summary

The following two tables summarize the detail information provided in the *Appendix C - Program Review Student Success Report*. The first table shows the number of students. The second table shows the percentage of students. Both tables show the distribution of student grades by year for the program (subject). They show the number of students who were counted at census, completed the class (retention), and were successful. The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 success measures. The "College" success percentages are included to compare the results of the program to the results of the college.

| Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GEOG	FY08	409	360	301	22	120	158	204	11	1,585	1,380	1,092
GEOG	FY09	453	429	338	14	137	153	208	1	1,733	1,525	1,234
GEOG	FY10	352	472	359	12	157	229	193	6	1,780	1,587	1,195
GEOG	3 Year Avg	405	420	333	16	138	180	202	6	1,699	1,497	1,174
GEOG	FY11	297	425	389	11	157	219	245	21	1,766	1,519	1,122

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GEOG	FY08	26%	23%	19%	1%	8%	10%	13%	1%		87%	69%
GEOG	FY09	26%	25%	20%	1%	8%	9%	12%	0%		88%	71%
GEOG	FY10	20%	27%	20%	1%	9%	13%	11%	0%		89%	67%
GEOG	3 Year Avg	24%	25%	20%	1%	8%	11%	12%	0%		88%	69%
GEOG	FY11	17%	24%	22%	1%	9%	12%	14%	1%		86%	64%
College	**3 Year Avg**	**33%**	**19%**	**12%**	**5%**	**5%**	**10%**	**15%**	**2%**		**85%**	**68%**
College	FY11	33%	20%	13%	3%	5%	10%	14%	2%		86%	70%

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GIS	FY08	17	8	2	23	1	4	13	4	72	59	50
GIS	FY09	24	10	4	15	4	8	11	2	78	67	53
GIS	FY10	25	2	2	17	-	2	5	7	60	55	46
GIS	3 Year Avg	22	7	3	18	2	5	10	4	70	60	50
GIS	FY11	16	12	1	13	1	4	6	11	64	58	42

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
GIS	FY08	24%	11%	3%	32%	1%	6%	18%	6%		82%	69%
GIS	FY09	31%	13%	5%	19%	5%	10%	14%	3%		86%	68%
GIS	FY10	42%	3%	3%	28%	0%	3%	8%	12%		92%	77%
GIS	3 Year Avg	31%	10%	4%	26%	3%	7%	14%	6%		86%	71%
GIS	FY11	25%	19%	2%	20%	2%	6%	9%	17%		91%	66%
College	**3 Year Avg**	**33%**	**19%**	**12%**	**5%**	**5%**	**10%**	**15%**	**2%**		**85%**	**68%**
College	FY11	33%	20%	13%	3%	5%	10%	14%	2%		86%	70%

E3: Retention and Success Rates

This chart illustrates the retention and success rates of students who were counted at census. Each measure has four bars. The first bar represents the program's prior three year average percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.

Geography: Retention and Success Rates

Legend:
- Program 3 Year Average
- Program FY11
- College 3 Year Average
- College FY11

Retain:
- Program FY11: 86%
- College FY11: 86%

Success:
- Program FY11: 64%
- College FY11: 70%

GIS: Retention and Success Rates

Legend:
- Program 3 Year Average
- Program FY11
- College 3 Year Average
- College FY11

Retain:
- Program FY11: 91%
- College FY11: 86%

Success:
- Program FY11: 66%
- College FY11: 70%
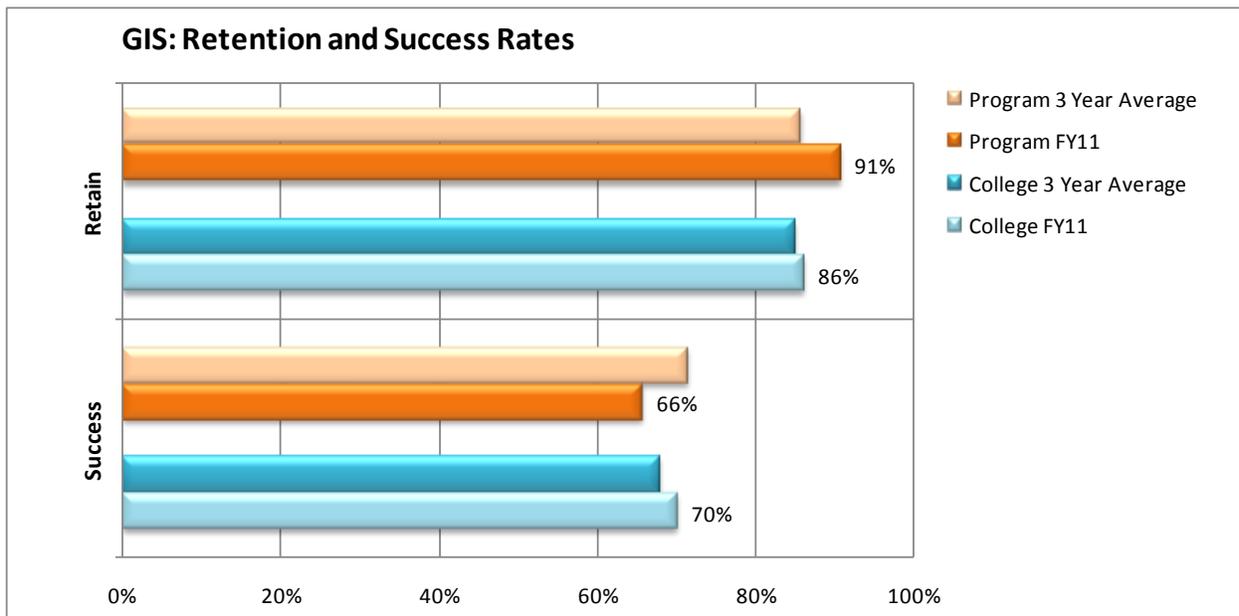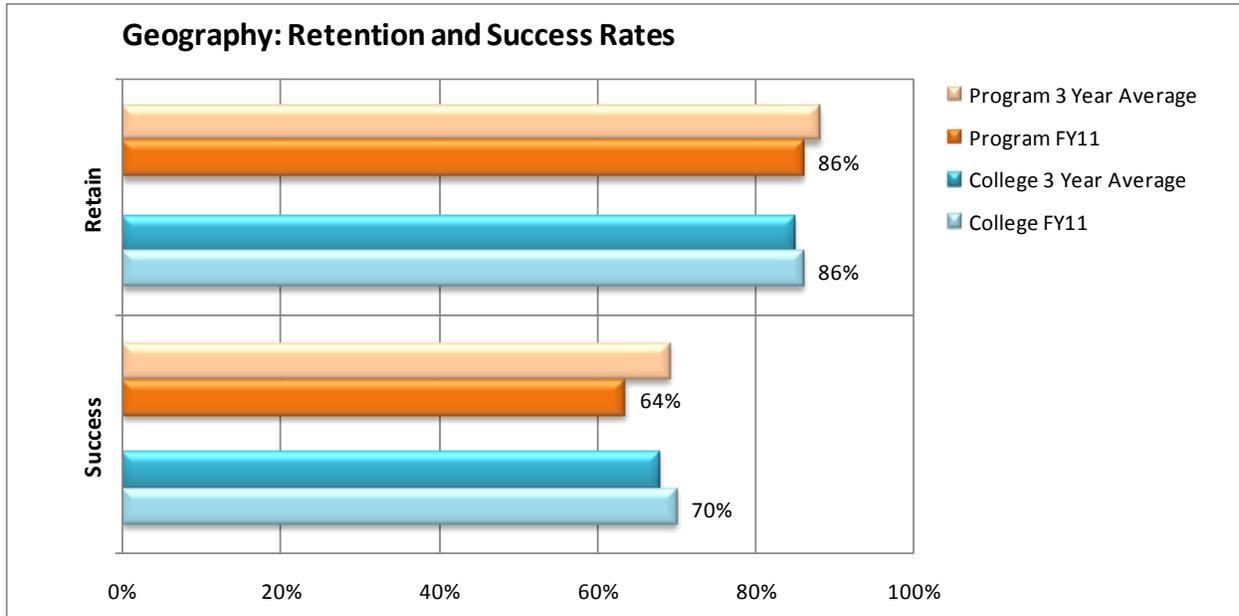
E4: Grade Distribution

This chart illustrates the program's distribution of grades (by subject). Each grade has four bars. The first bar represents the program's prior three year average percent of grades. The second bar shows last year's (FY11) grade distribution percents. The third and fourth bars represent the overall college distribution percents.

Geography: Grade Distribution

Legend:
- Program 3 Year Average
- Program FY11
- College 3 Year Average
- College FY11

Grade	Program FY11	College FY11
A	17%	33%
B	24%	20%
C	22%	13%
P/CR	1%	3%
D	9%	5%
F	12%	10%
W	14%	14%
NC	1%	2%

GIS: Grade Distribution

Legend:
- Program 3 Year Average
- Program FY11
- College 3 Year Average
- College FY11

Chart values:

A: 25% (Program FY11), 33% (College FY11)

B: 19% (Program FY11), 20% (College FY11)

C: 2% (Program FY11), 13% (College FY11)

P/CR: 20% (Program FY11), 3% (College FY11)

D: 2% (Program FY11), 5% (College FY11)

F: 6% (Program FY11), 10% (College FY11)

W: 9% (Program FY11), 14% (College FY11)

NC: 17% (Program FY11), 2% (College FY11)

X-axis: 0%, 5%, 10%, 15%, 20%, 25%, 30%, 35%

E5: Student Success Detail Report

The program student success detail information is available in *Appendix C – Program Review Student Success Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student success information includes all information associated with the program's subject codes. The *Program Review Student Success Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary and course detail by term. The following table defines the terminology.

E6: Interpretation of Program Retention, Student Success, and Grade Distribution

Student success and retention rates in Geography show little change from the prior three-year average of the program and the college. Geography 'A' grade distributions are significantly lower than the prior three years due primarily to student preparation issues. By percentage Geography awards half as many A's as compared to the college. Our grade distribution is close to a normal distribution; however, the college distribution may indicate grade inflation or easily attainable expectations. Further study is needed.

The lower number of A's is not inconsistent with the other science courses in our discipline. It is possible that additional tutoring help would benefit students by helping increase their success rate. An additional full-time faculty member who could meet with students or help set up tutoring by others would help in this regard

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F1: Program Completion – Student Awards
This table shows the number of students who completed a program certificate or degree during the fiscal year. Gender distribution is included. The following chart illustrates this information.

No certificates or degrees.

F2: Interpretation of the Program Completion Information

We award a few proficiency awards In GIS Basic Competency. We hope to develop a Transfer Model Curriculum based degree.

G1: Student Demographics Summary Tables

This table shows the program and college census enrollments for each demographic category. It also shows the average age of the students. The program FY11 results can be compared to its prior three year average, the college FY11 results, and the college prior three year average.

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GEOG	FY08,	672	631	51	49	13	25	21	123	763	820	2	26
GEOG	FY09,	780	653	48	71	7	25	34	115	848	878	7	24
GEOG	FY10,	800	653	54	91	20	22	25	115	873	902	5	23
GEOG	3 Year Avg	751	646	51	70	13	24	27	118	828	867	5	24
GEOG	FY11	907	583	41	54	13	33	27	108	799	963	4	23
College	3 Year Avg	11,806	11,169	988	1,005	217	827	403	2,302	15,888	12,694	134	27
College	FY11	13,034	10,566	977	1,040	196	886	402	1,688	15,734	13,014	40	24

| Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GIS	FY08,	11	47	-	-	1	-	3	10	24	44	4	39
GIS	FY09,	8	58	-	-	-	-	1	11	17	61	-	37
GIS	FY10,	6	38	4	1	-	1	2	8	21	39	-	39
GIS	3 Year Avg	8	48	1	-	-	-	2	10	21	48	1	38
GIS	FY11	15	37	4	2	-	-	1	5	25	39	-	40
College	3 Year Avg	11,806	11,169	988	1,005	217	827	403	2,302	15,888	12,694	134	27
College	FY11	13,034	10,566	977	1,040	196	886	402	1,688	15,734	13,014	40	24

This table shows the program and college percentage of census enrollments for each demographic category.

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GEOG	FY08,	42%	40%	3%	3%	1%	2%	1%	8%	48%	52%	0%	26
GEOG	FY09,	45%	38%	3%	4%	0%	1%	2%	7%	49%	51%	0%	24
GEOG	FY10,	45%	37%	3%	5%	1%	1%	1%	6%	49%	51%	0%	23
GEOG	3 Year Avg	44%	38%	3%	4%	1%	1%	2%	7%	49%	51%	0%	24
GEOG	FY11	51%	33%	2%	3%	1%	2%	2%	6%	45%	55%	0%	23
College	3 Year Avg	41%	39%	3%	3%	1%	3%	1%	8%	55%	44%	0%	27
College	FY11	45%	37%	3%	4%	1%	3%	1%	6%	55%	45%	0%	24

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Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
GIS	FY08,	15%	65%	0%	0%	1%	0%	4%	14%	33%	61%	6%	39
GIS	FY09,	10%	74%	0%	0%	0%	0%	1%	14%	22%	78%	0%	37
GIS	FY10,	10%	63%	7%	2%	0%	2%	3%	13%	35%	65%	0%	39
GIS	3 Year Avg	11%	69%	1%	0%	0%	0%	3%	14%	30%	69%	1%	38
GIS	**FY11**	**23%**	**58%**	**6%**	**3%**	**0%**	**0%**	**2%**	**8%**	**39%**	**61%**	**0%**	40
College	3 Year Avg	41%	39%	3%	3%	1%	3%	1%	8%	55%	44%	0%	27
College	**FY11**	**45%**	**37%**	**3%**	**4%**	**1%**	**3%**	**1%**	**6%**	**55%**	**45%**	**0%**	**24**

G2: Student Demographics Chart

This chart illustrates the program's percentages of students by ethnic group. . Each group has four bars. The first bar represents the program's prior three year percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.

Geography: Demographics

	Program Prior 3 Year Average	Program FY11	College Prior 3 Year Average	College FY11
Hispanic		51%		45%
White		33%		37%
Asian		2%		3%
Afr Am		3%		4%
Pac Isl		1%		1%
Filipino		2%		3%
Nat Am		2%		1%
Other		6%		6%
Female		45%		55%
Male		55%		45%

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GIS: Demographics

Hispanic	23% / 45%
White	58% / 37%
Asian	6% / 3%
Afr Am	3% / 4%
Pac Isl	0% / 1%
Filipino	0% / 3%
Nat Am	2% / 1%
Other	8% / 6%
Female	39% / 55%
Male	61% / 45%

Legend: Program Prior 3 Year Average, Program FY11, College Prior 3 Year Average, College FY11
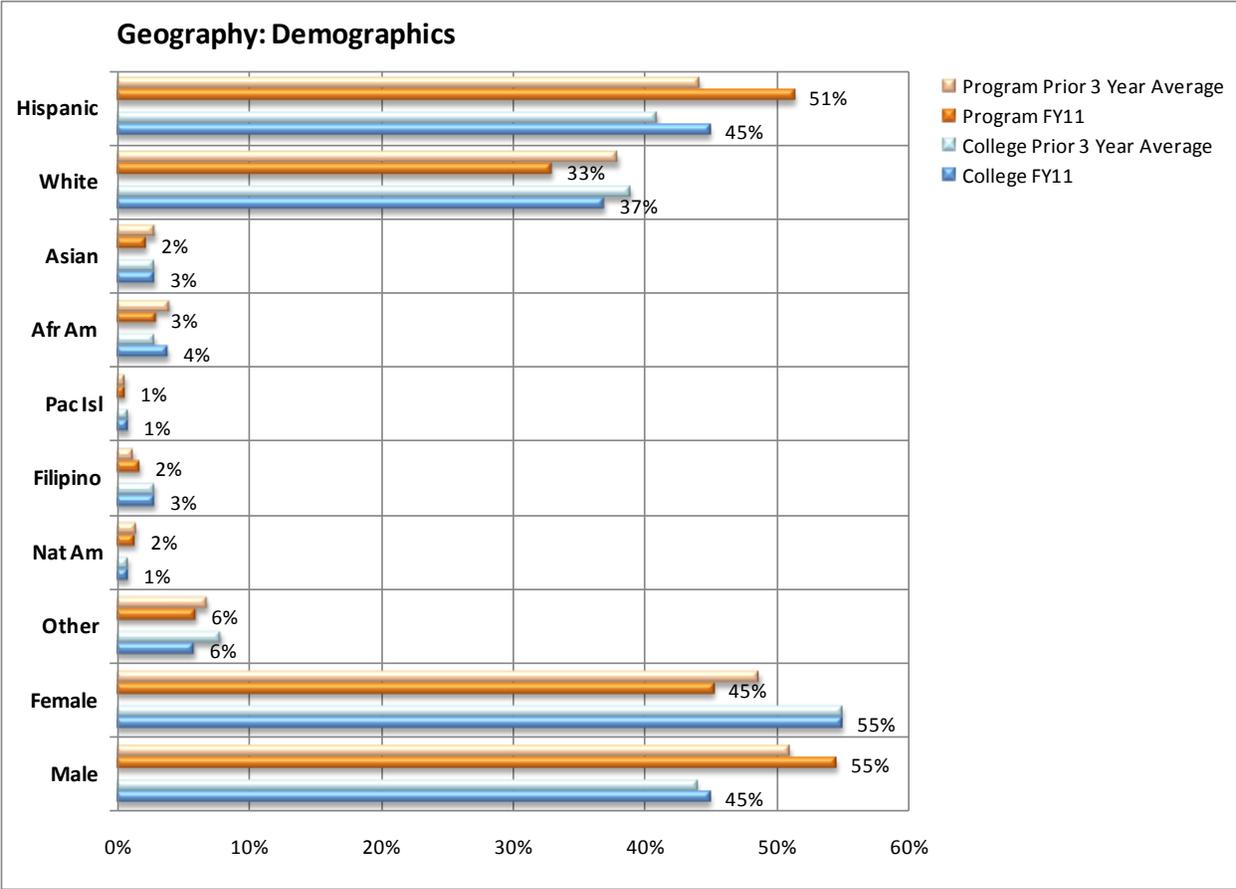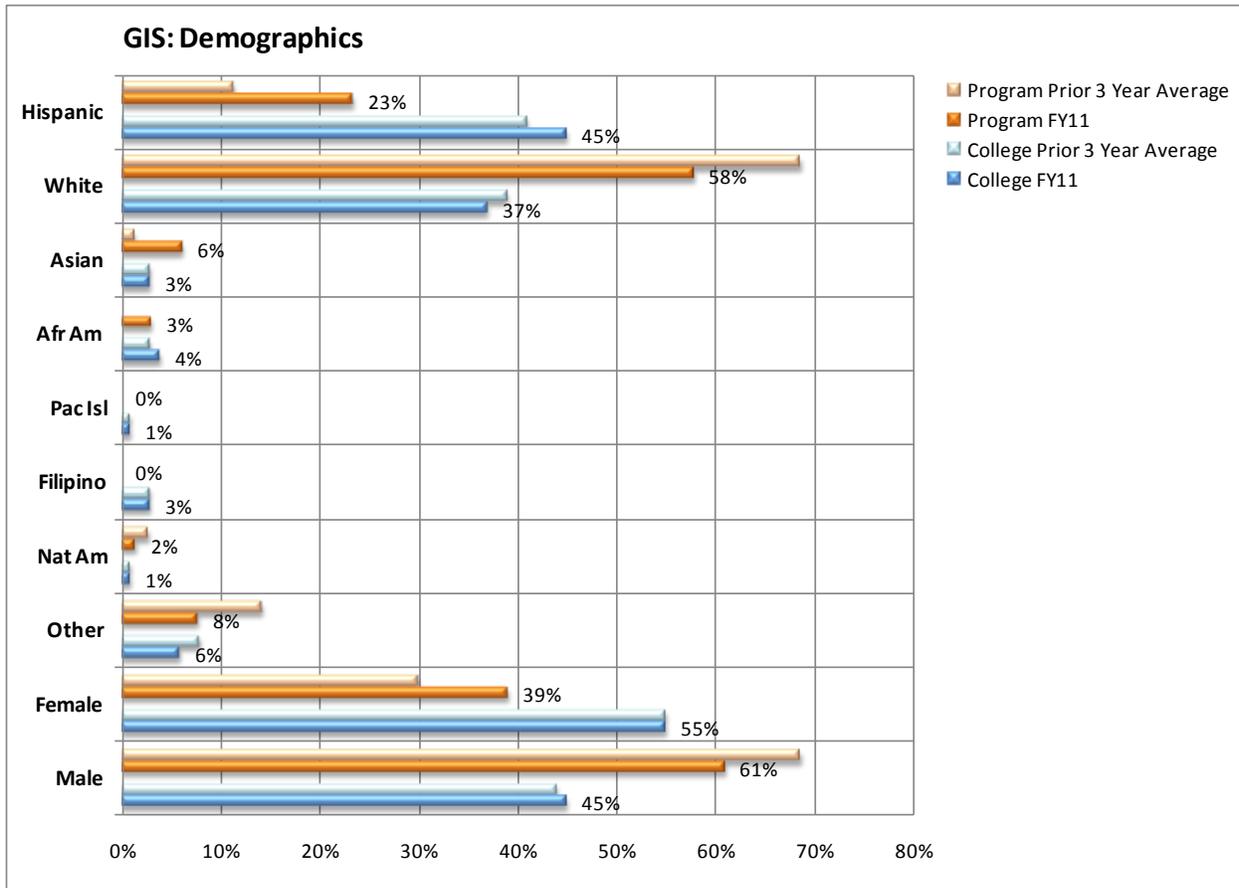
G3: Student Demographics Detail Report

The program student success detail information is available in *Appendix D – Program Review Student Demographics Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student demographic information includes all information associated with the program's subject codes. The *Program Review Student Demographics Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary by year, and detail demographics by term and course.

G4: Interpretation of the Program Demographic Information

The ethnic and gender distribution in Geography has remained relative constant over the past three years with a slight bump up in Hispanic students but roughly mirrors the college as a whole. GIS variations from the college are explained by the demographics of older professional students.

4. Performance Assessment

A1: Program-Level Student Learning Outcomes

Program-Level Student Learning Outcome 1	Performance Indicators
Students will be able to identify key geographic features.	Using maps students will identify key geographic features including physical and human features.
Operating Information	
Analysis – Assessment	
There is no data currently available; further analysis is required.	

Program-Level Student Learning Outcome 2	Performance Indicators
Students will analyze the location and distribution of geographic processes and concepts in their spatial context	Students will communicate in short essays and map exercises the spatial distributions.
Operating Information	
Analysis – Assessment	

Program-Level Student Learning Outcome 3	Performance Indicators
Operating Information	
Analysis – Assessment	

4B: Student Success Outcomes

Student Success Outcome 1	Performance Indicators
The program will increase its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will maintain or increase the retention rate.
Operating Information	
Analysis – Assessment	

Student Success Outcome 2	Performance Indicators
The program will increase its retention rate from the average of the **college's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will increase the retention rate by 2% or more above the average of the **college** retention rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 3	Performance Indicators
The program will increase the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program will increase student success rate by 2% or more above the **program's** average student success rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 4	Performance Indicators
The program will increase the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program student success will increase by 5% over the average of the **college's** student success rate for the prior three years.
Operating Information	
Analysis – Assessment	

Student Success Outcome 5	Performance Indicators
Students will complete the program earning certificates and/or degrees.	Increase the number of students earning a certificate to a minimum of 20% of the number of students enrolled in second-year courses.
Operating Information	
Analysis – Assessment	

C. Program Operating Outcomes

Program Operating Outcome 1	Performance Indicators
The program will maintain WSCH/FTEF above the 525 goal set by the district.	The program will exceed the efficiency goal of 525 set by the district by 2% or more.
Operating Information	
Analysis – Assessment	

Program Operating Outcome 2	Performance Indicators
Inventory of instructional equipment is functional, current, and otherwise adequate to maintain a quality-learning environment. Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5000 will be budgeted if funds are available.	A current inventory of all equipment in the program will be maintained. A schedule for service life and replacement of outdated equipment will reflect the total cost of ownership.
Operating Information	
The inventory list is out of date and needs to be reviewed (3B1)	
Analysis – Assessment	

Program Operating Outcome 3	Performance Indicators
Operating Information	
Analysis – Assessment	

Program Operating Outcome 4	Performance Indicators
Operating Information	
Analysis – Assessment	

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5. Findings

Finding 1 Data in section A and C indicate a need for an additional full-time faculty member. We have 3 FT faculty teaching in 3 separate programs that together total about 6 FTEF. The three program areas under Geosciences (Geology, Geography, and ESRM) all have particular staffing needs. One long-time Geography faculty member is credentialed to teach both Geography and Geology.

As we move forward we need to get expertise in Geology (i.e. a full-time faculty member) or we need to have another Geographer (who can help with GIS and/or ESRM) and we'll have the Geographer that can teach both disciplines help more in Geology (i.e., we'll have him put more energy into Geology. At this point a Geology hire takes precedence over and above a Geography hire. We do need more help in one or both of the disciplines!)

At points our staffing ratio FT/PT has come up lower than most other departments indicating not enough FT instructors in our area. While the data of other programs wasn't analyzed in this review, this inequitable situation most likely is still true.

Data in section C indicates a need for more tutorial support for students, either by increased faculty time (via increasing the FT faculty in our department) or by helping set up tutoring (also creating more demand on FT faculty.)

Finding 2 There should be more department chair release time based on the data for the Geography Program (along with the data for the Geology and ESRM Programs that also fall under the departmental heading of Geosciences). We have more than enough FTEF to have a full year of one class release. At this point we are only getting **one semester** a year of **one class release**. When departments were last being formed (around 1997-1998), we temporarily had dropped to one faculty member in our area (for just one year!), from the 3 that had been normal back when we offered only about half as many classes. At that point we were grouped together randomly with Physics/Astronomy/Engineering due to our *temporary* "smallness". This should have only been a *temporary* solution.

Since the first belated retirement replacement in Jan. 1999 that brought the FT faculty up to 2, our department total FTEF has remained well above 3 (the contract level for a full class release). In 2004 we finally achieved the replacement of the 3rd FT slot. Keep in mind our program offerings had increased dramatically (almost double) since that time in the early 1990s when we had 3 FT faculty. We have been doing all the work of a separate department all along (13 years now), but have had to share the release time with those other unrelated programs. Unfortunately rectifying this mismatch of programs (Geosciences put together with Physics/ENGR/ASTR) has not taken place, but with the extra workload represented by the SLO mandates and other tasks that have fallen to department chairs, it is time to give Geosciences its place at the table as a separate department.

The Environmental Sciences & Natural Resource Management (ESRM) program development was spearheaded by the Geosciences department and two of the key faculty members are from Geosciences. Thus it has been a natural member of Geosciences. While this is a multidisciplinary program with links to Biology, Political Science, and Agriculture, having it still reside in Geosciences (as a separate department) will provided continued oversight and strong support for the program.

Finding 3 There is a need for greater understanding campus-wide of the uniqueness of the 3 programs that are placed under the heading, Geosciences.

As we prepared the 3 program reviews for our Geosciences Department (Geography, Geology, ESRM), the distinctions between these related, but very unique disciplines are evident. It has become apparent that the strong difference between Geography and Geology in methodology, preparation, perspective, supplies/equipment and needs is not well understood on campus. These two disciplines are distinct like Anthropology and Sociology are different or as Chemistry and Biology are different.

Geography deals with the spatial distribution of both the physical features and human activities on our planet. This is expressed in the use of maps, geostatistics, Geospatial Technologies, and other methods drawn both from the social sciences and the physical sciences. The focus is on Where on Earth and Why are They There.

Geology on the other hand is a specific study of the lithosphere (the rock material of the planet) and how it is formed and destroyed. The emphasis is solely as a physical science: What is the Earth Made of?

Lack of understanding of this distinction has led to lack of resources to support Geology. We have a rock collection that has no one to oversee it. When our current Geology FT faculty member who has a minor in Geology retires in the not too distant future, we will be bereft of even that limited Geology expertise.

Finding 4 There is a need to outfit the GIS lab room.

For the GIS program, we have lower caps for seat count as can be noted in the lower enrollment numbers. This has been due to the jury-rigged solution for a temporary GIS lab. For the past 11 years we have squeezed 19 student computers into our Physical Geography lab room. It was supposed to be an interim solution as the computer area in that room takes away space from Geography Lab (and other) courses. It also has been a barely tenable solution for GIS.

A new lab was supposed to be in the works. In the Master Facilities Plan a new GIS lab was a key component of the Advanced Technology Education (ATE) building that was planned (now MCE). At a point in program planning it became apparent that the campus was trying to shove too many programs into that building. At that point Steve Palladino (a member of the FOG committee that made the Master Facilities Plan) and his dean, Dr. Renger, proposed to former VP of Business Services and FOG chair, Tom Kimberling, that GIS be removed from the ATE project, but only if space (vacated by the CAD/DRFT/ARCH programs in SCI 105/106) be set aside for GIS.

Come Spring 2012, GIS will move into SCI 106. The space will be shared with Engineering, Geosciences overflow, and perhaps some limited use for training by the College Technical Services. This, while not fully realizing the original agreement with Kimberling, does provide a better home for GIS. There is room for 23-24 GIS stations. The need is to outfit this class as a smart classroom and to increase the number of computers to 24 (adding to the 19 that will be relocated from the Geography lab room, SCI 113, that as doubled as the GIS lab for many years.) There will need to be a permanently mounted LCD projector and other upgrades to that room to prepare it for GIS (as well as Engineering and other uses).

6. Initiatives

Initiative: New faculty member for FY13.

Initiative ID GEOG #1-2011

Links to Finding 1   Section A shows F/T faculty expenditures are significantly lower than the college as a whole by 18%, pointing to a need for full-time faculty. With a WSCH/FTEF efficiency of 628 is at 120% average above the 525 district goal. GEOG V01 is 151% above the 525 district expectation. In the Geosciences we desperately need one additional Full-time faculty member, either in Geology or Geography. All of our programs are suffering with us having been very understaffed for years. Past somewhat high rankings by the Faculty Staffing Committee for a new faculty member have not been acted on perhaps due the issues in Finding 3 (recognizing the Geography/Geology distinction.)

Benefits: With more faculty, students have a greater access to FT faculty to assist them, our departmental duties and needs will be address in a much timelier fashion, and we can take the pressure off our part-timers to work 4 sections.

Request for Resources: 1 full-time Geosciences faculty member.

Funding Sources General Fund

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Initiative – Separate Geosciences Department.

Initiative ID GEOG #2-2011

Links to Finding 2 Create a unique Geosciences (Geography, Geology, ESRM) Department. Separate Geosciences (Geography, Geology, ESRM) from Physics/Astronomy/Engineering, officially creating what has been a de facto separate Geosciences department anyway. A number of deficiencies identified in the various programs in Geosciences will be more adequately address if we have the extra release time and clearer identity on campus.

Benefits This will help clarify the roles and responsibilities of those serving as department chairs of Geosciences and of Physics/etc. Geosciences department chair will be able to teach one less course a year, helping prevent the burn out that both the current Geosciences chair and the previous chair have experienced. This will also rectify a long-standing injustice. While ESRM is multidisciplinary, it's continued inclusion in Geosciences gives this newer program direction and oversight.

Request for Resources This will have a fairly minimal affect on the campus budget (one additional class release in just one semester, plus some other smaller stipend amounts).

Funding Sources
Please check one or more of the following funding sources.

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

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Initiative – Geosciences Programs – Clarification/Communication

Initiative ID GEOG #3-2011

Links to Finding 3 We need to establish a clear communication line with counselors and decision makers on campus to clarify the distinct nature of Geography and Geology. This process has begun with clear identification of Geography and Geology as separate programs (and the submittal of separate Program Review documents) and with discussions with the Division Dean and the Senate President about this issue. It now needs to move upwards on the administrative ladder. A meeting with counseling staff will be part of this process, but also a meeting with senior administrator(s) may be included.

Benefits Our students, staff, faculty, and administration are all ill served by not recognizing that these two long established and commonly taught fields of study, despite some strong affinities, are separate bodies of knowledge with distinct approaches.

Request for Resources None other than some time with colleagues.

Funding Sources
Please check one or more of the following funding sources.

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software))	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Geography & Geographic Information Systems (GIS) Program Review
2011-2012

Initiative Outfit SCI 106, the new home for the GIS lab, as a computer lab/smart classroom.

Initiative ID GEOG #4-2011

Links to Finding 4 SCI 106 needs to be outfitted as the GIS (and Engineering) lab by moving the 19 GIS computers in SCI 113 to SCI 106 and adding 5 more machines to bring the seat count to 24 as supported by the room's current infrastructure (computer tables and power/data ports). The room will also need to be outfitted as a smart classroom with a fixed LCD projector connected to an instructor station.

Benefits GIS will finally have a stable home in which to strengthen the program (by allowing enrollments over 20, the previous limit). Students will be well served by a dedicated room rather than being crammed into a fraction of SCI 113. This room will also serve as a resource to other programs and to the community at large (GISDAY activities, GIS training courses, and use by CTS or others.)

Request for Resources While the set up as a smart classroom may require significant resources for wiring and installation, the extra computing needs are very modest. We will also need to have an ongoing budget item of around $2500 for GIS software maintenance/update (this year we are seeking Foundation Educational Enhancement Grant funds to cover the software.)

Funding Sources
Please check one or more of the following funding sources.

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	X
Requires computer equipment funds (hardware and software)	X
Requires college equipment funds (other than computer related)	X
Requires college facilities funds	?
Requires other resources (grants, etc.)	X

6A: Initiatives Priority Spreadsheet

The following blank tables represent Excel spreadsheets and will be substituted with a copy of the completed Excel spreadsheets.

Personnel –Faculty Requests

Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

Personnel – Other Requests

Personnel - Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	New General Funds	Other
1												
2												
3												
4												
5												

Geography & Geographic Information Systems (GIS) Program Review
2011-2012

Computer Equipment and Software

Equipment - Computer Related	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Technology Fund	Other
1												
2												
3												
4												
5												

Other Equipment Requests

Equipment	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Equipment Fund	Other
1												
2												
3												
4												
5												

Facilities Requests

Facilities	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Facilities Fund	Other
1												
2												
3												
4												
5												

Other Resource Requests

Other Resources	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

6B: Program Level Initiative Prioritization
All initiatives will first be prioritized by the program staff. If the initiative can be completed by the program staff and requires no new resources, then the initiative should be given a priority 0 (multiple priority 0 initiatives are allowed). All other initiatives should be given a priority number starting with 1 (only one 1, one 2, etc.).

6C: Division Level Initiative Prioritization
The program initiatives within a division will be consolidated into division spreadsheets. The dean may include additional division-wide initiatives. All initiatives (excluding the '0' program priorities) will then be prioritized using the following priority levels:

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6D: Committee Level Initiative Prioritization
The division's spreadsheets will be prioritized by the appropriate college-wide committees (staffing, technology, equipment, facilities) using the following priority levels.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6E: College Level Initiative Prioritization

Dean's will present the consolidated prioritized initiatives to the College Planning Council. The College Planning Council will then prioritize the initiatives using the following priority levels.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

7A: Appeals

After the program review process is complete, your program has the right to appeal the ranking of initiatives.

If you choose to appeal, please complete the form that explains and supports your position.
The appeal will be handled at the next higher level of the program review process.

7B: Process Assessment

In this first year of program review using the new format, programs will be establishing performance indicators (goals) for analysis next year. Program review will take place annually, but until programs have been through an entire annual cycle, they cannot completely assess the process. However, your input is very important to us as we strive to improve, and your initial comments on this new process are encouraged.