

TEXAS  STATE<sup>®</sup>  
GEOGRAPHY

DEPARTMENT OF GEOGRAPHY  
TEXAS STATE UNIVERSITY  
ACADEMIC PROGRAM REVIEW  
SELF-STUDY REPORT  
AY 2008 – 2012 / FY 2009 - 2013  
Summer 2013

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**Each of the Seven CIP Code Program Descriptions Include:**

- A. Academic Program
  - 1. Program Name CIP Code and Level
- B. Program Curriculum
  - 1. Alignment of program with stated program and institutional goals and purposes
  - 2. Curriculum Development, Coordination and Delivery
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  - 9. Number of Degrees Conferred Annually
  - 10. Admissions
    - a. Admission Scores
    - b. Admission Requirements and Review
    - c. Recruitment
  - 11. Student Support Services
  - 12. Alumni Relations
- D. Conclusions and Recommendations

## Introduction

Texas State Geography is committed to maintaining a well-designed, effective process for conducting regular reviews of its academic programs and followed Texas State University [Policy and Procedure Statement 2.13](#) to prepare this Academic Program Review (APR) report.

The report is organized into two sections:

Part I - Academic Unit

Part II - Academic Programs by CIP Code

a. Undergraduate (1 - 4)

b. Graduate (5 - 7)

## Executive Summary

The Department of Geography at Texas State University offers degrees to students at the Undergraduate, Masters and Ph.D. levels. The department was among the first in the nation to offer a Master of Applied Geography (M.A.G.) degree and the first at Texas State to offer a Ph.D. degree. During the study period (2008 – 2012), the department averaged nearly 750 majors, conferred an average of 204 degrees and generated an average of 23,463 SCH each year. Additionally, the department offers minors in Geography, Nature & Heritage Tourism and Geology as well as several certificates. The department employs a full-time faculty of thirty along with numerous part-time adjuncts and graduate teaching assistants. The department also employs seven full-time support staff supplemented by student-workers. Housed in the Evans Liberal Arts Building, the geography department manages five ‘first-call’ classrooms, four computer labs, four labs for physical geography and geology as well as research and administrative space. In addition to outstanding classroom and lab instruction, the department also offers a career-enhancing internship program, nine department-sponsored student organizations and many field-experience opportunities. Chair-appointed undergraduate and graduate faculty committees make recommendations for program improvements to the full faculty for consideration. Programmatic learning outcomes, student course-evaluations and alumni surveys are examples of tools used to assess the academic experience.

If the success of the department during the past five years is an indicator for the next five, then the Texas State Department of Geography is prepared to continue that success. Table I summarizes the number of geography majors, the number of degrees conferred and student credit hours (SCH) generated.

**Table I - Geography Majors / Geography Degrees Conferred / SCH Generated**

Academic Program Level	FY	2008	2009	2010	2011	2012	Averages
Undergraduate Geography Majors		485	510	629	665	621	582
Masters Geography Majors		98	85	107	113	92	99
Ph.D. Geography Majors		64	64	71	73	66	67.6
Total Geography Majors (All Levels)		647	659	807	851	779	748.6
Undergraduate Degrees Conferred		142	145	182	173	188	166
Masters Degrees Conferred		38	29	25	35	26	30.6
Ph.D. Degrees Conferred		7	6	7	11	8	7.8
Total Degrees Conferred (All Levels)		187	180	214	219	222	204.4
Total SCH Generation		21,149	22,296	23,748	25,175	24,949	23,463

## **Part I. ACADEMIC UNIT**

### **A. Academic Unit Description**

#### **1. Vision, Mission and Goals**

##### Vision

The Department of Geography will continue to stress both the theoretical and applied realms in all of our degree programs. We will provide a high-quality educational experience in what is the largest undergraduate geography program in the nation, and lead the discipline with innovative applied work as exemplified by our Master of Applied Geography program. Finally, we will actively recruit top students nationwide and internationally for our MS and PhD research degree programs.

##### Mission

The Department of Geography's mission is to provide its students with educational experiences of the highest quality and to conduct vital research that produces valuable publications. The department is committed to outstanding teaching and scholarly activities within the framework of academic freedom and diversity of ideas. The Department of Geography is dedicated to the advancement of knowledge and to serving our communities, from local to international. Finally, The Department of Geography supports the [College of Liberal Arts mission](#): "The College of Liberal Arts values quality teaching and learning; innovative research, scholarship, and creative expression; and committed service to local and global communities. We expect our students to think, read, write, and speak effectively; to acquire foundational knowledge in the humanities and social sciences; and to develop expertise in their chosen fields of study. We celebrate diversity in people and ideas. We foster civility, ethical behavior, and personal responsibility and we embrace our role as citizens in an increasingly interdependent world."

##### Goals

The overall goals of the Department of Geography are the same as those of the University and College of Liberal Arts for 2012-2017. See: [University Mission and Goals](#). In addition, we expect that significant faculty scholarship and grant activity will support our goal of becoming a top-tier, nationally recognized PhD-granting department.

#### **2. Strategic Plan**

Texas State University established the [2012-2017 University plan](#) building on the success of previous plans. [The Department of Geography's Strategic Plan](#), posted on the Department's Website lists the following strategic planning priorities.

##### Top five priorities for the 2012-2017 planning cycle

1. Sustain conferring 6-8 PhD degrees per year, which will require acquiring competitive university- supported PhD assistantship stipends.
2. Acquire four new assistant professor faculty lines in order to maintain our programs given recent significant enrollment growth.
3. Enhance research activities by accumulating \$8 million in external grants and contracts over the 2012-2017 five year study period.
4. Contribute to internationalization by hiring tenure-track faculty with international roots and enrolling a larger number of international students in Geography's PhD programs.
5. Prepare selected mid-career faculty for future leadership roles for the departmental research centers and future administrative roles within the department as Graduate Coordinator and Undergraduate Coordinator, Associate Chair and Department Chair.

### **3. Degree and Certificate Programs by 4-digit CIP Code**

#### Undergraduate

CIP: 45.07- B.A. or B.S. in Geography, (General Geography) / B.S. in Geography, (Physical Geography) / B.S. in Geography, (Geographic Information Science)

CIP: 03.01 - B.S. in Geography with a Major in Resource and Environmental Studies

CIP: 03.02 - B.S. in Geography with a Major in Water Resources

CIP: 04.03 - B.S. in Geography with a Major in Urban and Regional Planning

#### Graduate

CIP: 45.07 - Master of Applied Geography (M.A. GEO – General / Master of Applied Geography (M.A. GEO – Geographic Education) / Master of Science Geography (M.S.) / Master of Applied Geography (M.A.GEO – Geographic Information Science)

CIP: 03.01 - Master of Applied Geography (M.A.GEO – Resource and Environmental Studies)

CIP: 45.07 - Ph.D. degree in Geography (Environmental Geography / Geographic Education / Geographic Information Science)

#### Minors and Certificates

The Geography Department offers minors in Geography, Nature and Heritage Tourism and Geology as well as certificates in Geographic Information Science, Water Resources Policy, Environmental Interpretation and Location Analysis.

### **4. Service Course Obligations**

GEO 1310 World Geography is among the choices within the Social and Behavioral Sciences component of the University's General Education Core Curriculum. This course may fill 3 of a 15-hour Texas Higher Education Coordinating Board (THECB) requirement for "Social and Behavioral Sciences" courses in the general education curriculum. This course stresses the similarities and differences of the major world regions, with an emphasis on human behavior in a spatial context and teaches students to analyze the physical and cultural realms of our world by comparing and contrasting similarities and differences of the major world regions. An emphasis on remarkable physical features and cultural specialties as well as human impacts on the natural environment is provided, including the ethical need for environmental stewardship. The course allows students to synthesize a value-based interpretation of the world from a geographic perspective and to become positive contributors to the diverse community to which we all belong. Students will also learn the concept of culture as it is employed by geographers, who link cultural variations to world regions and will learn to compare cultural differences that occur on the planet that are influenced by regional geographic variation and locational realities. Over the five academic years of this review (2008, 2009, 2010, 2011, 2012), total fall-semester enrollments in GEO 1310 averaged 2984, with a decrease over the 5 years of 14%.

GEOL 1410 Physical Geology and GEOL 1420 Historical Geology are choices within the Natural Science component of the University's General Education Core Curriculum. These courses may fill the 6-hour THECB requirement for the "Natural Sciences" courses in the general education core curriculum. Physical Geology involves the study of materials making up the earth, the processes that act upon them, and the results of these processes; the development of tools for the interpretation of earth's history and structure, and the major geologic concepts. Historical geology considers the geologic history of the earth (with special emphasis on North America), the evolution of life, the continents through geologic time and the principles and procedures used in the interpretation of earth history. (Note: The Department of Geography assumed responsibility for the University's geology program and courses effective fall 2007.) These courses meet the goals of this component of general education by providing the student with an understanding of the scientific method as it applies to natural science. Students acquire an appreciation of a dynamic earth in which the hydrosphere and atmosphere interact with a not-so-solid lithosphere to produce ever-changing landscapes rich in natural

resources. During the five academic years of this review (2008, 2009, 2010, 2011, 2012), total fall-semester enrollments in GEO 1410 and 1420 averaged 842, with an increase of 35%.

The Department added GEO 1305 (Meteorology) and its optional lab GEO 1105, to the natural sciences component of the general education core curriculum as of 2009. Over the four academic years since its introduction as a General Education option (2009, 2010, 2011, 2012), total combined fall and spring semester enrollments in GEO 1305 averaged 478, with an increase of 600%. The department's [Strategic Plan](#) includes additional faculty hires that will assist teaching some of the service courses especially the GEO 1305 (Meteorology) course.

## **5. Licensing / Accrediting Bodies**

Texas State University is accredited by the Southern Association of Colleges and Schools (SACS); accreditation was most recently reaffirmed in 2010. The standards or principles of reaffirmation are available at <http://www.sacscoc.org/pdf/2010principlesofaccreditation>. The Texas State University SACS website explains the reaffirmation process and results <http://www.avpie.txstate.edu/SACS>.

## **B. Faculty**

### **1. Faculty Qualifications**

#### **a. Faculty List**

Table I.B.1.a on the following page lists all geography faculty rank, highest degree earned and graduate faculty appointments. Although geography faculty teach and advise according to their research interests, none are assigned to specific programs.

#### **b. Faculty Qualifications**

[Faculty qualifications and vitae](#) are available on the Geography Department's website.

#### **c. Graduate Faculty Criteria**

The Department of Geography follows the provisions of the University Policy and Procedure Statement ([PPS](#)) 7.03. The policies are designed to ensure that graduate faculty membership is based on a careful review of teaching, scholarship / creative activity and service. Criteria for Graduate Faculty include:

1. Graduate faculty may serve as instructors of record for graduate courses (5000 and 7000 level). Individuals lacking graduate faculty status are not allowed to teach graduate level courses. Appointment of an individual lacking graduate faculty status to teach a graduate course is considered a serious violation of university policy.
2. Graduate faculty may chair or serve on dissertation or master's committees. No member of the graduate faculty may chair the committee directing a student to a degree higher than the level of the highest degree earned by the graduate faculty member. Appointment of an individual lacking graduate faculty status to serve as a member of a graduate committee is considered a serious violation of university policy.
3. Minimum Graduate College criteria for faculty teaching graduate courses include:
  - a. Completion of the doctorate or other recognized terminal degree from an accredited institution;
  - b. Doctorate/recognized terminal degree in a discipline in or related to the assigned graduate course(s);
  - c. Proven record of scholarship or creative activity.
4. Individuals nominated must meet minimum Graduate College criteria. Each department/school may develop additional criteria and guidelines for eligibility that conform to departmental and college expectations in scholarly/creative activity in place for tenure requirements.

**Table I.B.1.a - Texas State Geography Faculty Information**

<b>Last Name</b>	<b>First Name</b>	<b>Academic Rank</b>	<b>Highest Degree Earned</b>	<b>Graduate Appointment</b>
Blanchard	Denise	Professor	Ph.D.	Core Doctoral
Blue	Sarah	Assistant Prof.	Ph.D.	Core Doctoral
Boehm	Richard	Professor	Ph.D.	Core Doctoral
Brown	Brock	Professor	Ph.D.	Associate Doctoral
Butler	David	Professor	Ph.D.	Core Doctoral
Carter	Mark	Senior Lecturer	M.A.G.	
Chow	Edwin	Associate Prof.	Ph.D.	Core Doctoral
Cooper	Brian	Senior Lecturer	Ph.D.	
Currit	Nathan	Associate Prof.	Ph.D.	Core Doctoral
Day	Fred	Professor	Ph.D.	Associate Doctoral
DeHon	Rene	Senior Lecturer	Ph.D.	Regular Graduate
Dixon	Richard	Professor	Ph.D.	Core Doc
Earl	Richard	Professor	Ph.D.	Associate Doctoral
Estaville	Lawrence	Professor	Ph.D.	Core Doctoral
Fuhrmann	Sven	Associate Prof.	Ph.D.	Core Doctoral
Giordano	Alberto	Professor	Ph.D.	Core Doctoral
Hagelman	Ron	Associate Prof.	Ph.D.	Core Doctoral
Hiner	Colleen	Assistant Prof.	Ph.D.	Core Doctoral
Huebner	Donald	Senior Lecturer	Ph.D.	Regular Graduate
Jensen	Jennifer	Assistant Prof.	Ph.D.	Core Doctoral
Jo	Injeong	Assistant Prof.	Ph.D.	Core Doctoral
Julian	Jason	Associate Prof.	Ph.D.	Core Doctoral
Larsen	Robert	Professor	Ph.D.	Associate Doctoral
Lu	Yongmei	Professor	Ph.D.	Core Doctoral
Macey	Susan	Professor	Ph.D.	Associate Doctoral
Meitzen	Kimberly	Assistant Prof.	Ph.D.	Core Doctoral
Muniz	Oswaldo	Professor	Ph.D.	Core Doctoral
Petersen	James	Professor	Ph.D.	Associate Doctoral
Romig	Kevin	Associate Prof.	Ph.D.	Core Doctoral
Suckling	Philip	Professor	Ph.D.	Core Doctoral
Tiefenbacher	John	Professor	Ph.D.	Core Doctoral
Wagner	Jon	Senior Lecturer	M.S.	
Zhan	Ben	Professor	Ph.D.	Core Doctoral

## 2. Faculty Publications

The geography faculty publication and editorship record is summarized by Table I.B.2. Representative peer-reviewed publication journals include Physical Geography, Applied Geography, International Journal of Society, Systems and Science, Revista Cartografica, European Journal of Educational Studies, Journal of Geography and Geographic Information Science, Journal of Transport Geography, International Journal of Sustainable Society, and Environmental Hazard.

Detailed [Faculty Bibliographies](#) - including publication titles / references and editorial board membership are compiled from faculty annual review [FARRS reports](#) submitted to the College of Liberal Arts.

Academic Years (AY)	2007	2008	2009	2010	2011	Totals
Books	4	3	4	8	3	22
Book Chapters, Refereed Articles, Essays, Stories, Poems and Other Works	24	40	75	89	54	282
Scholarly Papers, Presentations and Readings – International, National, Regional and State	67	84	91	91	74	407
Editorships of Journals and Membership on Editorial Boards – International, National, Regional and State	24	38	32	31	36	161

## 3. Faculty External Grants

Geography Department Faculty received a total of \$18,417,358 in total departmental grants, contracts, and program funding dollars during the study period. Dr. Robert Larsen received the Award for the Most Grants Submitted and Funded for Fiscal Year 2010 from the College of Liberal Arts. In 2010, Dr. Larsen received total funding of \$1,784,251. \$946,526 came from the U.S. Bureau of Reclamation Advanced Water Treatment Pilot and Demonstration Project Grants and was used to fund a pilot Project for Assessing Sustainability of Brackish Groundwater Desalination as New Water Supply for Central Texas. \$173,700 came from the Texas commission on Environmental Quality and the remaining \$142,926 came from the Texas Department of Motor Vehicles. Dr. Larsen consistently received funding over \$1M for each of the study years. Two other faculty members received funding over \$1M over the course of the study period; Dr. Richard Boehm in 2009 and Dr. Andrew Sansom in 2011. In 2011, Dr. Ben Zhan was awarded the Presidential Award for Excellence in Scholarly/Creative Activities by Texas State University. In addition to mentoring students and publishing research, Dr. Zhan obtained a \$499,987 grant from the U.S. Environmental Protection Agency for “Air Pollution-Exposure-Health Effects Indicators, Mining Massive Geographically Referenced Environmental Health Data to Identify Risk Factors for Birth Defects.” Table I.B.3 shows annual grant funding summary. Liberal Arts [Faculty Bibliographies](#) provide details.

Academic Year	Total Grant Value
2008	\$ 1,685,701.06
2009	\$ 1,672,246.41
2010	\$ 1,750,739.44
2011	\$ 2,184,815.12
2012	\$ 1,383,708.00

#### 4. Faculty Teaching Load

The Department of Geography faculty is comprised of 33 members – 17 full professors, 6 associate professors, 5 assistant professors and 5 senior lecturers. Ph.D. core faculty members (the majority of the geography faculty) have a 2-2 teaching load. The few non-Ph.D. core tenured faculty generally have a 3-3 teaching load. Senior Lecturers are on 4-4 teaching load. During the study period the department increased the number of ongoing Senior Lecturer positions from two to five in order to ensure adequate teaching strength and stability within the undergraduate program. The department's policies about workload are in accordance with the University policies [PPS 7.05](#). All of the current tenured/tenure track faculty are members of the Graduate Faculty and can therefore participate in the Master's degree programs. Core Ph.D. faculty serve as doctoral dissertation advisors and Associate Ph.D. faculty teach at the doctoral level and serve on Ph.D. student committees. It is anticipated that all future tenure-track faculty hires will become members of the Core Ph.D. faculty.

Faculty and graduate students contribute to institution-wide instructional efforts in a number of areas. The Geography department's first-year courses (1309, 1310, 1410 and 1420) fulfill requirements for the general education core curriculum and are taught by a mix of tenured faculty, senior lecturers and teaching assistants. Geography faculty members also served as undergraduate honors student thesis advisors and second-readers during this study period. The geography department did not offer instruction at the Round Rock Higher Education Center or other off-campus program sites during this study period.

#### 5. Student / Faculty Ratio

Table I.B.5 shows on average student / faculty ration of about 25 – 1 during the study period.

FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
24.1	24.3	24.6	26.2	27.7	25.38

#### 6. Faculty Achievements

Table I.B.6 summarizes Geography Faculty Achievements not already listed. In addition, geography faculty members serve as officers and board members for regional and national professional organizations such as the Association of American Geographers and the National Council for Geographic Education. Geography faculty members also serve on appointed local government boards and commissions such as the San Marcos Historic Preservation Commission and the Upper San Marcos River Watershed Board. Finally, geography faculty volunteer with non-profit groups such as the Hays County Women's Shelter and the San Marcos Greenbelt Alliance. [Faculty Bibliographies](#) maintained by the College of Liberal Arts detail additional faculty achievements.

Academic Years (AY)	2007	2008	2009	2010	2011
Faculty Awards – International, National and Regional	13	8	23	18	18
Faculty Awards – State, Local and University	18	24	19	19	27
Mentors of Graduate Students	26	49	67	70	69
Mentors of Undergraduate Students	1	6	8	12	4

#### 7. Faculty Profile

The geography faculty is becoming more “senior” with more full professors, ten of whom are 60 years of age or older. This indicates the potential for a significant number of retirements during the next five years. Many of these senior faculty members are important dedicated contributors to the undergraduate program. Given the doctoral status of the department and resulting rigorous promotion

and tenure requirements facing junior faculty members (including any new tenure-track hires), this demographic presents a significant challenge in the not-too-distant future. The department must meet the demand for undergraduate instruction while continuing to develop a strong research-intensive faculty to sustain a quality doctoral program.

### **8. Faculty Community / Public Service**

Geography faculty perform a wide-variety of community service activities such as serving on local boards and commissions, presenting lectures to community groups and serving as non-profit organization fund-raisers. During the study period, geography faculty received fourteen Service Awards. For example, in 2011, Dr. Lawrence Estaville was awarded the Outstanding Scholarship and Service Award by the Business Geography Specialty Group of the Association of American Geographers and Dr. James Petersen was awarded the George J. Miller Award for Distinguished Service to Geographic Education by the National Council for Geographic Education.

### **9. Teaching Evaluation**

Instructors for all course and laboratory sections are evaluated by students each semester using separate instruments for [undergraduate and graduate lecture sections](#) and [lab sections](#). Students are encouraged to provide written comments directly on these forms as well. The original forms including comments are provided to the instructor a few weeks after the completion of the semester providing both quantitative and qualitative evidence for instructors to modify their instructional methods such as spending less time lecturing and more time engaging students in class or providing a review of entry-level subject knowledge at the beginning of the semester. Copies of comments and summary results are maintained by the Department. Comparative results of student evaluations are provided by the Chair to each instructor using the summative evaluation questions on the survey instrument. For all undergraduate courses, faculty must also administer a [short evaluation form](#) that satisfies the requirements for Texas House Bill 2504, Public Access to Course Information. The summaries of these student perceptions can be accessed through the [HB 2504 website](#).

Peer evaluations are conducted for tenure-track Assistant Professors and Senior Lecturers by members of the faculty Personnel Committee. Results are conveyed to the faculty member and Chair via the [Peer Class Visitation for Evaluation of Teaching form](#). Peer evaluations are also conducted for part-time adjunct instructors and doctoral teaching assistants (with instructor-of-record responsibilities) by the departmental Teaching Assistant/Adjunct Mentoring and Review Committee, which is comprised of four senior tenured faculty members. The department schedules graduate-level, teaching practicum courses (GEO 5150/5250 and GEO 7150/7250) to prepare students for instructional assignments. These courses use a combination of workshops, weekly seminar sessions and individual mentoring to assist our graduate instructors. Lecture and lab instructors who are found to need improvement in their teaching are mentored by their senior-colleague mentor and the Chair. Lab instructors are also routinely mentored during the semester by the course professor. Graduate assistants who need further assistance are mentored by their advisor or graduate coordinator as appropriate. Finally, the Chair consults with the Undergraduate and Graduate Program Coordinators regarding course evaluations to insure the results are used for continuous program improvement such as updating course prerequisites and managing instructor teaching assignments.

### **10. Faculty Development**

- The geography department provides travel funds for faculty delivering papers at regional, national, or international conferences.
- Tenured and tenure-track faculty have 25% of their time assigned for research.
- All tenured faculty members with at least six years of continuous employment are eligible to apply for developmental leave.

- All tenured and tenure-track faculty are eligible to apply for summer [Research Enhancement Program](#) funding.
- All tenure-track faculty members select a “mentor” from the senior faculty when they arrive in the department. The purpose of the mentor is to guide them in the various requirements of departmental, college, and university life, particularly Annual Review and the tenure process, but also to advise in matters of teaching and research. . The mentor provides assistance with developing annual review materials and eventually materials for promotion and tenure as well as being a sounding board for advice and other issues. The Chair regularly consults with probationary faculty members and meets once per semester with the entire group of Assistant professor to discuss issues unique to this group.

## **C. Resources**

### **1. Facilities and Equipment**

#### Facilities

The department is housed on the first and third floors of the Evans Liberal Arts Building (ELA) with slightly over 10,000 sq. ft. on the first floor and slightly over 13,000 sq. ft. on the third floor (total of over 23,000 sq. ft.). The Department also has 2200 sq. ft. in the Medina Building for Dr. Larsen’s contract research grant operation. Floor plans for Geography’s facilities on the first and third floors of ELA show about 9,000 sq. ft. of teaching space including five first-call classrooms, two seminar rooms, four computer teaching labs, a physical geography teaching lab, two geology teaching labs, a small geology microscope lab, a rock lab and two graduate-student research computer labs . The department’s facilities provide faculty and graduate-student offices and spaces for the department’s research centers, as well as administrative offices and workrooms. Additional space in ELA became available during the study period which allowed the addition of a new geology lab, a larger department conference room and the repurposing of several department spaces. Finally, during the study period several classrooms were remodeled and new student desks purchased for geography classrooms.

#### Equipment

The Department has more than \$700,000 worth of inventoried equipment (i.e. items above \$500 each). The equipment inventory includes approximately 375 computers. The Department has four teaching computer labs – three with 20 student stations and one with 24 student stations. The labs are designated for primary use as follows: Room 120 – Advanced GIS; Room 121 – Cartography/Remote sensing; Room 122 – Quantitative Methods; and Room 123 – Introductory GIS. Dedicated research labs associated with the Texas center for Geographic Information Science include another 20 computers. Software for these labs includes the full ESRI GIS package and SPSS, plus specialized software for transportation, cartography and remote sensing. The department has approximately another 100 computers located in faculty and graduate student offices. All labs have color laser printers and faculty/staff/Graduate Student offices have personal B/W laser printers. The Department has other centralized color printers plus a large-format (60”) HP plotter. Several servers are maintained by the Department as file servers, license servers, web servers, and database servers. The departmental network routinely backs up all faculty and staff computers. Other departmental equipment includes: four survey-quality GPS receivers for research and our advanced GPS course plus 29 introductory teaching-level GPS units; an infrared spectrometer; a Total Station laser surveying station; research-quality and teaching-quality flow meters; field equipment; microscopes for geology; and other physical geography and geology teaching materials. During this study period the department was awarded \$62,476.49 in equipment grants through the Texas State University Academic Computing Committee.

## 2. Finances

Table I.C.2.a provides department financial information showing revenue versus expenses and Table I.C.2.b shows M & O (maintenance and operation) and aggregated salaries budget and expenditures.

SCH	Total Revenue	Instructional Expenses including Benefits	Revenue less Instructional Expense	Other Institutional Expense	Net Revenue
24,949	\$ 6,798,512.21	\$ 4,500,512.46	\$ 2,297,999.75	\$ 2,293,062.59	\$ 4,937.16

Fiscal Year	Budget	Expenditures	Carry Over		Total Budget
2008	\$ 254,732.66	\$ 248,323.90	\$ 6,408.76	M&O	\$ 3,466,470.48
	\$ 3,211,737.82	\$ 3,211,737.82		Salaries	
2009	\$ 230,167.16	\$ 229,438.01	\$729.15	M&O	\$ 3,592,776.96
	\$ 3,362,609.80	\$ 3,362,609.80		Salaries	
2010	\$ 260,945.81	\$ 261,033.18	\$(87.37)	M&O	\$ 3,671,072.05
	\$ 3,410,126.24	\$ 3,410,124.24		Salaries	
2011	\$ 262,099.52	\$ 262,115.01	\$(26.52)	M&O	\$ 3,840,474.81
	\$ 3,578,375.29	\$ 3,578,375.29		Salaries	
2012	\$ 268,557.64	\$ 269,265.14	\$(707.50)	M&O	\$ 3,853,789.83
	\$ 3,585,232.19	\$ 3,585,232.19	\$(108.00)	Salaries	

## 3. Library Holdings and Allocations

The Alkek Library provided the following summary and tables showing library allocations for the Department of Geography. Complete reports available through these links: 1) [Library Titles Spreadsheet](#); 2) [Library Holdings](#); 3) [Library Serials](#).

- Number of Books, Ebooks, A/V, annuals, current and non-current serials total items, excluding government documents: 16,178
- Number of current, direct serial subscriptions: 156
- Number of Research Databases (includes access not directly subscribed to): 31

Fiscal Year	Total Allocation	Serials (taken from total)
2009	\$121,717	\$110,603
2010	\$120,964	\$115,080
2011	\$124,586	\$114,819
2012	\$128,805	\$114,170
2013	\$131,372	\$118,514

**Table I.C.3.b - Geography Library Holdings by Call Number**

Call Number	Description	# of Holdings
G 1 - 922	Geography (General)	3722
G 1000 - 3122	Atlases	1126
G 3180 - 9980	Maps	137
GA 1 - 1776	Cartography. Mathematical geography	521
GB 3 - 5030	Physical geography	1403
GC 1 - 1581	Oceanography	569
GE 1 - 350	Environmental sciences	989
GF 1 - 900	Human ecology. Anthropogeography	1009
HB 848 - 3697	Population geography	1039
HD 101 - 1395	Land use	1086
K 3581-3598	Environmental law	97
QC 851 - 999	Meteorology. Climatology	1285
QE 1 - 999	Geology	2595
S 590 - 599	Soils	443
S 900 - 972	Conservation of natural resources	157

#### 4. Program Administration

Dr. Philip Suckling has served as Department Chair for the past eight years, overseeing all departmental activities and ensuring the department meets and fulfills its duties to students, faculty, and university. Beginning fall 2013, Dr. Alberto Giordano becomes Chair and Dr. Ronald Hagelman will assist in the newly-created position of Associate Chair. Dr. David Butler - Graduate Program Coordinator - and Dr. Richard Earl - Undergraduate Program Coordinator - will continue serving in their current positions.

#### 5. Unit Staff

The Department of Geography has seven full-time [staff positions](#) working directly for the academic unit.

- Senior Administrative Assistant III: Ms. Angelika Wahl  
Ms. Wahl coordinates all of the other staff members and serves as the Department Chair's main administrative staff member.
- Graduate Staff Advisor: Ms. Allison Glass-Smith  
Ms. Glass-Smith serves as the main administrative assistant to the Graduate Coordinator.
- Administrative Assistant II – Main Office: Ms. Patricia Hell-Jones  
Ms. Hell-Jones serves as our main office receptionist
- Administrative Assistant II: Ms. Stella LoPachin  
Ms. LoPachin serves as the main administrative assistant to the Undergraduate Coordinator
- Administrative Assistant II – Accounting: Ms. Katie Chamness  
Ms. Katie Chamness handles grants and contracts accounting and all departmental travel.
- Coordinator – Microcomputer Lab II: Mr. Daniel Hemenway  
Mr. Hemenway is our senior computer specialist with major responsibilities for the departmental computer network and other computer-related issues.
- Coordinator – Microcomputer Lab: Mr. Charles Robinson  
Mr. Robinson is our second computer specialist who assists Mr. Hemenway, and has major responsibilities for our teaching computer labs.

Additionally, approximately 10 work-study students provide additional support for various departmental tasks and operations. Finally, the Grosvenor Center for Geographic Education, the Texas

Alliance for Geographic Education and Dr. Larsen's grant/contract a total of four staff members. These positions are funded entirely from grant and contract sources. Both of these operations also employ significant numbers of student workers.

## **6. Developmental Activities**

### **a) Special resources available through endowment and gifts**

The Department of Geography hosts the Jesse H. Jones Distinguished Chair in Geographic Education (currently held by Dr. Richard Boehm) through a \$1,000,000 Houston Endowment. Some years ago, gifts of stock were contributed to the Department by Dr. Ray Y. Gildea. This endowment account allows for discretionary expenses, scholarships, and other items at the discretion of the Department Chair. The estate of Mr. Bernard W. Detsfelsen established a permanent endowment for the department. This gift approximately doubled the Department's total scholarship endowment. The Michael R. Young Excellence Endowment involves a very generous gift also used to help support the department's 30 endowed [scholarships](#) available to undergraduate and graduate students. The Department also maintains a modest discretionary account funded by private donations. These funds are used to facilitate a variety of activities in support of student organizations, departmental social events, etc. Finally, the department's Grosvenor Center for Geographic Education also has endowment funds housed within the National Geographic Society's foundation. Income from these endowment funds supports the Grosvenor scholar program and other activities of the center.

### **b) Efforts to expand these resources**

The College of Liberal Arts has developed an Advisory Board that works closely with the Department to discover potential development opportunities. Also, our faculty members maintain frequent contact with our alumni encouraging support for the department after graduation. Our premier event to encourage alumni relations is our annual Alumni Reunion and Student Celebration.

## **D. Conclusions and Recommendations**

### Conclusions

The Department of Geography has the faculty, staff and physical resources to continue to provide high-quality undergraduate and graduate education through a variety of carefully developed degree and certificate programs following the overall vision, mission and goals of the University, the College of Liberal Arts and the department while providing service courses for the general education curriculum and other academic departments and meeting requirements for accreditation. Geography faculty members are qualified instructors, productive researchers and engaged in University, discipline and community service. The department's staff is well-trained and efficient in handling administrative processes, department finances and computer support. The department's facilities in Evans Liberal Arts provide adequate classroom, lab and administrative space with the University's Alkek Library assisting with acquiring and cataloging sufficient research resources.

### Recommendations

Continue to attract and retain a high-quality faculty and staff, while continuing to maintain and upgrade teaching spaces and research facilities.

## Part II. ACADEMIC PROGRAMS – DEPARTMENT OF GEOGRAPHY

### **A1. B.A. or B.S. in Geography – CIP CODE: 45.07 - Undergraduate**

Major areas of study within this 4-digit CIP Code

B.A. or B.S. in Geography, (General Geography)

B.S. in Geography, (Physical Geography)

B.S. in Geography, (Geographic Information Science)

### **B1. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The Bachelor of Science Degree prepares students for a wide variety of career opportunities in both the private and public sectors with a program of courses designed to improve students understanding of the world framed by a geographic perspective. The geography department tailored the degree to improve the student's observation, research, reporting, analysis and interpretation skills. Depending on the major area of study, the degree emphasizes the physical science elements of geography or the theory and application of Geographic Information Science technologies. Students choosing the general geography degree have flexibility in course selection once required courses and prerequisites are met.

The Bachelor of Arts Degree (general geography major only) provides an option for a Liberal Arts student with a non-science minor or double Liberal Arts major.

Lower Division Geography Courses are designed to introduce students to the fundamental ideas and concepts physical and cultural geography as well as the utility of geographic information systems. Two of these courses - Meteorology and World Geography - serve as entry points for many of our geography majors as both are General Education core options. Lower-division geography courses fulfill most requirements and prerequisites necessary to prepare the student to advance to upper-division courses.

Upper Division Geography Courses provide advanced study and opportunities for students to apply the geographic perspective to the observation and analysis of the spatial aspects of the physical and cultural landscapes of the Earth. Upper-division courses provide an in-depth study of specific subject areas such as urban planning and environmental management and typically include fieldwork and the preparation of professional-type reports. Many upper-division courses are sequenced with prerequisites designed to improve the student's learning experience. All undergraduate take a minimum of nine hours of Writing Intensive (WI) coursework to graduate from Texas State University. All Writing Intensive (WI) Geography courses – are upper-division.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience" - to the mission and goals of the College of Liberal Arts and the University.

[The Department of Geography](#)   [The College of Liberal Arts](#)   [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

The University has detailed procedures and schedule for the development of courses and programs. New course and program development begins in the department, with approval from the Undergraduate Committee, the Geography Faculty, the Liberal Arts Advisory Committee (serving as the college curriculum committee), the University Curriculum Committee, and the Provost's office – University Policy and Procedure Statements (PPS) [PPS 2.01](#) and [PPS 2.05](#) provide necessary instructions. New courses and programs also require approval by the Texas State University System

Board of Regents and new programs by the Texas Higher Education Coordinating Board. At all stages, courses and programs are reviewed in order to provide sufficient offerings and balance among geography's various specialties to meet student needs, interests and market demand as well as to provide sufficient breath of course offerings and sufficient depth for specialization.

#### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title 'Geographer' is expected to grow 35% between 2010 and 2020.

Other geography occupations related directly to CIP 45.07 predicted to have average or above-average growth between 2010 and 2020 include [cartography and photogrammetry](#), [surveying and mapping](#) and [geosciences](#).

In order to meet increased market / student demand for Geographic Information Science skills, the department added a GPS course to complement GIS, Cartography and Remote Sensing offerings. In order to meet the demand for Geographic Information Science courses, the department increased the total number of available seats in these techniques courses to satisfy demand. Lecture sections of 60 students with three 20-student lab sections offered both fall and spring semesters have now become the norm.

#### Curriculum Coordination

Courses and programs are reviewed to avoid duplication and ensure consistency with University and State guidelines. The Geography Undergraduate Committee regularly updates course and program requirements. During the study period, the Department made six additions, five deletions and 20 changes to the Undergraduate Curriculum and numerous other [catalog edits \(highlight in green\)](#) in order to improve the academic programs with the goals of providing students with appropriate learning opportunities and an efficient path to graduation.

All degree and course requirements are described in the [University's Undergraduate Catalog 2012-2014](#) and detailed in the [geography section](#) of the catalog. The [Geography Department Website](#) provides advising forms for majors, minors and certificates that show requirements for each on a checklist. CIP Code 45.07 Checklists: [Geography](#) / [GIS](#) / [Physical Geography](#)

#### Curriculum Delivery

The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. [Long-term scheduling](#) facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning.

During the study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

Geography students take courses from other academic units in order to complete the General Education Core Curriculum as well as a required minor. The Department Website provides [detailed course listings](#) for all geography major, minor and certificate offerings including required / recommended courses from other academic units. Qualified Geography students may also enroll in interdisciplinary classes offered by the [Honors College](#).

#### **4. Student Learning Outcomes Assessment**

Texas State University's institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

All Geography majors will demonstrate knowledge of:

- The major physical features of the Earth and the ability to locate examples of Earth's major physical features on a map.
- The major cultural features of the Earth and the ability to locate examples of Earth's major cultural features on a map.
- Quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.
- The foundations and theories of geographic information systems (GIS) and use of the tools and methods of GIS.

Additionally, geography majors will demonstrate their knowledge of one specialized area of geography.

Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures undergraduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from 5 years of Learning Outcome Reports for each of the programs within CIP 45.07 [Geography General](#), [Physical](#) and [GI Science](#), student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Results of assessment findings have influenced curriculum changes made to improve the program and helped instructors improve their courses. For example, several prerequisite changes made during the study period were in part due to learning outcome results. Instructors have added additional handouts and worksheets to assist student learning based on learning outcomes for topics such as the importance of Earth / Sun relationships, the US Public Land Survey System and the identification and mapping soil types.

#### **5. Program Curriculum and Duration**

Students majoring in Geography CIP 45.07 - complete either the Bachelor of Art (B.A.) or the Bachelor of Science (B.S.) degree. The B.S. degree requires a minimum of 36 semester hours of Geography. The B.A. degree requires a minimum of 30 semester hours of Geography. Either degree requires at least a 2.5 GPA for geography courses attempted at Texas State University and at least a 2.25 GPA for all courses taken at Texas State University. Either degree also requires a minor area of study with a minimum of 18 semester hours. Texas State requires a minimum of 120 semester hours of coursework to graduate, including [General Education Core requirements](#), major requirements, minor requirements, and additional elective courses selected from disciplines other than major or minor. At least 36 semester hours must be advanced (3000 – 4000) level courses. At least 9 semester hours must be writing intensive (WI). The department also offers secondary social studies teaching certification, which requires students to complete an additional course beyond the BS minimum course requirement of 36 hours. The Department of Geography offers minors in Geography and Geology as well as one interdisciplinary minor - Nature and Heritage Tourism. The geography department networks with the departments of agriculture, anthropology, biology, chemistry, English, history, management, marketing, physics, physical fitness/wellness, recreation administration, and sociology in order to deliver the Nature and Heritage Tourism interdisciplinary minor. The Geology minor is now housed fully in the geography department and is a popular minor for Geography majors. Finally, the department offers four certificate programs: Geographic Information Science (19-20 hrs.),

Environmental Interpretation (15 to 16 hrs.), Location Analysis (16 to 18 hrs.) and Water Resources Policy (13 hrs.). The certificates allow students to add value to their degrees and enhance their employability. Depending on the timing of a student’s declaration of major, minor and decision to add a certificate to their program, the duration of the undergraduate geography programs are typical of those at other peer institutions. [Geography major, minor, and certificate requirements](#) are available on the Department’s Website.

## 6. Co-curricular Opportunities

The Geography Department manages a very active [internship-for-credit program](#) with 25-35 students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job posting (many posted by successful geography alumni) as well as geography career information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, walk-in career advising and other career-education opportunities, such as preparing for information interviews and job shadowing experiences. The department also provides a variety of opportunities to allow students to enrich their undergraduate experience. Each fall the Undergraduate Committee sponsors a ‘Welcome Back Picnic’ along the banks of the San Marcos River. The department also hosts the annual [Texas Geography Student Research Symposium](#), a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high quality research and our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony.

The geography department also sponsors [nine very active student organizations](#) that organize and participate in department, campus and community events. Finally, many Undergraduate Courses include educational field experiences and the department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the Geography of the Southwestern United States. All are available for course credit.

## C1. Student and Graduates (Source -[Texas State Institutional Research Office](#))

### 1. Student Demographics

#### a. Classification

Table II.C1.1.a shows the number of geography CIP 45.07 majors organized by major area of study. CIP 45.07 experienced modest growth from FY 2009 to FY 2013 with an average of 287 majors for the study period. Geography (General) was the most popular major area of study during the five-year period, while the number of Physical Geography majors remained the most stable.

Major Area of Study	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Average
Physical Geography	44	46	50	44	48	46
Geographic Information Science	98	110	101	94	111	103
Geography (General)	110	114	168	160	136	138
Total for CIP 45.07	252	270	319	298	295	287

**b. Gender Diversity / Ethnicity**

Gender Diversity

Table II.C1.1.b1 shows the gender diversity for undergraduate of CIP 45.07 majors. Students majoring in this CIP are predominately male - nearly 74% on average with little year to year variation - for the study period. From FY 2009 to FY 2010/2011 the number of females increased, but then began decreasing in FY 2012 and FY 2013.

Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	68	86	86	67	62	73.8
Male	181	226	212	197	214	206
Total	249	312	298	264	276	279.8
% Male	73%	72%	72%	75%	77%	73.80%

Ethnicity

Table II.C1.1.b2 shows the ethnic diversity for undergraduate of CIP 45.07 majors. Students majoring in this CIP are predominately white, non-Hispanic - nearly 75% on average with little year to year variation - for the study period. From FY 2009 to FY 2013 the number of Hispanics have increased from 30 to 53 students, while the number of students from other non-white ethnic groups have remained small and relatively stable.

Ethnicity	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Am Indian/Alaskan Native	6	8	6	3	3	5.2
Asian/Pacific Islander	4	5	7	4	6	5.2
Black, non-Hispanic	6	7	3	4	7	5.4
Hispanic	30	46	40	50	53	43.8
Multi-race, non-Hispanic, non-Black				2	6	4
Non-Resident International	5	4	4	1	1	3
Unknown	3	1	6	5	13	5.6
White, non-Hispanic	195	241	232	195	187	210
% White, non-Hispanic	78%	77.24%	77.85%	73.86%	67.75%	74.94%

**c. Probation and Suspension**

Table II.C1.1.c shows the academic standing of CIP 45.07 majors. Nearly 90% of all CIP 45.07 majors were in good standing during the study period. The number of students on probation and suspension averaged about 7% and 3% respectively and remained mostly stable during the five years.

Academic Standing	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
Good standing	89.4%	86.3%	91.3%	90.6%	90.9%	89.70%
Probation	6.0%	9.2%	6.4%	6.0%	5.7%	6.66%
Suspension	3.7%	4.0%	2.2%	3.4%	3.4%	3.34%

## 2. Student Time to Degree

Table II.C1.2 shows the student time to degree for CIP 45.07 majors. During the study period, CIP 45.07 majors took an average of 5.3 years to compete their degrees. FY 2008 students took 6.2 years (max) and FY 2009 students took 4.7 years (min) to complete their CIP 45.07 degrees.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
Time to degree in years	6.2	4.7	4.9	5.2	5.5	5.3

## 3. Student Publications and Awards

According to the [Undergraduate Faculty-Mentored Student Research and Awards list](#) compiled by the College of Liberal Arts undergraduate geography majors mentored by faculty members published numerous articles and attended many conferences including presenting research findings and posters at our Geography Student Research Symposium. In addition to the many Geography Department awards and [scholarships](#) presented at our Annual Geography Alumni Reunion and Student Celebration Awards and Scholarship Ceremony, many of our majors receive Academic Achievement Awards from the College of Liberal Arts and are also regular recipients of University-level scholarships and contenders for University-level awards. Finally, during the past five years many geography majors have successfully written proposals and received funding for on campus improvements through the [Environmental Services Fee](#) Committee.

## 4. Student Retention for First-Time, Full-Time Geography Majors

Table II.C1.4 shows the student retention rates for CIP 45.07 majors. From FY fall 2007 to FY fall 2011, retention rates averaged nearly 80%, but with a large difference between minimums (50%) and maximums (100%). The one and two-year percentages for fall 2009 and 2010 likely best typify CIP 45.07 retention rates.

Years	FY	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
Baseline		100.0%	100.0%	100.0%	100.0%	100.0%	
1.0 year		100.0%	75.0%	80.0%	94.1%	50.0%	79.82%
2.0 years		100.0%	50.0%	70.0%	94.1%	NA	78.53%

## 5. Student Graduation Rates

Table II.C1.5 shows the student graduation rates for CIP 45.07 majors. From FY fall 2002 to FY fall 2006, an average of about 21% of CIP 45.07 majors graduated in four years, an average of about 51% graduated in five years and 60% had graduated in 6 years. The percentage of CIP 45.07 majors graduating in four years increased overall during the study period.

Years	FY	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Averages
Baseline		100.0%	100.0%	100.0%	100.0%	100.0%	
4.0 years		21.7%	20.0%	14.3%	21.6%	26.7%	20.86%
5.0 years		56.5%	53.3%	52.4%	51.4%	43.3%	51.38%
6.0 years		65.2%	63.3%	61.9%	64.9%	46.7%	60.40%

## 6. Number of Students Enrolled and Student Credit Hour (SCH) Generation

Table II.C1.6 show enrollments and SCH Generation for CIP 45.07. Note that these data count the number of students enrolled in courses classified into CIP 45.07 not enrollments and SCH generation by programs within CIP 45.07.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
Student Enrollments	3,066	3,187	3,466	3,470	3,060	3,250
SCH Generation	8,511	8,719	9,300	9,310	8,115	8,791

## 7. Graduate Licensure Rates – Not Applicable

## 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. Each year during the study period the Office of Institutional Research conducts an [Alumni Survey](#) to collect information from graduates from the previous calendar year about their college experience, current employment status and job satisfaction. During the years 2008 – 2012, 133 Geography Alumni (from all Undergraduate CIP Codes for a better sample size) responded to the on-line survey. Ninety percent indicated that they were employed at the time of answering the survey. Of those employed, the majority of alumni responded that they were ‘satisfied’ or ‘very satisfied’ with their jobs that their jobs were related to their geography major. Another source of data to measure the success of our graduates in the workplace is the Department’s [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be exploited – a recent keyword search: ‘Texas State Geography’ produced 4,348 results – including many Geography Alumni.

## 9. Number of Degrees Conferred Annually

Table II.C1.9 shows the number of degrees conferred for CIP 45.07. Texas State University conferred a total of 300 undergraduate degrees for CIP 45.01 - with an average of 73 per year - during the five-year study period. The largest total number of degrees conferred (149) went to Geography (General) students and the smallest total number (36) to Physical Geography students. Overall, the number of degrees conferred for CIP 45.07 grew modestly during the study period.

Major Areas of Study	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total	Averages
Physical Geography	NA	9	13	11	3	36	9
G.I. Science	20	20	31	37	27	115	27
Geography (General)	37	28	45	39	37	149	37
CIP 45.07 Total	57	57	89	87	73	300	73

## 10. Admissions

### a. Admission Scores

Table II.C10.a shows incoming freshman admissions scores for CIP 45.07. SAT scores averaged 1079 and ACT scores averaged 24 for the study period. Note interesting SAT score maximum for fall 2010.

Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
Headcount	2	16	20	17	6	
SAT	1040	1072	1055	1172	1057	1079
ACT	NA	23	25	25	23	24

### b. Admission Requirements and Review

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities outside the classroom as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards. Students meeting university admission standards enter the undergraduate Geography program as pre-majors by meeting with an [Academic Advisor](#) and declaring Geography CIP 45.07 as their major (or minor) which is coded into the '[Degree Works](#)' [Degree Audit System](#). To become majors, students must complete GEO 1309 or 1310; GEO 2410, and GEO 3301 (10 semester hours) with a grade of “C” or higher in each course. The Texas State [Undergraduate Admissions Office](#) maintains a website providing comprehensive information on the admissions process and dealing for both [freshman](#) and [transfer](#) students. The Admissions Office also publishes a series of [Transfer Planning Guides](#) to assist students planning to transfer to Texas State University from another institution in Texas. The Department expects the Admissions Office to continue to provide high-quality admissions processing during the next five years as it has during this study period.

### c. Recruitment

The Geography Department participates four times a year in [Bobcat Day](#), a University sponsored on-campus recruitment event that takes place two Saturdays in the spring, and two in the fall. These are very large events with thousands of participants – primarily high-school juniors and seniors, along with their parents. The Department also participates in other on-campus recruiting opportunities such as the ‘Un-decided Major Fair’ and the ‘Surviving the Sophomore Slump.’ Department representatives visit high-schools and community colleges on a regular basis and host both individual and group visits to the Department, often in coordination with the [Texas Alliance for Geographic Education](#) which is housed in the Department. The Department Website page - [Prospective Undergraduates](#) - includes a very informative PowerPoint presentation: ‘[Texas State Geography: A Great Place to Launch Your Career](#)’ with great photos and useful website ‘screen-shots.’ Since many of our majors who declare geography are ‘major-changers,’ one of our greatest recruitment tools is the word-of-mouth message from student to student about our geography programs – often through our student organizations. The department maintains active communication with geography faculty at Austin Community College and branches of San Antonio College, with whom the department has articulation agreements. Also, the department maintains active communication with geography faculty at Blinn College and Alvin College that has led to many of their students completing their degrees in our program. Finally, recognizing that faculty members serve as role-models and examples for our students, the Department of Geography continues working diligently to hire a diverse faculty to provide those role-models.

## **11. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our students' educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#), such as the [Student Learning Assistance Center](#) (SLAC) and the [Writing Center](#).

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- GTU Student Tutors and Mentors
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

## **12. Alumni Relations**

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal award and scholarship ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from alumni – on the [Geography Careers TRACS site](#).

## D1. Conclusions and Recommendations

### Conclusions

Tables II.D1.a and Table II.D1.b show and compare the number of undergraduate geography CIP 45.07 majors and degrees conferred with other geography CIPs. For CIP 45.07, the number of undergraduate geography majors averaged 287 students / year during the study period. The majority of these students were white, non-Hispanic males. Almost 90% of undergraduate CIP 45.07 students were in good academic standing and averaged 5.3 years to complete their degrees from 2008 – 2012. Two-year retention rates averaged 78.53% and six-year graduation rates averaged 60.4%. Texas State University conferred an average of 73 degrees for CIP 45.07 during the study period.

**Table II.D1.a - Undergraduate Geography Majors**

CIP and Major Areas of Study	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
CIP 45.07 - Physical Geography	32	44	46	50	44	43.2
CIP 45.07 - Geography (General)	110	114	168	160	136	137.6
CIP 45.07 - Geographic Information Science	86	98	110	101	94	97.8
CIP 03.01 - Resource & Environmental Studies	153	135	170	218	207	176.6
CIP 03.02 - Water Resources	16	31	49	44	48	37.6
CIP 04.03 - Urban and Regional Planning	88	88	86	92	92	89.2
Totals	485	510	629	665	621	582.0

**Table II.D1.b - Undergraduate Geography Degrees Conferred**

CIP and Major Areas of Study	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
CIP 45.07 - Physical Geography	No data	9	13	11	3	9
CIP 45.07 - Geography (General)	37	28	45	39	37	37.2
CIP 45.07 - Geographic Information Science	20	20	31	37	27	27
CIP 03.01 - Resource & Environmental Studies	59	47	53	54	76	57.8
CIP 03.02 - Water Resources	1	6	12	10	11	8
CIP 04.03 - Urban and Regional Planning	25	35	28	22	28	27.6
Totals	142	145	182	173	188	166

### Recommendations

The Texas State Geography Department should continue to provide high-quality classroom instruction, along with offering field experiences, internships and opportunities to participate in student organizations and other departmental activities. Recruitment efforts should continue to focus on increasing gender and ethnic diversity. Undergraduate students should be encouraged to present at conferences and publish their research.

## **A2. B.A. or B.S. in Geography – CIP CODE: 03.01 - Undergraduate**

B.S. in Geography, Resource and Environmental Studies (RES)

### **B2. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The Bachelor of Science Degree prepares students for a wide variety of career opportunities in both the private and public sectors with a program of courses designed to improve students understanding of the world framed by a geographic perspective. The geography department tailored the degree to improve the student's observation, research, reporting, analysis and interpretation skills. Depending on the major area of study, the degree emphasizes the physical science elements of geography or the theory and application of Geographic Information Science technologies. Students choosing the general geography degree have flexibility in course selection once required courses and prerequisites are met.

The Bachelor of Arts Degree (general geography major only) provides an option for a Liberal Arts student with a non-science minor or double Liberal Arts major.

Lower Division Geography Courses are designed to introduce students to the fundamental ideas and concepts physical and cultural geography as well as the utility of geographic information systems. Two of these courses - Meteorology and World Geography - serve as entry points for many of our geography majors as both are General Education core options. Lower-division geography courses fulfill most requirements and prerequisites necessary to prepare the student to advance to upper-division courses.

Upper Division Geography Courses provide advanced study and opportunities for students to apply the geographic perspective to the observation and analysis of the spatial aspects of the physical and cultural landscapes of the Earth. Upper-division courses provide an in-depth study of specific subject areas such as resource and environmental management and typically include fieldwork and the preparation of professional-type reports. Many upper-division courses are sequenced with prerequisites designed to improve the student's learning experience. All undergraduate take a minimum of nine hours of [Writing Intensive \(WI\) coursework](#) to graduate from Texas State University. All [Writing Intensive \(WI\) Geography courses](#) are upper-division.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience" - to the mission and goals of the College of Liberal Arts and the University.

[The Department of Geography](#)   [The College of Liberal Arts](#)   [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

The University has detailed procedures and schedule for the development of courses and programs. New course and program development begins in the department, with approval from the Undergraduate Committee, the Geography Faculty, the Liberal Arts Advisory Committee (serving as the college curriculum committee), the University Curriculum Committee, and the Provost's office – University Policy and Procedure Statements (PPS) [PPS 2.01](#) and [PPS 2.05](#) provide necessary instructions. New courses and programs also require approval by the Texas State University System Board of Regents and new programs by the Texas Higher Education Coordinating Board. At all stages, courses and programs are reviewed in order to provide sufficient offerings and balance among geography's various specialties to meet student needs, interests and market demand as well as to provide sufficient breath of course offerings and sufficient depth for specialization.

### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title ‘Geographer’ is expected to grow 35% between 2010 and 2020.

Geography occupations directly related to CIP 03.01 predicted to have average or above-average growth between 2010 and 2020 include [Environmental Protection Technicians](#) and [Environmental Specialists](#).

### Curriculum Coordination

Courses and programs are reviewed to avoid duplication and ensure consistency with University and State guidelines. The Geography Undergraduate Committee regularly updates course and program requirements. During the study period, the Department made six additions, five deletions and 20 changes to the Undergraduate Curriculum and numerous other [catalog edits \(highlight in green\)](#) in order to improve the academic programs with the goals of providing students with appropriate learning opportunities and an efficient path to graduation. All degree and course requirements are described in the [University’s Undergraduate Catalog 2012-2014](#) and detailed in the [geography section](#) of the catalog. The [Geography Department Website](#) provides advising forms for majors, minors and certificates that show requirements for each on a checklist. CIP Code 03.01 Checklist: [Resource and Environmental Studies](#)

### Curriculum Delivery

The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. [Long-term scheduling](#) facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning.

During the study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

Geography students take courses from other academic units in order to complete the General Education Core Curriculum as well as a required minor. The Department Website provides [detailed course listings](#) for all geography major, minor and certificate offerings including required / recommended courses from other academic units. Qualified Geography students may also enroll in interdisciplinary classes offered by the [Honors College](#).

### **4. Student Learning Outcomes Assessment**

Texas State University’s institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

All Geography majors will demonstrate knowledge of:

- The major physical features of the Earth and the ability to locate examples of Earth’s major physical features on a map.
- The major cultural features of the Earth and the ability to locate examples of Earth’s major cultural features on a map.

- Quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.
- The foundations and theories of geographic information systems (GIS) and use of the tools and methods of GIS.

Additionally, geography majors will demonstrate their knowledge of one specialized area of geography.

Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures undergraduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from [5 years of Learning Outcome Reports for CIP 03.01](#) student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Results of assessment findings have influenced curriculum changes made to improve the program and helped instructors improve their courses. For example, several prerequisite changes made during the study period were in part due to learning outcome results. Instructors enhanced current lecture materials (Power Points, handouts, in-class projects) and added readings for covering contemporary energy issues - a topic identified by the learning outcomes process as a weak area of student knowledge.

## 5. Program Curriculum and Duration

Students majoring in Geography CIP 03.01 - complete the Bachelor of Science (B.S.) degree. The B.S. degree requires a minimum of 36 semester hours of Geography. The degree requires at least a 2.5 GPA for geography courses attempted at Texas State University and at least a 2.25 GPA for all courses taken at Texas State University. Either degree also requires a minor area of study with a minimum of 18 semester hours. Texas State requires a minimum of 120 semester hours of coursework to graduate, including [General Education Core requirements](#), major requirements, minor requirements, and additional elective courses selected from disciplines other than major or minor. At least 36 semester hours must be advanced (3000 – 4000) level courses. At least 9 semester hours must be writing intensive (WI). The department also offers secondary social studies teaching certification, which requires students to complete an additional course beyond the BS minimum course requirement of 36 hours. The Department of Geography offers minors in Geography and Geology as well as one interdisciplinary minor - Nature and Heritage Tourism. The geography department networks with the departments of agriculture, anthropology, biology, chemistry, English, history, management, marketing, physics, physical fitness/wellness, recreation administration, and sociology in order to deliver the Nature and Heritage Tourism interdisciplinary minor. The Geology minor is now housed fully in the geography department and is a popular minor for Geography majors. Finally, the department offers four certificate programs: Geographic Information Science (19-20 hrs.), Environmental Interpretation (15 to 16 hrs.), Location Analysis (16 to 18 hrs.) and Water Resources Policy (13 hrs.). The certificates allow students to add value to their degrees and enhance their employability. Depending on the timing of a student's declaration of major, minor and decision to add a certificate to their program, the duration of the undergraduate geography programs are typical of those at other peer institutions. Geography major, minor, and certificate requirements are available on the [Department's Website](#).

## 6. Co-curricular Opportunities

The Geography Department manages a very active [internship-for-credit program](#) with 25-35 students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job posting (many posted by successful geography alumni) as well as geography career

information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, walk-in career advising and other career-education opportunities, such as preparing for information interviews and job shadowing experiences. The department also provides a variety of opportunities to allow students to enrich their undergraduate experience. Each fall the Undergraduate Committee sponsors a ‘Welcome Back Picnic’ along the banks of the San Marcos River. The department also hosts the annual [Texas Geography Student Research Symposium](#), a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high quality research and our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony.

The geography department also sponsors [nine very active student organizations](#) that organize and participate in department, campus and community events. Finally, many Undergraduate Courses include educational field experiences and the department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the Geography of the Southwestern United States. All are available for course credit.

## C2. Student and Graduates (Source-[Texas State Institutional Research Office](#))

### 1. Student Demographics

#### a. Classification

Table II.C2.1.a shows the number of geography CIP 03.01 majors. CIP 03.01 experienced modest overall growth from FY 2009 to FY 2013 with an average of 177 majors for the study period.

Table II.C2.1.a - Undergraduate Geography Majors CIP 03.01						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Number of Majors	153	135	170	218	207	177

#### b. Gender Diversity / Ethnicity

##### Gender Diversity

Table II.C2.1.b1 shows the gender diversity for undergraduate CIP 03.01 majors. Students majoring in this CIP are predominately male - nearly 60% on average with little year to year variation - for the study period. From FY 2009 to FY 2010 the number of females increased, decreased in FY 2012 and then increased in FY 2013.

Table II.C2.1.b1 - Gender Diversity Undergraduate Majors CIP 03.01						
Gender	FY 2009	FY 2010	FY 2010	FY 2012	FY 2013	Averages
Female	51	76	91	73	82	74.6
Male	82	91	122	126	139	112
Total	133	167	213	199	221	186.6
% Male	61.65%	54.49%	57.28%	63.32%	62.90%	59.93%

## Ethnicity

Table II.C2.1.b2 shows the ethnic diversity for undergraduate of CIP 03.01 majors. Students majoring in this CIP are predominately white, non-Hispanic - nearly 83% on average with little year to year variation - for the study period. From FY 2009 to FY 2013 the number of Hispanics have increased from 13 to 37 students, while the number of students from other non-white ethnic groups have remained small and unchanged.

Ethnicity	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Am Indian/Alaskan Native	0	1	2	2	0	1
Asian/Pacific Islander	1	3	2	1	1	1.6
Black, non-Hispanic	0	1	2	1	2	1.2
Hispanic	13	21	20	29	37	24
Multi-race, non-Hispanic, non-Black				2	3	2.5
Non-Resident International	2	3	2	1	1	1.8
Unknown	1	2	2	2	3	2
White, non-Hispanic	116	136	183	162	174	154.2
% White, non-Hispanic	87.22%	81.44%	85.92%	81.00%	78.73%	82.86%

### **c. Probation and Suspension**

Table II.C2.1.c shows the academic standing of CIP 03.01 majors. Ninety-three percent of all CIP 03.01 majors were in good standing during the study period. The number of students on probation and suspension averaged about 4% and 2% respectively and remained mostly stable during the five years.

Academic Standing	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
Good standing	92.7%	95.5%	94.0%	93.0%	92.5%	93.54%
Probation	4.7%	3.8%	3.6%	3.8%	4.5%	4.08%
Suspension	2.0%	0.8%	2.4%	3.3%	3.0%	2.30%

### **2. Student Time to Degree**

Table II.C.2.2 shows that CIP 03.01 geography students averaged 4.9 years to graduation during the study period.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
Time to degree in years	6.0	4.8	4.3	5.5	4.0	4.9

### **3. Student Publications and Awards**

According to the [Undergraduate Faculty-Mentored Student Research and Awards](#) list compiled by the College of Liberal Arts undergraduate geography majors mentored by faculty members published numerous articles and attended many conferences including presenting research findings and posters at our Geography Student Research Symposium. In addition to the many Geography Department awards and [scholarships](#) presented at our Annual Geography Alumni Reunion and Student Celebration Awards and Scholarship Ceremony, many of our majors receive Academic Achievement Awards from the College of Liberal Arts and are also regular recipients of University-level scholarships and contenders for University-level awards. Finally, during the past five years many geography majors have successfully written proposals and received funding for on campus improvements through the [Environmental Services Fee](#) Committee.

#### 4. Student Retention for First-Time Geography Majors

Table II.C.2.4 shows that one and two year retention rates average more than 80% for CIP 03.01 undergraduate geography students.

Table II.C.2.4 - Student Retention Rates for CIP 03.01 by Cohort Semester						
Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%	
1.0 year	71.4%	100.0%	72.7%	100.0%	60.0%	80.82%
2.0 years	100.0%	72.7%	63.6%	93.3%	NA	82.40%

#### 5. Student Graduation Rates

Table II.C.2.5 shows that nearly 69% of CIP 03.01 undergraduate geography students graduate in five years and more than 76% graduate in six years.

Table II.C.2.5 - CIP 03.01 Graduation Rates by Cohort Semester						
Fiscal Years (FY)	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Averages
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%	
4.0 years	15.4%	17.4%	33.3%	38.9%	53.3%	31.66%
5.0 years	61.5%	56.5%	73.3%	72.2%	80.0%	68.70%
6.0 years	76.9%	73.9%	73.3%	77.8%	80.0%	76.38%

#### 6. Student Enrollments and Student Credit Hour (SCH) Generation

Table II.C.2.6 show enrollments and SCH Generation for CIP 03.01. Note that these data count the number of students enrolled in courses classified into CIP 03.01 not enrollments and SCH generation by programs within CIP 03.01.

Table II. C.2.6 - CIP 03.01 Enrollments and SCH Generation					
Fiscal Years (FY)	2008	2009	2010	2011	2012
# Enrollments	153	135	170	218	207
SCH Generation	126	114	81	267	147

#### 7. Graduate Licensure Rates – Not Applicable

#### 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. Each year during the study period the Office of Institutional Research conducts an [Alumni Survey](#) to collect information from graduates from the previous calendar year about their college experience, current employment status and job satisfaction. During the years 2008 – 2012, 133 Geography Alumni (from all Undergraduate CIP Codes for a better sample size) responded to the on-line survey. Ninety percent indicated that they were employed at the time of answering the survey. Of those employed, the majority of alumni responded that they were ‘satisfied’ or ‘very satisfied’ with their jobs that their jobs were related to their geography major. Another source of data to measure the success of our graduates in the workplace is the Department’s [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be

exploited – a recent keyword search: ‘Texas State Geography’ produced 4,348 results – including many Geography Alumni.

## 9. Number of Degrees Conferred Annually

Table II.C2.9 shows the number of degrees conferred for CIP 03.01. Texas State University conferred a total of 289 undergraduate degrees for CIP 03.01 - with an average of 58 per year - during the five-year study period. Overall, the number of degrees conferred for CIP 03.01 remained stable during the study period until FY 2012

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Totals	Averages
Number of Degrees	59	47	53	54	76	289	58

## 10. Admissions

### a. Admission Scores

Table II.C2.10.a shows CIP 03.01 major freshman admissions scores averaged 1058 for those who took the SAT and 23 for those students who took the ACT.

<b>Fiscal Years (FY)</b>	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Average Scores
Headcount	7	11	11	15	5	
SAT	1069	1039	1064	1168	950	1058
ACT	NA	23	23	24	NA	23

### b. Admission Requirements and Review

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities outside the classroom as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards. Students meeting university admission standards enter the undergraduate Geography program as pre-majors by meeting with an [Academic Advisor](#) and declaring Geography – Resource and Environmental Studies CIP 03.01 as their major (or minor) which is coded into the ['Degree Works' Degree Audit System](#). To become majors, students must complete GEO 1309 or 1310; GEO 2410, and GEO 3301 (10 semester hours) with a grade of “C” or higher in each course. The Texas State [Undergraduate Admissions Office](#) maintains a website providing comprehensive information on the admissions process and dealing for both [freshman](#) and [transfer](#) students. The Admissions Office also publishes a series of [Transfer Planning Guides](#) to assist students planning to transfer to Texas State University from another institution in Texas. The Department expects the Admissions Office to continue to provide high-quality admissions processing during the next five years as it has during this study period.

### c. Recruitment

The Geography Department participates four times a year in [Bobcat Day](#), a University sponsored on-campus recruitment event that takes place two Saturdays in the spring, and two in the fall. These are very large events with thousands of participants – primarily high-school juniors and seniors, along with their parents. The Department also participates in other on-campus recruiting opportunities such as the ‘Un-decided Major Fair’ and the ‘Surviving the Sophomore Slump.’ Department representatives visit high-schools and community colleges on a regular basis and host both individual and group visits to the Department, often in coordination with the [Texas Alliance for Geographic Education](#) which is housed in the Department. The Department Website page - [Prospective Undergraduates](#) - includes a

very informative PowerPoint presentation: '[Texas State Geography: A Great Place to Launch Your Career](#)' with great photos and useful website 'screen-shots.' Since many of our majors who declare geography are 'major-changers,' one of our greatest recruitment tools is the word-of-mouth message from student to student about our geography programs – often through our student organizations. The department maintains active communication with geography faculty at Austin Community College and branches of San Antonio College, with whom the department has articulation agreements. Also, the department maintains active communication with geography faculty at Blinn College and Alvin College that has led to many of their students completing their degrees in our program. Finally, recognizing that faculty members serve as role-models and examples for our students, the Department of Geography continues working diligently to hire a diverse faculty to provide those role-models.

### **11. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our students' educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#), such as the [Student Learning Assistance Center](#) (SLAC) and the [Writing Center](#).

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- GTU Student Tutors and Mentors
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

### **12. Alumni Relations**

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal award and scholarship ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from alumni – on the [Geography Careers TRACS site](#).

## D2. Conclusions and Recommendations

### Conclusions

Tables II.D2.a and Table II.D2.b show and compare undergraduate geography CIP 03.01 majors and degrees conferred with other geography CIPs.

**Table II.D2.a - Undergraduate Geography Majors**

CIP and Major Areas of Study	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
CIP 45.07 - Physical Geography	32	44	46	50	44	43.2
CIP 45.07 - Geography (General)	110	114	168	160	136	137.6
CIP 45.07 - Geographic Information Science	86	98	110	101	94	97.8
CIP 03.01 - Resource & Environmental Studies	153	135	170	218	207	176.6
CIP 03.02 - Water Resources	16	31	49	44	48	37.6
CIP 04.03 - Urban and Regional Planning	88	88	86	92	92	89.2
Totals	485	510	629	665	621	582.0

**Table II.D2.b - Undergraduate Geography Degrees Conferred**

CIP and Major Areas of Study	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
CIP 45.07 - Physical Geography	NA	9	13	11	3	9
CIP 45.07 - Geography (General)	37	28	45	39	37	37.2
CIP 45.07 - Geographic Information Science	20	20	31	37	27	27
CIP 03.01 - Resource & Environmental Studies	59	47	53	54	76	57.8
CIP 03.02 - Water Resources	1	6	12	10	11	8
CIP 04.03 - Urban and Regional Planning	25	35	28	22	28	27.6
Totals	142	145	182	173	188	166

For CIP 03.01, the number of undergraduate geography majors averaged 177 students / year during the study period. The majority of these students were white, non-Hispanic males. 93% of undergraduate CIP 03.01 students were in good academic standing and averaged 4.9 years to complete their degrees from 2008 – 2012. Two-year retention rates averaged 82% and six-year graduation rates averaged 76%. During the study period, a total of 289 degrees were conferred (58 / year average) for CIP 03.01.

### Recommendations

The Texas State Geography Department should continue to provide high-quality classroom instruction, along with offering field experiences, internships and opportunities to participate in student organizations and other departmental activities. Recruitment efforts should continue to focus on increasing gender and ethnic diversity.

### **A3. B.A. or B.S. in Geography – CIP CODE: 03.02 - Undergraduate**

B.S. in Geography, Water Resources

### **B3. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The Bachelor of Science Degree prepares students for a wide variety of career opportunities in both the private and public sectors with a program of courses designed to improve students understanding of the world framed by a geographic perspective. The geography department tailored the degree to improve the student's observation, research, reporting, analysis and interpretation skills. Depending on the major area of study, the degree emphasizes the physical science elements of geography or the theory and application of Geographic Information Science technologies. Students choosing the general geography degree have flexibility in course selection once required courses and prerequisites are met.

The Bachelor of Arts Degree (general geography major only) provides an option for a Liberal Arts student with a non-science minor or double Liberal Arts major.

Lower Division Geography Courses are designed to introduce students to the fundamental ideas and concepts physical and cultural geography as well as the utility of geographic information systems. Two of these courses - Meteorology and World Geography - serve as entry points for many of our geography majors as both are General Education core options. Lower-division geography courses fulfill most requirements and prerequisites necessary to prepare the student to advance to upper-division courses.

Upper Division Geography Courses provide advanced study and opportunities for students to apply the geographic perspective to the observation and analysis of the spatial aspects of the physical and cultural landscapes of the Earth. Upper-division courses provide an in-depth study of specific subject areas such as urban planning and environmental management and typically include fieldwork and the preparation of professional-type reports. Many upper-division courses are sequenced with prerequisites designed to improve the student's learning experience. All undergraduate take a minimum of nine hours of Writing Intensive (WI) coursework to graduate from Texas State University. All Writing Intensive (WI) Geography courses are upper-division.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience" - to the mission and goals of the College of Liberal Arts and the University.

[The Department of Geography](#)   [The College of Liberal Arts](#)   [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

The University has detailed procedures and schedule for the development of courses and programs. New course and program development begins in the department, with approval from the Undergraduate Committee, the Geography Faculty, the Liberal Arts Advisory Committee (serving as the college curriculum committee), the University Curriculum Committee, and the Provost's office – University Policy and Procedure Statements (PPS) [PPS 2.01](#) and [PPS 2.05](#) provide necessary instructions. New courses and programs also require approval by the [Texas State University System Board of Regents](#) and new programs by the [Texas Higher Education Coordinating Board](#). At all stages, courses and programs are reviewed in order to provide sufficient offerings and balance among geography's various specialties to meet student needs, interests and market demand as well as to provide sufficient breath of course offerings and sufficient depth for specialization.

### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title ‘Geographer’ is expected to grow 35% between 2010 and 2020.

Other geography occupations related to CIP 03.02 predicted to have average or above-average growth between 2010 and 2020 include [Environmental Protection Technicians](#) and [Environmental Specialists](#) and [Hydrologists](#).

### Curriculum Coordination

Courses and programs are reviewed to avoid duplication and ensure consistency with University and State guidelines. The Geography Undergraduate Committee regularly updates course and program requirements. During the study period, the Department made six additions, five deletions and 20 changes to the Undergraduate Curriculum and numerous other [catalog edits \(highlight in green\)](#) in order to improve the academic programs with the goals of providing students with appropriate learning opportunities and an efficient path to graduation. All degree and course requirements are described in the [University’s Undergraduate Catalog 2012-2014](#) and detailed in the [geography section](#) of the catalog. The [Geography Department Website](#) provides advising forms for majors, minors and certificates that show requirements for each on a checklist. CIP Code 03.02 Checklist: [Water Studies](#).

### Curriculum Delivery

The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. [Long-term scheduling](#) facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning.

During the study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

Geography students take courses from other academic units in order to complete the General Education Core Curriculum as well as a required minor. The [Department Website](#) provides detailed course listings for all geography major, minor and certificate offerings including required / recommended courses from other academic units. Qualified Geography students may also enroll in interdisciplinary classes offered by the [Honors College](#).

### **4. Student Learning Outcomes Assessment**

Texas State University’s institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

All Geography majors will demonstrate knowledge of:

- The major physical features of the Earth and the ability to locate examples of Earth’s major physical features on a map.
- The major cultural features of the Earth and the ability to locate examples of Earth’s major cultural features on a map.
- Quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.

- The foundations and theories of geographic information systems (GIS) and use of the tools and methods of GIS.

Additionally, geography majors will demonstrate their knowledge of one specialized area of geography. Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures undergraduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from [5 years of Learning Outcome Reports for CIP 03.02](#) student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Results of assessment findings have influenced curriculum changes made to improve the program and helped instructors improve their courses. For example, several prerequisite changes made during the study period were in part due to learning outcome results. Instructors have begun returning assignments with corrections as a learning tool to emphasize the importance of following prescribed bibliographic format for reference citations as a result of learning outcomes assessment data.

## **5. Program Curriculum and Duration**

Students majoring in Geography CIP 03.02 complete the Bachelor of Science (B.S.) degree. The B.S. degree requires a minimum of 36 semester hours of Geography. The degree requires at least a 2.5 GPA for geography courses attempted at Texas State University and at least a 2.25 GPA for all courses taken at Texas State University. The degree also requires a minor area of study with a minimum of 18 semester hours. Texas State requires a minimum of 120 semester hours of coursework to graduate, including [General Education Core requirements](#), major requirements, minor requirements, and additional elective courses selected from disciplines other than major or minor. At least 36 semester hours must be advanced (3000 – 4000) level courses. At least 9 semester hours must be writing intensive (WI). The department also offers secondary social studies teaching certification, which requires students to complete an additional course beyond the BS minimum course requirement of 36 hours. The Department of Geography offers minors in Geography and Geology as well as one interdisciplinary minor - Nature and Heritage Tourism. The geography department networks with the departments of agriculture, anthropology, biology, chemistry, English, history, management, marketing, physics, physical fitness/wellness, recreation administration, and sociology in order to deliver the Nature and Heritage Tourism interdisciplinary minor. The Geology minor is now housed fully in the geography department and is a popular minor for Geography majors. Finally, the department offers four certificate programs: Geographic Information Science (19-20 hrs.), Environmental Interpretation (15 to 16 hrs.), Location Analysis (16 to 18 hrs.) and Water Resources Policy (13 hrs.). The certificates allow students to add value to their degrees and enhance their employability. Depending on the timing of a student's declaration of major, minor and decision to add a certificate to their program, the duration of the undergraduate geography programs are typical of those at other peer institutions. Geography major, minor, and certificate requirements are available on the [Department's Website](#).

## **6. Co-curricular Opportunities**

The Geography Department manages a very active [internship-for-credit program](#) with 25-35 students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job posting (many posted by successful geography alumni) as well as geography career information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, walk-in

career advising and other career-education opportunities, such as preparing for information interviews and job shadowing experiences. The department also provides a variety of opportunities to allow students to enrich their undergraduate experience. Each fall the Undergraduate Committee sponsors a ‘Welcome Back Picnic’ along the banks of the San Marcos River. The department also hosts the annual [Texas Geography Student Research Symposium](#), a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high quality research and our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony. The geography department also sponsors [nine very active student organizations](#) that organize and participate in department, campus and community events. Finally, many Undergraduate Courses include educational field experiences and the department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the Geography of the Southwestern United States. All are available for course credit.

**C3. Student and Graduates** (Source-[Texas State Institutional Research Office](#))

**1. Student Demographics**

**a. Classification**

Table II.C3.1.a shows an average of 46 CIP 03.02 majors per year and that the number of CIP 03.02 majors nearly doubled during the study period.

<b>Table II.C3.1.a - Undergraduate Geography Majors CIP 03.02</b>						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Number of Majors	31	49	44	48	59	46.2

**b. Gender Diversity / Ethnicity**

Gender Diversity

Table II.C3.1.b1 shows that 75% of CIP 03.02 majors, are on average and with little variation - males.

<b>Table II.C3.1.b1 - Gender Diversity Undergraduate Majors CIP 03.02</b>						
Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	7	14	12	10	12	11
Male	24	34	27	38	46	33.8
Total	31	48	39	48	58	44.8
% Male	77.42%	70.83%	69.23%	79.17%	79.31%	75.19%

Ethnicity

Table II.C3.1.b2 shows the ethnic diversity for undergraduate of CIP 03.02 majors. Students majoring in this CIP are predominately white, non-Hispanic - nearly 83% on average with little year to year variation - for the study period. From FY 2009 to FY 2013 the number of Hispanics have increased from 13 to 37 students, while the number of students from other non-white ethnic groups have remained small and unchanged.

<b>Table II.C3.1.b2 - Ethnicity Undergraduate Majors CIP 03.02</b>						
Ethnicity	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Black, non-Hispanic	0	0	0	0	1	0.2
Hispanic	2	2	3	6	3	3.2
White, non-Hispanic	29	44	35	41	53	40.4
% White, non-Hispanic	93.55%	91.67%	89.74%	85.42%	91.38%	90.35%

### b. Probation and Suspension

Table II.C3.1.c shows the academic standing of CIP 03.02 majors. Ninety-three percent of all CIP 03.01 majors were in good standing during the study period. The number of students on probation and suspension averaged about 4% and 2% respectively and remained mostly stable during the five years.

<b>Table II.C3.1.c - Probation and Suspension Undergraduate Majors CIP 03.02</b>						
Fiscal Years (FY)	2008	2009	2010	2011	2012	Averages
Good standing	93.8%	87.1%	93.8%	94.9%	95.8%	93.08%
Probation	6.3%	6.5%	2.1%	5.1%	2.1%	4.42%
Suspension	0.0%	6.5%	4.2%	0.0%	2.1%	2.56%

### 2. Student Time to Degree

Table II.C.3.2 shows that CIP 03.02 geography students averaged 4.75 years to graduation during the study period.

<b>Table II.C3.2 - Student Time to Degree Undergraduate Majors CIP 03.02</b>						
Fiscal Years (FY)	2008	2009	2010	2011	2012	Average
Time to degree in years	N/A	3.8	3.7	3.9	7.6	4.75

### 3. Student Publications and Awards

According to the [Undergraduate Faculty-Mentored Student Research and Awards](#) list compiled by the College of Liberal Arts undergraduate geography majors mentored by faculty members published numerous articles and attended many conferences including presenting research findings and posters at our Geography Student Research Symposium. In addition to the many Geography Department awards and [scholarships](#) presented at our Annual Geography Alumni Reunion and Student Celebration Awards and Scholarship Ceremony, many of our majors receive Academic Achievement Awards from the College of Liberal Arts and are also regular recipients of University-level scholarships and contenders for University-level awards. Finally, during the past five years many geography majors have successfully written proposals and received funding for on campus improvements through the [Environmental Services Fee](#) Committee.

### 4. Student Retention for First-Time, Geography Majors

Table II.C.3.4 shows excellent retention rates for CIP 03.02 students.

<b>Table II.C3.4 - CIP 03.02 Student Retention Rates by Cohort Semester</b>			
Fiscal Years (FY)	Fall 2008	Fall 2009	Averages
After 1 year	100.0%	100.0%	100.0%
After 2 years	100.0%	100.0%	100.0%

### 5. Student Graduation Rates

Table II.C3.5 shows that nearly 71% of CIP 03.02 majors graduate in five years and 79% in six.

<b>Table II.C3.5 - CIP 03.02 Graduation Rates by Cohort Semester</b>				
Fiscal Years (FY)	Fall 2004	Fall 2005	Fall 2016	Averages
4.0 years	N/A	16.7%	25.0%	20.85%
5.0 years	100.0%	50.0%	62.5%	70.83%
6.0 years	100.0%	50.0%	87.5%	79.17%

## 6. Number of Students Enrolled and Student Credit Hour (SCH) Generation

Table II.C3.6 show enrollments and SCH Generation for CIP 03.02. Note that these data count the number of students enrolled in courses classified into CIP 03.02 not enrollments and SCH generation by programs within CIP 03.02.

Fiscal Years (FY)	2008	2009	2010	2011	2012
# Enrollments	113	124	109	159	130
SCH Generation	259	294	251	355	332

## 7. Graduate Licensure Rates – Not Applicable

## 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. Each year during the study period the Office of Institutional Research conducts an [Alumni Survey](#) to collect information from graduates from the previous calendar year about their college experience, current employment status and job satisfaction. During the years 2008 – 2012, 133 Geography Alumni (from all Undergraduate CIP Codes for a better sample size) responded to the on-line survey. Ninety percent indicated that they were employed at the time of answering the survey. Of those employed, the majority of alumni responded that they were ‘satisfied’ or ‘very satisfied’ with their jobs that their jobs were related to their geography major. Another source of data to measure the success of our graduates in the workplace is the Department’s [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be exploited – a recent keyword search: ‘Texas State Geography’ produced 4,348 results – including many Geography Alumni.

## 10. Number of Degrees Conferred Annually

Table II.C3.9 shows the number of degrees conferred for CIP 03.02. Texas State University conferred a total of 40 undergraduate degrees for CIP 03.02 - with an average of 8 per year - during the five-year study period. Overall, the number of degrees conferred for CIP 03.02 shows strong growth in the department’s most recently created major.

Fiscal Years (FY)	2008	2009	2010	2011	2012	Totals	Averages
Number of Degrees	1	6	12	10	11	40	8

## 9. Admissions

### a. Admission Scores

Fiscal Year (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
Headcount	NA	1	1	NA	NA
SAT	NA	1090	1060	NA	NA
ACT	NA	NA	NA	NA	NA

## **b. Admission Requirements and Review**

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities outside the classroom as well as the minimum standards of the State of Texas Education Code ([TEC\) 51.803-51.809](#) Uniform Admissions Standards. Students meeting university admission standards enter the undergraduate Geography program as pre-majors by meeting with an [Academic Advisor](#) and declaring Geography as their major (or minor) which is coded into the ['Degree Works' Degree Audit System](#). To become majors, students must complete GEO 1309 or 1310; GEO 2410, and GEO 3301 (10 semester hours) with a grade of “C” or higher in each course. The Texas State [Undergraduate Admissions Office](#) maintains a website providing comprehensive information on the admissions process and dealing for both [freshman](#) and [transfer](#) students. The Admissions Office also publishes a series of [Transfer Planning Guides](#) to assist students planning to transfer to Texas State University from another institution in Texas. The Department expects the Admissions Office to continue to provide high-quality admissions processing during the next five years as it has during this study period.

## **c. Recruitment**

The Geography Department participates four times a year in [Bobcat Day](#), a University sponsored on-campus recruitment event that takes place two Saturdays in the spring, and two in the fall. These are very large events with thousands of participants – primarily high-school juniors and seniors, along with their parents. The Department also participates in other on-campus recruiting opportunities such as the ‘Un-decided Major Fair’ and the ‘Surviving the Sophomore Slump.’ Department representatives visit high-schools and community colleges on a regular basis and host both individual and group visits to the Department, often in coordination with the [Texas Alliance for Geographic Education](#) which is housed in the Department. The Department Website page - [Prospective Undergraduates](#) - includes a very informative PowerPoint presentation: [‘Texas State Geography: A Great Place to Launch Your Career’](#) with great photos and useful website ‘screen-shots.’ Since many of our majors who declare geography are ‘major-changers,’ one of our greatest recruitment tools is the word-of-mouth message from student to student about our geography programs – often through our student organizations. The department maintains active communication with geography faculty at Austin Community College and branches of San Antonio College, with whom the department has articulation agreements. Also, the department maintains active communication with geography faculty at Blinn College and Alvin College that has led to many of their students completing their degrees in our program. Finally, recognizing that faculty members serve as role-models and examples for our students, the Department of Geography continues working diligently to hire a diverse faculty to provide those role-models.

## **10. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our students’ educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#), such as the [Student Learning Assistance Center](#) (SLAC) and the [Writing Center](#).

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- GTU Student Tutors and Mentors
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

## 11. Alumni Relations

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal award and scholarship ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from geography alumni – on the [Geography Careers TRACS site](#).

## D3. Conclusions and Recommendations

### Conclusions

Tables II.D2.a and Table II.D2.b show and compare undergraduate geography CIP 03.02 majors and degrees conferred with other geography CIPs.

**Table II.D2.a - Undergraduate Geography Majors**

	2008	2009	2010	2011	2012	Averages
CIP 45.07 - Physical Geography	32	44	46	50	44	43.2
CIP 45.07 - Geography (General)	110	114	168	160	136	137.6
CIP 45.07 - Geographic Information Science	86	98	110	101	94	97.8
CIP 03.01 - Resource & Environmental Studies	153	135	170	218	207	176.6
CIP 03.02 - Water Resources	16	31	49	44	48	37.6
CIP 04.03 - Urban and Regional Planning	88	88	86	92	92	89.2
Totals	485	510	629	665	621	582.0

**Table II.D2.b - Undergraduate Geography Degrees Conferred**

	2008	2009	2010	2011	2012	Averages
CIP 45.07 - Physical Geography	NA	9	13	11	3	9
CIP 45.07 - Geography (General)	37	28	45	39	37	37.2
CIP 45.07 - Geographic Information Science	20	20	31	37	27	27
CIP 03.01 - Resource & Environmental Studies	59	47	53	54	76	57.8
CIP 03.02 - Water Resources	1	6	12	10	11	8
CIP 04.03 - Urban and Regional Planning	25	35	28	22	28	27.6
Totals	142	145	182	173	188	166

For CIP 03.02, the number of undergraduate geography majors averaged 38 students / year during the study period. The majority of these students were white, non-Hispanic males. 93% of undergraduate CIP 03.02 students were in good academic standing and averaged 4.75 years to complete their degrees from 2008 – 2012. Two-year retention rates averaged 100% and six-year graduation rates averaged 79%. During the study period, a total of 40 degrees were conferred (8 / year average) for CIP 03.02.

### Recommendations

The Texas State Geography Department should continue to provide high-quality classroom instruction, along with offering field experiences, internships and opportunities to participate in student organizations and other departmental activities. Recruitment efforts should continue to focus on increasing gender and ethnic diversity.

## **A4. B.S. in Geography – CIP CODE: 04.03 - Undergraduate**

B.S. in Geography, Urban and Regional Planning

### **B4. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The Bachelor of Science Degree prepares students for a wide variety of career opportunities in both the private and public sectors with a program of courses designed to improve students understanding of the world framed by a geographic perspective. The geography department tailored the degree to improve the student's observation, research, reporting, analysis and interpretation skills. Depending on the major area of study, the degree emphasizes the physical science elements of geography or the theory and application of Geographic Information Science technologies. Students choosing the general geography degree have flexibility in course selection once required courses and prerequisites are met.

The Bachelor of Arts Degree (general geography major only) provides an option for a Liberal Arts student with a non-science minor or double Liberal Arts major.

Lower Division Geography Courses are designed to introduce students to the fundamental ideas and concepts physical and cultural geography as well as the utility of geographic information systems. Two of these courses - Meteorology and World Geography - serve as entry points for many of our geography majors as both are General Education core options. Lower-division geography courses fulfill most requirements and prerequisites necessary to prepare the student to advance to upper-division courses.

Upper Division Geography Courses provide advanced study and opportunities for students to apply the geographic perspective to the observation and analysis of the spatial aspects of the physical and cultural landscapes of the Earth. Upper-division courses provide an in-depth study of specific subject areas such as urban planning and environmental management and typically include fieldwork and the preparation of professional-type reports. Many upper-division courses are sequenced with prerequisites designed to improve the student's learning experience. All undergraduate take a minimum of nine hours of Writing Intensive (WI) coursework to graduate from Texas State University. All Writing Intensive (WI) Geography courses are upper-division.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience" - to the mission and goals of the College of Liberal Arts and the University.

[The Department of Geography](#)   [The College of Liberal Arts](#)   [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

The University has detailed procedures and schedule for the development of courses and programs. New course and program development begins in the department, with approval from the Undergraduate Committee, the Geography Faculty, the Liberal Arts Advisory Committee (serving as the college curriculum committee), the University Curriculum Committee, and the Provost's office – University Policy and Procedure Statements (PPS) [PPS 2.01](#) and [PPS 2.05](#) provide necessary instructions. New courses and programs also require approval by the [Texas State University System Board of Regents](#) and new programs by the [Texas Higher Education Coordinating Board](#). At all stages, courses and programs are reviewed in order to provide sufficient offerings and balance among geography's various specialties to meet student needs, interests and market demand as well as to provide sufficient breath of course offerings and sufficient depth for specialization.

### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title ‘Geographer’ is expected to grow 35% between 2010 and 2020.

[Urban Planning occupations](#) related to CIP 04.03 are predicted to have average growth between 2010 and 2020. During the study period U.S. News recently listed Urban Planner as ‘One of the 50 best careers of 2010.’ Rapid population growth in Austin-San Antonio Corridor will continue to provide career-opportunities for Urban and Regional Planning graduates who choose to remain in the area.

### Curriculum Coordination

Courses and programs are reviewed to avoid duplication and ensure consistency with University and State guidelines. The Geography Undergraduate Committee regularly updates course and program requirements. During the study period, the Department made six additions, five deletions and 20 changes to the Undergraduate Curriculum and numerous other [catalog edits \(highlight in green\)](#) in order to improve the academic programs with the goals of providing students with appropriate learning opportunities and an efficient path to graduation. All degree and course requirements are described in the [University’s Undergraduate Catalog 2012-2014](#) and detailed in the [geography section](#) of the catalog. The [Geography Department Website](#) provides advising forms for majors, minors and certificates that show requirements for each on a checklist. CIP Code 04.03 Checklist: [Urban and Regional Planning](#)

### Curriculum Delivery

The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. [Long-term scheduling](#) facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning.

During the study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

Geography students take courses from other academic units in order to complete the General Education Core Curriculum as well as a required minor. The [Department Website](#) provides detailed course listings for all geography major, minor and certificate offerings including required / recommended courses from other academic units. Qualified Geography students may also enroll in interdisciplinary classes offered by the [Honors College](#).

### **4. Student Learning Outcomes Assessment**

Texas State University’s institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

All Geography majors will demonstrate knowledge of:

- The major physical features of the Earth and the ability to locate examples of Earth’s major physical features on a map.
- The major cultural features of the Earth and the ability to locate examples of Earth’s major cultural features on a map.

- Quantitative methods used by geographers and their ability to use statistical software to solve geographic problems.
- The foundations and theories of geographic information systems (GIS) and use of the tools and methods of GIS.

Additionally, geography majors will demonstrate their knowledge of one specialized area of geography.

Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures undergraduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from [5 years of Learning Outcome Reports for CIP 04.03](#) student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Results of assessment findings have influenced curriculum changes made to improve the program and helped instructors improve their courses. For example, several prerequisite changes made during the study period were in part due to learning outcome results. Instructor developed additional learning aids – glossaries and quizzes – to help students grasp the lexicon of planning as a result of learning outcomes assessment data.

### **5. Program Curriculum and Duration**

Students majoring in CIP Code 04.03 complete the Bachelor of Science (B.S.) degree. The B.S. degree requires a minimum of 36 semester hours of Geography. The degree requires at least a 2.5 GPA for geography courses attempted at Texas State University and at least a 2.25 GPA for all courses taken at Texas State University. Either degree also requires a minor area of study with a minimum of 18 semester hours. Texas State requires a minimum of 120 semester hours of coursework to graduate, including [General Education Core requirements](#), major requirements, minor requirements, and additional elective courses selected from disciplines other than major or minor. At least 36 semester hours must be advanced (3000 – 4000) level courses. At least 9 semester hours must be writing intensive (WI). The Department of Geography offers minors in Geography and Geology as well as one interdisciplinary minor - Nature and Heritage Tourism. The geography department networks with the departments of agriculture, anthropology, biology, chemistry, English, history, management, marketing, physics, physical fitness/wellness, recreation administration, and sociology in order to deliver the Nature and Heritage Tourism interdisciplinary minor. The Geology minor is now housed fully in the geography department and is a popular minor for Geography majors. Finally, the department offers four certificate programs: Geographic Information Science (19-20 hrs.), Environmental Interpretation (15 to 16 hrs.), Location Analysis (16 to 18 hrs.) and Water Resources Policy (13 hrs.). The certificates allow students to add value to their degrees and enhance their employability. Depending on the timing of a student's declaration of major, minor and decision to add a certificate to their program, the duration of the undergraduate geography programs are typical of those at other peer institutions. Geography major, minor, and certificate requirements are available on the [Department's Website](#).

### **6. Co-curricular Opportunities**

The Geography Department manages a very active [internship-for-credit program](#) with 25-35 students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job posting (many posted by successful geography alumni) as well as geography career information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, walk-in career advising and other career-education opportunities, such as preparing for information interviews

and job shadowing experiences. The department also provides a variety of opportunities to allow students to enrich their undergraduate experience. Each fall the Undergraduate Committee sponsors a ‘Welcome Back Picnic’ along the banks of the San Marcos River. The department also hosts the annual [Texas Geography Student Research Symposium](#), a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high quality research and our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony. The geography department also sponsors [nine very active student organizations](#) that organize and participate in department, campus and community events. Finally, many Undergraduate Courses include educational field experiences and the department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the Geography of the Southwestern United States. All are available for course credit.

**C4. Student and Graduates** (Source-[Texas State Institutional Research Office](#))

**1. Student Demographics**

**a. Classification**

Table II.C4.1a shows the number of geography CIP 04.01 majors. CIP 04.03 remained mostly stable – with a bit of recent growth – and an average of 91 majors for the study period.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Number of Majors	88	86	92	92	100	91.0

**b. Gender Diversity / Ethnicity**

Gender Diversity

Table II.C4.1.b1 shows that 73% of CIP 04.03 majors, are on average and with little variation - males.

Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	23	25	21	21	32	24.4
Male	65	60	70	70	67	66.4
Total	88	85	91	91	99	90.8
% Male	73.86%	70.59%	76.92%	76.92%	67.68%	73.19%

Ethnicity

Table II.C4.1.b2 shows that nearly 70% of CIP 04.03 majors are White, non-Hispanic.

Ethnicity	FY	2009	2010	2011	2012	2013	Averages
Am Indian/Alaskan Native		0	0	0	1	1	0.4
Asian/Pacific Islander		0	0	1	1	1	0.6
Black, non-Hispanic		2	4	5	7	7	5
Hispanic		25	15	14	17	17	17.6
Multi-race, non-Hispanic, non-Black		2	2	2	1	0	1.4
Non-Resident International		2	2	2	1		1.75
Unknown		0	0	1	3	1	1
White, non-Hispanic		59	64	68	59	69	63.8
% White, non-Hispanic		65.56%	73.56%	73.12%	65.56%	71.88%	69.93%

**c. Probation and Suspension**

Table II.C4.1.c shows that more than 90% of CIP 04.03 majors remained in good academic standing during the study period.

<b>Table II.C4.1.c - Probation and Suspension Undergraduate Majors CIP 04.03</b>						
Academic Standing	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Good standing	93.2%	92.0%	85.9%	89.0%	93.4%	90.70%
Probation	4.5%	4.5%	5.9%	7.7%	5.5%	5.62%
Suspension	2.3%	2.3%	7.1%	2.2%	1.1%	3.00%

**2. Student Time to Degree**

Table II.C4.2 shows that CIP 04.03 majors take an average of 5.7 years to complete their degree.

<b>Table II.C4.2 - Student Time to Degree for CIP 04.03 Undergraduate Majors</b>						
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
Time to degree in years	6.5	4.4	5.6	7.3	4.7	5.7

**3. Student Publications and Awards**

According to the [Undergraduate Faculty-Mentored Student Research and Awards](#) list compiled by the College of Liberal Arts undergraduate geography majors mentored by faculty members published numerous articles and attended many conferences including presenting research findings and posters at our Geography Student Research Symposium. In addition to the many Geography Department awards and [scholarships](#) presented at our Annual Geography Alumni Reunion and Student Celebration Awards and Scholarship Ceremony, many of our majors receive Academic Achievement Awards from the College of Liberal Arts and are also regular recipients of University-level scholarships and contenders for University-level awards. Finally, during the past five years many geography majors have successfully written proposals and received funding for on campus improvements through the [Environmental Services Fee](#) Committee.

**4. Student Retention for First-Time Geography Majors**

Table II.C4.4 shows that CIP 04.03 retention rates are excellent.

<b>Table II.C4.4 - CIP 04.03 Student Retention Rates by Cohort Semester</b>						
Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1.0 year	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2.0 years	100.0%	100.0%	100.0%	71.4%	N/A	92.85%

**5. Student Graduation Rates**

Table II.C4.5 shows that 60% of CIP 04.03 majors graduate in five years and 72% in six.

<b>Table II.C4.5 - CIP 04.03 Graduation Rates by Cohort Semester</b>						
Fiscal Years (FY)	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Averages
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%	
4.0 years	9.1%	62.5%	11.1%	36.4%	10.0%	25.82%
5.0 years	36.4%	75.0%	77.8%	81.8%	30.0%	60.20%
6.0 years	45.5%	87.5%	77.8%	81.8%	70.0%	72.52%

## 6. Student Enrollments and Student Credit Hour (SCH) Generation

Table II.C4.6 show enrollments and SCH Generation for CIP 04.03. Note that these data count the number of students enrolled in courses classified into CIP 04.03 not enrollments and SCH generation by programs within CIP 04.03.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
Student Enrollments	62	68	69	67	43	61.8
SCH Generation	186	204	207	201	129	185

## 7. Graduate Licensure Rates – Not Applicable

## 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. Each year during the study period the Office of Institutional Research conducts an [Alumni Survey](#) to collect information from graduates from the previous calendar year about their college experience, current employment status and job satisfaction. During the years 2008 – 2012, 133 Geography Alumni (from all Undergraduate CIP Codes for a better sample size) responded to the on-line survey. Ninety percent indicated that they were employed at the time of answering the survey. Of those employed, the majority of alumni responded that they were ‘satisfied’ or ‘very satisfied’ with their jobs that their jobs were related to their geography major. Another source of data to measure the success of our graduates in the workplace is the Department’s [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be exploited – a recent keyword search: ‘Texas State Geography’ produced 4,348 results – including many Geography Alumni.

## 9. Number of Degrees Conferred Annually

Table II.C4.9 shows that Texas State University conferred a total of 28 CIP 04.03 degrees with an average of 28 degrees awarded each years during the study period.

	FY 2008	FY 2009	FY 2010	2011	2012	Totals	Average
Number of Degrees	25	35	28	22	28	138	28

## 10. Admissions

### a. Admission Scores

Table II.C4.10.a shows CIP 04.03 major freshman admissions scores averaged 1107 for those who took the SAT and 23 for those students who took the ACT.

Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
Headcount	1	2	2	7	5	
SAT	1160	NA	1350	1003	917	1107
ACT	NA	NA	34	23	28	28

## **b. Admission Requirements and Review**

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities outside the classroom as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards. Students meeting university admission standards enter the undergraduate Geography program as pre-majors by meeting with an [Academic Advisor](#) and declaring Geography as their major (or minor) which is coded into the ['Degree Works' Degree Audit System](#). To become majors, students must complete GEO 1309 or 1310; GEO 2410, and GEO 3301 (10 semester hours) with a grade of “C” or higher in each course. The Texas State [Undergraduate Admissions Office](#) maintains a website providing comprehensive information on the admissions process and dealing for both [freshman](#) and [transfer](#) students. The Admissions Office also publishes a series of [Transfer Planning Guides](#) to assist students planning to transfer to Texas State University from another institution in Texas. The Department expects the Admissions Office to continue to provide high-quality admissions processing during the next five years as it has during this study period.

## **c. Recruitment**

The Geography Department participates four times a year in [Bobcat Day](#), a University sponsored on-campus recruitment event that takes place two Saturdays in the spring, and two in the fall. These are very large events with thousands of participants – primarily high-school juniors and seniors, along with their parents. The Department also participates in other on-campus recruiting opportunities such as the ‘Un-decided Major Fair’ and the ‘Surviving the Sophomore Slump.’ Department representatives visit high-schools and community colleges on a regular basis and host both individual and group visits to the Department, often in coordination with the [Texas Alliance for Geographic Education](#) which is housed in the Department. The Department Website page - [Prospective Undergraduates](#) - includes a very informative PowerPoint presentation: [‘Texas State Geography: A Great Place to Launch Your Career’](#) with great photos and useful website ‘screen-shots.’ Since many of our majors who declare geography are ‘major-changers,’ one of our greatest recruitment tools is the word-of-mouth message from student to student about our geography programs – often through our student organizations. The department maintains active communication with geography faculty at Austin Community College and branches of San Antonio College, with whom the department has articulation agreements. Also, the department maintains active communication with geography faculty at Blinn College and Alvin College that has led to many of their students completing their degrees in our program. Finally, recognizing that faculty members serve as role-models and examples for our students, the Department of Geography continues working diligently to hire a diverse faculty to provide those role-models.

## **11. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our students’ educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#), such as the [Student Learning Assistance Center](#) (SLAC) and the [Writing Center](#).

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- GTU Student Tutors and Mentors
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

## 12. Alumni Relations

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal award and scholarship ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from geography alumni – on the [Geography Careers TRACS site](#).

## D4. Conclusions and Recommendations

### Conclusions

Tables II.D2.a and Table II.D2.b show and compare undergraduate geography CIP 04.03 majors and degrees conferred with other geography CIPs.

**Table II.D4.a - Undergraduate Geography Majors**

Academic Years (AY)	2008	2009	2010	2011	2012	Averages
CIP 45.07 - Physical Geography	32	44	46	50	44	43.2
CIP 45.07 - Geography (General)	110	114	168	160	136	137.6
CIP 45.07 - Geographic Information Science	86	98	110	101	94	97.8
CIP 03.01 - Resource & Environmental Studies	153	135	170	218	207	176.6
CIP 03.02 - Water Resources	16	31	49	44	48	37.6
CIP 04.03 - Urban and Regional Planning	88	88	86	92	92	89.2
Totals	485	510	629	665	621	582.0

**Table II.D4.b - Undergraduate Geography Degrees Conferred**

	2008	2009	2010	2011	2012	Averages
CIP 45.07 - Physical Geography	No data	9	13	11	3	9
CIP 45.07 - Geography (General)	37	28	45	39	37	37.2
CIP 45.07 - Geographic Information Science	20	20	31	37	27	27
CIP 03.01 - Resource & Environmental Studies	59	47	53	54	76	57.8
CIP 03.02 - Water Resources	1	6	12	10	11	8
CIP 04.03 - Urban and Regional Planning	25	35	28	22	28	27.6
Totals	142	145	182	173	188	166

For CIP 04.03, the number of undergraduate geography majors averaged 91 students / year during the study period. The majority of these students were white, non-Hispanic males. 91% of undergraduate CIP 04.03 students were in good academic standing and averaged 5.7 years to complete their degrees. Two-year retention rates averaged 93% and six-year graduation rates averaged 73%. During the study period, a total of 138 degrees were conferred (28 / year average) for CIP 04.03.

### Recommendations

The Texas State Geography Department should continue to provide high-quality classroom instruction, along with offering field experiences, internships and opportunities to participate in student organizations and other departmental activities. Recruitment efforts should continue to focus on increasing gender and ethnic diversity.

## **A5. M.A.Geo or M.S. in Geography – CIP CODE: 45.07 - Graduate**

### Major areas of study within this 4-digit CIP Code

Master of Applied Geography (M.A.Geo. - General)

Master of Applied Geography (M.A.Geo. – Geographic Education)

Master of Science Geography (M.S.)

Master of Applied Geography (M.A.Geo. – Geographic Information Science)

### **B5. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The objective of the Master of Science (M.S.) program is to provide theoretical, research-oriented master's-level instruction in environmental geography, geographic education, geographic information science, and other areas of departmental expertise to interested and qualified students who wish eventually to pursue doctoral work in Geography or prepare themselves for research-oriented or teaching careers. The program was formally approved by action of the Texas Higher Education Coordinating Board in August, 2000. The Master of Applied Geography (M.A.Geo.) program was instituted in 1981 and is designed to train geographers to use their skills and background knowledge to solve real-world problems with geographic dimensions.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience and become a top tier, nationally recognized graduate program department" - to the mission and goals of the Graduate College and the University.

[The Department of Geography](#) [Graduate College Catalog \(Page 10\)](#) [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

During the review period, graduate programs have seen six additions, four deletions and seven changes, including the deletion of the Land Management M.A.G. degree. Of special note is the addition of a GPS course to complement GIS and Remote Sensing offerings.

##### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title 'Geographer' is expected to grow 35% between 2010 and 2020. Other geography occupations related to CIP 45.07 predicted to have average or above-average growth between 2010 and 2020 include [cartography and photogrammetry](#), [surveying and mapping](#), [geosciences](#), [environmental protection technicians](#) and [environmental specialists](#).

##### Curriculum Coordination

All degree and course requirements are described in the [University's Graduate Catalog 2011-2013](#). The [Geography Department Website](#) provides a link to course descriptions, course scheduling information as well as to the Policies and Procedures handbook.

##### Curriculum Delivery

The M.A.Geo. degree plan is outlined in the [2012 M.A.Geo. Policies and Procedures Handbook](#). The core curriculum for the M.S. and M.A.Geo. programs includes three courses: GEO 5309 Applied Geographic Analysis, GEO 5301 Quantitative Methods, and GEO 5300 Research Design and Techniques. Students are expected to complete these three courses within the first twelve graduate hours. In addition to the core curriculum, [M.A.Geo](#) students must complete six hours of electives either within Geography or outside the department, additional graduate credit hours comprised of elective courses to complete the minimum thirty-three required hours, and three hours of directed research. [M.S.](#) students must complete twelve hours of 5000-level geography electives in lieu of the specific

requirements associated with the other four majors and six hours of thesis credit. Students may substitute up to six hours of coursework from outside the Department for elective course work inside the Department. The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. Long-term scheduling facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning. During this study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

Graduate students may take up to six-hours of electives from departments other than geography in consultation with their advisor.

### **4. Student Learning Outcomes Assessment**

#### Program Learning Outcomes

Program Curricular Goals for all graduate programs are defined by the [Geography Department Program Student Learning Outcomes](#). The fundamental learning outcomes upon graduation for all graduate students of the Department of Geography are to have a working knowledge of the core concepts of geography as well as an insightful understanding of the essential concepts of their particular specializations that would be expected at the graduate level of study. Texas State University's institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

The M.S. and M.A.Geo. programs share the following goals in producing students who demonstrate:

- Understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas.
- Understanding of basic spatial statistics and multivariate quantitative and analytical methods, and other appropriate tools for spatial analysis.
- Understanding of the components of research design including problem definition, theory, literature review, methodology, and analysis.
- Significant research and writing expertise resulting in a meaningful scholarly contribution.
- Preparedness to apply their skills in professional careers.

Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures graduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from 5 years of Learning Outcome Reports for [MAGeo](#), [Geo MS](#) and [MAGeo-GIS](#) programs, student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Results of assessment findings have influenced curriculum changes: “The Geography faculty has recommended that the Master of Applied Geography-Land Management program (MAG-LM) be eliminated with new admissions not accepted effective fall 2013. It is felt that the broader focus of the Master of Applied Geography-Resource and Environmental Studies program can absorb the components of the land management program.

## 5. Program Curriculum and Duration

The M.S. degree requires completion of 30 graduate hours, including a nine-hour core curriculum and six hours of thesis credit. The remaining fifteen hours are elective. Passing a comprehensive examination is also required for graduation.

The M.A.Geo. degree requires completion of 33 graduate hours. These hours include a nine-hour core curriculum, a twelve-hour major in one of five major programs (Resource/Environmental Studies, Land Management, Geographic Education, Geographic Information Science, and General), a six-hour resource area, and a directed research project. The remaining graduate hours are elective. Passing a comprehensive examination is also required for graduation.

The core classes for both the M.S. and M.A.Geo. are scheduled as follows:

- GEO 5309 Applied Geographic Analysis is offered in the fall semester of every academic year. The purpose of this course is to introduce students to the graduate faculty of the Department and their research interests. All entering students are expected to take GEO5309 during their first fall semester in the program.
- GEO 5301 Quantitative Methods is offered each semester. It should be completed within the first full year of residence, after completing a prerequisite statistics course (GEO3301 or equivalent) if needed.
- GEO 5300/GEO 7300 Research Design and Techniques are offered during the spring semester. The appropriate one should be taken immediately after GEO 5309. Students beginning the program in the fall should take this course in the spring semester of their first year in the program. Students should select their research advisors upon completion of GEO 5309, and GEO 5300 or GEO 7300.

The M.A.Geo. in Geographic Education requires GEO 5342 Theory and Methods of Geographic Education, and at least 6 credit hours to be selected from GEO 5308, 5313, 5315, 5323, 5341, 5342, 5343, 5344, 5349, 5370, and 5395.

The M.A.Geo. in Geographic Information Science (12 hours) requires GEO 5408 Web Mapping, GEO 5415 Geographic Applications of Remote Sensing, 5417 Advanced Cartographic Design, GEO 5418 Geographic Information Systems, and GEO 5419 Geographic Information Systems II.

Depending on the timing of a student's course and research progress, the duration of graduate geography programs is typical of the duration of programs at peer institutions.

## 6. Co-curricular Opportunities

Internships provide opportunities for M.A.Geo. students to use their knowledge in real-world work experience. Internships provide valuable entree into the professional employment market. M.A.Geo. students who do not have work experience in applied geography are strongly encouraged to pursue internships, especially if their career plans involve working in the Austin-San Antonio corridor. The Geography Department manages a very active [internship-for-credit program](#) with students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job postings (many posted by successful geography alumni) as well as geography career information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, [walk-in career advising](#) and other career-education opportunities such as preparing for information interviews and job shadowing experiences.

The department hosts an annual [Texas Geography Student Research Symposium](#) a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high

quality research and provide graduate students and opportunity to present their research as a ‘warm-up’ prior to presentations at state, regional and national conferences. Finally, each spring we hold our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony.

Geography graduate students have organized the Graduate Student Forum and provide an excellent student resource through their [website](#). The Forum provides students with an opportunity to discuss concerns about the program, to provide formal feedback to the Graduate Coordinator, the Department Chair, and the faculty of the Department about these concerns, and to encourage the dissemination of information about the program among the graduate student population.

Finally, many Graduate Courses include educational [field experience](#). The department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, in [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the [Geography of the Southwestern United States](#). All are available for graduate academic credit.

**C5. Student and Graduates - (Source-[Texas State Institutional Research Office](#))**

**1. Student Demographics**

**a. Classification**

Table II.C5.1.a shows that the number of master’s CIP 45.07 majors remained mostly stable around an average of 71 during the study period.

<b>Table II.C5.1.a - Master’s Geography Majors CIP 45.07</b>						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Average
Number of Majors	69	57	71	83	75	71

**b. Gender Diversity / Ethnicity**

Gender Diversity

Table II.C5.1.b shows that on average during the study period the gender diversity for this master’s CIP was about evenly split between males and females.

<b>Table II.C5.1.b - Gender Diversity Master’s CIP 45.07</b>						
Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	28	37	36	32	22	31
Male	29	34	47	43	32	37
% Male	50.88%	47.89%	56.63%	57.33%	59.26%	54.40%

### Ethnicity

Table II.C5.1.b2 shows that more than 83% of all master's CIP 45.07 students declared themselves as White, non-Hispanic during the study period.

<b>Table II.C5.1.b2 - Ethnicity Master's CIP 45.07</b>						
Ethnicity FY	2009	2010	2011	2012	2013	Averages
Asian/Pacific Islander	2	2	1	0	1	1.2
Black, non-Hispanic	1	1	2	0	1	1
Hispanic	4	2	5	6	4	4.2
Multi-race, non-Hispanic, non-Black	0	0	0	2	3	1
Non-Resident International	2	1	1	0	1	1
Unknown	2	2	5	3	1	2.6
White, non-Hispanic	46	63	69	64	43	57
% White, non-Hispanic	80.70%	88.73%	83.13%	85.33%	79.63%	83.51%

### **d. Probation and Suspension**

Table II.C5.1.c shows that 97% of all master's CIP 45.07 students were in good academic standing during the study period.

<b>Table II.C5.1.c - Probation and Suspension Master's CIP 45.07</b>						
Academic Standing	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Averages
Good standing	94.2%	98.2%	97.2%	97.6%	98.7%	97.18%
Probation	1.4%	1.8%	1.4%	1.2%	1.3%	1.42%
Suspension	2.9%	0.0%	0.0%	0.0%	0.0%	0.58%

### **2. Student Time to Degree**

Table II.C5.2 shows that on average, Master's CIP 45.07 students took 2.7 years to graduate.

<b>Table II.C5.2 - Average Number of Years to Master's Degree CIP 45.07</b>						
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
Years to Degree	2.8	3.1	2.4	2.5	2.5	2.7

### **3. Student Publications and Awards**

According to the [Graduate Faculty-Mentored Student Research and Awards](#) list - reported by faculty and compiled by the College of Liberal Arts - graduate students in geography Master's CIP 45.07 published 23 articles, made 21 conference presentations and received 9 awards during academic years 2006 through 2010 as shown in Table II.C6.3.

<b>Table II.C6.3 – Faculty-Mentored Student Publications, Presentations and Awards</b>						
<b>Graduate CIP 45.07</b>						
	AY 2006	AY 2007	AY 2008	AY 2009	AY 2010	Totals
Articles	3	7	2	3	8	23
Conference Presentations	2	7	2	3	7	21
Awards	2	2	1	2	2	9

#### 4. Retention Rates for First-Time CIP 45.07 Master's Students by Cohort Semester

Table II.C5.4 shows an 86% one-year retention rate for Master's CIP 45.07 students.

Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
1.0 year	73.7%	100.0%	93.8%	80.0%	86.4%

#### 5. Graduation Rates for First-Time Master's Students CIP 45.07

Table II.C5.5 shows that nearly 44% of Master's CIP 45.07 students graduate within 3 years.

Cohort Semester (FY)	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
2.0 years	17.2%	35.7%	36.8%	46.2%	37.5%
3.0 years	55.2%	50.0%	57.9%	76.9%	43.8%
4.0 years	62.1%	57.1%	57.9%	76.9%	NA
5.0 years	65.5%	57.1%	57.9%	NA	NA

#### 6. Student Enrollments and SCH Generation for Master's CIP 45.07

Table II.C5.6 show enrollments and SCH Generation for Master's CIP 45.07. Note that these data count the number of students enrolled in courses classified into CIP 45.07 not enrollments and SCH generation by programs within CIP 45.07.

Fiscal Years (FY)	2008	2009	2010	2011	2012	Averages
# Enrollments	141	142	171	175	162	158
SCH	1,408	1,354	1,728	1,583	1,597	1,534

#### 7. Graduate Licensure Rates – Not Applicable

#### 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. One source of data to measure the success of our graduates in the workplace is the Department's [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Graduates are also tracked through their voluntary membership in departmental Facebook pages, such as the page "Texas State University-San Marcos Geography graduates". These pages include undergraduate as well as graduate students, but are another way our graduates are attempting to stay connected with the Department of Geography. There is also a "Geography Grad Forum at Texas State" Facebook page, to which current graduate students subscribe. Those students retain their voluntary association with that page after graduation, providing another connection to the department and way in which graduates can be tracked for determining career paths. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be exploited – a recent keyword search - Texas State Geography - produced 4,348 results – including many Geography Alumni.

## 9. Number of Degrees Conferred Annually - Master's CIP 45.07

Table II.C5.9 shows the number of Master's CIP 45.07 conferred during the study period with an average of 23 degrees conferred per year.

Table II.C5.9 - Number of Degrees Conferred Master's CIP 45.07							
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total	Average
Number of Degrees	30	24	20	20	21	115	23

## 10. Admissions

### a. Admission Scores

Table II.C5.10 shows an average GPA score of 3.49 and an average GRE score of 1096 for incoming Master's CIP 45.07 students.

Table II.C5.10 - Master's CIP 45.07 Admissions Scores						
Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
GPA	3.48	3.54	3.34	3.53	3.55	3.49
GRE	1149	1088	1086	1131	1027	1096

### b. Admission Requirements and Review

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards.

To be admitted to the CIP 45.07 M.A.Geo. or M.S. program, applicants must submit a completed application to the Graduate College in accordance with the procedures specified in the Graduate Catalog. The completed application must include the application form located at <http://www.gradcollege.txstate.edu/>, official transcripts of all universities attended, an official report of the score on the Graduate Record Examination (GRE), a letter of Intent, Resume, and at least two letters of recommendation. These documents are to be submitted directly to the Graduate College. International students should consult Graduate College website for additional procedures.

During the study period, admission standards for the M.A.Geo program were raised from a required a grade-point average (GPA) of at least 3.0 to at least 3.2 on a 4.0 scale over the last sixty hours of undergraduate course work, and a preferred combined score of at least 300 on the verbal and quantitative portions of the Graduate Record Examination (GRE) to be considered for admission by the Department. Admission standards for the M.S. program were raised from a required a grade-point average of at least 3.2 to at least 3.4 on a 4.0 scale over the last sixty hours of undergraduate course work, and a preferred combined score of at least 303 on the verbal and quantitative portions of the GRE. The GRE must be completed before the Department acts on any application to either program. Students who meet these criteria are eligible for admission and are admitted if approved by the Department. The Department's admission decisions are based on academic performance and potential as evaluated on the basis of the GPA, GRE, letters of recommendation, the compatibility of the research interests with the current research objectives of the Department's Graduate Faculty, and the Department's interest in maintaining a balance among the number of students pursuing particular research topics with particular advisors. Admission decisions are made twice per year. Applications received by the Graduate College before October 15th are eligible for admission in the spring semester. Applications received by the Graduate College before May 1st are eligible for admission in the fall semester.

### **c. Recruitment**

#### Departmental Level

The Graduate Staff Advisor assists the Graduate Coordinator and Department Chair in coordinating graduate recruiting activities for the Department of Geography. Recruitment includes visiting undergraduate upper division classes, presenting at the graduate-level Teaching Environmental Science courses, and attending professional meetings. Several recruitment workshops have been held within the Department of Geography in recent years. For example, students from Baylor University and Stephen F. Austin University attended one-day workshops at Texas State where sessions were held to introduce them to the faculty, graduate students and student organizations. The two workshops were considered successful and three students enrolled in the Department's Master's program and one in the Ph.D. program in Environmental Geography. In addition, information and recruitment material are provided at professional meetings including: National Association of Chicana and Chicano Studies (NACCS), National Council for Geographic Education (NCGE), Friends of Geography (FOG), Southwest Division of the Association of American Geographers (SWAAG), and the national Association of American Geographers (AAG). The department also routinely has a detailed entry in the AAG's annual Guide to Geography Programs in the Americas. The department has several [scholarships for graduate geography majors](#) including The George D. Battle Memorial Scholarship Supporting Research in Climatology or Coastal Geography and The Natural Hazards Scholarship honoring Dr. Gilbert F. White.

#### Graduate College Level

Representatives from the university Graduate College attend numerous graduate recruiting events throughout the year. The Graduate College presents and distributes information brochures for all graduate programs at Texas State. The Graduate College also provides information on financial aid, the application process, and copies of the Graduate Catalog. The Graduate College representatives visit colleges throughout Texas including: Texas Tech, UT El Paso, St. Edward's University, UT-Austin and Texas A&M-College Station.

### **11. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our student's educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#). Both the Graduate Staff Advisor and the Graduate Coordinator have generous open-door policies for students to drop in with questions about coursework, career paths, and professional issues.

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

### **12. Alumni Relations**

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal awards and scholarships ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from alumni – on the [Geography Careers TRACS site](#).

## **D5. Conclusions and Recommendations**

### Conclusions

The geography graduate degree programs (CIP 45.07) are stable and healthy. Our students are engaged in both classroom and research work, many also benefiting from field experiences and internships. Our graduate alumni find meaningful employment the private and public sectors as well as in academia. Table II.D5 summarizes the number of CIP 45.07 graduate majors, number of degrees conferred and SCH generation. CIP 45.07 Master's students complete their degrees in approximately 2.7 years. Graduate students published numerous papers and presented to local, state and national audiences. Finally, the department actively recruits new students, provides a variety of student support services and works diligently to stay in contact with our alumni.

**Table II.D5 - Master's CIP 45.07 Summary**

	2008	2009	2010	2011	2012	
Number of Majors	69	57	71	83	75	Average - 71
Number of Degrees Conferred	30	24	20	20	21	Total - 115
SCH Generation	1,408	1,354	1,728	1,583	1,597	Average 1,534

### Recommendations

Continue to recruit high-quality graduate students and provide excellent instruction and faculty mentoring to guide advisees through their research. Continue to recruit for a gender and ethnically-diverse student body. Monitor the impact of increasing the admissions standards for master's students.

## **A6. M.A. Geo. in Geography - CIP CODE: 03.01 – Graduate**

Master of Applied Geography (M.A.Geo) - Resource and Environmental Studies (RES)

### **B6. Program Curriculum**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The Master of Applied Geography - Resource and Environmental Studies Program CIP 03.01 - provides a high-quality educational experience training students to use their skills and background knowledge to solve real-world problems related to natural resource and environmental management with innovative applied academic work.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience and become a top tier, nationally recognized graduate program department" - to the mission and goals of the Graduate College and the University.

[The Department of Geography](#) [Graduate College Catalog \(Page 10\)](#) [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

During the review period, the CIP 03.01 graduate program curriculum's core remained focused on resource management and environmental policy. Topics courses on global warming and sustainability issues provided contemporary updates. Directed Research and optional internship-for-credit enhance classroom learning and highlight the applied nature of this program.

##### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title 'Geographer' is expected to grow 35% between 2010 and 2020. Specific to CIP 03.01, the Bureau of Labor Statistics predicts average or above-average growth between 2010 and 2020 in occupations such as [Environmental Protection Technicians](#) and [Environmental Specialists](#). In Texas, our CIP 03.01 graduates are in strong demand with public sector employers such as the Texas Commission on Environmental Quality and the City of Austin's environmental protection departments as well as private environmental-management consulting firms.

##### Curriculum Coordination

All degree and course requirements for the CIP 03.01 program are described in the [University's Graduate Catalog 2011-2013](#). The [Geography Department Website](#) provides a link to course descriptions, course scheduling information as well as to the Policies and Procedures handbook.

##### Curriculum Delivery

The M.A.Geo. CIP 03.01 degree plan is outlined in the [2012 M.A.Geo. Policies and Procedures Handbook](#). The core curriculum for the M.A.Geo. CIP 03.01 program includes three courses: GEO 5309 Applied Geographic Analysis, GEO 5301 Quantitative Methods, and GEO 5300 Research Design and Techniques. Students are expected to complete these three courses within the first twelve graduate hours. The Resource and Environmental Studies program (CIP 03.01) requires GEO 5313 Environmental Management and GEO 5314 Environmental Law. It also requires nine hours selected from among GEO5312, 5316, 5317, 5330, 5334, 5336, 5337, 5339, 5349, 5351, 5352, 5370, 5390, 5418, and 5430. Finally, in addition to the core curriculum, M.A.Geo CIP 03.01 students must complete six hours of electives either within Geography or outside the department, additional graduate credit hours comprised of elective courses to complete the minimum thirty-three required hours, and three hours of directed research. Students may substitute up to six hours of coursework from outside

the Department for elective course work inside the Department. The department invests considerable effort to plan and deliver a schedule of classes (SOC) each semester of required and elective courses that allow students to efficiently progress through their academic program. Programmatic needs (including prerequisite coordination), classroom / lab availability and instructor assignment are some of the variables that factor into this process. Long-term scheduling facilitates student planning and advising. A department-developed scheduling grid assists with semester-schedule planning. During this study period, the University updated the Student Information System – including scheduling and [on-line registration](#) software from a retired legacy system to a BANNER system. Students, Faculty and Staff have all spent considerable time learning and adapting to this new database interface.

### **3. Required/Recommended Courses from other Academic Units**

[M.A.Geo CIP 03.01](#) students may take up to six-hours of electives from departments other than geography in consultation with their advisor.

### **4. Student Learning Outcomes Assessment**

#### Program Learning Outcomes

Program Curricular Goals for all graduate programs are defined by the [Geography Department Program Student Learning Outcomes](#). The fundamental learning outcomes upon graduation for all graduate students of the Department of Geography are to have a working knowledge of the core concepts of geography as well as an insightful understanding of the essential concepts of their particular specializations that would be expected at the graduate level of study. Texas State University's institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

[M.A.Geo. CIP 03.01](#) program goals include producing students who demonstrate:

- Understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas.
- Understanding of basic spatial statistics and multivariate quantitative and analytical methods, and other appropriate tools for spatial analysis.
- Understanding of the components of research design including problem definition, theory, literature review, methodology, and analysis.
- Significant research and writing expertise resulting in a meaningful scholarly contribution.
- Preparedness to apply their skills in professional careers.

Working with the Office of [Academic Development and Assessment](#), the Geography Department annually and systematically measures graduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from 5 years of Learning Outcome Reports for CIP 03.01 [M.A.Geo - Resource and Environmental Studies](#), student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Also as a result of learning outcomes assessment data, Master's advisors are recommending their students, especially those in their second year of the program, to make presentations at professional conferences. In particular, students will be encouraged to participate in our local Texas Geography Student Research Symposium (GSRS) which is held during the spring semester.

### **5. Program Curriculum and Duration**

The [M.A.Geo. Degree CIP 03.01](#) requires completion of 33 graduate hours. These hours include a nine-hour core curriculum, a twelve-hour major in Resource & Environmental Studies, a six-hour resource area, and a directed research project. The remaining graduate hours are elective. Finally, Graduate CIP 03.01 students must pass a comprehensive oral and written examination.

The core classes for the M.A.Geo. CIP 03.01 are scheduled as follows:

- GEO 5309 Applied Geographic Analysis is offered in the fall semester of every academic year. The purpose of this course is to introduce students to the graduate faculty of the Department and their research interests. All entering students are expected to take GEO5309 during their first fall semester in the program.
- GEO 5301 Quantitative Methods is offered each semester. It should be completed within the first full year of residence, after completing a prerequisite statistics course (GEO3301 or equivalent) if needed.
- GEO 5300/GEO 7300 Research Design and Techniques are offered during the spring semester. The appropriate one should be taken immediately after GEO 5309. Students beginning the program in the fall should take this course in the spring semester of their first year in the program. Students should select their research advisors upon completion of GEO 5309, and GEO 5300 or GEO 7300.

## 6. Co-curricular Opportunities

Internships provide opportunities for M.A.Geo. CIP 03.01 students to use their knowledge in real-world work experience. Internships provide valuable entree into the professional employment market. M.A.Geo. students who do not have work experience in applied geography are strongly encouraged to pursue internships, especially if their career plans involve working in the Austin-San Antonio corridor. The Geography Department manages a very active [internship-for-credit program](#) with students performing a career-enhancing experience each long semester and during the summer with a wide variety of sponsors. The department maintains an [internship / career website](#) which offers internship and job postings (many posted by successful geography alumni) as well as geography career information. The department also collects, organizes and publishes an [Alumni Business Card Directory](#) which provides a useful tool for career exploration and networking. Many of the cards include CIP 03.01 alumni. The Geography Department works closely with the Texas State [Career Services](#) to coordinate [jobs fairs](#), resume workshops, walk-in career advising and other career-education opportunities such as preparing for information interviews and job shadowing experiences.

The department hosts an annual [Texas Geography Student Research Symposium](#) a student-led professional mini-conference designed to celebrate and encourage CIP 03.01 geography students to conduct high quality research and provide an opportunity to present their resource and environmental management research as a 'warm-up' prior to presentations at state, regional and national conferences. Finally, each spring we hold our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department's annual [scholarship](#) and award ceremony.

Geography graduate students have organized the Graduate Student Forum and provide an excellent student resource through their [website](#). The Forum provides students with an opportunity to discuss concerns about the program, to provide formal feedback to the Graduate Coordinator, the Department Chair, and the faculty of the Department about these concerns, and to encourage the dissemination of information about the program among the graduate student population.

Finally, many graduate courses include educational field experiences as part of the course. The department also offers several faculty-led overseas field experiences including Europe and [Cuba](#) through the University's [Study Abroad Office](#). Other field-experience courses include the [Geography of Big Bend](#) and the [Geography of the Southwestern United States](#). All are available for graduate academic credit. Many CIP 03.01 graduate students use these field experiences as resource and environmental management research opportunities.

**C6. Student and Graduates** (Source - [Texas State Institutional Research Office](#))

**1. Student Demographics**

**a. Classification**

Table II.C6.1.a shows the number of graduate geography CIP 03.01 majors. Graduate CIP 03.01 experienced decline in overall growth from FY 2009 to FY 2013 with an average of 26 majors for the study period. The decline in the number of CIP 03.01 majors was at least in part the result of the geography department’s decision to raise admission requirements for CIP 03.01

<b>Table II.C6.1.a - Master’s Geography Majors CIP 03.01</b>						
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Average
Number of Majors	28	36	30	17	19	26

**b. Gender Diversity / Ethnicity**

Gender Diversity

Table II.C6.1.b1 shows the gender diversity for graduate CIP 03.01 majors. Students majoring in this CIP are roughly split between males and females on average with little year to year variation for the study period. From FY 2009 to FY 2010 the number of females increased, decreased in FY 2012 and then increased in FY 2013.

<b>Table II.C6.1.b1 - Master’s CIP 03.01 Gender Diversity</b>						
Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	14	14	16	9	9	12.4
Male	14	22	14	8	10	13.6
% Male	50%	61.1%	46.7%	47%	52.6%	51.5%

Ethnicity

Table II.C6.1.b2 shows the ethnic diversity for master’s CIP 03.01 majors. Students majoring in this CIP are predominately white, non-Hispanic - 84% on average for the study period.

<b>Table II.C6.1.b2 - Master’s CIP 03.01 Ethnicity</b>							
Ethnicity	FY	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Averages
Asian/Pacific Islander		1	1	1	0	0	0.6
Hispanic		6	4	2	0	2	2.8
Multi-race, non-Hispanic, non-Black		0	0	0	0	1	0.2
Unknown		0	1	2	0	1	0.8
White, non-Hispanic		21	30	25	17	15	21.6
% White, non-Hispanic		75%	83.3%	83.3%	100 %	79%	84%

**b. Probation and Suspension**

Table II.C6.1.c shows more than 94% of all master’s CIP 03.01 majors in good academic standing.

<b>Table II.C6.1.c - Master’s CIP 03.01 Probation and Suspension</b>						
Fiscal Years (FY)	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Averages
Good standing	89.7%	96.4%	88.9%	96.7%	100.0%	94.34%
Probation	3.4%	0.0%	5.6%	3.3%	0.0%	2.46%
Suspension	3.4%	0.0%	2.8%	0.0%	0.0%	1.24%

## 2. Student Time to Degree

Table II.C6.2 shows that master's CIP 03.01 students take an average of 2.9 years to graduate.

Table II.C6.2 - Average Number of Years to Master's Degree CIP 03.01						
Fiscal Years (FY)	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Average
	2.5	2.7	3.1	4.2	1.8	2.9

## 3. Student Publications and Presentations

According to the [Graduate Faculty-Mentored Student Research and Awards](#) list - reported by faculty and compiled by the College of Liberal Arts - graduate students in geography Master's CIP 03.01 published 11 articles and made 10 conference presentations during academic years 2006 through 2010 as shown in Table II.C6.3.

Table II.C6.3 – Faculty-Mentored Student Publications and Presentations						
Graduate CIP 03.01						
	AY 2006	AY 2007	AY 2008	AY 2009	AY 2010	Totals
Articles	5	1	2	1	2	11
Conference Presentations	5	1	2	1	2	10

## 4. Retention Rates for First-Time CIP 03.01 Master's Students by Cohort Semester

Table II.C6.4 - CIP 03.01 shows that an average of 86.4% of CIP 03.01 geography students are retained after the first year.

Table II.C6.4 - CIP 03.01 Master's Retention Rates by Cohort Semester						
Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Average
1.0 year	87.5%	88.9%	69.2%	100.0%	86.4%	86.40%

## 5. Graduation Rates for First-Time Master's Students CIP 03.01 by Cohort Semester

Table II.C6.5 shows that nearly 40% of all Master's CIP 03.01 students graduated within three years during the years 2005 to 2009.

Table II.C6.5 - CIP 03.01 Master's Graduation Rates					
Cohort Semester (FY)	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
2.0 years	33.3%	40.0%	NA	11.1%	30.8%
3.0 years	33.3%	60.0%	25.0%	33.3%	38.5%
4.0 years	33.3%	60.0%	62.5%	33.3%	NA
5.0 years	33.3%	60.0%	62.5%	NA	NA

## 6. Student Enrollments and SCH Generation Master's CIP 03.01

Table II.C6.6 show enrollments and SCH Generation for Master's CIP 03.01. Note that these data count the number of students enrolled in courses classified into CIP 03.01 not enrollments and SCH generation by programs within CIP 03.01.

Table II.C6.6 - Master's CIP 03.01 Enrollments and SCH Generation						
Fiscal Years (FY)	2008	2009	2010	2011	2012	Averages
# Enrollments	141	142	171	175	162	158
SCH	1,408	1,354	1,728	1,583	1,597	1,534

## 7. Graduate Licensure Rates – Not Applicable

## 8. Graduate Placement

It is difficult to track our many students after they graduate to determine their placement in the job market. Street and e-mail addresses change and alumni communication with Texas State after graduation is of course, voluntary. One source of data to measure the success of our graduates in the workplace is the Department's [Alumni Business Card Directory](#). Now in its Seventh Edition, the department has since 1993 collected hundreds and hundreds of Geography Alumni Business Cards which not only show graduate placement but are also useful recruitment, career advising and networking tools. Many of the Geography [Internships and Job Postings](#) uploaded to a special website (part of the TRACS course-deliver system) are sent to the Department by our Alumni providing another source of graduate-placement data. Graduates are also tracked through their voluntary membership in departmental Facebook pages, such as the page "Texas State University-San Marcos Geography graduates". These pages include undergraduate as well as graduate students, but are another way our graduates are attempting to stay connected with the Department of Geography. There is also a "Geography Grad Forum at Texas State" Facebook page, to which current graduate students subscribe. Those students retain their voluntary association with that page after graduation, providing another connection to the department and way in which graduates can be tracked for determining career paths. Finally, the [LinkedIn](#) Career Networking site provides a new opportunity to track and stay connected to our Alumni yet to be exploited – a recent keyword search - Texas State Geography - produced 4,348 results – including many Geography Alumni.

## 9. Number of Degrees Conferred Annually – Master's CIP 03.01

Table II.C6.9 shows the number of Master's CIP 030.01 degrees conferred per year during the study period and an average of 7.6 degrees conferred each year.

Table II.C6.9 - Master's CIP 03.01 Degrees Conferred						
	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average
Number of Degrees	8	5	5	15	5	7.6

## 10. Admissions

### a. Admission Scores

Table II.C6.10 shows an average GPA score of 3.23 and an average GRE score of 1028 for incoming Master's CIP 03.01 students.

Table II.C6.10 - CIP 03.01 Admissions Scores						
Fiscal Years (FY)	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
GPA	3.11	3.21	3.22	3.22	3.39	3.23
GRE	1056	1006	999	1055	1026	1028

### b. Admission Requirements and Review

Admittance to Texas State University is based primarily on the overall academic record of applicants, and to a lesser extent, their extra-curricular activities as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards.

To be admitted to the M.A.Geo. CIP 03.01 program, applicants must submit a completed application to the Graduate College in accordance with the procedures specified in the Graduate Catalog. The completed application must include the application form located at <http://www.gradcollege.txstate.edu>, official transcripts of all universities attended, an official report of the score on the Graduate Record Examination (GRE), a letter of Intent, Resume, and at least two letters of recommendation. These

documents are to be submitted directly to the Graduate College. International students should consult Graduate College website for additional procedures.

During the study period, admission standards for the M.A. Geo program were raised from a required a grade-point average (GPA) of at least 3.0 to at least 3.2 on a 4.0 scale over the last sixty hours of undergraduate course work, and a preferred combined score of at least 300 on the verbal and quantitative portions of the Graduate Record Examination (GRE) to be considered for admission by the Department. The GRE must be completed before the Department acts on any application to either program. Students who meet these criteria are eligible for admission and are admitted if approved by the Department. The Department's admission decisions are based on academic performance and potential as evaluated on the basis of the GPA, GRE, letters of recommendation, the compatibility of the research interests with the current research objectives of the Department's Graduate Faculty, and the Department's interest in maintaining a balance among the number of students pursuing particular research topics with particular advisors. Admission decisions are made twice per year. Applications received by the Graduate College before October 15th are eligible for admission in the spring semester. Applications received by the Graduate College before May 1st are eligible for admission in the fall semester.

### **c. Recruitment**

#### Departmental Level

The Graduate Staff Advisor assists the Graduate Coordinator and Department Chair in coordinating graduate recruiting activities for the Department of Geography. Recruitment includes visiting undergraduate upper division classes, presenting at the graduate-level Teaching Environmental Science courses, and attending professional meetings. Several recruitment workshops have been held within the Department of Geography in recent years. For example, students from Baylor University and Stephen F. Austin University attended one-day workshops at Texas State where sessions were held to introduce them to the faculty, graduate students and student organizations. The two workshops were considered successful and three students enrolled in the Department's Master's program and one in the Ph.D. program in Environmental Geography. In addition, information and recruitment material are provided at professional meetings including: National Association of Chicana and Chicano Studies (NACCS), National Council for Geographic Education (NCGE), Friends of Geography (FOG), Southwest Division of the Association of American Geographers (SWAAG), and the national Association of American Geographers (AAG). The department also routinely has a detailed entry in the AAG's annual Guide to Geography Programs in the Americas. The department has several [scholarships for graduate geography majors](#) including The George D. Battle Memorial Scholarship Supporting Research in Climatology or Coastal Geography and The Natural Hazards Scholarship honoring Dr. Gilbert F. White.

#### Graduate College Level

Representatives from the university Graduate College attend numerous graduate recruiting events throughout the year. The Graduate College presents and distributes information brochures for all graduate programs at Texas State. The Graduate College also provides information on financial aid, the application process, and copies of the Graduate Catalog. The Graduate College representatives visit colleges throughout Texas including: Texas Tech, UT El Paso, St. Edward's University, UT-Austin and Texas A&M-College Station.

### **12. Student Support Services**

The Department of Geography provides a wide variety of student support services in order to enhance our student's educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#). Both the Graduate Staff

Advisor and the Graduate Coordinator have generous open-door policies for students to drop in with questions about coursework, career paths, and professional issues.

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

## 12. Alumni Relations

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal awards and scholarships ceremony which includes recognizing an outstanding former student with the Department’s Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from alumni – on the [Geography Careers TRACS site](#).

## D6. Conclusions and Recommendations

### Conclusions

Geography graduate degree program (CIP 03.01) students are engaged in both classroom and research work, many also benefiting from field experiences and internships. Our graduate alumni find meaningful employment the private and public sectors as well as in academia. Table II.D6 summarizes the number of CIP 03.01 graduate majors and number of degrees conferred. Master’s students complete their degrees on average in 2.9 years. Graduate students published numerous papers and presented to local, state and national audiences. Finally, the department actively recruits new students, provides a variety of student support services and works diligently to stay in contact with our alumni.

**Table II.D6 - Master’s CIP 03.01 Summary**

Fiscal Years (FY)	2008	2009	2010	2011	2012	
Number of Majors	29	28	36	30	17	Average - 28
Number of Degrees Conferred	8	5	5	15	5	Total - 38

### Recommendations

Continue to recruit high-quality graduate students and provide excellent instruction and faculty mentoring to guide advisees through their research. Continue to recruit for a gender and ethnically-diverse student body. Monitor the impact of increasing the admissions standards for master’s students.

## **A7. Ph.D. in Geography – CIP CODE: 45.07 - Graduate**

Major areas of study within this 4-digit CIP Code

Ph.D. in Environmental Geography

Ph.D. in Geographic Education

Ph.D. in Geographic Information Science

### **B7. [Program Curriculum](#)**

#### **1. Alignment of Program with Stated Program and Institutional Goals and Purposes**

The objective of the Ph.D. program in Geography is to educate students in the process of geographic research, the development of new knowledge, and the application of this research and knowledge to solve problems with spatial dimensions.

Ph.D. Program Objectives:

- 1) To graduate Ph.D.'s in geography that will conduct vital research and serve the needs and interests of Texas and the nation.
- 2) To offer a clear alternative to the nature and scope of geography Ph.D. programs in Texas by building on the inherent strengths of the department's existing faculty and programs in environmental geography and geographic education.
- 3) To employ the latest analytical technologies in scholarly research and in the solution of geographic problems.

#### Mission and Goals

The reference-links below relate the Geography Department's overall mission and goal - "to provide a high-quality educational experience and become a top tier, nationally recognized graduate program department" - to the mission and goals of the Graduate College and the University.

[The Department of Geography](#)   [Graduate College Catalog](#)   [Texas State University](#)

#### **2. Curriculum Development, Coordination and Delivery**

##### Curriculum Development

During the review period, the Ph.D. programs did not have any major new curricular development, although several courses were deleted and a few minor changes made.

##### Market Demand for Geographers

The Bureau of Labor Statistics [Occupational Outlook Handbook](#) provides evidence that occupations with job title 'Geographer' is expected to grow 35% between 2010 and 2020. Other geography occupations related to CIP 45.07 predicted to have average or above-average growth between 2010 and 2020 include [cartography and photogrammetry](#), [surveying and mapping](#), [geosciences](#), [environmental protection technicians](#) and [environmental specialists](#).

##### Curriculum Coordination

All degree and course requirements are described in the [University's Graduate Catalog 2011-2013](#). The [Geography Department Website](#) provides a link to course descriptions, course scheduling information as well as to the Policies and Procedures handbook.

##### Curriculum Delivery

The degree plan for the doctoral program is outlined in the [2009 Ph.D. Policies and Procedures Handbook](#). All Ph.D. students must complete a minimum of 31 hours of doctoral-level course work. These hours include nine hours of core courses, a four-hour skills course, 12 hours of specialization courses, and six hours of elective courses in geography or a related field. Some of these courses have prerequisites, and students who lack the appropriate prerequisites must complete them before enrolling in those courses. Students who hold master's degrees in fields other than Geography may be required to take leveling course work at the undergraduate or master's level. Prerequisite and leveling courses

do not count for doctoral credit and are not included in the 31-hour course work minimum. After completing the required course work students must also complete a minimum of 15 hours of doctoral dissertation credit. Students must also pass a comprehensive examination, complete a research proposal, and complete and defend a Ph.D. dissertation.

### **3. Required/Recommended Courses from other Academic Units**

Six hours of elective courses may be from a related field in another academic unit.

### **4. Student Learning Outcomes Assessment**

#### Program Learning Outcomes

Program Curricular Goals for all graduate programs are defined by the [Geography Department Program Student Learning Outcomes](#). The fundamental learning outcomes upon graduation for all graduate students of the Department of Geography are to have a working knowledge of the core concepts of geography as well as an insightful understanding of the essential concepts of their particular specializations that would be expected at the graduate level of study. Texas State University's institutional accrediting body, the [Southern Association of Colleges and Schools](#) (SACS), requires each academic program to have clear and [measurable student learning outcomes](#).

Ph.D. students will demonstrate the following upon completion of the program:

- 1) Advanced understanding of the historical development of geographical thought, and the major current philosophical and theoretical debates in geography.
- 2) Advanced understanding of the development of a theoretically meaningful geography or geographic education research problem and the components of a research proposal.
- 3) Advanced proficiency in the use of technical tools for geographic research including quantitative methods and other appropriate tools for spatial analysis.
- 4) Preparedness for advanced-level careers in academia, with governmental research and educational organizations, or within the private sector.

Working with the Office of Academic Development and Assessment, the Geography Department annually and systematically measures graduate student learning outcomes using embedded exam questions and embedded class project assignments based on meeting, exceeding or failing to meet expectations. Summarized from 5 years of [Ph.D. Learning Outcome Reports](#), student achievement has shown modest overall improvement each year - especially regarding an increase in the number of students exceeding expectations. Based on learning outcomes findings, faculty will strongly encourage their PhD advisees to make professional presentations at conferences.

### **5. Program curriculum and duration in comparison to peer programs**

The core curriculum for all Ph.D. students in Environmental Geography, Geographic Education, and Geographic Information Science includes:

- GEO 7300 Advanced Research Design
- GEO 7301 Advanced Quantitative Methods in Geography
- GEO 7302 Nature and Philosophy of Geography

Full-time students must complete these courses in their first year of residence. Part-time students must complete them within the first two years of their Ph.D. course work.

All Ph.D. students in Environmental Geography and Geographic Education must complete a four-hour skill course. The courses that satisfy this requirement include:

- GEO 7415 Geographic Applications of Remote Sensing
- GEO 7417 Geographic Information Systems (GIS)
- GEO 7430 Field Methods
- GEO 7447 Spatial Graphics in Geographic Education

All Ph.D. students in [Geographic Information Science](#) must complete the following four-hour skill course: GEO 7418 Technical Foundations and Methods in Geographic Information Science.

Depending on the timing of a student’s course and research progress, the duration of graduate geography programs are typical of other peer institutions.

## 6. Co-curricular Opportunities

The department hosts an annual [Texas Geography Student Research Symposium](#) a student-led professional mini-conference designed to celebrate and encourage geography students to conduct high quality research and provide graduate students and opportunity to present their research as a ‘warm-up’ prior to presentations a state, regional and national conferences, Finally, each spring we hold our Annual [Geography Student Celebration / Alumni Reunion](#) which includes the department’s annual [scholarship](#) and award ceremony.

Geography graduate students have organized the Graduate Student Forum and provide an excellent student resource through their [website](#). The Forum provides students with an opportunity to discuss concerns about the program, to provide formal feedback to the Graduate Coordinator, the Department Chair, and the faculty of the Department about these concerns, and to encourage the dissemination of information about the program among the graduate student population.

Finally, many Graduate Courses include educational [field experience](#). The department also offers several faculty-led overseas summer school opportunities in Europe, including a [GI Science Course](#) and beginning in 2013, in [Cuba](#) through the University’s [Study Abroad Office](#) as well as a student exchange program in Hanover, Germany. Other field-experience courses include the [Geography of Big Bend](#) and the [Geography of the Southwestern United States](#). All are available for graduate academic credit.

## C7. Student and Graduates (Source - [Texas State Institutional Research Office](#))

### 1. Student Demographics

#### a. Classification

Table II.C7.1 shows the number of Ph.D. CIP 45.07 majors organized by major area of study.

Majors Areas of Study	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Environmental Geography	29	32	36	30	18	29
Geographic Education	19	19	18	18	29	21
Geographic Info Science	16	20	19	18	16	18
Totals	64	71	73	66	63	67

#### b. Gender Diversity / Ethnicity

##### Gender Diversity

Table II.C7.1.b shows that on average the Ph.D. CIP 45.07 program had nearly an equal number of males and females.

Gender	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Averages
Female	31	34	35	33	33	33
Male	33	37	38	33	30	34
% Male	51.56%	52.11%	52.05%	50.00%	47.62%	50.67%

## Ethnicity

Table II.C7.1.b2 shows that about 70% of Ph.D. CIP students are White, non-Hispanic.

Ethnicity	FY	2009	2010	2011	2012	2013	Averages
Asian/Pacific Islander		4	7	8	0	0	3.8
Hispanic		6	6	5	6	7	6
Multi-race, non-Hispanic, non-Black		0	0	0	1	2	0.6
Black, non-Hispanic		2	3	1	0	0	1.2
Unknown		0	0	0	1	4	1
White, non-Hispanic		46	52	57	45	36	47.2
Non-Resident International		6	3	2	13	14	7.6
% White, non-Hispanic		71.88%	73.24%	78.08%	68.18%	57.14%	69.70%

### c. Probation and Suspension

Table II.C7.1.c shows that almost all Ph.D. CIP 45.07 students were in good academic standing during the study period.

Academic Standing	FY	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Averages
Good standing		98.4%	98.4%	97.2%	98.6%	100.0%	98.5%
Probation		0.0%	0.0%	1.4%	0.0%	0.0%	.3%

### 2. Student Time to Degree

Table II.C7.2 shows that Ph.D. CIP 45.07 students take 4.9 years to complete their degrees on average.

FY	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Average
	5.9	4.9	4.4	5.0	4.4	4.9

### 3. Student Publications and Awards

According to the [Graduate Faculty-Mentored Student Research and Awards](#) list - reported by faculty and compiled by the College of Liberal Arts - graduate students in geography Ph.D. CIP 45.07 published 190 articles, made 185 conference presentations and received 5 awards during academic years 2006 through 2010 as shown in Table II.C6.3.

Graduate CIP 45.07						
	AY 2006	AY 2007	AY 2008	AY 2009	AY 2010	Totals
Articles	33	17	38	44	58	190
Conference Presentations	31	15	39	44	56	185
Awards	1	1			3	5

### 4. Retention Rates for First-Time Ph.D. CIP 45.07 Students by Cohort Semester

Table II.C7.4 shows Ph.D. first and second year retention rates of 91% and 84% respectively.

Fiscal Years	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Average
1.0 year	78.6%	87.5%	100.0%	88.9%	100.0%	91.0%
2.0 years	78.6%	87.5%	80.0%	88.9%	NA	83.7%

## 5. Graduation Rates for First-Time Doctoral Students CIP 45.07 by Cohort Semester

Table II.C7.5 shows that 60% of all Ph.D. CIP 45.07 students graduate in six years.

Cohort Semester	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004
4.0 years	25.0%	12.5%	NA	12.5%	30.0%
5.0 years	25.0%	37.5%	33.3%	25.0%	40.0%
6.0 years	100.0%	37.5%	50.0%	43.8%	60.0%
7.0 years	100.0%	37.5%	50.0%	43.8%	70.0%
8.0 years	100.0%	37.5%	50.0%	43.8%	70.0%

## 6. Student Enrollments and SCH Generation Ph.D. CIP 45.07

Table II.C7.6 show student course enrollments and SCH generation for Ph.D. CIP 45.07.

FY		2008	2009	2010	2011	2012	Averages
<u># Enrollments</u>	Env. Geo.	66	62	71	74	65	67.6
	Geo. Ed.	43	38	40	37	35	38.6
	G.I. Science	37	32	45	38	36	37.6
	Total	146	132	156	149	136	143.8
SCH		1041	1004	1139	1085	988	1051.4

## 7. Graduate Licensure Rates – Not Applicable

## 8. Graduate Placement

The Department of Geography conferred the first PhD degree at Texas State University in 2000. Since then, 85 doctorates have been granted with subsequent job placement categorized as follows:

- University-level academic positions: 41 (at least 13 are tenured Associate Professors)
- Community college/high school teaching: 11
- University / non-government researchers including post-docs: 12
- Government positions: 9
- Private sector positions: 9
- Independent scholars / retired: 3

## 9. Number of Degrees Conferred Annually - Ph.D. CIP 45.07.

Table II.C7.9 shows that Texas State University conferred a total of 39 Ph.D. CIP 45.07 degrees during the study period with an average of 7.8 degrees per year.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Totals	Averages
Env. Geo.	4	2	1	7	5	19	3.8
Geo. Ed.	1	3	3	1	2	10	2
G. I. Science	2	1	3	3	1	10	2
Total	7	6	7	11	8	39	7.8

## 10. Admissions

### a. Admission Scores

Table II.C7.10 shows that incoming CIP 45.07 Ph.D. students had an average GPA of 3.51 and a GRE score of 1122.

Cohort Semester	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Averages
GPA	3.38	3.32	3.35	3.67	3.83	3.51
GRE	1034	1093	1179	1174	1130	1122

### b. Admission Requirements and Review

Admittance to Texas State University is based primarily on the overall academic record of the applicant, and to a lesser extent, their extra-curricular activities as well as the minimum standards of the State of Texas Education Code ([TEC](#)) [51.803-51.809](#) Uniform Admissions Standards.

The minimum requirements for admission to CIP 45.07 Ph.D. programs in Geography at Texas State University include a completed master's degree in geography or a related field, a grade-point average (GPA) of 3.5 or better in master's-level course work, a score of at least 1100 on the verbal and quantitative portions combined of the Graduate Record Examination (GRE), 3 letters of recommendation, and a statement of goals. Students for whom English is a second language must also complete the Test of English as a Foreign Language (TOEFL). Each international student must have a TOEFL score of at least 78 (iBT) with four out of four minimum section scores: 19/Reading; 19/Listening; 19/Speaking; 18/Writing.

### c. Recruitment

#### Departmental Level

The Graduate Staff Advisor assists the Graduate Coordinator and Department Chair in coordinating graduate recruiting activities for the Department of Geography. Recruitment includes visiting undergraduate upper division classes, presenting at the graduate-level Teaching Environmental Science courses, and attending professional meetings. Several recruitment workshops have been held within the Department of Geography in recent years. For example, students from Baylor University and Stephen F. Austin University attended one-day workshops at Texas State where sessions were held to introduce them to the faculty, graduate students and student organizations. The two workshops were considered successful and three students enrolled in the Department's Master's program and one in the Ph.D. program in Environmental Geography. In addition, information and recruitment material are provided at professional meetings including: National Association of Chicana and Chicano Studies (NACCS), National Council for Geographic Education (NCGE), Friends of Geography (FOG), Southwest Division of the Association of American Geographers (SWAAG), and the national Association of American Geographers (AAG). The department also routinely has a detailed entry in the AAG's annual Guide to Geography Programs in the Americas. The department has several [scholarships for graduate geography majors](#) including The George D. Battle Memorial Scholarship Supporting Research in Climatology or Coastal Geography and The Natural Hazards Scholarship honoring Dr. Gilbert F. White.

#### Graduate College Level

Representatives from the university Graduate College attend numerous graduate recruiting events throughout the year. The Graduate College presents and distributes information brochures for all graduate programs at Texas State. The Graduate College also provides information on financial aid, the application process, and copies of the Graduate Catalog. The Graduate College representatives

visit colleges throughout Texas including: Texas Tech, UT El Paso, St. Edward's University, UT-Austin and Texas A&M-College Station.

### 11. Student Support Services

The Department of Geography provides a wide variety of student support services in order to enhance our student's educational experience. Below is a list of effective departmental student support services that augment those offered by the [University](#) and the [College of Liberal Arts](#). Both the Graduate Staff Advisor and the Graduate Coordinator have generous open-door policies for students to drop in with questions about coursework, career paths, and professional issues.

- [Department of Geography Scholarships](#)
- Academic and Career Advising
- Weekend and evening open computer lab hours
- Funding for student travel
- Administrative and facility support for Geography Student Organization Activities

### 12. Alumni Relations

This year we celebrated our 19<sup>th</sup> [Annual Geography Alumni Reunion and Student Celebration](#). Each year in April this event bring alumni and current students together for a formal awards and scholarships ceremony which includes recognizing an outstanding former student with the Department's Distinguished Alumni Award. The Geography Department also publishes [GEONEWS](#) which features updates on geography alumni, students, faculty and staff. The Department also stays connected to our alumni through our [Alumni Business Card Directory](#) and Internship and Job Postings – many of which come from alumni – on the [Geography Careers TRACS site](#).

### D7. Conclusions and Recommendations

Geography graduate degree programs (CIP 47.05) students are engaged in both classroom and research work. Our graduate alumni find meaningful employment the private and public sectors as well as in academia. Table II.D7 summarizes the number of graduate majors, number of degrees conferred and SCH generation. Graduate students published numerous papers and presented to local, state and national audiences. Finally, the department actively recruits new students, provides a variety of student support services and works diligently to stay in contact with our alumni.

<b>Table II.D7 - Ph.D. CIP 45.07 Summary</b>						
Fiscal Years (FY)	2008	2009	2010	2011	2012	Averages
Number of Graduate Majors	64	64	71	73	66	68
Number of Degrees Conferred	7	6	7	11	8	39
SCH Generation	1041	1004	1139	1085	988	1,051

#### Recommendations

Continue to recruit high-quality graduate students and provide excellent instruction and faculty mentoring to guide advisees through their research. Continue to recruit for a gender and ethnically-diverse student body.