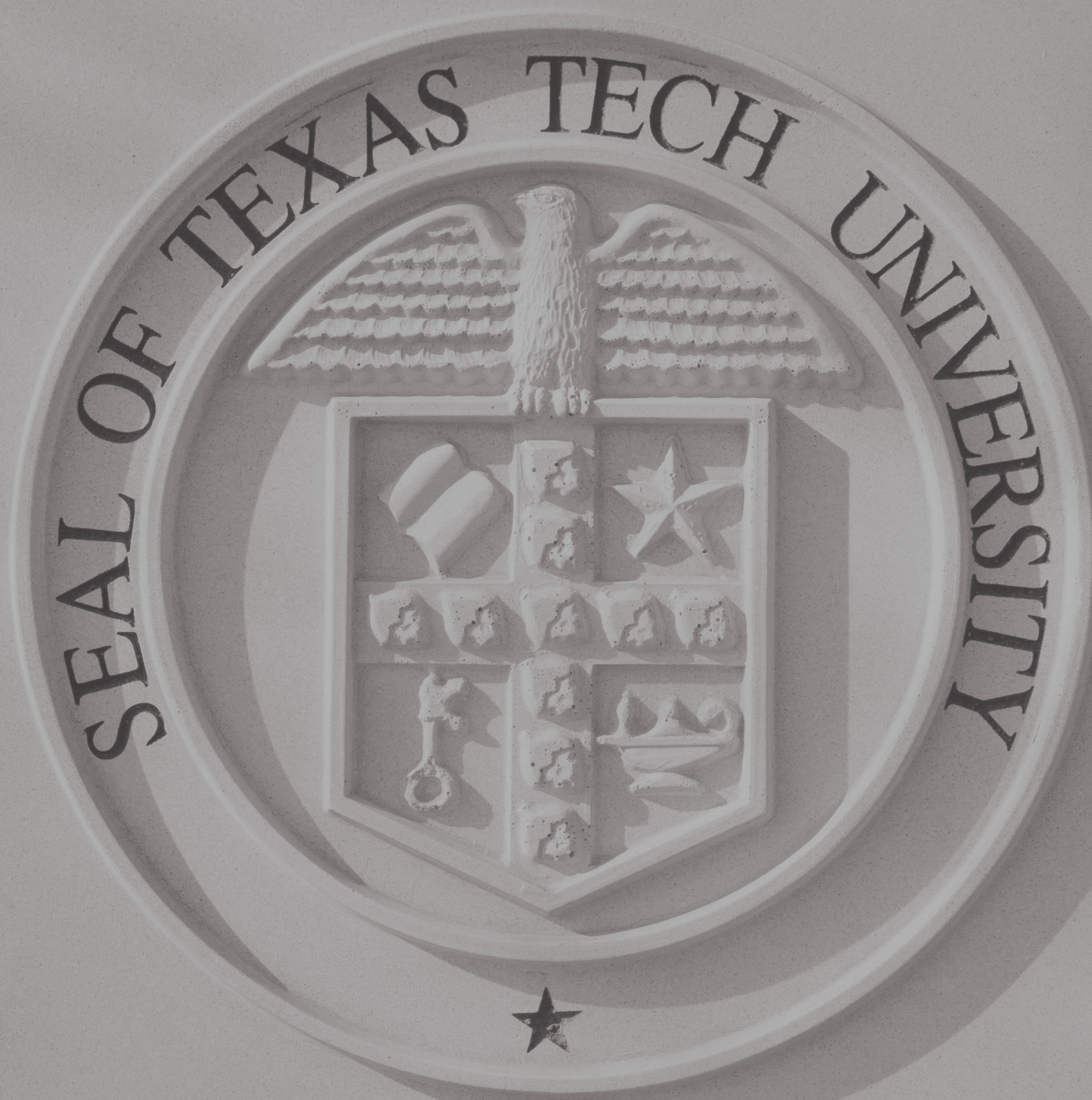




TEXAS TECH UNIVERSITY  
Graduate School™



Enhancing Graduate Education at Texas Tech University:

## *The Path Forward*

Strategic Plan of the Graduate School 2015-2020  
2016 Update





## Message from the Dean

The graduate enterprise of Texas Tech is an essential part of the university's emergence as a premier national research university. This was affirmed by the recent designation of Tech by the Carnegie Commission on Higher Education as one of the nation's most elite universities ("doctoral university: highest research activity"), a recognition for which our graduate programs figured prominently.

Enhancing Graduate Education at Texas Tech University: The Path Forward complements the strategic plan of the university to continue to move us forward as a top-tier institution. The kind of institution that helps meet the demands for innovation and a highly skilled workforce. The kind of institution that serves as an economic engine and helps secure the economic vitality of Texas and the nation.

The Path Forward, however, is much more than a set of milestones for growth. It is a comprehensive plan for developing an enterprise that produces ethical, knowledgeable, and thoughtful graduates who are prepared to tackle complex challenges and to enrich the cultural and social fabric of society.

The Path Forward, is a dynamic plan designed to adapt and respond to the needs of our students, our partners inside and outside the university, and to the workforce. Accordingly, the plan has been reviewed for progress toward goals and has been revised to assure continuous improvement and furtherance of the university's mission. I'm particularly grateful to the Dean's Advisory Council of the Graduate School for their input. Adjustments to the plan also have been made in response to feedback from our various programs and from surveys of graduating students and alums.

Mark A. Sheridan, Ph.D.

Vice Provost for Graduate and Postdoctoral Affairs

Dean of the Graduate School

Texas Tech University



# Background and Progress Towards Goals

Graduate education is the centerpiece of American higher education and is highly respected worldwide. Graduate education has major impacts on society. It drives innovation in all fields of endeavor, from the arts and humanities to science, technology, engineering, and mathematics. Graduate education also is a central component of the US workforce development strategy as graduate degree holders bring increased value to the workforce and to society through their specialized knowledge and problem-solving ability. The contributions of graduate education on research and innovation and workforce development helps fuel economy, create jobs, and improve the quality of life and the cultural and social fabric of society. Graduate degree holders also realize significant personal benefits through higher annual and lifetime earnings and increased job security.

## Graduate education has significant and far-reaching impacts on society

- Creates the workforce needed in a global, knowledge-based economy
- Contributes to innovation and groundbreaking research
- Facilitates technology transfer and commercialization
- Develops innovators and entrepreneurs
- Prepares future college and university faculty
- Develops leaders for business, nonprofit, and government sectors
- Prepares the K-12 teacher workforce
- Contributes to start-ups and the creation of new jobs
- Enables development and implementation of public health and safety initiatives
- Strengthens communities through social action
- Enhances society through the arts, humanities, and social sciences

Texas Tech University, in its strategic plan, *Making it Possible: 2010-2020 Strategic Plan*, sets out the goal to become a premier national research university, a Tier 1 university. The strategic plan of the Graduate School, *Enhancing Graduate Education at Texas Tech University: The Path Forward*, complements the strategic plan of the university to help achieve this goal by increasing the size, scope, and quality of its graduate enterprise.



The university has made significant progress on meeting the goals set forth in *The Path Forward*; here are some highlights:

We have added three doctoral degree programs, 19 master's degree programs, and 7 graduate certificate programs since 2013 that align with the strategic priorities of the university and help meet workforce demands. We also have added some 10 graduate certificate programs that focus on developing critical skills in focused areas. A particular emphasis has been placed on increasing accessibility, and of the new programs added, most are available online.

Expanded marketing and recruitment efforts have led to a 38% increase in the number of applications since 2013. At present, 48.6% of our applications are domestic, while 24% are from India and 7% from China; other countries from which we receive applications, in order of number, include Iran, Bangladesh, Saudi Arabia, Nigeria, Sri Lanka, Turkey, Taiwan, South Korea, Nepal, Vietnam, Brazil, and Mexico.

Since 2013, \$5M from central administration has been added to increase the number of assistantships and stipend levels. The average stipend has increased about \$1000 since 2013 to \$20,045. The endowment of the Graduate School has increased by \$20M since 2013, which now provides over 450 recruitment fellowships to increase the competitiveness of department offers and helps support the newly launched Presidential Fellowship Program aimed at attracting top applicants. These investments have increased the quality of applicants. Since 2013, the quantitative GRE score increased from the 35th percentile to the 55th percentile and admission selectivity has improved from 50.2% of applicants admitted to 39% of applicants admitted.

Total graduate enrollment has increased 29% since fall 2008 and has increased over 11% since 2013. Full-time graduate enrollment ranks 66th in the US (top 10%)\* and is ahead of all Big 12 peers except UT and Iowa State University. Doctoral enrollment in STEM fields ranks 78th in the US (top 14%).\* TTU's enrollment growth far outpaces national trends, which has increased ca. 1% per year since 2008 according to data from the Council of Graduate Schools. Therefore, the increase in TTU's graduate enrollment is ca. five times the national average over this same time.

A signature feature of the graduate experience at TTU is professional and career development that complements disciplinary training which helps students succeed in their program and helps them transition to the workforce. Since 2013, we have increased the number of professional and career development events, launched the Graduate Student Writing Center, expanded opportunities for students to present their work, and created a fellowship office to assist students develop and submit applicants for external fellowships. Over 74% of alums report that they are "very satisfied" or "satisfied" with the preparation that

### **Increasing the size, scope, and quality of graduate programs leads to:**

- Expand the economy of the region, state, and nation
- Increase stature of the university
- Advance technology development and commercialization
- Increase R&D funding
- Enhance teaching and learning
- Recruit top-quality faculty
- Compete effectively for prestigious external fellowships
- Increase intellectual capacity



The number of master's degrees awarded increased by 38% between fall 2008 and fall 2015 (to 1429 degrees); there has been an increase of 5% since 2013. Between fall 2008 and fall 2015, the number of doctoral degrees awarded increased by 65% (to 332); there has been an increase of 10% since fall 2013. The number of doctoral degrees awarded ranks 54th (top 14%)\* in the US and is ahead of all Big 12 peers except UT and Iowa State University.

Following completion of their degree Programs, our graduates enter every sector of the economy (private industry, higher education, K-12 education, government, and nonprofit)\*\* Moreover, 66% of alums remain in Texas for employment.\*\*

The achievements we have made in full-time enrollment and number of doctoral degrees conferred are significant and put us at levels for these metrics similar to those displayed by our aspirational AAU peers. In other areas, such as percent of total student population who are graduate students, percent of graduate students receiving funding, and stipend levels, however, we have substantial progress to make. In light of the fact that graduate students are increasingly taking positions outside of academia, it is essential that our students continue to obtain a wide range of professional and career development skills in addition to their disciplinary training in order to launch and advance in their careers.

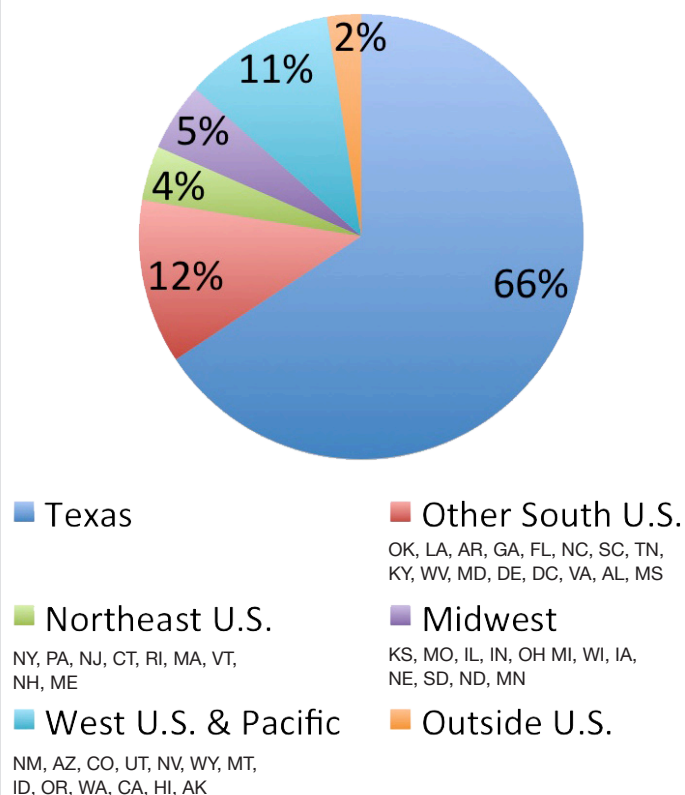
*Enhancing Graduate Education at Texas Tech University: The Path Forward* is a comprehensive plan aimed at improving the size, scope, and quality of the graduate enterprise in a manner that will further the mission of the university and the attainment of its goal to be a premier national research university. Ultimately, the plan will lead to expansion of the innovative capacity of the university and to meeting the nation's demand for highly-skilled workforce. The plan is built around the following four priority areas:

1. **Strengthen academic identity**
2. **Increase student success and enhance professionalization**
3. **Expand globalization**
4. **Further diversity and inclusion**

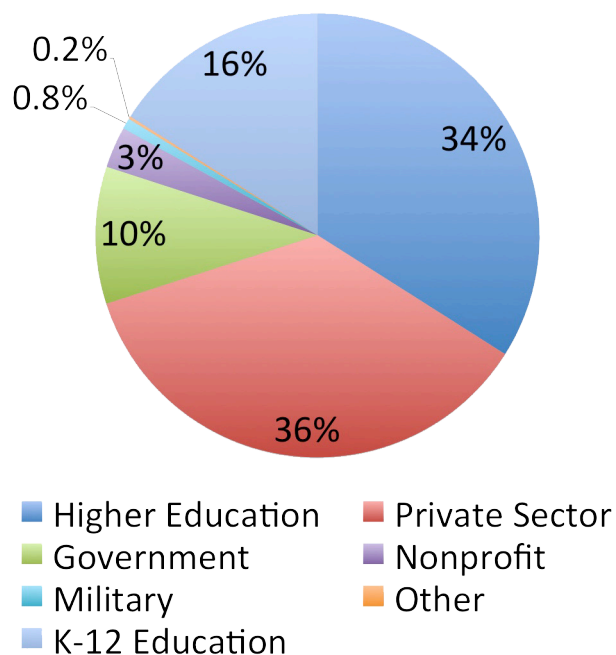
\*Data source: National Science Foundation

\*\*Data source: Survey of TTU Graduate School Alumni, 2015

**Location of Employment**



**Employment Sector**





# Strategic Priority I : Strengthen Academic Identity

This priority is aimed at increasing the size, scope, and quality of graduate programs that are accessible through traditional and non-traditional modes of delivery and at attracting the highest quality students, nationally and internationally.

## The specific goals to address this priority are as follows:

- Expand the Texas Tech brand in domestic and international markets
- Create and strengthen graduate programs to meet workforce demands that align with the strategic priorities of the university
- Increase graduate enrollment to 8000 students by 2020
- Increase applicant quality and admission selectivity

## The following strategies will be employed to accomplish these goals:

- Develop and implement a comprehensive enrollment management plan that includes strategic marketing and recruitment plans
- Establish programs and incentives to attract and develop National Science Foundation Graduate Research Fellows
- Establish salary guidelines for assistantships and work collaboratively to increase stipends to levels of aspirational peers
- Create a dissertation completion program that facilitates degree completion and entry into the workforce
- Review market and workforce development demands for the region, state, and nation and work collaboratively to create new graduate programs and to review existing programs
- Work with the Chancellor and President to increase the endowment to support more graduate fellowships, including the establishment of a fellowship program that provides stipends commensurate with those of the National Science Foundation Graduate Research Fellowship Program to attract top-quality students





## The following milestones and the timetable for their completion have been established:

- One-hundred percent of the graduate programs will have a recruiting plan by 2016
- Increase website traffic by 20% percent by 2020
- Increase the number of applications by 5% per year each year through 2020
- Increase the number of combined/accelerated bachelor's-master's programs by 100% by 2020
- Increase the number of graduate degree programs in areas of strategic interest which meet workforce demands, particularly those available by distance, by 20% by 2020
- Increase the endowment of the Graduate School by \$15M by 2020
- Increase the average stipend of teaching assistants and research assistants to the level of our AAU aspirational peers by 2020
- Increase the number of NSF Graduate Research Fellows to 10 by 2020
- Increase the quality of applicants as measured by standardized test scores by ten percentile by 2020
- Increase the number of doctoral degrees awarded by 10% by 2020
- Reduce time to degree to national averages in all disciplines by 2020
- Increase the number of programs ranked in the Top 100 by US News by 100 by 2020

Metric	2013	2014	2015 Target	2015 Actual	2016 Target	2020 Target
Fall enrollment	5427	5881	6028	6045	6390	8000
Fall applications	4687	6160	6459	6468	6846	8643
Dept recruitment plans	0	0%	100%	22%	100%	100%
Web traffic						
Sessions	nd	413,189	426,961	552,055	482,053	619,783
Page Views	nd	1.48M	1.53M	1.72M	1.73M	2.22M
New student GRE scores						
Verbal	149 (47%ile)	149 (47%ile)	150 (49%ile)	149 (47%ile)	151 (51%ile)	153 (55%ile)
Quantitative	149 (35%ile)	151 (43%ile)	152 (47%ile)	154 (55%ile)	153 (51%ile)	157 (65%ile)
Admission selectivity	50%	44.3%	45%	39%	35%	25%
Average stipend	19,140	19,533	20,475	20,045	21,450	25,350
Endowment	\$ ~30M	\$~42M	\$44M	\$~47	\$49M	\$~57M
NSF Graduate Research Fellows	1	2	3	2	4	12
Number of doctorates awarded	306	317	327	332	331	367
Number of on-line degree programs	18	19	20	21	22	24
Number of on-line certificate programs	17	18	19	25	20	22
Number of programs in US News top 100	nd	nd	nd	9	10	16

nd: no data/not determined

## Challenges:

- Geographical location of Lubbock in West Texas
- Assistantship stipend levels that are below those of peers and aspirational peers
- Insufficient funds to facilitate the recruitment of top students (e.g., marketing, student visits to campus, etc.)

A variety of information will be used to assess progress toward meeting these goals, including data on applicants as well as on newly admitted and enrolled students, data from the newly developed fellowship tracking system, and program reviews and other external appraisals of program quality (e.g., accreditation reports, NRC study). This priority of the graduate school supports four of the university's strategic priorities: Increase Enrollment and Promote Student Success, Strengthen Academic Quality and Reputation, Expand and Enhance Research and Creative Scholarship, Increase and Maximize Resources.





## Strategic Priority 2: Enhance Professionalization

This priority is aimed at assuring that graduate students have the professional skill set necessary to succeed in their degree programs and to embark and advance in careers in a diverse and global marketplace, whether in academia, government, the private sector, or in nonprofit organizations. This is especially important in light of the fact that graduate students are increasingly seeking positions outside of academia and need to be prepared for these types of environments.

### The specific goals to address this priority are as follows:

- Increase the skill set of graduate students in communication, critical thinking, leadership and management, professionalism, teamwork, and ethics
- Increase participation and engagement of graduate students in professional activities
- Increase placement of students in discipline-related careers in all sectors of employment

### The following strategies will be employed to accomplish these goals:

- Establish a Graduate Center that provides essential support services (e.g., graduate writing center, statistical consulting, career services, counseling services) and serves as a nexus for professional/career development and student life events
- Establish a task force to develop a comprehensive professional development program in communication, critical thinking, leadership and management, professionalism, teamwork, and ethics that augments disciplinary education and training
- Establish Fellowship Office to help students find and apply for individual fellowship and grant opportunities to support professional activities
- Work with programs and businesses to expand internship opportunities
- Expand student travel program
- Establish a dean's alumni advisory council
- Conduct surveys of graduating students and alumni regarding program effectiveness



## The following milestones and timetable for their completion have been established:

- Increase the number of career and professional development events by 20% by 2020 and the participation of students in those events by 100% by 2020
- Increase use of the Graduate Student Writing Center by 100% by 2020
- Increase the number of students who participate in the Individual Development Plan (IDP) program by 100% by 2020
- Increase submission of student-initiated applications for external fellowships and grants by 100% by 2020
- Increase participation in graduate school-hosted conferences by 50% by 2020
- Increase the number of students engaged in internships by 10% by 2020
- Increase the number of students who receive travel support to present the results of their research at a professional conference by 20% by 2020
- Increase student satisfaction with career placement by 10% by 2020

Metric	2013	2014	2015 Target	2015 Actual	2016 Target	2020 Target
Professional and career development events	224	317	nd	354	339	380
Graduate writing center usage (appointments)	nd	160	nd	1050	1200	2000
Individual Development Plan participation	nd	nd	nd	nd	100	500
External fellowship applications	nd	12	nd	87	104	175
Graduate School conferences*	nd	228	236	274	252	276
Travel awards	443	492	458	484	476	532
Satisfaction with career preparation**	nd	nd	nd	74	76	84

nd: no data/not determined

\*includes Arts & Humanities Conference, Poster Competition, 3-minute Thesis Competition

\*\*Alumni survey

## Challenges:

- Lack of coordination of professional and career development opportunities and insufficient opportunities to develop skill sets needed for diverse career paths in a global marketplace
- Lack of awareness of external fellowship and grant opportunities by graduate students and postdoctoral scholars
- Insufficient funding available to support travel to and present work at professional meetings

A variety of information is and will be used to assess progress toward meeting these goals, including exit surveys of graduate students, alumni surveys, employer surveys, feedback on professional and career development events, assessment data in program reviews and other external appraisals of program quality (e.g., accreditation reports), and discussions with the Alumni Advisory Board. This priority of the graduate school supports three of the university's strategic priorities: Increase Enrollment and Promote Student Success, Strengthen Academic Quality and Reputation, Increase and Maximize Resources.



## Strategic Priority 3: Expand Globalization

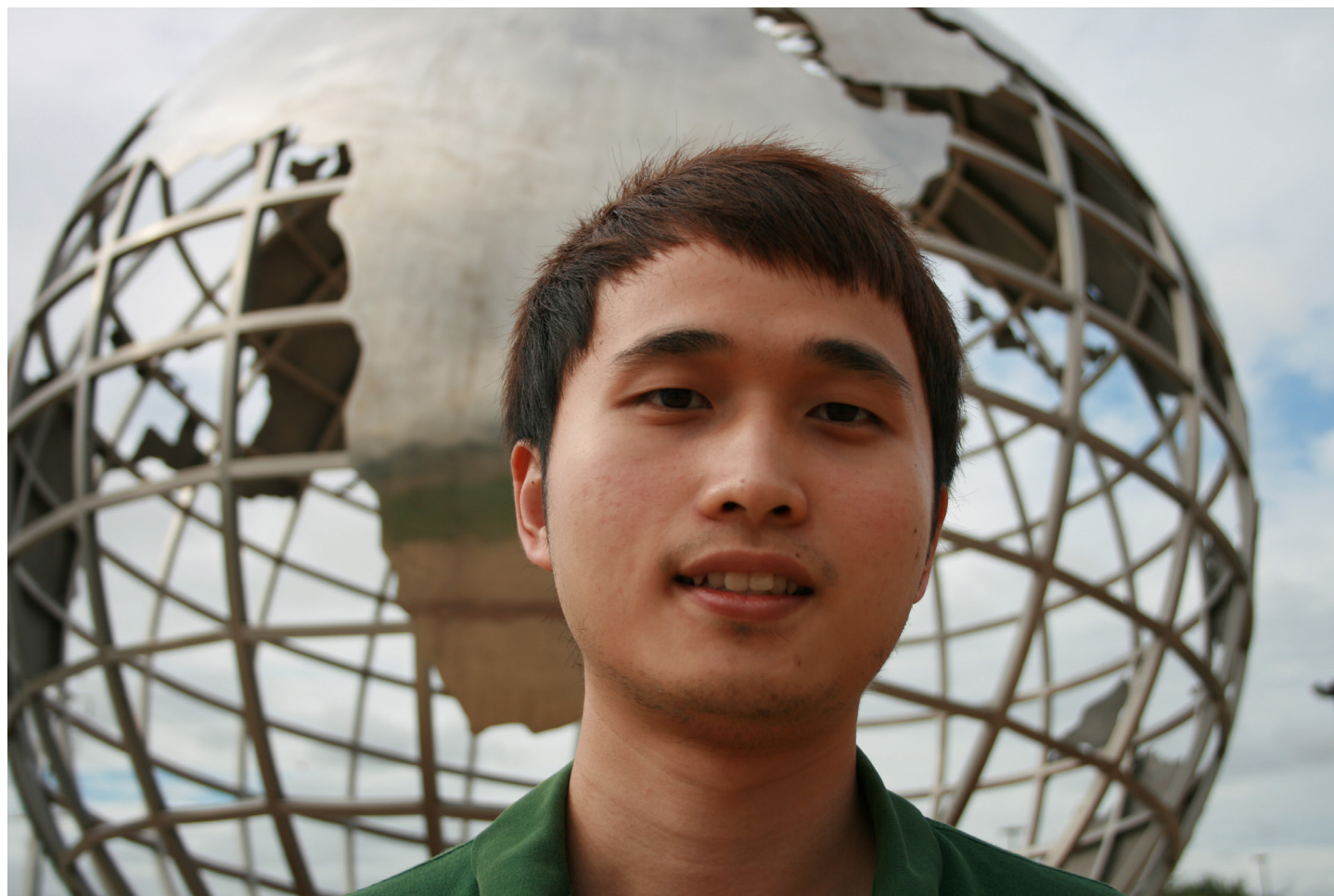
This priority is aimed at increasing the number of international students enrolled at Texas Tech University and in establishing and sustaining partnerships that expand the influence and impact of TTU globally.

### **The specific goals to address this priority are as follows:**

- Increase participation of international graduate students in the graduate programs of Texas Tech University
- Increase participation of Texas Tech University graduate students in international experiences

### **The following strategies will be employed to accomplish these goals:**

- Establish and maintain cooperative agreements with foreign governments and international institutions that 1) foster student exchange and/or 2) enable joint/dual degree conferral
- Develop and implement a comprehensive international recruitment plan
- Establish Fellowship Office to help students find and apply for external fellowships and grants that support international experiences
- Develop and implement programs and incentives to encourage TTU graduate students to engage in international experiences



## The following milestones and timetable for their completion have been established:

- Increase the number of agreements to foster student exchange and/or enable joint/dual degrees conferral by 10% by 2020
- Increase the number of international graduate students by 10% by 2020
- Increase the number of international sponsored students by 100% by 2020
- Increase the number of applications for external fellowships/grants to support international experiences by 100% by 2020
- Increase the number of TTU graduate students that study abroad by 50% by 2020
- Increase the number of TTU graduate students receiving Fulbright Fellowships to teach/research abroad by 50% by 2020

Metric	2013	2014	2015 Target	2015 Actual	2016 Target	2020 Target
Number of international agreements	182	237	241	251	245	261
Number of International graduate students	1,277	1,569	1,595	1,636	1,621	1,726
Number of sponsored graduate students	83	111	113	179	148	222
Applications for international experiences	nd	nd	nd	32	38	64
Fulbright recipients	0	0	0	0	1	4
Graduate students study abroad participants	nd	nd	nd	60	72	120

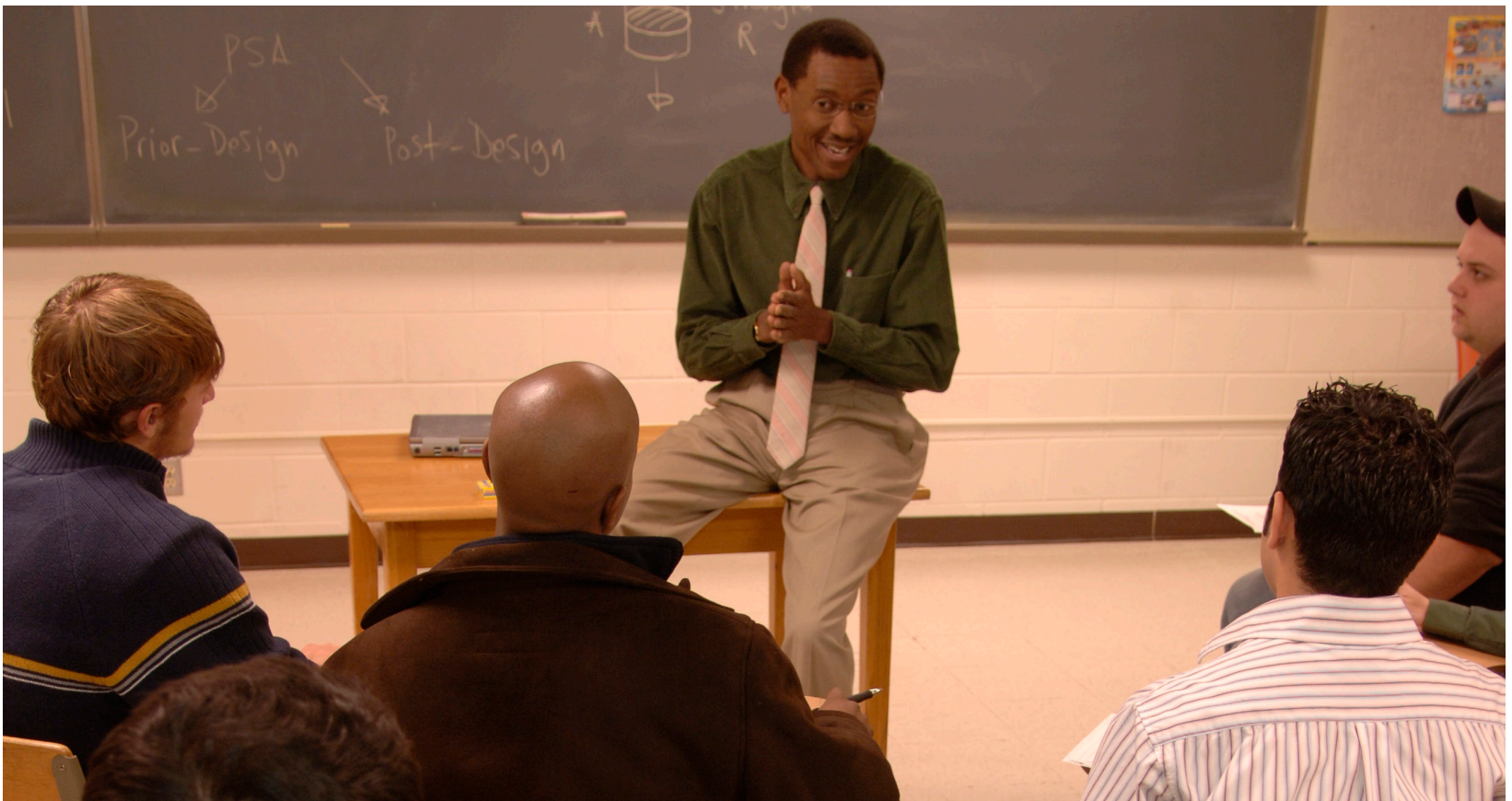
\*nd: no data/not determined

## Challenges:

- Highly competitive market for international students
- Geographical location of Lubbock in West Texas
- Assistantship stipend levels that are below those of peers and aspirational peers
- Lack of awareness of external fellowship and grant opportunities by graduate students and postdoctoral scholars to engage in international experiences
- Lack of travel support for graduate students and postdoctoral scholars to present invited talks at international professional conferences

A variety of information is and will be used to assess progress toward meeting these goals, including data on applicants as well as on newly admitted and enrolled students and data from sponsored student programs and study abroad. This priority of the graduate school supports all five of the university's strategic priorities: Increase Enrollment and Promote Student Success, Strengthen Academic Quality and Reputation, Expand and Enhance Research and Creative Scholarship, Further Outreach and Engagement, Increase and Maximize Resources.





## Strategic Priority 4: Increase Diversity and Inclusion

Diversity produces unquestioned benefits. Diverse groups are more likely to produce innovative solutions to problems, and interacting with people from diverse backgrounds helps prepare students for productive activity in a multicultural, global life. Increasing access to education also produces benefits to individuals from backgrounds which are traditionally underrepresented by enabling them to add their voices to the generation of new ideas and products. This priority is aimed at increasing participation of members of underrepresented groups in academic programs thereby assuring that the research enterprise of TTU a) enjoys the benefits of a diverse graduate student population and b) produces a workforce that will enhance the economic competitiveness of Texas and the US.

### The specific goals to address this priority are as follows:

- Increase recruitment of students from traditionally underrepresented backgrounds
- Increase retention and graduation of students from traditionally underrepresented backgrounds
- Establish and implement programs directed at recruiting members of underrepresented groups
- Implement recommendations of Council of Graduate Schools completion and attrition study to increase retention by members of underrepresented groups.

### The following strategies will be employed to accomplish these goals:

- Develop and implement a comprehensive enrollment management plan that includes increased recruitment activities at minority-serving institutions and recruiting events/conferences that emphasize serving underrepresented populations
- Establish fellowship program to support students from traditionally underrepresented groups
- Develop and implement a retention program for students from traditionally underrepresented backgrounds (e.g., first generation, minority students)



## The following milestones and timetable for their completion have been established:

- Increase the number of applications from students with traditionally underrepresented backgrounds by 10% by 2020
- Increase the number of enrolled domestic students with traditionally underrepresented backgrounds by 5% by 2020
- Reduce attrition of students from traditionally underrepresented backgrounds to national averages in each discipline by 2020

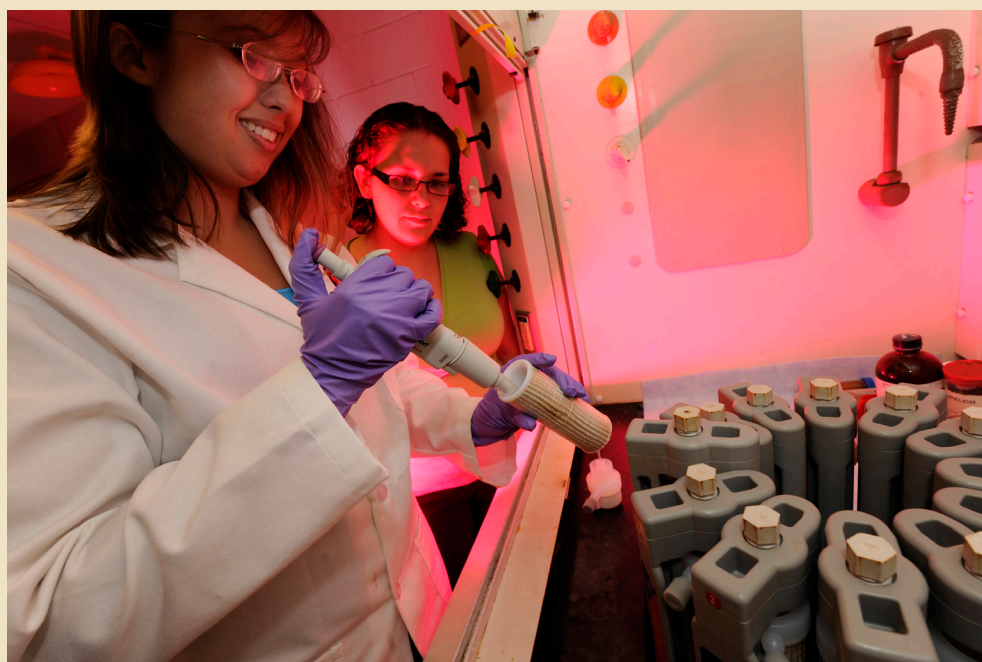
Metric	2013	2014	2015 Target	2015 Actual	2016 Target	2020 Target
Applications from traditionally underrepresented groups	nd	26%	28%	28%	30%	36%
Enrollment of traditionally underrepresented groups	17.6%	17.5%	18.3%	18.7%	19.1%	22.5%

\*nd: no data/not determined

## Challenges:

- Geographic location of Lubbock in West Texas
- Students from traditionally underrepresented backgrounds often lack a support structure and role models who understand the value of graduate education
- Faculty advisors often lack the skill sets to effectively mentor students from traditionally underrepresented backgrounds

A variety of information is and will be used to assess progress toward meeting these goals, including data on applicants as well as on newly admitted and enrolled students. This priority of the graduate school supports all five of the university's strategic priorities: Increase Enrollment and Promote Student Success, Strengthen Academic Quality and Reputation, Expand and Enhance Research and Creative Scholarship, Further Outreach and Engagement, Increase and Maximize Resources.





# Continuing Review and Revision of the Strategic Plan

The strategic plan of the Graduate School is a dynamic document. Continuous review is necessary to not only review progress toward achieving stated goals but also to be able to rapidly adapt to changes in the marketplace and university environments. Assessment data plays a critical role in planning in the Graduate School and in revision of its strategic plan. For example, analysis of assessment data informs the extent to which specific milestones for each goal and the timetable for their completion are achieved, which is reviewed and adjusted annually producing actions for improvement. More broadly, assessment information may will result in refinement of goals and/or the adjustment of strategic priorities to assure that they further the university's mission



†The mission of Texas Tech University. As a public research university, Texas Tech advances knowledge through innovative and creative teaching, research and scholarship. The university is dedicated to student success by preparing learners to be ethical leaders for a diverse and globally competitive workforce. The university is committed to enhancing the cultural and economic development of the state, nation and world.





DEDICATED  
SEPT 30, 1972  
TEXAS TECH  
UNIVERSITY





TEXAS TECH UNIVERSITY  
Graduate School™

Texas Tech University Graduate School | Administration Building 328  
P.O. Box 41030 | Lubbock, TX 79409 | Tele: 806.742.2787  
Fax: 806. 742. 1746