Texas State University

2012-2017 University Goals, Initiatives, and Indicators*

(*All responses for identified indicators should include <u>only</u> current-year data, unless otherwise noted)

College of Science and Engineering 2015-2016 Plan Progress

Goal 1: Promote academic quality by building and supporting a distinguished faculty.

1.1 Increase average full-time faculty salaries at all ranks.

Key Performance Indicators*:

- Median salary levels for each rank including professor, associate professor, assistant professor, and lecturer

Department of Mathematics- The Department of Mathematics has hired tenure-track faculty members at or above the CUPA median. Additional work is needed to improve salaries at the lecturer rank.

1.2 Increase number of full-time faculty as a percent of all faculty FTE.

Key Performance Indicators*:

- Number and percent of full-time faculty including tenured administrators

Department of Mathematics- The Department of Mathematics converted 3 lecturer and 1 senior lecturer positions into tenure-track positions in order to improve our ratio of tenure-line to non-tenure-line faculty.

School of Engineering - Added two (2) full time lecturers; Added one (1) full time tenured faculty member; Searching for two (2) new full time tenure-track faculty.

MSEC - Added seven people to its doctoral faculty (5 internal, 2 external).

Department of Chemistry/Biochemistry-The Department of Chemistry and Biochemistry hired seven new faculty in the Fall 2015. One faculty member, Dr. Sean Kerwin, was hired as a tenured Associate Professor. Two of the faculty, Dr. Liqin Du and Dr. Cynthia Luxford, are new tenure-track faculty. We hired two full-time lecturers (Dr. Craig Damin and Mr. Sedriel Montalvo) and two per course lecturers (Dr. Jeffrey Allison and Dr. Benjamin Shoulders). We are currently searching for two new tenure-track faculty, one in the area of Analytical Chemistry and one in the area of Physical Chemistry.

Department of Eng. Tech.- Frederico Aguayo

Department of Biology - Maria de Mar Huertas Pas

1.3 Provide merit increases and other recognitions based on performance in order to retain highly competent faculty.

Key Performance Indicators*:

- Merit increases awarded/not awarded
- List of new recognitions received

Department of CS - CS retained Mina Guirguis, one of the NSF CAREER awardees, against a competitive offer from Old Dominion University

Department of Mathematics - The Department of Mathematics distributed funding from the merit pool based on meritorious performance. Highly competent faculty received larger (as a percentage of salary) raises. Some faculty were not awarded merit raises. These faculty are to work with their mentors to improve their performance.

1.4 Provide a university infrastructure (including equipment and facilities) to support teaching, research, and scholarly and creative activity.

Key Performance Indicators*:

- Number and dollar value of facility upgrades made this year
- Major equipment purchases and acquisitions
- Number of Library expansions
- Number of Technology Resource developments

Department of CS - CS renovated Derrick 236 (teaching lab, worth about $40,000), and started renovating Derrick Mezzanine (worth about $450,000).

Department of Mathematics - Facilities: In 2015-2016, we upgraded/rennovated Derrick Hall rooms 117, 120, 121, 327, 338, and 339. We received the use of additional office space in Nueces (3 offices) and the Swinney Guest House (5 offices). We improved the facility in the Swinney Guest House (eg: termites removed, broken windows repaired, etc.) and now use it to house 7 faculty.
Purchases and Acquisitions: Computer equipment was upgraded through the refresh cycle, with department funding supplementing the process so that the enhanced equipment meets the needs of research faculty. We were able to replace 26 computers in Derrick Hall 233 through a Student Computing Grant of $34,164.
Technology Resource Developments: The department maintained a staff position dedicated to supporting the technology needs of faculty engaged in teaching, research, and scholarly activity. We also provided funding for discipline specific software needs for teaching and scholarly activity.

School of Engineering - Approximately $130k spent on new network

infrastructure for the School of Engineering in addition to associated facilities renovations; Over $300k spent on equipment/facility acquisitions during FY2016 to support rollout of the MS Engineering program.

MSEC - The Analysis Research Service Center (ARSC) expanded to support over 140 active users and over 45 active research projects. The ARSC also provided training to 62 students in 5 classes in COSE. The ARSC expanded its equipment through the support of faculty startup funds, grants, and other university resources including acquisition of a critical point dryer and one atomic force microscopes. A UV-Vis Spectrometer was also donated to the ARSC. The Nanofabrication Research Service Center (NRSC) officially began self-support in September of 2016 and currently supports 37 users in 14 active research projects. The NRSC also provided training to 109 undergraduate and 26 graduate students across 5 classes in COSE. The NRSC expanded its equipment through the support of faculty startup funds, grants, and other university resources including acquisition of a load lock for the electron beam evaporator, plasma enhanced atomic layer deposition system, plasma enhanced chemical vapor deposition system, spin etcher, and improved gas manifolds for more automated gas management. The total cost for the ARSC and Cleanroom equipment was ~$710,000 (one-time funding from Provost). The Advanced Polymer Laboratory increased its user base from 3 to 5 and trained two students.

Department of Eng Tech - Engineering Technology purchased and installed a hot rolling mill in the foundry lab with funds donated by Commercial Metals Company. The purchase price for this new piece of equipment was $57,000. Our newest tenure-track hire, Dr. Aguayo, will be purchasing a number of new pieces of equipment for the concrete lab from his start-up funds, including an environmental test chamber, but those purchases remain in the offing at the moment.

Department of Physics - Instructional Lab Infrastructure: $25,015 department funded & $34,850 HEAF
ACC funded proposal: $32,133
Contribution to RSC through time & equipment grants by A. Zakhidov & M. Holtz (may also be reported by MSEC).

Department of Chemistry/Biochemistry- The Department of Chemistry and Biochemistry ambitiously seeks renovation funds to improve infrastructure for existing faculty and students. A key component of our faculty hiring strategy is to provide attractive and functional office and laboratory space for all new faculty. During the past year, the following renovations were completed: replaced the distilled water system in Centennial Hall, replaced the countertops in the teaching laboratories in the Chemistry Building, renovated three laboratories in Centennial Hall, and upgraded the emergency electrical panels in Centennial Hall. These renovations were on the order of $3 million dollars. We received one-time funding (~$50,000) for equipment to support both research and teaching.

Department of Biology - Freeman Aquatic Building (lab extension $200,000)
Supple (Illumina sequencer, plus supporting equipment ($260,000)

1.5 Offer academic programs that are nationally and internationally competitive.

Key Performance Indicators*:

- List of current national/international program recognitions
- List of current national/international student awards and recognitions
- Number of academic programs accredited or reaccredited

Department of CS -The CS PhD program proposal was approved by the unversity and the university system and was submitted to the Texas Higher Education Coordinating Board.

Department of Mathematics -The Mathworks team that participated in the Primary Math World Contest in July finished tied for first (in the world).

School of Engineering - All four (4) Engineering undergraduate programs (Electrical, Computer, Industrial, Manufacturing) achieved “full” 6-year ABET accreditation with few concerns and no identified weaknesses.

Department of Eng. Tech. -The Construction Science and Management program was accredited by the American Council for Construction Education in 2013. The Concrete Industry Management program was accredited by the National Steering Committee for CIM in 2014. Texas State was named an Excellent University for the 6th consecutive year by the American Concrete Institute.

Department of Chemistry/Biochemistry -The Department of Chemistry and Biochemistry received full American Society for Biochemistry and Molecular Biology (ASBMB) accreditation through October 2023. Our department continues to be an approved program through the American Chemical Society (ACS). Eight BS Biochemistry graduates earned accreditation of their degrees from the ASBMB and 5 BS Biochemistry graduates earned accreditation of their degrees with Distinction from the ASBMB. One of our MS Biochemistry graduate students received an ASBMB 2016 Graduate/Postdoctoral Travel Award of $1,000 to travel to the Experimental Biology meeting. One of our BS Biochemistry students received a travel award to the Annual Biomedical Research Conference for Minority Students.

Department of Biology- None

1.6 Strengthen research and scholarly/creative activity efforts through achieving increases in sponsored program expenditures including collaboration across disciplines.

Key Performance Indicators*:

- Current sponsored program expenditure dollars
- List of new cross-discipline collaborative sponsored programs

Department of CS - CS faculty generated more than $1.5M in annual external research expenditures.

Department of Mathematics - During 2015-2016 six faculty in Mathematics served as PI for 7 externally funded grants totaling $2,975,817. Faculty in Mathematics also served as CO-PI on cross-disciplinary grants housed in other departments, not included in this total. In addition, 3 of the faculty who were hired brought grants with them that are also not yet included in this total. Note that 2 of these faculty were appointed during all or part of Summer 2016 with grant support not included in this total.
New cross-disciplinary grants for 2015-2016:
Faculty members in Mathematics served as CO-PI or Senior Personnel on: NSF STEP-IUSE grant Texas State STEM Rising Stars (Araceli Ortiz PI), January 1, 2015-January 31, 2019, $1,500,000
NASA Future Aerospace-engineers and Mathematicians Academy (FAMA). $412,000.00. (Araceli Ortiz I). NASA Office of Education. 10/2015 – 10/2018.
In addition to grant funding, Mathworks received $631,196 in donations.

School of Engineering -The faculty of the School of Engineering have over $1.2M in active research programs via 37 funded projects managed by 13 PIs. 15 projects are funded via federal/state sources ($956k), 22 projects are funded via industry sources ($318k); During FY2016, faculty members in Engineering were involved in several major cross-disciplinary grants, including: STEM Rising Stars (NSF, $1.5M), STEM Educator Professional Development Collaborative (NASA, $15M), and EverGreen: A Cross-Disciplinary Research-Based Education Program for Hispanic Students at the Food-Water-Energy Intersection (USDA, $1.0M)

MSEC - MSEC faculty primarily reside in separate departments in COSE. Thus the majority of our faculty's research grants are processed through their departments rather than through the MSEC program. For 2015-2016, the total sponsored program expenditure dollars processed through MSEC was $1,417,298.76, a 10% increase from 2014-2015.

Department of Physics - 1.) Spin-Dependent Transport (N. Theodoropoulou), 2.) STEM Rising Stars (E.Close), 3.) Iron Doped NiO Thin Films (W. Geerts), 4.) PhysTec (H. Close), 5.) Building STEM Skills (E. Close), 6.) Meson Camp (E. Close), 7.) Orthogon (A. Zakhidov), 8.) RADIANS (E. Close), & 9.) Noyce Scholarship (E. Close); Specific expenditure amounts available upon request. Additional grants reported through MSEC for Physics faculty - M. Holtz, T. Myers, & E. Piner.

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry had a total of 17 grants and contracts with one, the NSF-PREM, supporting 9 researchers. One of our faculty, Dr. Todd Hudnall, has both a CAREER and an individual investigator grant from NSF.

Department of Eng. Tech. - Faculty in Engineering Technology currently hold a total of 9 externally funded grants for a total of $611,237. These include 3 grants from NSF, one from the National Institute of Standards and Technology, one from TX DoT, two collaborative projects with The Fountain People and the American Society of Concrete Contractors, one TEXO Education Foundation Research grant and one from NTF Tech for the development of a high efficiency micro-heatsink.

College of Science and Engineering- Biology- $2,304,458.49;
Chemistry/Biochemistry- $1,836,740.28;COSE- $132,159.74; CS- $1,512,625.64;
Department of EngTech.- $401,195.57; EARDC- 79,338.60;
Ingram Eng. - $1,245,559.10; Mathematics- $323,858.94; MSEC- $1,427,241.44;
Physics- $360,078.18; Mathwork- $184,585.51

1.7 Provide start-up funds in order to attract and retain distinguished faculty to conduct research and attract external grants.

Key Performance Indicators*:

- Academic start-up dollars awarded (division and college)
- Library start-up funds awarded

Department of Mathematics - In addition to start-up funds provided by the Provost, the Department committed to providing $21,500 in start-up funding to the 6 faculty who were hired during 2015-2016. These funds were committed to attract distinguished faculty. The funds will be expended 2016-2018.

Department of Eng. Tech - Dr. Frederico Aguayo received start-up funding in excess of $200,000 to purchase research equipment for his research in concrete durability, and to hire a graduate research assistant.

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry hired one tenured Associate Professor, Dr. Sean Kerwin, and two tenure-track faculty, Dr. Liqin Du and Dr. Cynthia Luxford. Each of these new faculty members received substantial start-up funds.

Department of Biology -$12,000 travel funds for 3 incoming Asst. Professors

1.8 Support faculty efforts in international research.

Key Performance Indicators*:

- List of new international research efforts and scholarly/creative activities
- International travel funds provided (division and college)
- Number of Fulbright Research Scholars and other international fellowships
- Number of visiting scholars supported
- List of new technology support activities for international research

Department of CS - CS provided travel funds for several international conference trips. CS faculty supported three international postdoc researchers and two visitng students.

Department of Mathematics - One new international research activity working in Peru resulted in an paper accepted publication: Cueto, S., Leon, J., Sorto, M. A., & Miranda, A. (accepted). Teachers' Pedagogical Content Knowledge and Mathematics Achievement in Peru. Educational Studies in Mathematics. Other internation research activities were continuations of activities previously reported. A doctoral student is doing dissertation research in Costa Rica.
The Department provided $28,740.22 in funding for international travel. Grant funding within the Department provided an additional $20,996.86 and Mathworks funded $939.34 in research related international travel and $29,500.00 for international travel related to the Primary World Math Competition.
Using this funding, faculty traveled for research purposes to Czechoslovakia, Germany, Canada, China, Italy, Korea, and Lithuania.
The Department of Mathematics hosted a visiting Fulbright Scholar, Dr. Samir Safi, during 2015-2016.

Department of Eng. Tech - Several faculty in Engineering Technology have travelled to international destinations this year in an effort to cultivate additional opportunities for collaboration. This has included trips to Korea by Drs. Yoo Jae Kim, Byoung Hee You, and In-Hyouk Song. Additionally, we enjoyed the privilege of having two visiting scholars come to our campus this year; Dr. Chang-Wook Han and Dr. Joosang Youn, both from Dong-Eui University, in South Korea. These visiting scholars have collaborated with our faculty on various research initiatives.

Department of Physics - International Travel for N. Theodoropoulou to Paris, France (10/5/2015 – 10/11/2015) & E. Piner to Portugal (5/282016 – 6/10/2016). Two visiting scholars:
Drs. Sandeep Sohal & Mohammed Nazari with Dr. Mark Holtz (MSEC)

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry has several internationally active faculty who presented results at international conferences and hire postdoctoral researchers and visiting scientists from foreign countries. A large cohort of our faculty are recognized internationally. Dr. Sean Kerwin was invited by Dr. Kuechapudiporn, Associate Dean for Academic Affairs in the Faculty of Pharmaceutical Sciences at

Chulalonghorn University, Thailand, to teach a course in the International Pharmaceutical Technology Program. During the week-long course, entitled" Principles and Concepts of Drug Discovery" Dr. Kerwin presented graduate students from Thailand and Japan an overview of the drug discovery process. After departing, he remained in contact with these students as they completed their work and sat for the final exam for the course. In addition, Dr. Kerwin initiated a collaborative research project at Chulalonghorn University with Dr. Boudin Tuesuwan. The Department Chair is currently on development leave at the University of Freiburg, Germany where one primay goal is to establish a funded, long-term scientific collaboration with a European partner.

Department of Biology - first 2 of 4 new international courses (Ecuador, Costa Rica) taught, continued Cambodia class

1.9 Pursue National Research University Fund (NRUF) eligibility.

Key Performance Indicators*:

- NRUF Eligibility
  - Total restricted research expenditures
  - Total endowment funds
  - Number of doctor of philosophy (PhD) degrees awarded
  - Percentage of first-time entering freshmen in the top 25% of their high school class
  - Average SAT and ACT scores of first-time entering freshmen
  - Status as a member of the Association of Research Libraries, having a Phi Beta Kappa chapter, and Phi Kappa Phi chapter
  - Number of tenured/tenure-track faculty who have achieved national or international distinction through recognition as a member of one of the national academies, are Nobel Prize recipients, and have received other faculty awards as designated in the NRUF eligibility criteria.
  - Number of graduate level programs and graduation rates for master's and doctoral programs

Department of Mathematics -The Department hired an additional CAREER grant recipient, who was officially appointed during part of Summer 2016. The Department graduated 6 doctoral students. Our graduates were highly successful in the job market, with 3 of them accepting tenure-track positions, some earning more than we pay our new faculty, without having completed a postdoc. The other 3 took postdoctoral, program faculty, and lecturer positions. The first graduate of our doctoral program notified us that she has now received tenure and is serving as the chair of a department of mathematics.

School of Engineering - Dr. Ravi Droopad elevated to IEEE fellow.

MSEC - The MSEC Program graduated six doctoral students in this time period.

Four of these found positions in their field immediately upon graduation, and two are currently looking for positions in their field.

1.10 Increase Texas Research Incentive Program (TRIP) awards.

Key Performance Indicators*:

- Number and total dollar amounts of TRIP-eligible submissions/awards
- Total dollar amount of matching funds received from TRIP for the year

Department of CS - CS faculty received Google a TRIP-eligible research gift.

Department of Mathematics - Mathworks, a University Center of Excellence within the Department of Mathematics, received a $100,000 donation that is eligible for TRIP matching funds. The contribution has been submitted for TRIP matching and has received approval for $50,000. We are waiting for funds to be distributed. Two additional TRIP funds received by Mathworks are:

- 9-1507 Meadows – Beginning Funding amount $68,850.00; remaining funds $45,045.59
- 9-1513 KLE - Beginning funding amount $51,750; remaining funds $15,707.25

Goal 2: Provide opportunities for a public university education and contribute to economic and cultural development.

2.1 Move forward on the goals of participation, success, and excellence.

Key Performance Indicators*:

- Freshman class size compared to prior year and percent change
- Overall enrollment compared to prior year and percent change
- Overall African American and Hispanic enrollments compared to enrollments of previous year
- Rate of participation (applications for admission) and success (freshman to sophomore retention rate and graduation rates)

MSEC - Enrollment remained the same at 35 students.

2.2 Continue engagement in the economic development of the region.

Key Performance Indicators*:

- List of current economic collaborations with external constituents
- Number of clients in STAR Park
- Number of clients, job creation and retention, business starts and expansions, and cultural infusion in Small Business and Development Center (SBDC)

- Number of clients in the Office of Commercialization and Industry Relations (OCIR)

School of Engineering - Approval by THECB and Board of Regents to develop B.S. Civil & Environmental Engineering program. Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry has two sponsored research agreements, STTR Phase I.

2.3 Continue engagement in the cultural development of the region.

Key Performance Indicators*:

- List of current cultural collaborations with external constituents (e.g., Wittliff program development, lecture series, performance and creative arts events)

Department of Mathematics -The Department of Mathematics works with the city of San Marcos and the mayor each year to celebrate Math Awareness Month in April.

2.4 Increase undergraduate student scholarships and graduate student financial support in an effort to improve recruitment and retention of students.

Key Performance Indicators*:

- Number of new scholarships awarded
- Number of new merit scholarships awarded
- Total dollar amounts of new scholarships and average award amounts
- Other dollars contributed toward undergraduate and graduate student financial support (division and college)
- Percentage increase in salary levels for graduate assistants

Department of Physics - Employed 12 GIAs in Fall, 9.5 GIAs in Spring, & 4 GIAs in summer ($150,026) Griffin Scholarship – new scholarship for 2016-17 Crawford Scholarship – 1 award of $1,000 Anderson Scholarship – 4 awards of $1,000 each Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry has recently received an endowed scholarship. The endowment was funded by a recently retired faculty member, Dr. David Easter, to award scholarships to an outstanding student that has completed the junior level chemistry majors courses. In addition, the Department of Chemistry and Biochemistry received a $25,000 endowment from the Society of Plastics Engineers to recognize undergraduate

and graduate achievements in plastics and polymers research.

Department of Mathematics -The Department of Mathematics awarded $12,100.00 in scholarships to undergraduate and graduate students. The Department financially supports students through employment. The Department spend $140,994.47 on student wages in FY16, in addition to approximately $700,000 in wages for TA's, GA's, RA's, and UIA's.

Department of CS- Department of CS - CS awarded departmental scholarships (worth about $10K) to undergraduate and graduate students.

Department of MSEC - MSEC Doctoral students are guaranteed two years of doctoral instructional assistantships. In 2015-2016, 21 students received a combined total of $692,160 in assistantship funding. This number included a 3% increase in salary levels for assitants over 2014-2015. An additional $5,522 was paid to support student travel.

COSE Scholarship-
Dennison-Koehn 2015-2016-1 awarded; 2016-2017- 2 awarded
Dorothy Coker 2015-2016- 1 awarded; 2016-2017- 3 awarded
Gwen Durrenberger 2015-2016-10 awarded; 2016-2017- 15 awarded
Joan K. Thompson-2015-2016-n/a; 2016-2017-n/a
Mariel Muir 2015-2016-1 awarded; 2016-2017- 1 awarded
Presidential Upper Level 2015-2016-0 awarded; 2016-2017-1 awarded
Smith-Wilms 2015-2016-1 awarded; 2016-2017-1 awarded
Stan Israel 2015-2016-0 awarded; 2016-2017- 1 awarded
Suzanne Barry Patenude-2015-2016-n/a; 2016-2007- 1 awarded

2.5 Internationalize the curriculum.

Key Performance Indicators*:

- Number and list of new/revised courses and programs with international content
- Number of faculty participants in globalization workshops

2.6 Encourage faculty and students in pursuing global academic experiences.

Key Performance Indicators*:

- Number of faculty-led study abroad programs
- Number of students studying abroad
- Number of Fulbright Teaching Scholars
- Number and list of student international research efforts and scholarly/creative activities (presentations, papers, etc.)
- Number and list of student international teaching activities

- Number and list of student international service activities
- Dollars contributed toward study abroad scholarships
- Number of institutionally-recognized international exchange programs
- Number and list of countries impacted
- Number and list of staff-led international experiences

Department of Mathematics - Four doctoral students in Mathematics Education traveled to Germany to present papers in the ICME conference in Hamburg, Germany in Summer 2016.

School of Engineering - Several interns placed at Infineon in Munich, Germany.

MSEC - A doctoral student traveled abroad to present research results at an international conference.

2.7 Maintain a vigorous, targeted recruitment and marketing campaign.

Key Performance Indicators*:

- List of new or major modifications to undergraduate and graduate recruitment initiatives
- List of new or major modifications to marketing efforts implemented

Department of CS - CS upgraded website for marketing CS programs and recruitng high-quality students.

Department of Mathematics -The Math Department held its fifth annual Graduate Mathematics Open House in October. This is our major recruitment tool. It is held in conjuction with our Math In the Picture Contest, which engages students in highschool through graduate school. The Department included high school participants and held a special session for them at the Open House for the first time during 2015-2016. The Department also began a new initiative to invite our top undergraduate students to apply for our graduate programs. We used mailings and direct faculty contact to encourage graduate applications. We advertised our graduate programs in the TODOS conference as well.

School of Engineering - Senior Design Day every May and December attracts over 250 visitors each time, including high school students and industry participants; Participation in ENGINE national graduate student recruitment program to improve quality of recruited graduate students as well as provide additional opportunities for Ingram School students interested in pursuing graduate studies at tier-1 universities.

MSEC - Updates to the website were completed. Faculty members traveled to other universities in Texas to attempt to recruit students to our doctoral program.

Department of Physics - Outreach events through SPS (Society of Physics

Students) supported by department
Targeted marketing campaigns for graduate programs through AIP (American Institute Of Physics) and GradSchoolShopper.com

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry continues to explore new recruiting tools and methods for the graduate chemistry program, including the updating of our departmental web-site, revising recruiting brochures, and engaging potential students at both regional and national ACS meetings.

2.8 Recognize the role of Athletics in developing the image of the university and enhancing economic and cultural development.

Key Performance Indicators*:

- Number and list of new Texas State athletic advertisements placed
- List of all athletic events on local or national television
- Average number of athletic events each year, home and away
- Total economic impact from athletic events on local community
- Product licensing income for the year and new licenses added around the State of Texas
- Increase in membership for Bobcat Club for the year

2.9 Expand delivery of distance learning.

Key Performance Indicators*:

- Number of new online and hybrid SCH as a percent of overall offered

School of Engineering - Formal offering of ENGR 3190 Cooperative Education to 2 students via conventional and hybrid delivery mechanisms in prototype for launch of campus-wide Cooperative Education Program.

Goal 3: Provide a premier student-centered, educational experience that fosters retention and success.

3.1 Increase student retention and graduation rates.

Key Performance Indicators*:

- Student retention rates compared to prior year (college and institutional)
- Student graduation rates compared to prior year

MSEC - 6 MSEC doctoral students graduated this year, a 50% increase over 2014-2015.

3.2 Create and deliver co-curricular experiences to promote student success.

Key Performance Indicators*:

- Number and list of new co-curricular activities provided
- Number of attendees at each co-curricular event

Department of Mathematics -The Department offers several seminars and regular colloquia open to students. We host the Talk Math 2 Me series, with talks for students by students. Attendance at those talks regularly exceeds 100 students. We also offer activities through Math Club and Pi Mu Epsilon aimed at promoting student success.

School of Engineering - Participation with IEEE Standards Workshop development for modular incorporation of this activity directly into the undergraduate curriculum; Over 20 students and 5 faculty members participated in the initial offering of the IEEE Standards Workshop on the TX State campus in November 2015. Similar involvement anticipated for the November 2016 offering.

MSEC - The Doctoral Program hosts two bootcamps each year where MSEC students are instructed in the creation of a business plan by members of the College of Science and Engineering, the McCoy School of Business, and the College of Fine Arts and Communication. Approximately 20-25 people attend each of these bootcamps.

3.3 Enhance quality and consistency of academic advising services.

Key Performance Indicators*:

- Number of students served (i.e., walk-in, email, phone, appointment, social media)
- List of professional development opportunities provided to academic advisors for consistent messaging
- Number of external professional development opportunities attended by how many advisors
- Number and list of current internal and external awards and recognitions received by advisors
- Advisor/student ratios compared to prior year

Department of Mathematics - The Department of Mathematics has a doctoral student advisor, a master's advisor, and two undergraduate advisors. The doctoral advisor oversees approximately 30 students as well as meeting frequently with prospective students. The master's advisor oversees approximately 26 students as well as meeting frequently with prospective students. The undergraduate advisors are available during regular business

hours for walk-ins and phone calls, as well as being available to answer questions from PACE and CoSE advisors. The also hold sessions during student orientations. They assist with approximately 304 mathematics majors, approximately 1029 mathematics minors, as well as approximately 12,000 students in general education courses.
As the University enrollment has increased, the number of advisors in our department has held steady, thus increasing the ratio.

MSEC - The MSEC Graduate Advisor advised 35 students in 2015-2016; this represents no change from the previous year.

Department of Physics - Dr. Hunter Close, Undergraduate Program Director, attended workshop regarding encouraging success in undergraduate students
Dr. David Donnelly, Undergraduate Advisor – requires a 1-to-1 advising meeting with all Physics majors (~100) each semester prior to registration
Dr. Wim Geerts, Graduate Advisor – procedures revised by Graduate Program Director.

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry has one undergraduate academic and career advisor, Dr. Wendi David, and one graduate academic and career advisor, Dr. Chad Booth. Dr. David is available to meet with students individually during the registration process and also schedules appointments throughout the year. She is actively involved in the summer orientation sessions. Throughout the year, Dr. David serves as a resource to both PACE and College of Science and Engineering advisors and evaluates transfer courses, completes overrides, and provides support for majors, minors, and also students completing chemistry courses as part of their degree programs. The department recently implemented a policy by which an advising hold is placed on every graduate student each semester until they meet with Dr. Booth. This is to ensure that the students are taking the appropriate classes, are on track for graduation, and also have input regarding their career paths. As enrollment increases, the demand on the advisors is increasing since we have not been able to increase the number of advisors.

3.4 Enhance the Honors College to better attract and engage high achieving students.

Key Performance Indicators*:

- Number and percent of students enrolled in Honors College compared to prior year
- Number of Honors sections offered
- Number of Honors College graduates compared to prior year

Department of CS- CS offered an honors section of its introductory computer science course.

Department of Mathematics- The Department of Mathematics offers Honors sections of Calculus I and II and Elementary Statictics, has several Honors topics courses running, including Number Theory and Graph Theory, with additional ones proposed, and offers research opportunities for students interested in writing Honors Theses.

Department of Physics - Drs. Eleanor Close & Don Olson taught Honors courses

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry is now offering a Honors Organic Chemistry I (CHEM 2341) course in the Fall and a Honors Organic Chemistry II (CHEM 2342) course in the Spring.

3.5 Recognize and support intercollegiate athletics and the arts as vehicles to promote a well-rounded collegiate experience for all students.

Key Performance Indicators*:

- Number and list of events (athletic and artistic) provided for the year
- Average number of students that attend sporting events
- List of promotions and collaborations with student groups to engage them in athletics
- Number and list of new academic support initiatives provided to student athletes

Department of Mathematics-One of our scholarship endowments give preference to a student athlete, as per the MOU.

Department of Biology - none

3.6 Assess outcomes (student learning, administrative support, academic and student support, research, community/public service, and general education) to ensure continuous improvement and student success.

Key Performance Indicators*:

- Examples of new selected improvement efforts implemented as a result of assessment findings
- Number and percent of programs completing outcomes assessment
- Number and percent of completed audits

Department of CS- CS changed a few required courses to revamp its BS program through a rigorous outcome assessment process.

Department of Mathematics- Assessment outcomes were presented and discussed at a faculty meeting with an emphasis on finding ways to improve instruction. The instruction information for faculty teaching selected courses was changed to including the recommendation that they spend a little extra time on

selected material to address problems identified by SACS assessments. One course in particular has some proposed modification being piloted this semester.

School of Engineering- ABET-related processes directly effect improvements via a continuous, closed-loop process involving faculty, students, constituents, industry; ABET accreditation renewal of all four (4) undergraduate programs with few concerns and no identified weaknesses

Department of Eng. Tech.- All academic programs in Engineering Technology undergo SACS student learning assessment every year, with evidence of improvement and action plans updated to Academic Development and Assessment's web site annually. The Construction Science and Management program conducts outcomes assessment specific to the accreditation requirements of the American Council for Construction Education (ACCE) on an on-going basis. The Concrete Industry Management program conducts assessment specific to the accreditation requirements of the National Steering Committee on an on-going basis.

Department of Physics - Modified course descriptions and objectives at the undergraduate level with specific regards to the intro physics courses

Department of Chemistry/Biochemistry - The Department of Chemistry and Biochemistry has four degree programs (MS Biochemistry, MS Chemistry, BS Biochemistry, and BS Chemistry) for which they complete program outcomes. Additionally, we have four courses (CHEM 1310, CHEM 1430, CHEM 1341, and CHEM 1342) which are part of the general education core and have the associated general education outcomes. Each year, we complete the outcomes and have discussions regarding the process by which we can continue to improve despite continuous enrollment increases.

Department of Biology - 7 outcome assessments (SACS) for a total of 9 programs (4 BS, 4 MS, 1 PhD)

3.7 Utilize program review and accreditation processes to improve academic, administrative, and student support programs to foster student success.

Key Performance Indicators*:

- Number of program reviews completed and number submitted to THECB
- Examples of selected program improvements made based on program review/accreditation findings
- Percent of academic program reviews with <u>all</u> items scored “acceptable” or higher

3.8 Broaden efforts to facilitate successful transition of students to the workplace and graduate/professional education.

Key Performance Indicators*:

- Number and list of career support programs provided
- Number and list of academic outreach and recruitment efforts
- Number and list of new companies recruiting at Texas State
- Number and list of employers conducting on-campus interviews
- Number and list of career fairs, including number of employers attending fairs
- Number of internships completed by students
- Number and list of programs and events to prepare students for graduate/professional education
- Number and list of alumni-supported career events and initiatives to support student networking and career success
- Number and list of on-campus student employment career preparation programs and initiatives
- Number of face-to-face career counseling appointments
- Number of PACE career counseling sessions

Department of CS- CS graduate and undergaduate students completed more than 20 internships

Department of Mathematics-The Department of Mathematics hosted a Graduate Open House in October as a recruitment tool. A panel discussion was held (open to all current students as well) regarding successful transition to graduate school. The Math Club has multiple activities including: Hosting visits from institutions recruiting math majors, emailing student organization members about on-campus and area career fairs (general and STEM), resume writing workshops, and other useful events at Career Services, and encouraging presentation of results of students' independent studies at AMS/MAA sanctioned student conferences.The club advisor visits with students individually about their career plans and maintains a posting of summer internship opportunities on the student organizations' bulletin board. There are regular meetings for Math GRE subject preparation and tips for graduate school admission.

School of Engineering-Development of campus-wide Cooperative Education Program; Successful introduction of MS Engineering program with more than double anticipated enrollment; Participation in ENGINE national graduate student recruitment program to improve quality of recruited graduate students as well as provide additional opportunities for Ingram School students interested in pursuing graduate studies at tier-1 universities.

Department of Eng. Tech.- Engineering Technology sponsors and participates in four career fairs every year; two for the construction and concrete industries, and two STEM fairs for all CoSE majors. At each of the two most recent

construction and concrete industry career fairs over 65 employers and more than 200 students participated. These career fairs are a significant source of internships for underclassmen and career positions for graduating seniors and graduate students.
Two graduates of our Master of Science in Technology (MST) program were accepted in 2012 into the Ph.D. program in Material Science Engineering and Commercialization (MSEC) and both students have now completed their doctoral degrees and graduated. Two additional MS graduates were accepted into the MSEC program for fall 2014. One of these students has completed his degree and the other is scheduled to stand for his dissertation defense in fall 2016. Yet another graduate of our MS program has been accepted into the MSEC program and maintains his good academic standing through his second year.

Department of Physics - Realignment of core courses in graduate programs
Monitoring of graduate student progress to include meeting with Graduate Advisor each semester prior to registration as mentioned in 3.3
Colloquium series to encourage networking with industry professionals and exposure to different areas of focus
Creation of department Professional Development Committee

Department of Chemistry/Biochemistry -The Department of Chemistry and Biochemistry, as part of the National Science Foundation PREM Grant, has been extremely active in local community events that include the San Marcos STEM Fair, the PREM Teacher Academy, and the Student SACNAS Chapter. Dr. Chad Booth and Dr. Wendi David met with a representative from AECOM (Austin, TX) about recruiting our graduates.

Department of Biology - Pre-med/pre-dent departmental support (2 faculty), with college-wide participation

3.9 Continue faculty and student information literacy initiatives that support student learning.

Key Performance Indicators*:

- Number of literacy sessions provided
- Number of faculty and students served

3.10 Implement Personalized Academic and Career Exploration (PACE) to foster retention and success.

Key Performance Indicators*:

- Number of freshman students served
- Number and list of support programs provided

- QEP successes based on outcomes achievement and continuous improvement

Goal 4: Enrich our learning and working environment by attracting and supporting a more diverse faculty, staff, and student body.

4.1 Attract and retain a diverse faculty and staff.

Key Performance Indicators*:

- Number and percent of female full-time faculty and staff compared to prior year
- Number and percent of African American, Hispanic, and other minority faculty and staff compared to prior year

4.2 Remain a Hispanic Serving Institution.

Key Performance Indicators*:

- Number and percent of Hispanic student enrollment compared to prior year
- Number and percent of Hispanic student graduates compared to prior year
- Number and percent of Hispanic students retained compared to prior year

MSEC - Faculty members traveled to UT Rio Grande Valley to recruit new doctoral students.

4.3 Enhance student recruitment, retention, and support programs for all racial, ethnic, gender-based, and international groups.

Key Performance Indicators*:

- Examples of new academic, student support, and administrative programs provided
- Number of students served with support activities
- Number and list of new recruitment activities
- Number and list of new academic, student support, and administrative retention activities

Department of CS - CS faculty participated in the NSF SPARK Scholarship program which recruits female and minority students to STEM fields.

Department of Mathematics - The Department hosted the annual NAM meeting,

which is a society dedicated to the support of minority mathematicians. The graduate programs were advertised in TODOS (a society supporting mathematics for all, with a focus on Hispanic mathematicians).

School of Engineering - SPARK scholarship program recruits female/underprivileged students in STEM fields; MSEIP program develops infrastructure for HSI/MSI community colleges; USDA/NIFA program recruits minority students to study sustainability topics; WAMS program recruits minority students to participate in industrial internships.

Department of Eng. Tech - Dr. Kimberly Talley's NSF-STEM Rising Stars grant is engaged in recruitment and retention of underrepresented minorities and women into the STEM disciplines.

Department of Physics - Departmental support for SWIP (Society for Women in Physics) meetings.

Department of Chemistry/Biochemistry -The Department of Chemistry and Biochemistry has ongoing efforts through the National Institutes of Health (NIH) Bridge Program, the NSF PREM Center, and our participation in the NSF-STEM Rising Stars Grant.

Department of Biology - SI support for a total of 13 sections, pre-med/pre-dent advising and mentoring (2 faculty plus support from college.

MSEC- Faculty members traveled to UT Rio Grande Valley to recruit new doctoral students.

4.4 Expand efforts to promote diversity and inclusion among all faculty, staff, and students.

Key Performance Indicators*:

- Examples of new/modified academic programs that added multicultural or multi-perspective content
- Number of new/revised courses with multicultural or multi-perspective content
- Examples of new academic, student support, and administrative programs/activities provided (e.g., activities related to Common Experience)
- Number of individuals served in academic, student support, and administrative programs/activities

Department of CS - CS faculty attended Grace Hopper Celebration of Women in Computing which is the world's largest gathering of women technologists.

Department of Physics - Multicultural Course Transformation Workshop – S.

Holtz, J. Palomino, & N. Theodoropoulou

4.5 Seek historically underutilized business suppliers.

Key Performance Indicators*:

- Number of active HUB vendors compared to previous year
- Percentage of construction value issued to HUB vendors
- Number of active mentor/protégé partnerships compared to previous year
- Percent of total university procurement with HUB vendors compared to previous year

Goal 5: Develop and manage human, financial, physical, and technological resources effectively, efficiently, and ethically to support the university's mission.

5.1 Increase average full-time staff salaries in all categories.

Key Performance Indicators*:

- Percent increase in average salary levels for all categories

School of Engineering - Reclassification of Supervisor of Engineering Lab Services to Director of Engineering Support Services

5.2 Increase number of full-time staff as a percent of all staff FTE.

Key Performance Indicators*:

- Number and percent increase in full-time staff compared to prior year
- Number and list of newly-created positions

5.3 Provide merit increases and other recognitions based on performance in order to retain highly competent staff.

Key Performance Indicators*:

- Merit increases awarded/not awarded
- List of recognitions received

5.4 Maintain a physical setting that presents Texas State as a premier institution.

Key Performance Indicators*:

- Number and list of new repair and renovation projects completed
- Number and list of new campus enhancement projects completed
- Number and list of new ADA modification projects completed

5.5 Implement the Campus Master Plan update for 2012-2017 to ensure it meets the needs of the University.

Key Performance Indicators*:

- Number and list of capital projects completed
- Total cost of capital projects completed
- Number and list of property acquisitions
- Number and list of new "gray to green" projects completed per the Campus Master Plan

5.6 Maintain compliance with Coordinating Board classroom and class lab space usage efficiency standards.

Key Performance Indicators*:

- Total hours of classroom type activity taught anywhere on campus divided by total number of classrooms must equal or exceed 45 hours per week
- Total hours of classroom lab type activity taught anywhere on campus divided by total number of class labs must equal or exceed 35 hours per week
- Total number of weekly minutes taught in classrooms divided by 50 minutes and divided by total number of classrooms must equal or exceed 38 hours per week
- Total number of weekly minutes taught in class labs divided by 50 minutes and divided by total number of class labs must equal or exceed 25 hours per week
- Student station occupancy in classrooms is 65% or above for classrooms
- Student station occupancy in class labs is 75% or above for class labs

5.7 Expand and support professional development opportunities for faculty and staff.

Key Performance Indicators*:

- Examples of major new internal professional development workshops offered at main campus and Round Rock campus
- Examples of major new internal faculty development sessions offered
- Total number of faculty served through internal faculty development sessions
- Total number of staff served through internal professional development sessions
- Examples of external faculty development opportunities attended by faculty
- Examples of external professional development opportunities attended by staff
- Number of faculty developmental and supplemental leaves awarded

Department of CS - Two CS faculty members were on developmental leave, visiting top-tier universities and research laboratories in US, UK, and Australia.

Department of Mathematics -The Department hosted a series of grant supported brown bag lunches attended by faculty within the Department who teach Calculus and by faculty within the College of Science and Engineering who teach courses that require Calculus as a prerequisite. Approximately 15-25 faculty attended the meetings. Discussions were focused on improvement of teaching and course content. There was a 3-day summer workshop attended by many of the same faculty members that supported professional development. In addition, several faculty members were awarded travel funding to attend conferences for professional development purposed (particularly related to innovative teaching techniques). Two faculty members were awarded developmental leave.

School of Engineering - Dr. Maggie Chen is currently on full-year development leave, and Dr. Fred Chen has applied for development leave for the upcoming year; Engineering has had at least one faculty member on development leave for each of the past 3+ years; All staff members are provided with opportunities for on-campus and off-campus professional development via structured courses and seminars.

Department of Eng. Tech - Dr. Byoung Hee You has been awarded a full year's developmental leave for the 2016-2017 academic year. He is currently engaged in conducting research relating to that leave. Dr. Yoo Jae Kim has been awarded a one-semester developmental leave for the spring 2017 semester.

Department of Physics - New faculty workshop attended on-campus by J. Li
M. Holtz attended Physics Department Chairs Conference sponsored by AAPT (American Association of Physics Teachers)
Learning Assistant workshop in Boulder, Colorado attended by A. Gregory, B. Lunk, and L. Scolfaro.

Department of Chemistry/Biochemistry - In addition to the required Hazardous Waste, Hazard Communication, and EEO training, our faculty enrolled in many faculty development workshops including, as examples: College Mental Health, P-Card On-Line Course, PCI Compliance Training On-Line Course, and Spill Prevention, Control, and Countermeasures. Two of our faculty, Sean Kerwin and Karen Lewis, travelled to Milwaukee, WI to participate in a 3D workshop hosted by the Center for BioMolecular Modeling at the Milwaukee School of Engineering. This knowledge translated to an enhanced educational experience for their students in organic chemistry and in biochemistry. Sean Kerwin also attneded an Active Learning in Organic Chemistry workshop sponsored by a NSF-sponsored program, Chemistry Collaborations, Workshops and Communities of Scholars. Karen Lewis also attended a curriculum development workshop hosted by ASBMB at UT Southwestern. Two development leaves were granted to faculty in 2015-2016.

5.8 Support structured, standards-driven web course development and programs that enable faculty to appropriately integrate technology into the teaching-learning process.

Key Performance Indicators*:

- Examples of new web-based courses offered compared to prior year
- Number of faculty completing distance education training
- List and dollar amount of new resources provided to support distance learning
- List and dollar amount of new resources provided to support technology in the teaching and learning process
- Number and list of current excellence in online teaching awards

School of Engineering -- Over $600k in expenditures over the last 2 years to support integration of various technologies directly into the classroom, including networked systems, extensive computing and software facilities, and additional lab infrastructure & systems to support MS Engineering program and undergraduate programs.

5.9 Reduce deferred maintenance in existing facilities.

Key Performance Indicators*:

- List and total cost of deferred maintenance projects completed

5.10 Ensure compliance with SACSCOC standards to continuously improve overall institutional effectiveness.

Key Performance Indicators*:

- Number and list of major process improvements made to address specific SACSCOC standards
- Number of IE Council meetings held and level of participation
- Number of disseminations of SACSCOC-related information

5.11 Effectively engage alumni and external constituents to influence and generate human and financial capital opportunities.

Key Performance Indicators*:

- Number and list of alumni and new external constituent (parents, families, businesses) outreach activities
- Total annual value of alumni and external constituent contributions
- Number and percent of alumni donating to Texas State
- Number and percentage of alumni who have graduated in the last five years that donate to Texas State
- Number of alumni volunteering their time on behalf of Texas State (e.g., board participation, Chapter leadership, guest speakers, faculty, advisory boards, judges, research)
- List of new student and alumni collaboration efforts (e.g., conferences, mentoring)
- Number and list of recognized alumni achievements
- Number of events and total participation at Alumni Association sponsored and co-sponsored events
- Number of recognized alumni chapters, number of alumni chapter hosted events, and annual participation at these events

Department of CS - CS engaged its alumni in the external review of the CS PhD program proposal and the REU Poster Day event. CS held two IAB meetings.

Department of Mathematics - The Department of Mathematics published a newsletter that was sent to alumni and external consitutents for which we had contact information. In additional to providing information regarding departmental activities, information on how to donate to the University was included. We would like to increase our contact with departmental alumni but are restricted due to lack of available staff resources for this endeavor. We are developing a social media presence to assist with alumni connections.

School of Engineering - Senior Design Day every May and December is attended by many alumni; Several Senior Design projects are sponsored by alumni-owned businesses and/or involve alumni as project technical advisors.

Department of Physics - Annual newsletter to all physics alumni with news on developments in the department and scholarship donation requests (Griffin,

Crawford, Anderson)
Colloquium series invites alumni to share research/industry experience and allows networking with students on a regular basis

Department of Biology - None

5.12 Assess the needs and opportunities to refine Alkek Library utilization to improve support for the achievement of faculty and student instruction and research.

Key Performance Indicators*:

- Number and list of library assessment activities
- Number and list of library improvements made

5.13 Ensure regulatory compliance, environmentally responsible and sustainable practices and the efficient use of energy and water resources.

Key Performance Indicators*:

- Percent of campus electric usage per square foot increase/decrease compared to prior year
- Percent of campus natural gas consumption per square foot increase/decrease compared to prior year
- Number and list of awards/recognitions for environmentally responsible practices
- Number and list of new environmentally responsible activities implemented
- Number of new activities implemented as a result of external audit findings

5.14 Leverage Enterprise Resource Planning (ERP) and other technology investments to continually improve campus business and instructional support activities.

Key Performance Indicators*:

- Narrative list of campus business improvements enabled or enhanced by technology
- Number and list of new and enhanced instructional support activities provided

5.15 Implement fundraising initiatives to help achieve strategic plan goals.

Key Performance Indicators*:

- Total dollar amount raised for the year
- Total dollars raised per strategic fundraising priority area

School of Engineering - Participation in University Advancement “Day of Giving” achieved roughly $3k for activities including Senior Design (experiential learning) and the Maker Space for the new Engineering and Science Building

5.16 Promote a safe and secure environment.

Key Performance Indicators*:

- Number and list of new safety/security support activities introduced
- Increase/decrease in crime statistics
- Number of new educational activities related to applicable laws and regulations (e.g., Title IX, Campus Save Act, Violence Against Women Act)
- Percent of required policy and procedure statements updated for the year as a result of applicable laws and regulations (e.g., Title IX, Campus Save Act, Violence Against Women Act)
- Number and percent of faculty, staff, and students that have received training related to applicable laws and regulations (e.g., Title IX, Campus Save Act, Violence Against Women Act)
