



**Diana Natalicio, President
The University of Texas at El Paso**

Diana Natalicio was named president of UTEP in 1988. During her long and distinguished career with the University, Dr. Natalicio has served as vice president for academic affairs, dean of liberal arts, chair of the modern languages department and professor of linguistics. Her sustained commitment to provide all residents of the Paso del Norte region access to outstanding higher education opportunities has made UTEP a national success story.

During Dr. Natalicio's tenure as president, UTEP's enrollment has grown to more than 21,000 students, who reflect the demographics of the Paso del Norte region from which 90 percent of them come: More than 75 percent are Mexican American, and another 6 percent commute to the campus from Ciudad Juárez, Mexico. UTEP's annual budget has increased from \$65 million to more than \$350 million, since 1988. UTEP is designated as a research/doctoral-intensive university, recognized nationally for both the excellence and breadth of its academic and research programs. UTEP's externally funded research expenditures have grown from \$6 million to nearly \$60 million per year, and doctoral programs from one to 16 during this same period. To accommodate steady growth in enrollment, academic programs and research, the university is currently managing more than \$250 million in facilities expansion projects in science, engineering and health sciences.

Dr. Natalicio serves on the board of trustees of the Rockefeller Foundation and on the board of directors of Trinity Industries, the American Council on Education and the National Action Council for Minorities in Engineering. She has served on the board of governors of the U.S.-Mexico Foundation for Science, the NASA Advisory Committee (NAC), the boards of the Sandia Corporation and Internet2, and was appointed by President George H.W. Bush as a member of the Advisory Commission on Educational Excellence for Hispanic Americans. Initially appointed to the National Science Board by President Bill Clinton in 1994, she served two six-year terms as a Board member and three two-year terms as the NSB's vice chair.

In recognition of her success in building strong partnerships between UTEP, the El Paso Community College and school districts in the Paso del Norte region, Dr. Natalicio received the Harold W. McGraw, Jr. Prize in Education in 1997. She was inducted into the Texas Women's Hall of Fame in 1999, was honored with the Distinguished Alumnus Award at The University of Texas at Austin in 2006, and is the recipient of honorary doctoral degrees from Smith College and the Universidad Autonoma de Nuevo Leon.

A graduate of St. Louis University, Dr. Natalicio earned a master's degree in Portuguese and a doctorate in linguistics from The University of Texas at Austin.

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**Building a National Research University
By Successfully Serving its Region**

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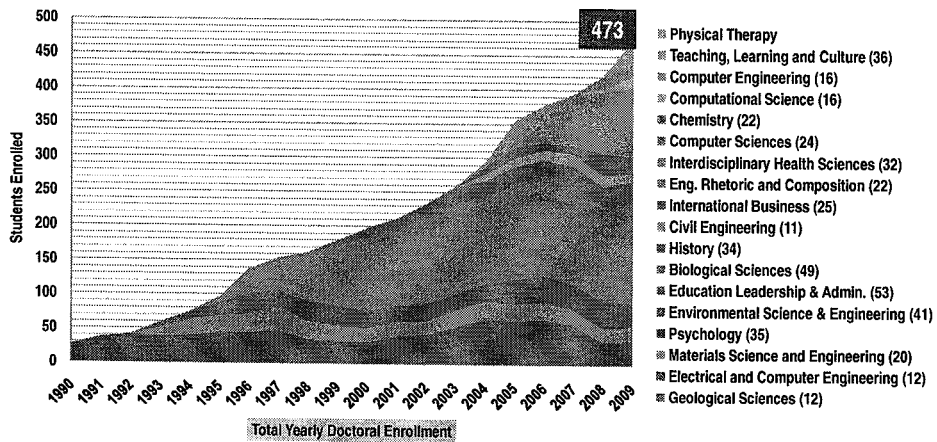
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UTEP's National Research University Goals

- **Annual expenditure of at least \$100 million in externally funded research, according to commonly accepted national standards; and**
- **Annual graduation of approximately 200 doctoral degrees.**

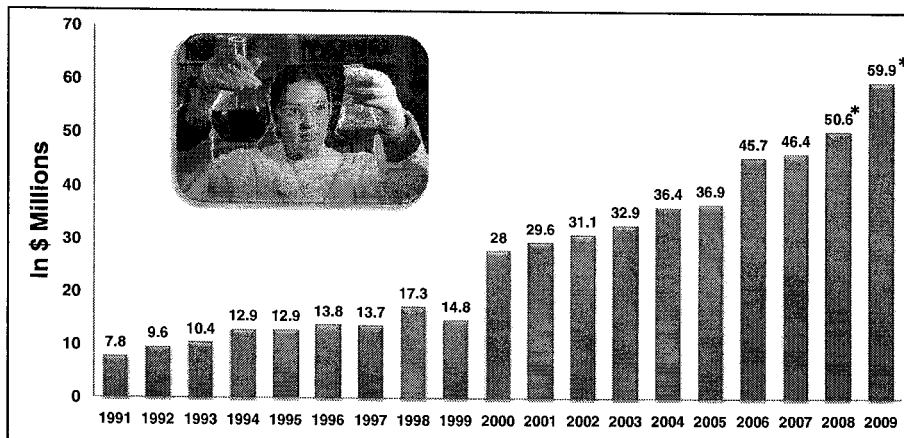
UTEP Doctoral Enrollment Growth



Source: UTEP Center for Institutional Evaluation, Research and Planning

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Growth in Total Research Expenditures Fiscal Years 1991-2009



Source: Office of Research and Sponsored Projects
* Reported to NSF, Science Resources Statistics (SRS), Jan. 2010

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UT System STARs Program Return on Investment: Research Grants

	UTA	U. T. Austin	UTD	UTEP	UTSA	Total
Competitive STARs Awarded	\$ 6,180,562	\$ 15,445,000	\$ 3,500,000	\$ 5,734,438	\$ 2,990,000	\$ 33,850,000
Institutional Match	1,100,000	7,370,276	1,500,000	1,197,000	930,850	12,098,126
Total Investment	\$ 7,280,562	\$ 22,815,276	\$ 5,000,000	\$ 6,931,438	\$ 3,920,850	\$ 45,948,126
Research Grants Since Award	\$20,562,731	\$189,620,147	\$13,026,000	\$62,744,846	\$15,236,442	\$301,190,166
Net Return on Investment	\$13,282,169	\$166,804,871	\$ 8,026,000	\$55,813,408	\$11,315,592	\$255,242,040

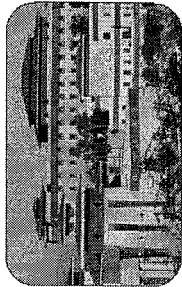


THE UNIVERSITY OF TEXAS SYSTEM
The Universities, Six Health Institutions, Unimcated Institutions

TRIP Summary

Total Gifts for Endowments <i>(Chairs and Professorships; Graduate Fellowships)</i>	\$ 1,950,000
Total for Current Purposes <i>(Research Equipment and Centers)</i>	\$ 2,200,000
Total Gifts	\$ 4,150,000
Total TRIP Match <i>(Graduate Fellowships, Research Laboratories)</i>	\$ 2,950,000
Total Gifts and TRIP Match	\$ 7,100,000

Executive Summary



UTEP's long-standing commitment over the last two decades has been to reject the traditional choice between access and excellence that characterized U.S. higher education in the twentieth century and to insist upon the joint attainment and contributing enhancement of both access and excellence.

That means, in its simplest form, that we must be a research university in order to fully serve the people of our region now and in the future. We must reflect our 21st-century demographic, and we must embrace the highest standards of excellence in public higher education—that is, the full capacity, breadth, innovation, and regional impact of a national research university.

UTEP's most recent effort has been to become the first national research university in the United States to be designated a Hispanic Serving Institution. Our 21st-century demographic is the predominantly Mexican-American population of West Texas along with the Hispanic populations of Texas as a whole and the United States. UTEP President Diana Nataficio recently characterized our challenge as follows:

"In Texas—and indeed across the U.S.—higher education is locked in a traditional model better suited to the mid-20th-century America than today. Demographics have shifted dramatically, often rapidly, and we must change our model. We must find ways to recognize that low-income and minority students have every right to expect the same level of educational excellence experienced by their peers in more affluent settings. Texas' future prosperity resides in these undereducated segments of our

THE UNIVERSITY OF TEXAS AT EL PASO STRATEGIC PLAN FOR RESEARCH

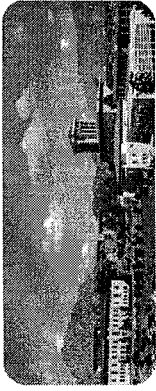


MARCH 18, 2010

Access to enrollment has been matched by excellence in teaching and learning, as shown by the degrees awarded. Excellence is also a function of the research, scholarship and creative activity produced by the faculty and students of the University. UTEP's research performance has been no less impressive. Research on the UTEP campus has increased steadily over the past 20 years, with growth in expenditures from under \$3 million in FY 1989 to almost \$60 million in FY 2009.

This growth in research performance has been fueled by extraordinary investments in research facilities. Over the past 20 years, UTEP has invested in expenditures that exceed more than \$200 million in UTEP infrastructure, primarily facilities to support the University's Science, Technology, Engineering, and Mathematics research and educational programs. Included in this investment are the recently opened Bioscience Research Building and new buildings being constructed for the Department of Chemistry and Computer Science and for the College of Health Science and the School of Nursing.

UTEP's progress during the past 20 years has clearly demonstrated its capacity to become a national research university. UTEP's students are exceptional thinkers and researchers. UTEP's faculty are nationally recognized. UTEP is a member of the University of Houston among the other emerging Tier One institutions. UTEP also excels in private giving, ranking first by a wide margin among the emerging Texas Tier One universities in the UT System. UTEP will celebrate its Centennial in 2014, and will incorporate the quest to become a national research university into both its current and future plans. UTEP's research performance has been exceptional and will continue to be. The University has already initiated the quiet phase of the Centennial capital campaign whose goal is expected to be \$200 million and whose focus will be on securing funding for endowed faculty chairs and professorships, endowed graduate fellowships, undergraduate merit scholarships, and other investments to continue building the University's excellence.



population. We literally cannot succeed without setting high expectations for them and fully developing their talents.

UTEP's responsibility to its students and to the State of Texas is to demonstrate that a commitment to both access and excellence—to both "Closing the Gap" and "The One" goal—can and must be achieved. We have been highly successful over the past 20 years in building research and doctoral program capacity while maintaining our commitment to excellence in teaching and learning. We have also demonstrated our ability to attract and retain the best faculty and students. We intend to continue to build on that success to achieve our Tier One goal, for and with the UTEP student we serve, not in spite of them. They—and Texas—should expect nothing less.

— The Texas Tribune, January 19, 2010

UTEP can bring to Texas the first national research university to fully serve its 21st century demographics. What does that mean? Why are there so few institutions for students who are not white, male, and from the Midwest? UTEP's commitment to build a university that can keep up with the changes in the characteristics of the population it serves; in its region, in its state, and nationally; it takes an equally long time to lay the foundations to build a research university; adding doctoral programs, recruiting and supporting graduate students of color, and supporting faculty whose research, scholarship and creative activity are of national caliber and distinction. Few institutions have embarked upon those long journeys at the same time; fewer still have stayed the course.

Over the last few years, UTEP has produced steady increases in undergraduate enrollment (up 13% from fall 2003 through fall 2009) and spectacular increases in undergraduate degrees awarded (up 71% over the same time period). Even more important for state and national policy priorities, UTEP increased the enrollment of Hispanic students by even more than its total population (Hispanics up 89% from fall 2003 through fall 2009 compared to 19% overall), and most important of all, a 41% increase in degrees awarded to Hispanics (up 66% compared to 71% overall).

- maintain the overall University student/faculty ratio at approximately 21:1 and
- maintain the number of doctoral student per tenured/tenure-track faculty member at less than 3:1.

These ratios have been set within the range of values at our aspirational peer institutions and those at leading national research universities in Texas.

Efficiency: Fourth, our analyses show that our past growth has been accomplished in part by efficiency gains over the last 3-10 years. Our models for increased enrollment and program growth must be based on continued incremental efficiency gains in the following measures and specified efficiency objectives:

- increase annual dollar volume of sponsored research per tenured/tenure-track faculty member at a rate higher than the rate of inflation, and
- reduction in time to doctoral degree after completion of coursework.

If UTEP maintains its best practices in growth of enrollment, faculty, program development and research productivity, if there are modest incremental efficiency gains, and if the Centennial Campaign successfully achieves its funding goal in 2014, we can expect to increase our annual dollar volume of sponsored research and 200 PhD graduates per year within 7-8 years, or approximately by 2017-18. With increased systems, state, federal and/or private investments, the models project that UTEP will be able to achieve more aggressive and strategic growth in our doctoral program growth that will permit earlier attainment of the Tier One benchmark.

While a national research university necessarily encompasses academic, scholarly, and artistic disciplines in all areas of its endeavors, a key part of the strategic plan for research identifies a few areas of research that are particularly well suited for a pursuit of externally sponsored research that will be focused. By their very nature, opportunistic and flexible, the following research priorities are ones in which UTEP already has achieved national distinction and which also seem particularly promising for future growth:

- Health & Biomedical Sciences and Engineering - Addressing key border health issues and Hispanic health disparities by understanding complex living systems and defining new biomedical technologies and therapies.

UTEP's strategic planning for research is based on four groups of objectives that are critical to our success. The following table lists the key research objectives, quantitative outcomes have been determined and developed for the next decade.

Performance: First, UTEP's strategic planning for research identified the following two set key performance objectives:

- annual expenditures of at least \$100 million in externally funded research, primarily doctoral research, and
- annual graduation of approximately 200 doctoral degrees.

Growth: Second, in order to achieve these outcomes, UTEP will have to grow in a number of critical dimensions, one of which have been identified as key objectives. UTEP will increase its number of research-active faculty who are nationally competitive in acquisition of external funding and who will serve as the core faculty members and dissertation directors for doctoral students. UTEP is an emerging research university, and many of our doctoral programs are still within the early stages of development. To meet our growth objectives, we must complement our PhD programs, and we have developed plans to grow our core faculty in strategically identified new areas of potential national distinction. New faculty and new doctoral programs will require significant increase in resources, including continuing growth at all programmatic levels as UTEP strives for national recognition at a large and historically under-served population. More students and faculty will be needed to support the growth of our research facilities, both new and renovated. These considerations will drive the following four supporting growth objectives:

- increase the number of tenured and tenure-track faculty from 508 to 720 by 2020;
- increase the number of PhD programs to 40 by 2020;
- increase student enrollment from 20,000 to 29,500 by 2020; and
- increase the provision of research, instructional, and associated support space by 3.2 M gross square feet (GSF) by 2020.

Quality Assurance: Third, UTEP's strategic plan monitors the quality of the educational experience for UTEP students by tracking two critical quality assurance objectives that indicate the acme of students to faculty teachers and mentors:

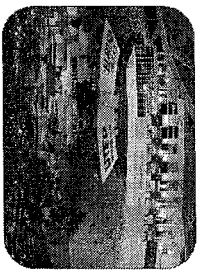
All research universities have points of distinction and areas of emphasis upon which they plan to build. All will hire superb faculty and develop programs that will bring them national and international recognition. So will UTEP. But what makes UTEP unique in this endeavor is the essential role played by our student demographic, for our region, for Texas, and for the U.S.

UTEP's commitment to becoming the first national research university serving a 21st century demographic started with the fundamental principle that talent is everywhere and that all talent should have an equal opportunity to flourish. The U.S. is as rich in brilliant, creative, diligent, and tenacious talent as any other nation. It is the responsibility of education to provide that talent with the financial resources and job opportunities that will allow them to realize their potential.

When the El Paso Collaborative for Academic Excellence was launched twenty years ago, it recognized the essential continuity and coherence of the K-16, and later Ph.D., continuum. At the time UTEP was limited to a single doctoral program in geological sciences. Aspiration and ambition for west Texas did not extend into doctoral education and research.

The question then might be asked: if UTEP had not had the support of the LUDWIG LEWIS and MARIE LEWIS Endowment, would it have been possible to create that Ph.D. program that predated 1990? The answer is yes, but it would have been a much greater challenge. It is a real danger if the same assumptions that have historically excluded Hispanics and expanded the talent gaps they represent for the rest of the state are allowed to persist.

UTEP has already demonstrated its capacity to become an emerging Texas Tier One university and is well positioned now to become a national research university by achieving and enhancing excellence (through its growth in graduates, in doctoral programs, and in research, scholarship and creative work) while at the same time expanding access. UTEP has the potential to become a national research university because that was never the problem. The problem that UTEP recognized and tackled head-on was the under-estimation of that "raw material" and the misunderstanding of its promise. That's why this Tier One opportunity and this Strategic Plan for Research are not a new vision for us -- they are simply a consummation of the journey, an attention of educational opportunity to the highest level we can go.



- Energy & Environment - Studying the impacts of environmental change and the striking surplus of waste energy. Developing energy technologies for the Chihuahuan Desert and globally, to provide solutions that sustain and improve the quality of life.
- Education for the 21st Century Demographic - Conducting rigorous educational research to improve teaching, prepare students from diverse populations to succeed in a global economy, and develop policy.
- National Defense and Border Security - Meeting the needs of agencies responsible for the protection, safety and fostering of future economic integration opportunities along the U.S.-Mexico border.
- Global Enterprise & Border Studies - Researching the causes and consequences of globalization to inform academia, practitioners, and policy groups and to advance understanding of globalization on the border, in the Western Hemisphere, and in the world.

In addition, research at UTEP is strengthened by a number of cross-cutting themes that link and synergize work across and between the priority areas:

- Coherent Structure and Collaborative Environments - Creating innovative environments to cultivate education and research collaborations within and across disciplines.
- Emerging Technologies, Information Technology, Biotechnology & Nanotechnology - Developing innovative methods and technologies to advance research in areas of regional, state, and national need.
- U.S. - Mexico and Latin America, Social and Behavioral Issues - Leading the nation in studies that require multidisciplinary expertise on Mexico and Latin America, multi-cultural communities, and language and cultural issues in border environments.

On the basis of the last twenty years, UTEP has the confidence that it will complete that journey with and for these students, not in spite of them.

For Texas, what does this mean? Closing the Gates has shown that achieving equity in access and excellence is a long, hard process. It took UTEP twenty years to close its gap with its community. What happens to UTEP in the next decade will play a very large part in the national ability of the Tier One and national research university effort in Texas. If UTEP is not sustained and advanced, if our research university effort in Texas is not sustained and advanced, then we are in trouble for Hispanics. But if UTEP emerges successfully as a recognized national research university, as we are confident that we will, then Texas will have achieved something no other state has done or even has on its agenda – it will have developed the first national research university serving a 21st century demographic.

