

**Senate Higher Education Subcommittee  
Senate Finance Higher Education Subcommittee**

**Kent R. Hance  
Chancellor  
Texas Tech University System**

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Texas Tech University's current goal in its strategic plan is to become a nationally recognized comprehensive research university. Aspects of this goal include enriching the academic experience of the undergraduate student, enhancing graduate and professional education opportunities, and recruiting and retaining quality faculty and staff. In addition, as Texas Tech strives to grow as a research intensive institution, the university wants to double its external sponsored research to over \$100 million annually. The ultimate objective in each of these areas is to continually improve.

The announcement two years ago that the university was authorized to shelter a chapter of Phi Beta Kappa was recognition of the quality of Texas Tech's undergraduate experience. This was significant because it affirmed that Texas Tech University's core programs in the liberal arts and sciences are judged to be among the top ten percent of all institutions of higher education in the United States.

Texas Tech established the Teaching, Learning and Technology Center to hone faculty teaching skills and to assist them in learning advanced teaching methods. These methods include opportunities to engage students in active learning such as undergraduate research, online course development, and study abroad. Improving the quality of teaching contributes to student success, and that success empowers undergraduate students to pursue advanced degrees which further the attainment of all the university's goals.

As a result of the early stages of the strategic plan, the university focused on growing graduate enrollment. A decision was made to allocate additional resources to the Graduate School which

has resulted in a 25% (900 additional graduate students) increase in enrollment in the last 6 years. In 2007, the university awarded 354 more Masters and doctoral degrees than in 2001. This represents a 38% increase.

To achieve improvement as a comprehensive research university, it is important to note there is no single instantaneous “silver bullet” out there. This is a long-term and fairly gradual process. For example, for several years in the early 90’s the university made targeted investments in the library system, and as a result, we are now a member of the Association of Research Libraries, along with UT, A&M, Rice and the University of Houston.

There are several factors that must come into play to accomplish research improvement. The University must develop a more focused research environment including the following:

- Recruiting additional research oriented faculty with proven histories of research accomplishment who can also perform in the classroom, at both the undergraduate and graduate levels. It goes almost without saying that such accomplished research faculty cost more than our formula funding provides at the current levels of funding, therefore it is essential that we have another funding source to provide competitive salaries and research infrastructure (building and equipping labs, funding research assistants, etc).
- Secondly, we must expand the enrollment and capacity of the graduate programs, especially in the research intensive disciplines, i.e., engineering, chemistry, biology, physics, etc. While Texas Tech has heavily involved undergraduates in the research endeavor, graduate students remain the primary research assistant foundation of research endeavors and improvement.

- As stated before, all of this is expensive beyond the current funding levels of the formulas. To accomplish increased research production and in the process become recognized as a nationally comprehensive research institution, substantial additional funds need to be made available to those institutions that have the ability and potential to improve substantially.

There are funding mechanisms already in place like the Competitive Knowledge Fund and the Research Development Fund. A huge first step would be to increase both funds and to limit participation to those universities with a research mission and the greatest opportunity for research advancement -- that is, those identified by the Higher Education Coordinating Board as "Emerging Research Universities." Increasing the funding for the RDF and targeting this increase to the top performing Emerging Research Universities would triple or quadruple the amounts distributed through the RDF formula, and allow institutions to invest in faculty, graduate students, and equipment.

Each institution's ability to raise private funds will vary dramatically. For any institution to advance its research production while continuing to enhance and improve performance in the classroom will require a stable, predictable funding environment. Increases in the RDF, Competitive Knowledge Fund, the HEF, and the continued authorization and funding of TRBs, especially for research infrastructure to support research oriented classroom buildings and laboratories is crucial to improving the Texas economy and quality of life of Texas residents.