



ON THE NOVEMBER BALLOT—PROPOSITION 4: CREATING MORE TIER-ONE UNIVERSITIES IN TEXAS

The most important natural resource Texas has is Texans. Unfortunately, our state suffers from a “brain drain” as many of our best and brightest students leave to further their education. A contributing cause is a lack of “tier one” universities in Texas. Proposition 4 (a constitutional amendment to create a National Research University Fund to help fund certain state universities to become nationally recognized research institutions) would provide funding to Texas universities seeking to attain tier-one status. With more university research, the state hopes for new jobs, increased wages, and more state and local tax revenue. This Policy Page describes criteria commonly used to determine tier-one status, the benefits of having more tier-one universities in Texas, progress of selected Texas schools toward tier-one status, and the specifics of Proposition 4.

What is a tier-one university?

The proposed constitutional amendment is intended to provide funding “to enable emerging research universities in this state to achieve national prominence as major research universities.” The shorthand description of this goal is to create more “tier-one universities” in Texas.

No single commonly accepted definition of “tier one” exists. One frequently cited measure is membership in the Association of American Universities (AAU). Sixty institutions claim AAU membership – only three in Texas (University of Texas at Austin, Texas A&M University, and Rice University). UT-Austin has been a member since 1929, but Rice was not accepted until 1985 and A&M only in 2001. In contrast, there are nine members in California, including six campuses of the University of California, three of which were accepted in the 1990s.

The primary qualifications for AAU membership are:

- Competitively funded federal research through the National Science Foundation
- Faculty membership in the National Academies (Sciences, Engineering, Medicine)
- National Research Council faculty quality ratings

- Faculty arts and humanities awards, fellowships, and memberships
- Citations in the Science Indicators database

Another frequent measure is listing in *Top American Research Universities*, a publication of The Center for Measuring University Performance. Fifty-four institutions ranked in the top 25 on at least one of the study’s nine measures:

- total research and development expenditures
- federally sponsored research and development expenditures
- number of members of the National Academies
- number of significant faculty awards earned
- number of doctorates awarded
- number of postdoctoral appointments supported;
- median SAT scores
- size of endowment
- amount of annual giving

UT-Austin, Texas A&M, and Rice are the only three Texas universities to qualify.

- UT ranked among the top 25 nationally in endowment (#6), number of doctorates (#6), faculty awards (#11), National Academy members (#18) and annual giving (#23).
- A&M ranked among the top 25 in endowment (#12), number of doctorates (#19), and total research (#22).
- Rice ranked high in two categories: SAT scores (#16) and endowment (#17).

In addition, Baylor College of Medicine qualified because of its number of post-doctoral degrees awarded (#23) and total research (#24), as did the MD Anderson Cancer Center (#24 in postdoctoral degrees). Nine California institutions are listed, including six University of California campuses.

Why would Texas want more tier-one universities?

Strengthening Texas universities is vital to creating the highly skilled workforce essential to promoting economic success. Proponents give many examples of the number of new jobs, additional wages, and increased state and local tax revenues generated by university research expenditures. The success of Silicon Valley in California and Route 128 in Boston are often credited to the influence of local research universities.

Texas is suffering an increasing “brain drain,” since more high-school graduates leave the state to attend top-flight universities than come to Texas from other states. Promoting “tier one” universities should slow this trend and help keep Texas’ best and brightest students in the state.

How would Proposition 4 create new tier-one universities?

Proposition 4 (which was passed as Article 2 of House Joint Resolution 14 by Representative Frank Corte and others) would create the National Research University

Fund to provide funding to help certain state universities become nationally recognized research institutions. The fund would be primed with the transfer of the assets of the Higher Education Fund (HEF), which was established in 1986 to benefit institutions that are not eligible for the Available University Fund (UT-Austin, A&M, and Prairie View A&M). The HEF had accumulated more than \$575 million by the end of fiscal year 2008, but is currently estimated to be worth roughly \$450 million. The investment earnings of the new fund are expected to grow to \$2 billion before any institution become eligible to receive distributions, which could total \$25 million per year.

HB 51 by Representative Dan Branch and others would give statutory authority for distribution of the National Research University Fund distributed according to a point system that includes many of the factors considered by AAU and *Top American Research Universities*. For instance, the institution would have to spend at least \$45 million per year in restricted research funds and satisfy four of six other criteria, such as an endowment of \$400 million, award of at least 200 Ph.D. degrees, and a study body and faculty that meet standards of high quality.

HB 51 creates two additional funding initiatives to help create national research institutions:

- a Research University Development Fund distributed in proportion to research funds spent by each institution; and
- a Texas Research Incentive Program to match private gifts for research.

The schools classified as “emerging research universities” eligible to receive assistance under these programs are:

- Texas Tech University;
- University of Texas at Arlington;
- UT Dallas;
- UT El Paso;
- UT San Antonio;

- University of Houston; and
- University of North Texas.

How close are the emerging schools to tier-one status?

A standard measure of research status is the amount of expenditures for research and development in science and engineering fields, particularly federal grants. In 2006, the most recent year for which data is available, Texas A&M had \$493 million in research grants (of which \$206 million was from federal sources) and UT-Austin had \$431 million (\$273 million federal). To receive distributions from the National Research University Fund an emerging institution would have to spend at least \$45 million in “restricted research funds.”

Among the emerging institutions are:

- University of Houston – University Park had \$76 million in research expenditures (\$39 million federal);
- Texas Tech, \$59 million (\$22 million federal);
- UT – Dallas, \$44 million (\$20 million federal);
- UT – El Paso, \$32 million (\$19 million federal);
- UT – San Antonio, \$30 million (\$20 million federal);
- UT – Arlington, \$29 million (\$19 million federal); and
- University of North Texas, \$15 million (\$8 million federal).

Another criterion for distribution from the National Research University Fund standard measure is the award of at least 200 Ph.D. degrees annually. UT – Austin presented 779 doctoral degrees in 2007 and Texas A&M gave out 598. Among the emerging schools, University of Houston presented 239; University of North Texas 196; Texas Tech 192; UT – Dallas 133; UT – Arlington 124; UT – San Antonio 46; UT – El Paso 39.

The Fund will also consider the quality of an institution’s faculty, including membership in national academies. UT-Austin has 59 academy members and Texas A&M has 16. Among the emerging schools, the University of Houston has eight members, UT-Dallas has two, and Texas Tech has one.

What other investments should Texas make in education?

Proposition 4 would help create a long-term plan to raise the top level of higher education in Texas. But the top of anything depends upon the base on which it rests. Texas must increase its investment in all levels of education, starting with pre-K, so that Texas students will be ready to take advantage of new national research institutions.

While it strengthens schools, the state improve the lives of families at home and communities because the social and economic environment in which Texas children develop also directly affects their academic achievement. In particular, Texas must ensure that all students have the resources needed to reach their full potential, regardless of their family’s income, through an equitable school-finance system that recognizes the extra costs of educating a child from a low-income or non-English speaking background, as well as access to adequate health care and other necessary services.

Texas needs a broader, bolder approach to education, as we outline in our special KIDS COUNT report, [“Closing the Educational Gaps” in The State of Texas Children 2008-09.](#)