Texas as a "State of Minds"

The Potential Impact of Increasing the Number of Tier One Universities on State and National Business Activity

SUMMARY OF FINDINGS FROM A RECENT STUDY PROVIDED AS A PUBLIC SERVICE BY THE PERRYMAN GROUP

Residents, new and old alike, often refer to Texas as a "state of mind." There is little doubt that this large and rugged land that was once an independent country has a personality and character all its own. In the future, however, **it is critical that Texas enhance its current economic base and evolve in a manner that can consistently achieve and sustain global business leadership**. The state that carved its early success out of a vast base of natural resources has adapted to new realities, but much remains to be done. To assure future prosperity, the "state of mind" must become the "state of minds" – attracting and developing the very best and brightest for generations to come.

Education is a key factor of success not only for individuals, but also for local and state economies. In an increasingly competitive US and international market, nationally recognized, top-quality academic research universities are critical to securing a highly skilled workforce, creating and dispersing knowledge, cultivating entrepreneurship and associated capital investment, attracting activity in high-growth sectors, and promoting economic development.

Texas lags behind other populous states in the number of nationally recognized research universities. Texas' adverse ranking has notable negative consequences for the economy including lost opportunity for billions of dollars in research funding and an out-migration of bright high school graduates, as well as disadvantages in generating startup firms in emerging fields and attracting major clusters of technology-oriented production.

> ***"Texas has a number of positive attributes and is projected to achieve ongoing expansion under current conditions. The incremental benefits of pursuing an aggressive strategy to promote high-quality educational institutions, however, are quite substantial and worthy of aggressive pursuit."***
>
> M. Ray Perryman

In addition, the lack of nationally recognized research universities has even been shown to diminish university attendance more generally. Moreover, in key workforce categories (particularly in science and engineering), Texas lags other states such as California and Massachusetts, thus hampering the outlook for future performance.

In a recent study, The Perryman Group (TPG) quantified the potential effects of a concerted effort to develop additional top-tier research universities on the Texas economy. This analysis, provided as a public service, illustrates the importance of this critical investment in the "intellectual infrastructure" of the state.

Aside from the economic contributions of running the actual institution, **Tier One universities spend millions of dollars annually on research**, much of which is funded from outside sources. They are **leaders in innovative ideas and new creations and discoveries**. They **partner with local businesses and produce graduates that create a highly trained workforce** in the area. The Perryman Group analyzed the incremental benefit of a potential enhancement of the state's position in Tier One universities.

Increasing the number of such institutions in Texas benefits the state in ways including the fact that **nationally recognized research universities attract the world's most talented students and faculty and produce significant economic impacts through research, spin-off enterprises, and enhanced competitiveness in emerging technology clusters**.

A proposed Texas constitutional amendment, **Proposition 4, would create a National Research University Fund to help fund**

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state universities meeting certain quality requirements for the purpose of becoming nationally recognized research institutions.

This initiative is important given Texas' current position compared to other areas. While there is no single universal definition of a Tier One university, membership in the Association of American Universities (AAU) is one common criterion. **Among the 60 US universities with memberships in the AAU, three are located in Texas, of which two are large public universities**: The University of Texas at Austin, Texas A&M University, and Rice University.

Seven public universities have been classified as "emerging research universities" with the potential of receiving the above funds including:

- Texas Tech University,
- University of Texas at Arlington,
- University of Texas at Dallas,
- University of Texas at El Paso,
- University of Texas at San Antonio,
- University of Houston, and
- University of North Texas.

Overall, **the advancement of some of these institutions to Tier One standing would generate a large potential economic impact for the state**.

To illustrate the benefits of securing a greater number of nationally-recognized research universities, TPG developed the following three scenarios related to the number of institutions achieving Tier One status and the related change in per-capita output in emerging sectors.

> ***"If four of the seven emerging research universities could attain Tier One status by 2035, the impact on the Texas economy (in constant 2009 dollars) could reach up to $603.3 billion in total spending per year, $306.6 billion in output, and 1,289,419 permanent jobs. Even if only two are successful, incremental activity would include an estimated $161.1 billion in total spending each year, $81.8 billion in annual output, and 344,393 permanent jobs."***
>
> M. Ray Perryman

The assumptions related to these scenarios, as well as the methodologies and terms used, are explained in the full study. In essence:

- **Scenario I** assumes Texas is able to add two typical Tier One universities by 2035 (bringing the state to the national average on a per-capita basis) with the resulting benefits leading to closing half the gap with California in per-capita output in emerging sectors. In this case, incremental business activity in Texas as of 2035 includes **$161.1 billion in total spending each year, $81.8 billion in annual output, and 344,393 permanent jobs. The State government would gain more than $4.2 billion in annual fiscal revenues, with local tax authorities seeing benefits of about $1.3 billion per annum.**

- In **Scenario II**, it is assumed that Texas is able to add three typical Tier One universities by 2035 (bringing the state to the average of the ten largest states, excluding Florida) on a per-capita basis with the resulting benefits lead to closing the current gap with California in per-capita output in emerging sectors. In Scenario II, gains in Texas business activity as of 2035 rise to **$320.5 billion in spending each year, $162.8 billion in annual output, and 684,954 permanent jobs. Similarly, fiscal revenues expand to $8.4 billion for the State and nearly $2.6 billion for local governments.**

- **Scenario III** assumes Texas is able to add four typical Tier One universities by 2035 (placing the state at approximately the average of California and Massachusetts on a per-capita basis) with the resulting benefits leading to per-capita output in emerging sectors equivalent to the average for California and Massachusetts. In this instance, TPG found overall gains in incremental business activity by 2035 of **$603.3 billion in total spending per year, $306.6 billion in output, and 1,289,419 permanent jobs, which allows revenues to the State and local governments to expand by $15.9 billion and almost $4.9 billion per annum, respectively**.

Note that only incremental benefits over and above current operations of the universities and baseline projected growth in technology industries are considered and all monetary values are expressed in constant (2009) dollars and fully adjusted for anticipated gains in productivity**.**

Proposition 4 permits resources to be available to the seven emerging universities to work toward Tier One recognition without any additional tax dollars being required.

It is appropriate to observe, however, that the peer groups of nationally-recognized institutions receive substantially more State money than is currently provided to the Texas schools, and such funding would likely be necessary to sustain national research leadership.

Assuming that the level of support per student rose to the average of the peer institutions, the State would gain $17.25 in fiscal revenue for every dollar committed under Scenario I, $23.02 for every dollar under Scenario II, and $32.51 for every dollar under Scenario III. The payoffs to the economy as a whole are even more dramatic, ranging from $334.55 in gross product per dollar of State funding in Scenario I, to $443.83 in Scenario II, and $626.93 in Scenario III.

Using existing funds to further the goal of achieving nationally recognized (Tier One) status of high-performing universities would lead to enhanced opportunities for individuals, facilitate the economically and socially desirable goal of increasing the education level of the state residents, and generate sizable economic gains. If the program is successful, the payoff to the investment of public resources is enormous.

Texas will always be a "state of mind." As a "state of minds," however, it is characterized by **much greater prosperity and competitiveness on a sustainable basis. The importance of Proposition 4 as an initial catalyst to this outcome cannot be overemphasized.**

Potential Annual Impact of an Ongoing Investment in Achieving Tier One Status for Higher Education Institutions on Business Activity
(Monetary Values in Billions of 2009 Dollars)

	Scenario 1: Texas adds Two Tier Ones and Closes Half the Gap with California in Emerging Sectors		**Scenario 2:** Texas adds Three Tier Ones and Equals California in Emerging Sectors		**Scenario 3:** Texas adds Four Tier Ones and Reaches Average of California and Massachusetts in Emerging Sectors	
	US	***Texas***	***US***	***Texas***	***US***	***Texas***
Total Expenditures	$194.064	$161.125	$383.397	$320.478	$717.407	$603.332
Gross Product	$93.653	$81.792	$185.335	$162.764	$347.326	$306.553
Personal Income	$58.868	$51.810	$116.529	$103.101	$218.434	$194.186
Retail Sales	$20.834	$19.730	$41.257	$39.253	$77.364	$73.916
Employment	387,497	344,393	766,534	684,954	1,436,004	1,289,419
State Taxes		$4.2		$8.4		$15.9
Local Taxes		$1.3		$2.6		$4.9