



# Criteria for Establishing National Research Universities

Presentation for the  
Senate Subcommittee on Higher Education

July 23, 2008

# Research Universities: Texas vs. National Peers

<b>AAU Members</b>	<b>Public</b>	<b>Private</b>	<b>Total</b>
California	6	3	9
New York	2	5	7
Pennsylvania	2	2	4
<b>Texas</b>	<b>2</b>	<b>1</b>	<b>3</b>
Illinois	1	2	3
Massachusetts	0	3	3
Indiana	2	0	2
Iowa	2	0	2
Michigan	2	0	2
<b>Total in United States</b>	<b>34</b>	<b>26</b>	<b>60</b>

There is no clear or consistent pathway or evaluation criteria for nation research universities

- ✓ The Association of American Universities (AAU) and the Center for Measuring University Performance (CMUP) are two organizations that have developed some evaluation criteria.
- ✓ These criteria may provide a foundation for Texas to create its own evaluation mechanism.

# Center for Measuring University Performance

## Evaluation Criteria

- ✓ Total Research Expenditures
- ✓ Federal Research Expenditures
- ✓ Endowment Assets
- ✓ Alumni Support
- ✓ National Academy Members
- ✓ Faculty Recognition
- ✓ Doctorates Granted
- ✓ Postdoctoral Appointees
- ✓ Excellence in Undergraduate Education (SAT/ACT Range)

# Association of American Universities Evaluation Criteria

- ✓ Federal Research Expenditures
- ✓ National Academy Members
- ✓ Faculty quality rating
- ✓ Faculty Recognition
- ✓ Citations: U.S. University Science Indicators
- ✓ USDA, state and industrial research funding
- ✓ Doctoral Education; # granted and programs
- ✓ Undergraduate Education

# Criteria used by both AAU and CMUP

- ✓ Federal Research expenditures
- ✓ Number of doctorates awarded
- ✓ Number of doctoral programs
- ✓ National Academy Members and Faculty Recognition
- ✓ Excellence in Undergraduate Education

# Federal Research Expenditures

(in millions)

	FY2003	FY2004	FY2005	FY2006	Change
<b>University of Arizona</b>	\$259,074	\$283,956	\$292,811	\$301,619	16.4%
<b>University of Missouri</b>	\$84,211	\$90,304	\$96,038	\$101,732	20.8%
<b>University of Kansas</b>	\$92,888	\$101,920	\$110,768	\$115,522	24.4%
<b>University of Nebraska</b>	\$96,627	\$115,833	\$129,216	\$139,113	44.0%
<b>University of Houston</b>	\$32,556	\$34,468	\$37,262	\$38,559	18.4%
<b>Texas Tech University</b>	\$31,776	\$23,181	\$22,071	\$22,278	-29.9%
<b>UT San Antonio</b>	\$9,982	\$11,644	\$15,924	\$20,277	103.1%
<b>UT Dallas</b>	\$14,530	\$15,733	\$19,933	\$19,954	37.3%
<b>UT El Paso</b>	\$18,116	\$16,900	\$15,378	\$19,331	6.7%
<b>UT Arlington</b>	\$7,884	\$10,498	\$17,654	\$19,006	141.1%
<b>University of North Texas</b>	\$6,320	\$5,499	\$7,003	\$8,343	32.0%

# Number of Doctoral Degrees Awarded

## FY 03-FY 06

	FY2003	FY2004	FY2005	FY2006	Change
<b>University of Arizona (79)</b>	<b>378</b>	<b>398</b>	<b>386</b>	<b>395</b>	<b>4%</b>
<b>University of Missouri (38)</b>	<b>274</b>	<b>251</b>	<b>274</b>	<b>277</b>	<b>1%</b>
<b>University of Kansas (70)</b>	<b>232</b>	<b>239</b>	<b>223</b>	<b>271</b>	<b>17%</b>
<b>University of Nebraska (67)</b>	<b>254</b>	<b>236</b>	<b>234</b>	<b>245</b>	<b>-4%</b>
<b>University of Houston (52)</b>	<b>203</b>	<b>196</b>	<b>211</b>	<b>236</b>	<b>16%</b>
<b>Texas Tech University (58)</b>	<b>163</b>	<b>174</b>	<b>175</b>	<b>199</b>	<b>22%</b>
<b>University of North Texas (59)</b>	<b>145</b>	<b>153</b>	<b>146</b>	<b>161</b>	<b>11%</b>
<b>UT Dallas (23)</b>	<b>61</b>	<b>63</b>	<b>102</b>	<b>126</b>	<b>107%</b>
<b>UT Arlington (30)</b>	<b>68</b>	<b>58</b>	<b>86</b>	<b>88</b>	<b>29%</b>
<b>UT El Paso (16)</b>	<b>29</b>	<b>30</b>	<b>30</b>	<b>33</b>	<b>14%</b>
<b>UT San Antonio (20)</b>	<b>7</b>	<b>4</b>	<b>12</b>	<b>21</b>	<b>200%</b>

**( ) = Total Current Doctoral Degree Programs**



# National Academy Members

## FY 2006

Institution	#
University of Arizona	31
University of Kansas	7
University of Missouri	5
University of Nebraska	3
University of Houston	9
Texas Tech University	1

Source: Center for Measuring University Performance

# National Faculty Awards

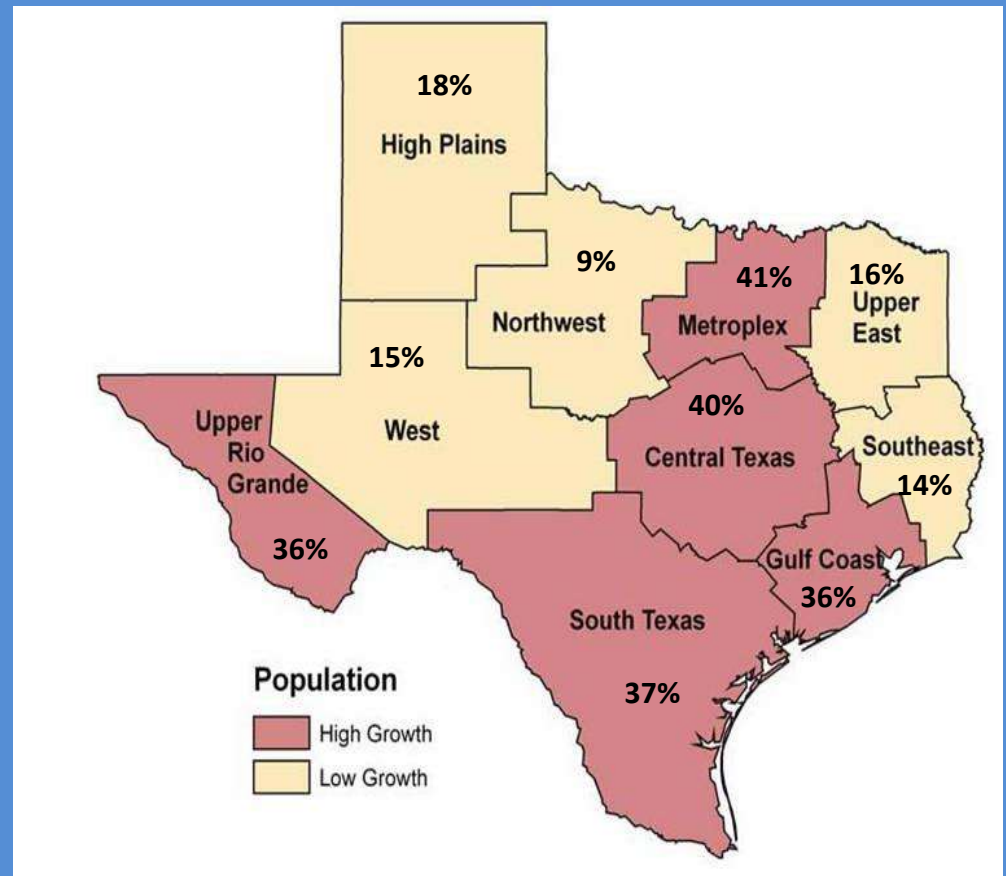
## FY 2003-06

Institution	FY03	FY04	FY05	FY06
University of Arizona	19	23	16	18
University of Kansas	7	10	5	9
University of Missouri	14	8	9	7
University of Nebraska	2	5	4	4
University of Houston	5	2	1	5
Texas Tech University	3	4	2	2

Source: Center for Measuring University Performance

# Population growth is an important consideration for deploying a national research institution

Higher Education Regions Based on Projected Total Population Growth by 2015



- ✓ The Metroplex will experience the greatest increase in traditional college age population (18-24): 78,000
- ✓ Gulf Coast and South Texas will experience increases in this population of 46,000 and 33,000, respectively

# Local and regional economic infrastructure also play a critical role in establishing national research institutions

- ✓ Business and industry clusters can facilitate the evolution and long-term success of a national research institution
- ✓ The Texas Workforce Commission estimates jobs by industry for each region by the year 2014.

<b>Workforce Development Region</b>	<b># Top 25 Future Industry Performers</b>
Gulf Coast	7
Dallas	6
Alamo	5
North Central	3

# State Appropriations per FTSE

## FY 2006

<b>Institution Name</b>	<b>Appropriations/FTSE FY06</b>	<b>FTSE, Fall 2006</b>
University of Arizona	\$11,492	32,946
University of Nebraska	\$10,933	20,056
University of Missouri	\$8,823	25,641
University of Kansas	\$6,085	23,398
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UT Dallas	\$6,529	11,084
University of Houston	\$6,045	28,178
Texas Tech University	\$5,746	25,796
UT Arlington	\$5,322	19,298
UT El Paso	\$5,193	15,194
University of North Texas	\$4,351	27,077
UT San Antonio	\$4,212	23,059

# Strategic considerations for higher education

- ✓ Texas must continue to strengthen its existing national research universities to make them more competitive with peers
- ✓ Texas must systematically invest in cultivating future national research institutions that take full advantage of existing resources and strengths in the context of demographic and economic factors
- ✓ Texas must harness regional economic strengths and opportunities to create highly focused regional research universities
- ✓ Excellence in undergraduate education must remain a cornerstone for all universities