



# FACTS AT A GLANCE

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## Higher Education Graduation Rates Finding a Benchmark

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Graduation rates have long been a concern for legislative and institutional leaders. However, it is unclear how to measure the extent of the problem and establish reasonable standards of performance. It is also unclear how to make a fair comparison of graduation rates among schools that have different missions, student bodies, and funding levels. This paper demonstrates one way of comparing the graduation rates of dissimilar schools. It analyzes data published by The Education Trust that compares each Texas school with relevantly similar institutions within the state and from around the nation. Then, it develops a benchmark that impartially compares the graduation rates of Texas schools and takes into account their differences in missions, student bodies, and funding levels.

### *Summary of Findings*

- With few exceptions, Texas schools do less well than their peers nationwide in graduating their students within four, five, or six years. Over one-half of Texas schools are in the bottom third of their peer groups, while seven to nine percent are in the top third. Only one Texas school had a four-year graduation rate that was in the top 20 percent of its peer group, and no Texas school is in the top 20 percent of its peer group with respect to its five- and six-year graduation rate.
- Although their graduation rates are generally lower, many Texas schools have been successful at improving these rates in recent years. Based on the change in graduation rates from 1997 through 2003, roughly half of Texas schools ranked in the top half of their peer groups; almost 30 percent were in the top third, and nearly 10 percent were at the top of their peer groups in terms of improving their graduation rates.
- Some schools that may seem unexceptional when compared to other Texas institutions in terms of raw graduation rates are shown to rank relatively well when compared to their peers.

### *Data and Methodology*

The graduation rate data set used for this analysis is extracted from the ongoing Graduation Rate Survey (GRS) of institutions eligible for Title IV funding, which is conducted by the National Center for Education Statistics (NCES) of the U.S. Department of Education. It includes, for the 1,396 institutions that reported a six-year graduation rate for 2003 (the most recent year for which data are available), the

four-year, five-year, and six-year graduation rates of the student cohort who started college in the fall of 1997. The four-year, five-year, and six-year graduation rates are cumulative. For example, the five-year graduation rate shows the percent of students who graduated in five years or less, not the percent who took exactly five years to graduate. In addition, the data set includes the six-year graduation rate for other student cohorts who graduated in the years 1997 through 2003.

This analysis also uses peer groups established by The Education Trust, an independent, nonprofit organization, in its analysis of the NCES survey data on responding institutions. The organization's groupings are based on 11 institutional and student characteristics that the organization found to be statistically correlated with overall six-year graduation rates:

- Median SAT or ACT
- Admissions selectivity, per *Barron's Guide to American Colleges*
- Carnegie Classification, used to distinguish degree programs and institutional mission
- Percent of undergraduates receiving Pell Grants
- Public sector vs. private sector
- Number of full-time equivalent undergraduates
- Student-related expenditures spent on each full-time equivalent (FTE) student
- Percent of FTE undergraduate students age 25 and over
- Status as a Historically Black College or University
- Percent of undergraduates who are enrolled part-time
- Status as a commuter campus

(See Appendix 1 for more information on the data from NCES and The Education Trust used for this analysis.)

The Education Trust established the groupings in order to identify successful institutions and establish best practices that may be useful models for similar schools around the nation. Also, the comparisons are made available to prospective students and their families, who can use them to identify successful institutions within the types they have targeted for consideration. However, nationwide peer group rankings, although essential, still do not address the need to compare dissimilar schools in Texas so that realistic accountability standards can be developed that do not oversimplify the problem or enforce an unrealistic, "one size fits all" solution.

To allow statewide comparisons of institutions based on peer group rankings, we assigned each member of a peer group a decile rank that compares its graduation rate with that of its peers. For example, an institution with a graduation rate below the 10th percentile of the group scores would be assigned to the first decile. At the other end of the scale, a school with a graduation rate in or above the 90th percentile would be in the 10th decile.

Once the decile rank of each of the 61 Texas schools included in the survey is established within its national peer group, these decile ranks can be used to compare the graduation rate performances of these Texas schools. This provides an impartial means of comparing graduation rate performance among Texas schools, taking into consideration their differences in missions, student bodies, and funding levels.

To explore whether an institution is improving in its effort to graduate students within six years, we used the six-year graduation rate for other student cohorts who graduated in the years 1997 through 2003 to calculate a rate trend index for each institution in the survey. If the trend index is negative, the trend in the graduation rate is falling and becoming worse. If the index is -10 percent, the relative

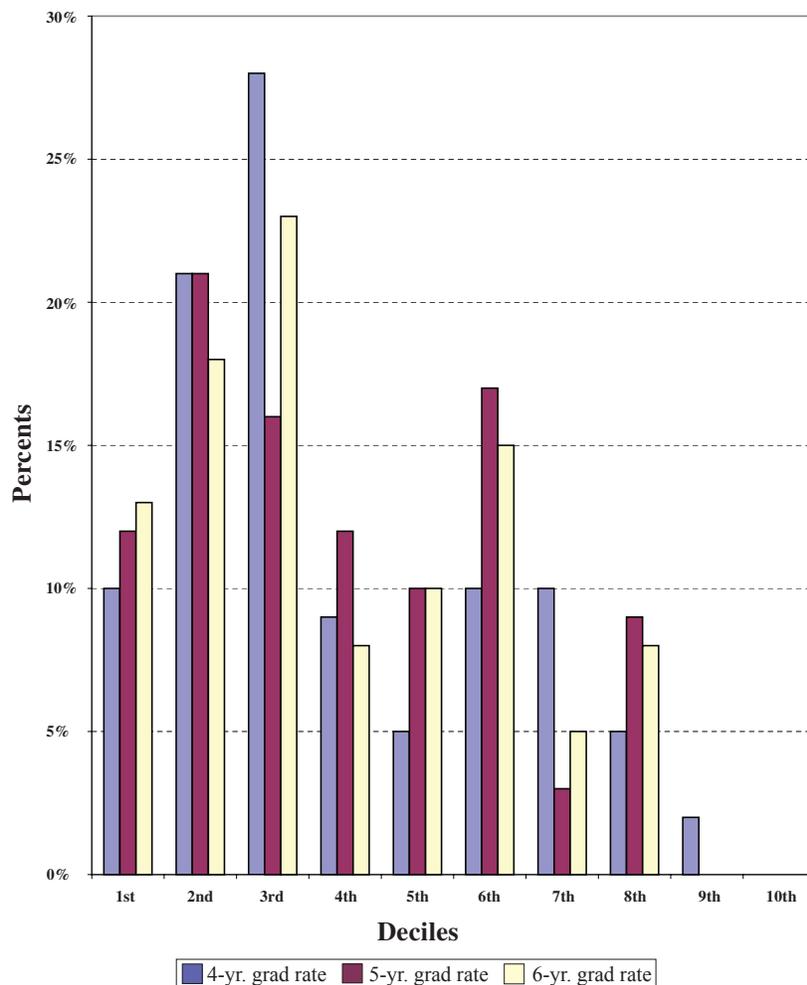
magnitude of the decline is greater, or the rate is deteriorating more quickly, than if the index is -2 percent, and so on. (See Appendix 2 for additional information on the methodology used to calculate the rate trend index for each Texas institution.)

The rate trend index, like the raw graduation rate itself, can be deceptive when dissimilar schools are compared. Therefore, after we calculated the trend rates for all schools in each peer group, we assigned a rate trend index decile rank to each school to rank its performance in improving graduation rates within that peer group. Using the decile rank, Texas schools can be compared among themselves in terms of how each school performed with respect to its peer group. This provides an impartial means of comparing Texas schools in terms of their performance in improving graduation rates in the context of their different missions, student bodies, and funding levels.

**Discussion**

Chart 1 below presents a summary of how the four-year, five-year, and six-year graduation rates of Texas schools in 2003 compare with those of similar schools that participated in the GRS. Roughly half of Texas schools rank in the bottom third of their peer groups, between the first and third decile.

**Chart 1**  
**How Graduation Rates of Texas Schools Compare to Their National Peers**



Seven to nine percent of Texas schools rank in the top three deciles, and only one school, Wayland Baptist University, has a four-year graduation rate that ranks in the ninth decile.

Although the 2003 graduation rate of most Texas schools was uniformly lower than that of their national peers, many Texas schools were successful at improving their graduation rates over the study period from 1997 to 2003. As indicated in Chart 2, roughly half of Texas schools ranked in the top half of their peer groups; almost one-third were in the top three deciles, and nearly 10 percent were in the top decile of their peer groups. (For a list of four-year, five-year, and six-year graduation rates and decile ranks for individual schools, see Appendix 3.)

**Chart 2**  
**Changing Graduation Rates (1997-2003):**  
**How Texas Schools Compare to Their Peers**

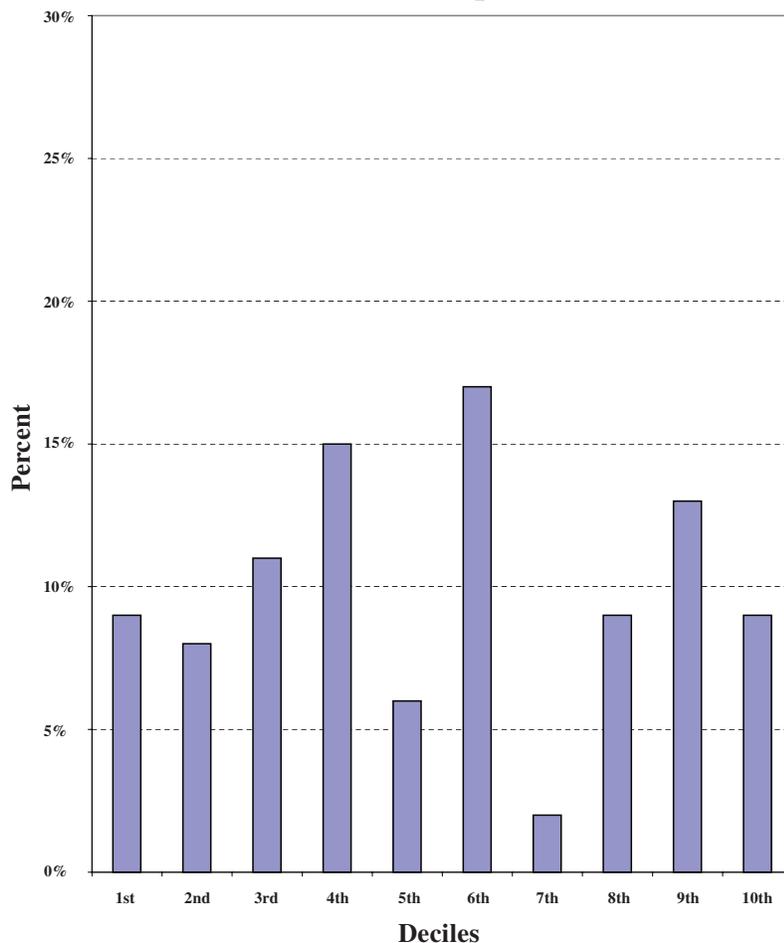


Table 1 illustrates the 2003 six-year graduation rate and the decile rank of individual Texas schools in their respective peer groups. Schools are listed in the order of their decile rank. As the table shows, there is no clear relation between the raw graduation rate of an institution and how well the institution is doing with respect to its peers. For example, Tarleton State University, at the top of the list, graduated only 43 percent of entering freshmen within six years, but the school’s graduation rate is better than 80 percent of its peers and is improving at a rate that is as good or better than all of its peers. At the same time, several Texas schools with higher raw graduation rates rank in the bottom deciles of their peer groups.

**Table 1**  
**2003 Graduation Rate, Rate Trend Index, and**  
**Decile Ranks of Individual Texas Schools**

<b>Institution</b>	<b>2003 Graduation Rate (6-Yr.)</b>	<b>Graduation Rate Decile</b>		<b>1997-2003 Rate Trend Index</b>	<b>Rate Trend Decile</b>
Tarleton State University	43%	8		12%	10
Austin College	74%	8		10%	9
Texas A&M University-Corpus Christi	39%	8		1%	5
Prairie View A&M University	37%	7		4%	8
Texas A&M University	75%	8		5%	8
St. Mary's University	63%	8		5%	6
Texas Woman's University	35%	7		2%	5
Northwood University	45%	7		—	—
St. Edward's University	53%	6		11%	9
Texas A&M University-Commerce	36%	6		4%	9
Baylor University	70%	6		3%	6
West Texas A&M University	36%	6		5%	6
McMurry University	42%	6		1%	5
East Texas Baptist University	41%	6		0%	4
Rice University	91%	6		1%	1
Angelo State University	34%	6		-1%	1
Wiley College	30%	6		—	—
Our Lady of The Lake University	38%	5		7%	10
University of Texas at Austin	71%	5		5%	9
Wayland Baptist University	36%	5		0%	4
Schreiner University	40%	5		-2%	3
Southern Methodist University	72%	5		1%	2
Huston-Tillotson College	20%	5		—	—
University of Texas-Pan American	26%	3		10%	10
Texas Lutheran University	54%	4		10%	9
Lamar University	28%	4		2%	6
University of Houston-University Park	40%	4		2%	6
LeTourneau University	51%	4		-1%	4
University of Texas at San Antonio	28%	3		1%	4
Southwestern University	74%	4		0%	3
Texas State University	46%	3		9%	10
University of Texas at Dallas	57%	3		9%	10
Midwestern State University	28%	3		8%	9
University of Texas at Arlington	37%	3		7%	9
University of Mary Hardin-Baylor	41%	3		4%	8
University of The Incarnate Word	40%	3		5%	8
Howard Payne University	35%	3		5%	6
Abilene Christian University	55%	3		3%	3
Hardin-Simmons University	46%	3		1%	3

<b>Institution</b>	<b>2003 Graduation Rate (6-Yr.)</b>	<b>Graduation Rate Decile</b>		<b>1997-2003 Rate Trend Index</b>	<b>Rate Trend Decile</b>
Stephen F. Austin State University	35%	3		0%	2
Dallas Baptist University	46%	3		—	—
Houston Baptist University	49%	3		—	—
Texas A&M University at Galveston	37%	2		7%	8
Texas Tech University	54%	2		6%	7
Texas A&M University-Kingsville	22%	2		2%	6
University of Texas at El Paso	26%	2		3%	6
Sam Houston State University	35%	2		1%	4
Trinity University	75%	2		1%	3
University of St. Thomas	47%	2		-2%	2
Jarvis Christian College	11%	2		-7%	1
Lubbock Christian University	16%	2		-5%	1
Sul Ross State University	18%	2		-4%	1
Paul Quinn College	22%	2		—	—
University of Houston-Downtown	12%	1		4%	6
Southwestern Adventist University	30%	1		1%	4
Texas Christian University	65%	1		1%	4
University of North Texas	39%	1		1%	4
Concordia University	22%	1		-4%	3
University of Dallas	59%	1		1%	2
Texas Southern University	19%	1		—	—
Texas Wesleyan University	12%	1		—	—

— School did not submit sufficient graduation rate data to calculate moving averages for trend analysis.

## Appendix 1. Data Description

### *Graduation Rate Data*

The data used in this analysis are publicly available and can be downloaded from The Education Trust website, “College Results Online.” (See <http://www.collegeresults.org/>.) The data were collected through the Graduation Rate Survey (GRS) conducted by the National Center for Education Statistics (NCES) of the U.S. Department of Education. Detailed documentation of the data is available at <http://www.collegeresults.org/aboutthedata.aspx>.

The data set contains two full cohorts of college students who began their studies in 1996 and 1997. A student who began in fall 1997 is considered to have successfully completed a degree within six years if the degree was earned on or before August 31, 2003. The data also contain cumulative graduation rates for the entering classes of 1991-1995. Those data sets contain the large majority of all students enrolled in four-year institutions, but are incomplete because reporting of graduation data was not yet mandatory when the data were submitted.

Although not every four-year Title-IV eligible higher education institution is included in the data set, it contains 1,396 institutions that enrolled 94 percent of students at four-year institutions. Of the 74 public and independent universities in Texas, 61 are included in the data set. In addition, some values in the data set are missing because the survey does not report graduation rates for groups of students smaller than ten, and some rates based on small cohorts have been “statistically perturbed” by the U.S. Department of Education.

Graduation rates are based on the percentage of first-time, full-time, degree-seeking freshmen who earn a bachelor’s degree from the institution where they originally enrolled. Certain students are excluded from consideration, including those who begin as part-time or non-degree-seeking students or who transfer into the reporting institution. Also, an institution may exclude a student from its calculation if the student dies or becomes permanently disabled, or if the student fails to earn a degree because the student leaves to serve in the armed forces, to serve with a foreign aid service of the federal government, or to serve on an official church mission. The four-year, five-year, and six-year graduation rates discussed in this paper are cumulative. For example, the five-year graduation rate shows the percent of students who graduated in five years or less, not the percent who took exactly five years to graduate.

### *Peer Group Data*

Peer groups were defined by comparing institutions in the data set with respect to 11 institutional and student characteristics that The Education Trust found to be statistically correlated with overall six-year graduation rates. Each institution was compared to every other institution in the sample with respect to these characteristics, and up to 15 schools were identified as being peers of that institution.

The characteristics that The Education Trust used to establish peer groups were based on a regression model in which the dependent variable was the overall six-year graduation rates for the 1997-2003 GRS cohort. The 11 characteristics were weighted according to their relative influence on the graduation rates in the model, and points were summed to calculate an overall similarity score that was used as the basis for establishing peer groups. Once similar institutions were identified, additional filters were applied to narrow the variation allowed for each characteristic. The set of characteristics used to establish similarity among institutions were the following:

- Median SAT or ACT
- Admissions selectivity, per *Barron’s Guide to American Colleges*

- Carnegie Classification, used to distinguish degree programs and institutional mission
- Percent of undergraduates receiving Pell Grants
- Public sector vs. private sector
- Number of full-time equivalent undergraduates
- Student-related expenditures spent on each full-time equivalent (FTE) student
- Percent of FTE undergraduate students age 25 and over
- Status as a Historically Black College or University
- Percent of undergraduates who are enrolled part-time
- Status as a commuter campus

### ***Limitations of the Peer Group Data***

Although the methodology used to group similar schools is based on the recommendations of an advisory panel of national experts and incorporates a wide range of data elements, The Education Trust is quick to point out that “. . . no automated peer group methodology is perfect or incontrovertible.” It is entirely possible that the grouping will be more accurate for some institutions and less accurate for others. Also, the methodology was specifically designed to compare graduation rates, and a different method might be appropriate for comparing institutions in other respects.

## **Appendix 2. Methodology for Creating the Rate Trend Index**

The Education Trust data includes the six-year graduation rate of student cohorts who graduated in the years 1997 through 2003. This series of graduation rates was used to examine whether an institution has improved in its efforts to graduate students within six years. Because of the wide variations that can occur from one year to the next, a series of three-year moving average rates was computed from the individual rates. Next, the difference in the smoothed rates from one three-year moving average to the next was calculated by subtracting each subsequent average rate from the prior average rate. If the rate improved, the difference would be a positive value; the difference would be negative if the rate declined. Finally, the differences were summed across the series to provide a rough indication of the overall trend and relative magnitude of the net change in rates across the seven years. Thus, if the sum of the rates is negative, the trend in the graduation rate is falling and becoming worse. If the net difference across the seven years is -10 percent, the relative magnitude of the decline is greater, or the rate is deteriorating more quickly, than if the difference is -2 percent, and so on.

### Appendix 3. Graduation Rates of the 1997 Freshman Cohort in Texas Institutions

Institution	Graduation Rate			Decile		
	4-Year	5-Year	6-Year	4-Year	5-Year	6-Year
Abilene Christian University	27%	51%	55%	1	2	3
Angelo State University	17%	29%	34%	6	6	6
Austin College	68%	73%	74%	8	8	8
Baylor University	40%	66%	70%	6	6	6
Concordia University	12%	21%	22%	2	1	1
Dallas Baptist University	28%	42%	46%	3	3	3
East Texas Baptist University	20%	38%	41%	3	6	6
Hardin-Simmons University	25%	43%	46%	3	3	3
Houston Baptist University	27%	46%	49%	3	3	3
Howard Payne University	20%	33%	35%	2	2	3
Huston-Tillotson College	6%	16%	20%	3	4	5
Jarvis Christian College	—	—	11%	—	—	2
Lamar University	13%	25%	28%	7	5	4
LeTourneau University	32%	49%	51%	5	5	4
Lubbock Christian University	—	—	16%	—	—	2
McMurry University	28%	39%	42%	6	6	6
Midwestern State University	7%	21%	28%	2	2	3
Northwood University	31%	40%	45%	7	7	7
Our Lady of The Lake University	16%	34%	38%	1	3	5
Paul Quinn College	9%	15%	22%	3	2	2
Prairie View A&M University	11%	30%	37%	7	6	7
Rice University	73%	89%	91%	2	6	6
St. Edward's University	27%	47%	53%	2	4	6
St. Mary's University	34%	60%	63%	3	7	8
Sam Houston State University	12%	29%	35%	2	2	2
Schreiner University	28%	38%	40%	7	5	5
Southern Methodist University	56%	70%	72%	3	4	5
Southwestern Adventist University	16%	25%	30%	2	1	1
Southwestern University	61%	73%	74%	2	4	4
Stephen F. Austin State University	15%	31%	35%	4	4	3
Sul Ross State University	7%	16%	18%	3	3	2
Tarleton State University	17%	36%	43%	8	8	8
Texas A&M University	32%	68%	75%	4	8	8
Texas A&M University-Commerce	18%	33%	36%	6	6	6
Texas A&M University-Corpus Christi	16%	32%	39%	7	8	8
Texas A&M University at Galveston	23%	36%	37%	2	2	2
Texas A&M University-Kingsville	5%	17%	22%	2	2	2

Institution	Graduation Rate			Decile		
	4-Year	5-Year	6-Year	4-Year	5-Year	6-Year
Texas Christian University	39%	62%	65%	1	1	1
Texas Lutheran University	38%	52%	54%	5	5	4
Texas Southern University	8%	14%	19%	3	1	1
Texas State University	18%	40%	46%	3	2	3
Texas Tech University	24%	48%	54%	4	3	2
Texas Wesleyan University	—	—	12%	—	—	1
Texas Woman's University	18%	31%	35%	8	8	7
Trinity University	63%	74%	75%	1	1	2
University of Dallas	52%	58%	59%	5	2	1
University of Houston-Downtown	2%	7%	12%	1	1	1
University of Houston-University Park	9%	29%	40%	3	3	4
University of Mary Hardin-Baylor	24%	38%	41%	3	4	3
University of North Texas	13%	31%	39%	2	2	1
University of St. Thomas	25%	41%	47%	3	3	2
University of Texas at Arlington	20%	34%	37%	7	6	3
University of Texas at Austin	36%	64%	71%	6	6	5
University of Texas at Dallas	32%	53%	57%	3	2	3
University of Texas at El Paso	2%	15%	26%	1	1	2
University of Texas at San Antonio	6%	19%	28%	4	4	3
University of Texas-Pan American	6%	18%	26%	3	3	3
University of The Incarnate Word	14%	34%	40%	2	2	3
Wayland Baptist University	24%	33%	36%	9	5	5
West Texas A&M University	12%	28%	36%	4	5	6
Wiley College	13%	23%	30%	6	6	6

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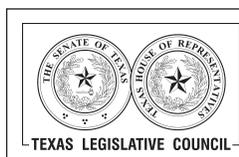
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