



# Education

**E**ducation is the foundation for a free and independent society. It is the cornerstone of economic development and the key to excelling in the global race for economic success. Most importantly, education is the path to a bright and healthy future for our children.

## Public Education

Texas has been a leader among states in taking steps to improve the quality of its public education. It has increased accountability and instituted more rigorous curricula, but it continues to face challenges in preparing its students for success in the 21st century.

## Student Population

Texas has the nation's second-largest elementary and secondary school enrollment, accounting for 9 percent of the U.S. total.<sup>155</sup> The state's 1,031 public school districts, including 7,729 campuses, and 191 charter operator, including 332 campuses, provide early education through twelfth grade for about 4.6 million students, 20 percent more than ten years ago.<sup>156</sup>

The State Data Center estimates that the public elementary and secondary school population will grow by about 900,000 between 2010 and 2040, assuming net migration rates of about one-half of that experienced during the 1990-2000 decade.<sup>157</sup>

The state's student population has become more diverse over the last decade and will con-

### DID YOU KNOW?

*Public education was appropriated \$24.4 billion — about 28 percent of the state budget — for fiscal 2008.*





continue to do so through 2040, according to current projections. The segment with the greatest growth is Hispanics, whose share will grow to about 60.9 percent of the total; Whites will decline to 25.9 percent; Blacks will decline to 9.5 percent; and “Other” ethnicities will grow to 3.7 percent of the total (**Exhibit 27**).<sup>158</sup>

In addition, the state’s share of students identified as Limited English Proficient (LEP) rose from 13.4 percent in 1996-97 to 16 percent of all children in 2006-07.<sup>159</sup> The Texas Education Agency (TEA) reports that 127 languages are spoken by the state’s schoolchildren.<sup>160</sup>

Texas also has seen a significant increase in the number and percentage of economically disadvantaged students in public schools. In the 1996-97 school year, about 1.8 million students, or 48.1 percent of all Texas students, were identified as economically disadvantaged. In the 2006-07 school year, about 2.5 million children — 55.5 percent of all Texas students — were considered economically disadvantaged.<sup>161</sup>

### Accountability

In 1990, the Texas Legislature established the state’s first accountability system for public

education based on school district and campus ratings tied to certain measurable indicators. The system currently uses TAKS test scores, alternative test scores for Special Education students, annual dropout rates and school completion rates.<sup>162</sup> Using these indicators, the system rates school districts and campuses as “Exemplary,” “Recognized,” “Academically Acceptable” or “Academically Unacceptable.”<sup>163</sup>

As of August 2007, excluding charter schools, 19 Texas public school districts were rated Exemplary; 190 were rated Recognized; 801 were rated Academically Acceptable; and 21 were rated Academically Unacceptable. Of total campuses, again excluding charter operators, 628 were rated Exemplary; 2,317 were rated Recognized; 3,891 were rated Academically Acceptable; 232 were rated Academically Unacceptable; and 661 were listed as “Not Rated: Other.”<sup>164</sup> The latter category includes districts and campuses that are not rated in the accountability system, such as alternative education or early childhood programs.

The key criterion of the accountability system is the competency of students in core subjects as measured by testing against academic standards.<sup>165</sup> The most current standards, the Texas Essential Knowledge and Skills (TEKS), became effective on September 1, 1998. Texas Assessment of Knowledge and Skills (TAKS) testing based on these standards began in spring 2003, and accountability ratings using the new tests began in fall 2004.<sup>166</sup>

The 2007 Texas Legislature, however, passed legislation that phases out TAKS for grades 9-12, including the exit-level test required to receive a diploma. In its place, beginning in the 2011-12 school year, ninth-grade students will take end-of-course exams in core subjects,

Exhibit 27

### Ethnicity of Students in Texas Public Schools 1996-97 Actual – 2040 Projected

Ethnicity	1996-97 Actual	2006-07 Actual	2040 Projected
White	45.6%	35.7%	25.9%
Black	14.3%	14.4%	9.5%
Hispanic	37.4%	46.3%	60.9%
Other	2.7%	3.6%	3.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Sources: Texas Education Agency and Texas State Data Center.



including those previously covered in the exit-level test. To pass these exams, a student must score at least 60 points on a scale of 100; to receive a diploma, students must score a cumulative average of at least 70 points when all tests are considered.<sup>167</sup>

TAKS testing will continue for students in grades 3 through 8 in reading; grades 4 and 7 in writing; grades 3 through 8 in mathematics; grades 5 and 8 in science; and grade 8 in social studies. **Exhibit 28** provides the percentage shares of students who passed all assessments in the 2006-07 academic year.<sup>168</sup>

In addition, Texas has also instituted the “Student Success Initiative,” which requires students to pass the TAKS reading assessment or an approved alternate test in third grade, or receive a unanimous decision by a school’s grade placement committee, to advance to fourth grade. Students must also meet requirements for reading and mathematics in fifth grade and in eighth grade to be promoted to the next grade.<sup>169</sup>

A National Center for Educational Statistics report for 2007, *The Nation’s Report Card*, provides interstate comparisons based on the National Assessment of Educational Progress (NAEP), administered by the U.S. Department of Education and a bipartisan governing board; the NAEP is a collection of tests that measure levels of proficiency in core subject areas.<sup>170</sup>

The report found that Texas eighth-graders scored above the national average of 280 in mathematics, ranking 15th in the nation; their reading scores were tied at the national average; and science scores, last measured in 2005, were slightly lower than the national average of 147. Their reading rank among

Exhibit 28

**2007 TAKS Results  
Selected Characteristics  
Sum of All Tests, All Grades Tested**

Student Population	Percent Passing All TAKS Tests
State	67%
Black	52%
Hispanic	59%
White	80%
Native American	71%
Asian/Pacific	87%
Male	67%
Female	67%
LEP	47%
Economically Disadvantaged	57%

Note: Includes 8th grade Science.  
Source: Texas Education Agency.

the states was 31st, however, and their science rank was 35th. In addition, while mathematics scores and ranking improved from 2000, reading and science scores remained relatively stable, and the state’s rankings declined (**Exhibit 29**).<sup>171</sup>

Although Texas’ fourth-graders improved their scores during the same time period in all three subjects, so did children in other

Exhibit 29

**Average Scores for Texas Students in Grade 8 and State Rankings, National Assessment of Educational Progress 2000-2007**

Subject	2000 Average Score	2000 State Ranking	2007 Average Score	2007 State Ranking
Mathematics	273	20	286	15
Reading*	262*	26	261	31
Science*	143	28	143*	35

\* Reading average score is for 2002; no 2000 score is available. Science average score is for 2005; no 2007 score is available. Six states were not included in the Science assessment.  
Source: National Center for Educational Statistics.



Exhibit 30

**Average Scores for Texas Students in Grade 4 and State Rankings, National Assessment of Educational Progress 2000-2007**

Subject	2000 Average Score	2000 State Ranking	2007 Average Score	2007 State Ranking
Mathematics	231	7	242	20
Reading*	217*	29	220	31
Science*	145	29	150*	29

\* Reading average score is for 2002; no 2000 score is available. Science average score is for 2005; no 2007 score is available. Six states were not included in the Science assessment. Source: National Center for Educational Statistics.

states, causing Texas' state ranking to decline in mathematics and reading (Exhibit 30). Their mathematics score was higher than the national average of 239, their reading score tied the national average, and they scored one point higher in science.<sup>172</sup>

The federal No Child Left Behind Act (NCLB) of 2001 requires all states to have students proficient in math and reading by

2013-14. To measure their proficiency, all states must have a state-defined accountability system and report "adequate yearly progress" toward proficiency on a state, district and campus basis. They must measure progress based on annual tests and related academic indicators, such as graduation rates, and have annual goals designed to ensure that all districts and campuses have students proficient by 2013-14.<sup>173</sup> To comply with the law, Texas measures districts and schools against TAKS or alternative test participation and performance standards or performance improvement standards and against graduation rates, if the district or school offers Grade 12, or attendance rates if they do not.<sup>174</sup>

Parents whose children attend schools receiving federal Title I funds (aid awarded based on the percentage of students from low-income families) that do not meet these annual improvement goals for two consecutive years may transfer their child within the district, and the district must pay for the transportation. If school districts fail to meet adequate yearly progress goals for three years running, they must provide free tutoring services outside the regular school day; schools that remain in this status after three years are subject to corrective action and restructuring, including takeover or reorganization.

In 2007, 96.8 percent of Texas school districts and 67.6 percent of campuses, including charters, received Title I funds.<sup>175</sup> While most of the state's 1,205 regular and charter public school districts measured for adequate yearly progress met standards in 2007, 131 Title I districts and another five non-Title I districts did not. Of 7,111 regular and charter campuses measured statewide, 485 Title

Exhibit 31

**Comparison of Proficiency in Reading and Mathematics TAKS (Spring 2007) and NAEP (2007)**

Grade/Subject	TAKS Percent Meeting Standard	NAEP - Percent At or Above Proficiency (Texas)	NAEP - Percent At or Above Proficiency (National Average)
4th Grade Reading	84%	30%	32%
4th Grade Mathematics	86%	40%	39%
8th Grade Reading	89%	28%	29%
8th Grade Mathematics	73%	35%	31%

Note: Meeting the 4th grade TAKS reading standard required getting 27 of 40 points correct; the mathematics standard required getting 28 of 42 points correct. Meeting the 8th grade TAKS reading standard required getting 33 of 48 points correct; the mathematics standard required getting 30 of 50 points correct. The NAEP "proficient" standard for reading required fourth graders to score 238 or more and eighth graders to score 281 or more on a 500-point scale score. The NAEP "proficient" standard for mathematics required fourth graders to score 249 or more and eighth graders to score 299 or more on a 500-point scale score. Sources: Texas Education Agency and National Center for Educational Statistics.



I campuses and 179 non-Title I campuses missed the standards.<sup>176</sup>

Although the state uses TAKS results to comply with NCLB, TAKS is not comparable with other states' tests. The NAEP tests, however, provide for interstate comparisons of proficiency in core subject areas.<sup>177</sup>

In 2007, the NAEP found that 30 percent of Texas' fourth-graders were proficient or better in reading compared to a national average of 32 percent. Forty percent were proficient or better in mathematics, compared to a national average of 39 percent. On the other hand, 84 percent of fourth-graders met the TAKS reading standard in 2007, and 86 percent met the TAKS mathematics standard (**Exhibit 31**).<sup>178</sup>

The NAEP also found that 28 percent of Texas eighth-graders were proficient or better in reading, compared to a national average of 29 percent; 35 percent were proficient or better in mathematics compared to a national average of 31 percent. About 89 percent of eighth-graders met the TAKS reading standard in 2007, and 73 percent met the TAKS mathematics standard.<sup>179</sup>

## Outcomes

Texas business and educational experts have stressed the need to continue increasing educational standards to make more students college-ready.<sup>180</sup> The number of credits required to graduate under Texas' "Recommended" graduation plan has risen to 26, beginning with students entering the ninth grade in the 2007-08 academic year; the number of advanced mathematics and science credits required under the program increased from three to four.<sup>181</sup>

The more stringent Recommended plan became the standard graduation plan for

entering ninth-graders in the 2004-05 school year; this plan includes all of the courses that most colleges require for admission. Students also may graduate under the Distinguished Achievement plan, which has even more stringent requirements; or the Minimum plan, which is less stringent than the Recommended plan, requiring only 22 credits to graduate, but parental and school approval are required for participation.<sup>182</sup>

As a result of these changes, the percentage of students graduating under the Recommended or Distinguished Achievement plans rose from about 51 percent in 2000-01 to more than 75 percent in 2005-06, although the total number of public high school graduates in Texas peaked in 2003-04 with 244,165; in 2005-06, only 240,485 graduated (**Exhibit 32**).<sup>183</sup>

In addition to stronger graduation requirements, the state has made more college-level courses available to students in high school. Students are being offered more Advanced Placement (AP) and International Baccalaureate (IB) courses, which provide college credit if students score high enough on exams. In 2006, 18.9 percent of students attempted at least one AP or IB exam, and 51.3 percent of them met the minimum score for college credit on at least one exam.<sup>184</sup> Concurrent or dual-enrollment courses, which provide both high school and college credit, are becoming more common as well.

Despite recent progress, many education and business leaders remain concerned that Texas is not producing enough high school graduates with the skills needed to succeed in college or the workplace. To help address this concern, the Texas Legislature in 2006 directed the State Board of Education (SBOE) to develop college



## Exhibit 32

**Texas Public School Graduates**

Graduation Plan	2000-01	Percent of Total	2003-04	Percent of Total	2005-06	Percent of Total
Recommended	99,454	46.2%	147,051	60.2%	157,626	65.5%
Distinguished Achievement	10,661	5.0%	19,920	8.2%	24,355	10.1%
Minimum	105,201	48.9%	77,194	31.6%	58,504	24.3%
<b>Total</b>	<b>215,316</b>	<b>100.0%</b>	<b>244,165</b>	<b>100.0%</b>	<b>240,485</b>	<b>100.0%</b>

Note: Numbers may not total due to rounding.  
Source: Texas Education Agency.

readiness standards and incorporate them into the TEKS. To assist SBOE in this task, the Legislature also directed the commissioners of education and higher education to appoint “vertical teams” of high school and college faculty. These vertical teams are responsible for developing college readiness standards in English language arts, math, science and social studies. These standards will be subjected to public comment before being approved by the Commissioner of Education and the Texas Higher Education Coordinating Board. They will then be submitted to SBOE for consideration; SBOE has final authority for deciding what will be included in the new curriculum standards.<sup>185</sup>

In April 2007, Governor Perry appointed the Commission for a College Ready Texas to “engage all Texans in a discussion of what skills and knowledge a student must possess to be college ready, and to provide expert resources and general support to the vertical teams and the State Board of Education (SBOE).” The commission, of which Comptroller Susan Combs is a member, released a report in November 2007 outlining its findings and recommendations. The report made recommendations to strengthen the state’s high school curriculum to help ensure

graduates are prepared to succeed in college or the workforce. As noted above, SBOE will make the final decisions on what to include in the TEKS.<sup>186</sup>

Many students are not reaping the advantages of recent educational improvements. The most common reason for dropping out is falling behind in school. Freshmen have the highest retention rates — that is, the rate at which they are forced to repeat a grade. In 2005-06, 16.5 percent of Texas freshmen were retained in Grade 9, the highest rate by far of any grade. Grade 10 had the next highest rate, at 8.7 percent; on the other hand, only 1.8 percent of eighth-graders were retained. Hardest-hit are minorities, who are about twice as likely to be held back; about one in five Black and Hispanic students do not advance to Grade 10 after Grade 9.<sup>187</sup>

The Texas Education Agency’s (TEA’s) reported attrition rate, which compares ninth-grade enrollment in 2002-03 (372,396) to twelfth-grade enrollment in 2005-06 (256,799) was 31 percent; however, this rate does not take into account such factors as student enrollment growth or retention and students who graduate early, receive a GED



or leave for a legitimate reason other than dropping out.<sup>188</sup>

Using TEA's current definition, the 2005-06 annual dropout rate for Texas public school students in Grades 9-12 was 3.7 percent; for Grades 7-12, it was 2.6 percent. TEA's annual dropout rate is much lower than its attrition rate because it only measures the number of students who dropped out in one year — the "annual" rate. TEA recently changed its dropout rate definition to the National Center for Education Statistics' definition, to allow for interstate comparisons, so TEA's current rates cannot be compared with its previous rates. NCES defines a dropout as a student who "does not return to public school the following fall, is not expelled, and does not graduate, receive a GED, continue school outside the public school system, begin college, or die."<sup>189</sup>

Males represented a higher proportion of dropouts than females — 55.5 percent compared to 44.5 percent; of the total 7th-12th grade population, males represented 51.3 percent compared to 48.7 percent for females. Among ethnic groups, Hispanics represented 56.5 percent of total dropouts compared to 22.6 percent for Blacks and 19.4 percent for Whites; of the total 7th-12th grade population, Hispanics represented 41.5 percent compared to 15.4 percent for Blacks and 39.6 percent for Whites.<sup>190</sup>

Of the total students who graduate from high school, about one-half attend a two-year college or undergraduate university within a year of graduation. Of total graduating students, about 41.6 percent of Hispanics, 44.5 percent of Blacks, 46.6 percent of Native Americans, 57.7 percent of Whites

and 63.5 percent of Asians attend college within a year of graduating.<sup>191</sup>

For those who do not, some may attend proprietary schools to obtain a skill or credential while others begin employment, usually in low-skilled, low-wage positions. For students who do not intend to further their education beyond high school, career and technology education is their only chance to learn a skill before entering the work force.

### Career and Technology Education

Secondary career and technology education in Texas and throughout the nation has become more expansive, rigorous and integrated with academics in recent years. This trend began in the 1990s, in response to demands for more skilled and knowledgeable employees that could adapt to the changing demands of a global economy.

About 941,000 Texas public school students were enrolled in a career and technology program in 2006-07, a number representing almost half of all students in grades 7-12.<sup>192</sup> Business education has the highest concentration of students, with 35 percent of career and technology students enrolled in at least one of these courses in 2004-05. About 19 percent were enrolled in family and consumer sciences; the remaining study areas each had less than 15 percent of total enrollment.<sup>193</sup>

The variety of courses in career and technology has expanded in recent years, as computer technology has opened new fields and occupations and gender barriers have been reduced. Some schools have developed "academies" in certain areas, such as business or allied health, which offer courses that are integrated to provide for a cohesive continuum of training.



Another significant change in career and technology education has been the infusion of academics and an understanding of global competitiveness, making them more relevant and challenging than in the past.

To provide more course options and the latest technologies, texts, equipment and information, many high schools have formed partnerships with community colleges and universities; if they qualify academically, students may take some courses at a community college or university campus or from a college professor who teaches at the high school. Students may receive high school and college credit for these dual or concurrent enrollment classes.

Texas Higher Education Coordinating Board (THECB) rules allow students to take no more than two dual or concurrent enrollment classes per semester unless they meet certain exceptional qualifications. Some high schools may further limit this number.<sup>194</sup> More commonly, students enroll in Tech Prep programs, which provide college credit for college-level technology courses taken in high school upon graduation and enrollment in the community college.

High schools generally require students enrolling concurrently to pay for course

tuition, fees and books, which can provide a disincentive, although colleges may waive all or some portion of these tuition and fees. TEA currently has a pilot project to reimburse certain districts for books bought for economically disadvantaged students.<sup>195</sup>

### School Finance

The total actual cost of Texas public education, including capital outlay and debt service, was \$9,629 per student in 2005-06; instruction represented 44.6 percent of that amount. Since the 2000-01 school year, the total actual cost per student has risen by 16.8 percent, from \$8,245. The average teacher salary increased by 8.8 percent during the same time period.<sup>196</sup>

State funding for public education is provided through the Permanent School Fund, the Available School Fund and the Foundation School Program. The Foundation School Program, composed of state revenue and local property tax revenue, funds the largest share of education. State funds are disbursed according to a system of formulas based on district and student characteristics. State funding is intended to ensure that each school district can provide adequate educational resources to

Exhibit 33

### Revenue Sources for Texas Public Education (in billions)

Sources	2000-01 Actual Revenue	Percent	2005-06 Actual Revenue	Percent	2006-07 Budgeted Revenue	Percent
Local Taxes	\$12.9	43.0%	\$19.1	48.3%	\$18.8	51.0%
State	\$12.5	41.8%	\$13.4	33.9%	\$15.3	41.5%
Federal	\$2.4	8.2%	\$4.5	11.5%	\$1.3	3.5%
Other Local*	\$2.1	7.1%	\$2.5	6.3%	\$1.4	3.9%
<b>Total</b>	<b>\$29.9</b>	<b>100.0%</b>	<b>\$39.5</b>	<b>100.0%</b>	<b>\$36.8</b>	<b>100.0%</b>

\*'Other Local' refers to local revenues primarily from services provided to other school districts. Data do not include equity transfers or certain other receipts, such as sale of bonds.  
 Note: Numbers may not total due to rounding.  
 Source: Texas Education Agency.



meet the needs of its students regardless of its local property tax base.

One issue that has been debated for many years has been the declining state share of public school funding. By 2005-06, local property taxes were providing 48.3 percent of all revenue used to fund public schools, as opposed to 43 percent in 2000-01; the state’s share declined from 41.8 percent to 33.9 percent over the same period (**Exhibit 33**).<sup>197</sup> In 2004-05, compared with other states, Texas ranked 49th in the state’s share of per pupil revenue but 17th in its local share of per pupil revenue.<sup>198</sup>

In an effort to ease the burden on property taxpayers, the 2005 Legislature cut school property taxes by an estimated 11 percent in 2007 and 33 percent in 2008; however, increasing property values are likely to offset some of this relief. Budgeted financial data for 2006-07 show the state’s share of revenue growing to 41.5 percent and increasing by almost \$2 billion over the previous year. In addition, revenue from local taxes is budgeted to decline to \$18.8 billion from \$19.1 billion in 2005-06; however, the percent of local share is

budgeted to increase primarily because federal and other local revenue are expected to decline sharply. State share is likely to increase again for the 2007-08 school year as the new school funding system is fully implemented.<sup>199</sup>

Preliminary data from TEA confirm that the state share of aid will expand in fiscal 2007 and 2008 as a result of actions by the 2007 Legislature. **Exhibit 34** shows the state share growing from 52.6 percent in fiscal 2006 to 61.5 percent in 2008; the total funding per student, as measured by Refined Average Daily Attendance (RADA), will also grow by 44.7 percent, from \$4,852 in fiscal 2006 to \$7,026 in fiscal 2008.<sup>200</sup>

As the state’s accountability system has matured, funding teacher pay according to performance has become a subject of debate. Starting in fall 2007, Texas began funding the “Awards for Student Achievement” teacher incentive program at \$97.5 million per year for teachers at educationally disadvantaged campuses; in addition, the new Educator Excellence Awards Program will provide \$147.8 million in fiscal 2009 for

Exhibit 34

**State Aid Funding**

	2002-03	2005-06 (p)	2006-07 (p)	2007-08 (p)
Total Refined ADA (RADA)	3,939,620	4,187,231	4,252,288	4,361,881
Total State Aid	\$10,824,191,130	\$10,683,875,820	\$14,462,444,375	\$18,831,899,272
Local Share	\$8,097,616,916	\$9,631,462,023	\$10,445,878,115	\$11,785,994,760
Total State and Local	\$18,921,808,046	\$20,315,337,843	\$24,908,322,490	\$30,617,894,032
State Aid per RADA	\$2,748	\$2,552	\$3,401	\$4,317
Local Share per RADA	\$2,055	\$2,300	\$2,457	\$2,702
Total per RADA	\$4,803	\$4,852	\$5,858	\$7,019
Percent State	57.2%	52.6%	58.1%	61.5%
Percent Local	42.8%	47.4%	41.9%	38.5%

Note: Data as of December 10, 2007.  
Source: Texas Education Agency.



teacher incentive funding in districts with approved plans.<sup>201</sup>

The base amount that teachers are paid is another ongoing issue; as a result, the 2005 Legislature provided funding for a net \$2,000 base salary increase for teachers.<sup>202</sup> The 2007 Legislature further increased educator salaries by about \$430 for the 2008-09 biennium.<sup>203</sup>

During 2006-07, Texas teachers earned an average of \$44,897 for regular duties, 17 percent more than the \$38,361 average for 2000-01.<sup>204</sup> (The average is affected by the teachers' collective number of years of experience and state and local pay increases. Average salaries for teachers may also be less

than for people with comparable education and experience because they work under a 10-month contract.)

A related issue has been the need to reduce high turnover rates, especially among less experienced teachers. Average salaries for all teachers have risen over the last several years, but pay for beginning teachers, especially, and those with less experience has increased at a higher rate than that for more experienced teachers since 2000-01 (**Exhibit 35**).<sup>205</sup>

The state's number of teachers with less experience also increased at a higher rate (**Exhibit 36**).<sup>206</sup>

This shift has reduced Texas teachers' average years of experience from 11.9 in 2000-01 to 11.3 years in 2006-07. The average turnover rate also declined, from 16 percent in 2000-01 to 15.6 percent in 2006-07, possibly due to the salary increases.<sup>207</sup>

Exhibit 35

**Texas Average Actual Salary, Public School Teachers, 2000-01 and 2006-07 School Years**

Experience	2000-01 Average Actual Salary	2006-07 Average Actual Salary	Percent Change
Beginning	\$29,824	\$38,095	27.7%
1-5 Years	\$31,987	\$39,880	24.7%
6-10 Years	\$35,304	\$42,380	20.0%
11-20 Years	\$41,755	\$47,042	12.7%
>20 Years	\$48,183	\$55,028	14.2%

Source: Texas Education Agency.

**Higher Education**

Higher education is critical to the Texas economy because it is the key to providing a highly qualified work force in an increasingly technical world. Higher education also helps to meet specific local and regional employer demands for skilled employees. Finally, it provides higher salaries throughout a graduate's lifetime, increasing the quality of life for these individuals and their families.

The Texas Legislature recognized the importance of these factors by referencing the Texas Higher Education Coordinating Board's *Closing the Gaps* master plan for higher education in state law.<sup>208</sup> The plan calls for improved statewide participation, better graduation outcomes, improved excellence and increased research funding by 2015.<sup>209</sup>

Exhibit 36

**Texas Public School Teachers, By Years of Experience, 2000-01 and 2006-07 School Years**

Experience	2000-01	2006-07	Percent Change
Beginning	21,493.2	25,153.0	17.0%
1-5 Years	75,174.0	90,607.2	20.5%
6-10 Years	49,717.2	60,919.8	22.5%
11-20 Years	69,508.6	73,448.4	5.7%
>20 Years	58,923.6	61,337.9	4.1%

Note: Number of teachers is based on full-time equivalent teachers. Source: Texas Education Agency.



In recent years, partly in response to THECB’s plan and its tracking measures, the state has made major changes to its higher education system, including its funding methods, student financial aid and admission policies. In the process, the state has explored fundamental questions about the system, its structure and purpose; enacted innovative and sometimes untried policies; and addressed controversial issues — some of which remain unresolved.

### Availability

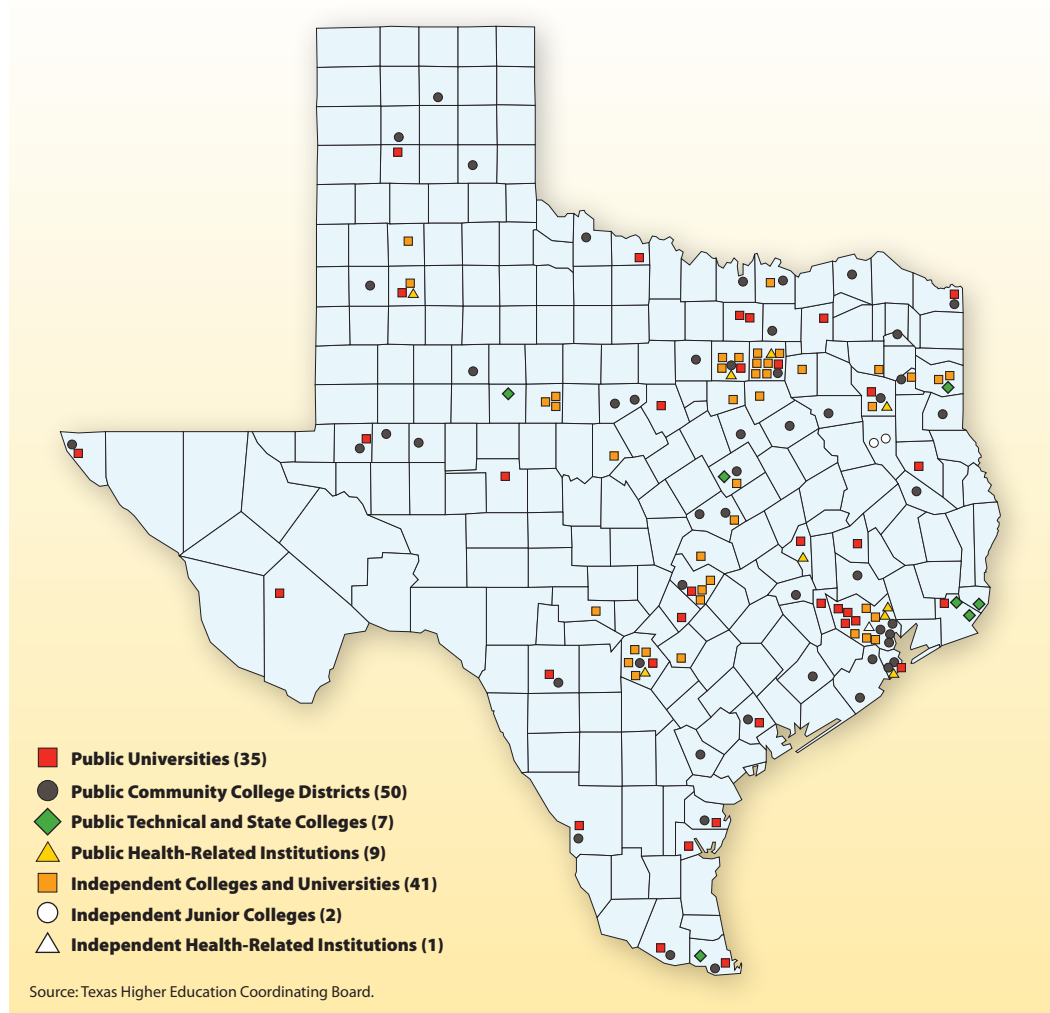
One factor affecting higher education participation is the availability of educational opportunities. Texas has 145 higher education institutions, including 101 public universities and colleges. Public institutions include 35 universities, nine health-related institutions, seven technical and state colleges and 50 community college districts; private institutions include 39 universities, two junior colleges, two chiropractic colleges and one medical school (Exhibit 37).<sup>210</sup>

#### DID YOU KNOW?

*Higher education was appropriated \$10.1 billion — about 12 percent of the state budget — for fiscal 2008.*

Exhibit 37

### Texas Public Institutions of Higher Education





In addition, the Texas Workforce Commission lists about 250 proprietary and nonprofit schools in the state, many with multiple campuses, offering career and technology training.<sup>211</sup> Online opportunities also have increased the availability of higher educational programs to anyone with access to a computer.

To make more classroom education available in regions with growing or high demand, and to conserve on costs, the state has established nine higher education centers, sometimes called multi-institution teaching centers (MITCs), that offer courses at one central location or at several sites. MITCs are partnerships between institutions of higher education and may include public community and technical colleges, public universities and independent colleges and universities. Students enroll through their college or university but can attend classes at the MITC.<sup>212</sup>

In addition, Texas is establishing a new medical school in El Paso and has authorized a new MITC in East Williamson County.<sup>213</sup> Certain junior colleges also have been authorized to offer up to five baccalaureate programs.<sup>214</sup> These additions will increase availability for undergraduate and graduate education in areas of the state where demand has outpaced availability.

Texas' community colleges, which are open to anyone who applies and serve almost all areas of the state, offer a variety of one-year technical certifications and two-year associate degrees in a wide variety of technical and academic subjects. In addition, the community college system offers many classes at night and on weekends year-round, through the Internet and at satellite centers such as high schools,

providing flexibility that allows the system to respond relatively quickly to changes in enrollment, employer and regional demand.

Even so, THECB reports that 17 percent of two-year students in its Southeast region and 15.6 percent in its Northwest region attended Texas two-year institutions outside their home region in 2005, compared with just 5.6 percent statewide. This may reflect a lack of institutions within these (generally more rural) areas; closer proximity of students to institutions in neighboring regions; or greater availability of course offerings in other regions.<sup>215</sup>

THECB's Northwest and Upper East Texas regions ranked highest in 2005 for the percentage of students traveling outside the region but within the state to attend undergraduate universities — 65.3 percent and 64.1 percent respectively, compared with 36.3 percent statewide. These percentages probably reflect the relatively low number of universities in those regions.<sup>216</sup>

Demand has outstripped the supply of certain programs, such as nursing, throughout the state. In response, Texas has increased incentive funding for nursing and other allied health programs in short supply and streamlined the process for establishing new nursing programs beginning in 2007.<sup>217</sup> As a result, some areas are starting to see lower nursing demand or are projecting additional nurses being available in the near future.<sup>218</sup> Although the demand is still greater than the supply, THECB reports that the state is now on target for meeting its 2015 goals for graduates in health fields.<sup>219</sup>

### Accessibility

Another factor affecting participation in higher education is the accessibility of



educational opportunities. One of the most debated aspects of this issue has been admission to Texas universities.

Since 1998, the state has guaranteed admission to Texas public universities to all Texas high students ranked in the top 10 percent of their high school graduating classes. Starting in 2008-09, freshmen must also graduate under the more demanding Recommended or Distinguished Achievement high school graduation plans to gain automatic admission under the 10 percent rule. (See the Outcomes section for a discussion of graduation plans.)<sup>220</sup>

Higher education leaders attribute the increased numbers and percentages of minorities, particularly Hispanics, enrolled in Texas institutions, and particularly at the University of Texas at Austin (UT), primarily to the 10 percent rule; other factors, such as increased recruitment and incentives, also have contributed.<sup>221</sup>

The Hispanic population in Texas rose by 22.1 percent from 2000 to 2005 (most recent data available).<sup>222</sup> Total Hispanic enrollment at Texas public universities rose from 81,180 in fall 2000 to 117,816 in fall 2007, a 45.1 percent increase; UT's total Hispanic enrollment rose from 5,920 to 7,991 over the same period, a 35 percent increase.

The increase in UT's Hispanic enrollment is more significant than these numbers indicate, however, since UT kept its total enrollment relatively flat from fall 2000 to fall 2007 at about 50,000 students, compared with an 19.9 percent increase in total enrollment for public universities statewide. UT increased the Hispanic share of its total enrollment from 11.8 percent in fall 2000 to 15.9 percent in fall 2007, compared with 19.6 percent to 23.7 percent statewide.

Despite these increases, since the statewide share of Hispanic enrollment also increased, the university continues to lag about 7.8 percentage points behind the statewide share.<sup>223</sup>

In all, then, UT's Hispanic share of total enrollments rose by 4.1 percentage points from fall 2000 to fall 2007, the same as statewide enrollment growth of 4.1 percentage points. From fall 2000 to fall 2005, however, the Hispanic share of the state's total population increased by 3.6 percentage points, from 32 percent to 35.6 percent. At this rate of growth, enrollments statewide and at UT will continue to lag behind the Hispanic share of the state's population.<sup>224</sup>

Black enrollment at UT grew by 33.6 percent from fall 2000 to fall 2007, from 1,582 to 2,113; this represents an increase from 3.2 percent of total enrollment to 4.2 percent during the same period. Statewide, Black enrollment increased from 9.8 percent of total enrollment to 11.4 percent.<sup>225</sup> The Black share of the state's total population fell from 11.5 percent in 2000 to 11.4 percent in 2005, which means that the gain in share of enrollment has been a real gain when compared with population growth.<sup>226</sup>

The 10 percent rule also is having an effect on the number and percentage of females accepted to Texas public universities. Statewide, 62 percent of students accepted under the 10 percent rule in summer and fall 2006 were female, compared with only 54.8 percent of total students accepted; females represented 53.9 percent of all applicants. At UT, 58.5 percent of students accepted under the top 10 percent rule were female, but only 46.5 percent of students accepted under other criteria were female. Females represented 54.3 percent of all students accepted to the university.



The percentage of first-time undergraduates accepted to Texas public universities who ranked in the top 10 percent of their high school graduating class rose from 21.1 percent in fall 2000 to 23 percent in fall 2006. First-time undergraduate acceptances at UT under the 10 percent rule, however, have increased from 31.9 percent in fall 2000 to 72.8 percent in fall 2006. The top 10 percent group at UT increased from 52.1 percent of fall enrollment of first-time undergraduates in 2000 to 75.8 percent in fall 2006. Statewide, the top 10 percent group enrollment rose from 25.3 percent to 26.5 percent of the total enrolled (**Exhibit 38**).<sup>227</sup>

The increase in the top 10 percent group as a percentage of the total enrolled as first-time graduates at UT was due primarily to rela-

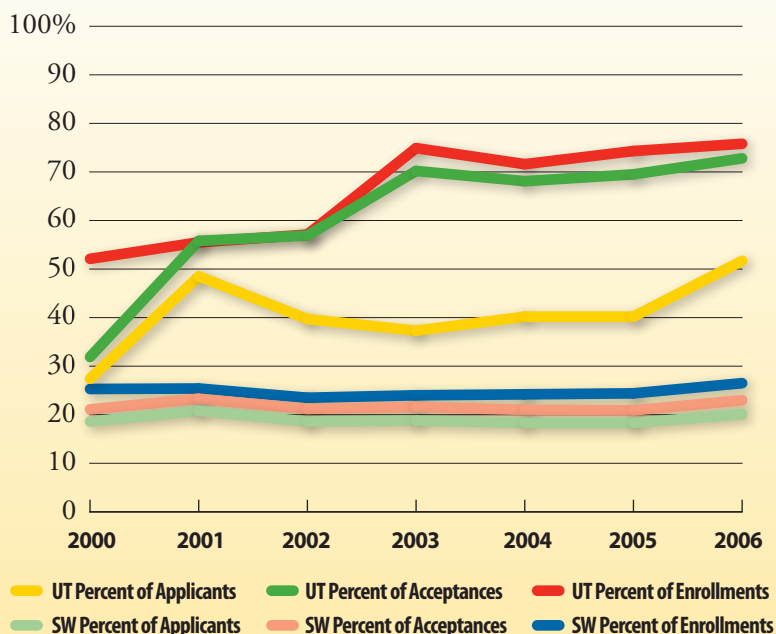
tively flat total acceptances and enrollment compared to an increase in applicants in the top 10 percent group and a cut in total acceptances in fall 2003. UT cut total acceptances in fall 2003 by almost 1,000 students from the year before and did not exceed fall 2002 acceptance levels until fall 2006. Although UT increased total acceptances by 11.2 percent over the fall 2000 to fall 2006 period, total first-time undergraduate enrollment rose only slightly, by 2.6 percent, after dipping below fall 2000 levels in fall 2003 (**Exhibit 39**).<sup>228</sup>

Nearly 40 percent of all Texas students who qualify for automatic admission under the 10 percent rule apply to UT.<sup>229</sup> A continuing rise in the number of high school graduates accepted to UT under the rule poses a potential problem for some who prefer that the university maintain its current size, as it has for many years, and employ more than one criterion to select students; others view it as a positive way to increase qualified candidates and minority enrollment.<sup>230</sup>

Although the total number of first-time undergraduate students at Texas public universities has increased, the percentage of applicants accepted has declined slightly, from 88.5 percent in fall 2000 to 87.6 percent in fall 2006; the number of applications grew by 41 percent and the number of applications that were accepted grew by 39.6 percent. The top 10 percent group grew as a percentage of enrollment from 25.3 percent to 26.5 percent from fall 2000 to fall 2006.<sup>231</sup> These data indicate that for the most part, universities are expanding to accommodate applicants, and the top 10 percent group is having little effect on competitiveness.

Exhibit 38

**The University of Texas at Austin and Statewide Students Under Top 10 Percent Rule as Percent of Total First-time Undergraduates**



Source: Texas Higher Education Coordinating Board.



For UT, the percentage of first-time undergraduate applicants accepted to the university declined from 85.8 percent in fall 2000 to 71 percent in fall 2006.<sup>232</sup> Total fall applicants to UT increased by 4,386 over this period, but the total accepted increased by only 1,224; applicants accepted under the top 10 percent rule increased by 5,348.<sup>233</sup> If these trends continue and UT does not expand its capacity, gaining admittance to this institution may become increasingly difficult for those who do not qualify under the 10 percent rule.

### Affordability

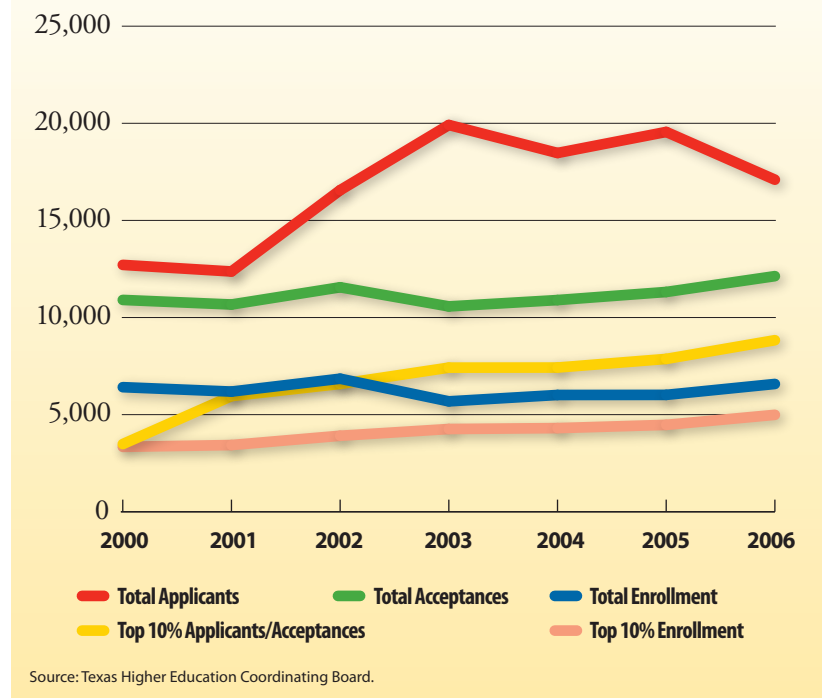
Another key to increasing both participation and graduation outcomes is ensuring the affordability of higher education. Traditionally a “low tuition, low aid” state, Texas deregulated tuition in 2003, allowing institutions to set their own rates.<sup>234</sup> To offset the resulting tuition increases, the state expanded financial aid—but not enough to curb a growing gap between college costs and aid.

The state requires its public undergraduate institutions to set aside 15 percent of state-mandated resident tuition and, since deregulation, not less than 20 percent of other tuition above \$46 per semester credit hour, to assist undergraduate students with financial aid.

In addition to institutional and federal financial assistance and tax incentives, eligible students can access a wide variety of state aid as well as a 529 college savings plan, which provides special tax benefits under section 529 of the Internal Revenue Code to families that set aside funds for future college costs. In Texas, the plan is called the Texas College Savings Plan; it was established and is maintained by the Texas Prepaid Higher Education

Exhibit 39

### UT Applicants, Acceptances and Enrollments First-time Undergraduates Total and Top 10 Percent Group Fall 2000 - Fall 2006



Tuition Board (TPHETB) and staffed by the Comptroller of Public Accounts.<sup>235</sup> The 2007 Legislature passed a program of prepaid tuition contracts, also administered by TPHETB and staffed by the Comptroller’s office, which starts September 1, 2008, and will allow families to purchase tomorrow’s tuition at today’s costs.<sup>236</sup>

Texas public and private institutions of higher education received about \$4.8 billion in total need-based financial aid to assist students in fiscal 2006. Need-based aid includes gift aid, which does not have to be paid back, loans and work-study. The federal government awarded 76.1 percent of that amount; the state provided another 11.3 percent, or about \$541 million; institutions gave 6.8 percent



of the total; and 5.8 percent came from other sources.<sup>237</sup> Total annual aid has risen by about 60 percent since fiscal 2002, but the state has more than doubled the amount it contributes.<sup>238</sup>

The state's largest program, the TEXAS Grant Program, which began in fiscal 2000 with \$19.8 million, disbursed \$198.7 million to 62,435 recipients in fiscal 2008. An estimated 42,000 students that qualify for the grant in fiscal 2008 will not receive it due to inadequate funding levels.<sup>239</sup>

Another new effort, the B-On-Time Loan Program, which forgives loans of students who graduate on time, provided 7,384 students with \$26.9 million in fiscal 2006. Currently, the program has no funding for new students.<sup>240</sup>

In fiscal 2006, about half of all students attending Texas public and private institutions, more than 582,000, received some type of need-based aid. This represented 62.5 percent of students who enrolled and applied for such aid. Of the total receiving aid, 94 percent registered Texas as their home state.<sup>241</sup>

Despite recent increases in state financial aid, the gap between actual college costs and aid received by Texas students rose from \$2.3 billion in fiscal 2001 (in constant 2006 dollars), to \$3.9 billion in 2006, a 71 percent increase in costs that students and their families must cover (**Exhibit 40**).<sup>242</sup>

Estimated average annual tuition and fees at Texas undergraduate universities, based on 30 semester credit hours, increased by \$2,128, or 61.8 percent, from 2003 to 2007.<sup>243</sup>

Community colleges have the lowest tuition and fee requirements, although students who live outside community college taxing districts must pay more than in-district students. Annual public community college tuition and fees for students living within the community college taxing district, based on 15 credit hours for each semester, averaged an estimated \$1,639 in 2007-08, compared with \$5,569 for undergraduate universities. THECB estimates total 2007-08 resident costs of attending community colleges — including tuition and fees, books and supplies, room and board, transportation and personal expenses — at \$10,456, and undergraduate institutions at \$16,995.<sup>244</sup>

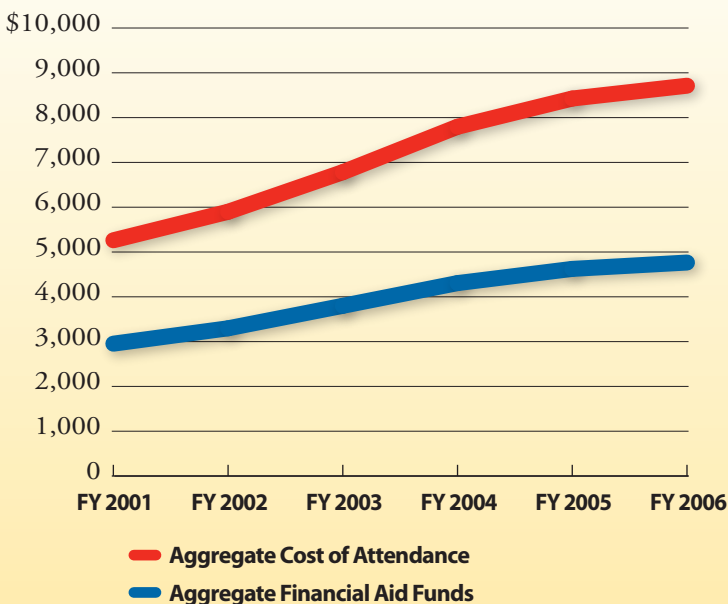
### Participation

By fall 2006, Texas was about a third of the way to reaching its *Closing the Gaps* participation outcomes for total enrollment in undergraduate education for 2015. Progress

Exhibit 40

### Aggregate Costs of Attendance vs. Aggregate Financial Aid Funds Constant 2006 Dollars

In millions



Source: Texas Higher Education Coordinating Board.



toward the goal, however, as measured by the percentage of the population enrolled in higher education institutions, is slowing. The plan also sets goals for increased participation of Hispanic and Black students; while progress is on target for Blacks, it is below target for Hispanics.<sup>245</sup>

Fall 2006 enrollment in all colleges and universities in the state was 1.2 million, about 5.3 percent of the state’s population. Enrollment was 5 percent of the population in 2000; the 2010 goal is 5.6 percent and the 2015 goal is 5.7 percent, which would place Texas third among the ten most populous states behind California and Illinois.<sup>246</sup> Enrollment in public institutions represented 90.3 percent of the total in 2006. Enrollment in two-year institutions amounted to 48 percent of the total.<sup>247</sup>

Community colleges absorbed the greatest enrollment increase, rising 29.2 percent from fall 2000 to fall 2006, an increase representing more than 126,000 students. Public universities increased their enrollment by 18.5 percent, or more than 76,000 students, over the same period.<sup>248</sup>

Although Hispanic enrollment at all Texas public and independent institutions rose by 40.7 percent from fall 2000 to fall 2006, their participation represented only 3.9 percent of the Hispanic population in 2006. While this was an improvement over the 3.7 percent participation rate in 2000, it is well below the *Closing the Gaps* targets of 4.8 percent for 2010 and 5.7 percent for 2015. To reach the 2010 target alone, Hispanic enrollment must increase by another 41.9 percent.<sup>249</sup>

Black enrollment is on target for meeting the *Closing the Gaps* goals for both 2010 and

2015, and THECB cited this improvement as “one of the most important accomplishments” since the start of the effort. Enrollment for this group was 31.5 percent higher in fall 2006 than in fall 2000 and is equivalent to 5.4 percent of this group’s estimated population — up from 4.6 percent in 2000.<sup>250</sup>

The public college and university population is projected to increase to 1.1 million by 2040, assuming 50 percent of the net migration rate that occurred during the 1990-2000 decade. Enrollment in public community colleges is projected to grow to about 588,000 and to 478,000 for public colleges and universities.<sup>251</sup>

Hispanic enrollment as a share of the total is projected to increase to 44.2 percent by 2040; all other ethnicities are projected to decline as a percentage of the total. White enrollment is projected to decline to 38.4 percent; Black enrollment, to 9.4 percent; and other ethnicities, to 7.9 percent (**Exhibit 41**).<sup>252</sup>

About half of all Texas high school graduates enroll in a higher education institution in the fall following graduation; of these, about half attend two-year institutions. In recent years, Texas has strengthened its high school

Exhibit 41

**Public College and University Enrollment by Ethnicity**

	Fall 2000	Fall 2006	2040 Projected
White	55.4%	49.7%	38.4%
Black	10.4%	11.3%	9.4%
Hispanic	24.4%	28.4%	44.2%
Other	9.8%	10.6%	7.9%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Note: Numbers may not total due to rounding.  
Sources: Texas Higher Education Coordinating Board and Texas State Data Center.



graduation requirements, improved academic content in all grades, established standards and accountability systems and expanded its offerings of dual-enrollment classes.<sup>253</sup>

These changes should improve student preparation for the work force and increase the share of students who attend college after high school. The share of Texas high school graduates entering Texas public higher education institutions in the fall following graduation rose from 43.4 percent in 2000 to 46.1 percent in 2006, a difference of more than 18,000 students.<sup>254</sup>

### Graduation

Trends show that *Closing the Gaps* college graduation outcomes are on target for meeting overall 2015 goals, but the state is slightly below its target for producing math and science teachers and well below its target for

math and science graduates. On the other hand, the state is above target for increasing allied health and nursing graduates by 2015, an area that is still in high demand. Growth from 2000 to 2006 was 30.9 percent despite a decline from 2000 to 2001 that did not recover for two-year institutions until 2003 and for four-year institutions until 2004.<sup>255</sup>

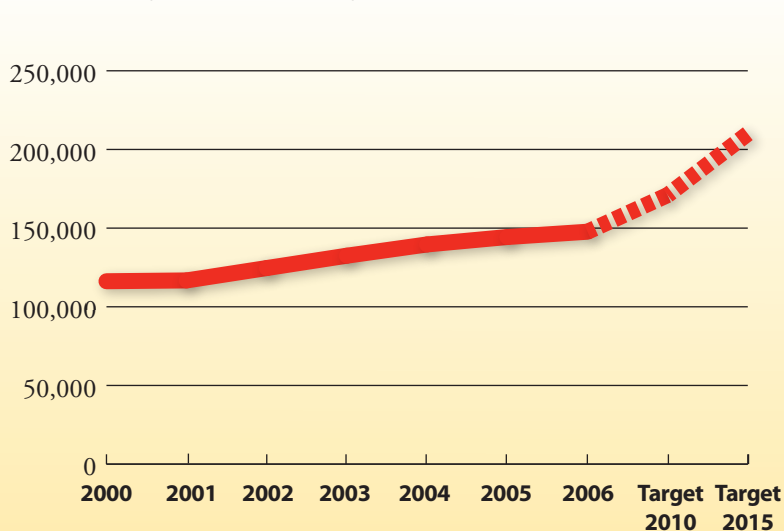
Although the increase in the total number of bachelor's and associate's degrees and certificates awarded is currently on target, the trend is slowing and flattening. The 27.1 percent increase in degrees awarded since fiscal 2000, which rose to 147,705 degrees in fiscal 2006, will not be enough to reach the 2015 goal of 210,000. To meet this goal, institutions must increase the number of degrees awarded by another 42.2 percent from fiscal 2006 (**Exhibit 42**).<sup>256</sup>

Improving the college readiness of high school students can improve the number of students who stay in college, which in turn will improve graduation rates. A steadily increasing percentage of first-time, full-time, degree-seeking students entering Texas public universities are now graduating — about 24.3 percent within four years and about 56.7 percent within six years.<sup>257</sup>

For Texas community colleges, 11.7 percent of first-time, full-time students received a credential within three years as of fiscal 2005, and 30.6 percent did so within six years. This represents an improvement from fiscal 2000, when 10.8 percent received a credential within three years and 25.7 percent received one within six years.<sup>258</sup> About a third of students who graduated from a Texas university in 2005 had completed at least 30 semester credit hours at a community college.<sup>259</sup>

Exhibit 42

### Public and Independent Institutions' Bachelor's and Associate's Degrees and Certificates Awarded and "Closing the Gaps" Targets



Source: Texas Higher Education Coordinating Board.



In fall 2003, about one-half of first-time entering students did not meet state standards in at least one area of math, reading or writing. For public universities, the total was 21.2 percent and for two-year institutions, it was 61.6 percent.<sup>260</sup>

About 65.8 percent of the high school graduating class of 2006 took either the SAT or ACT college entrance exams; of those, only 27.1 percent scored at or above the criterion used to determine college readiness. In 2007, about 53 percent of high school students were college-ready in English Language Arts and 54 percent in Mathematics, according to the TEA's higher education readiness testing program.<sup>261</sup>

Recent increases in high school graduation requirements and the strengthening of academics throughout public education may improve these percentages in the future. In the meantime, students and institutions must rely primarily on costly noncredit, remedial courses to prepare students for college-level work.

## Quality

Besides participation and graduation outcomes, *Closing the Gaps* calls for increasing excellence in higher education.

The *Closing the Gaps* target for 2010 is for one research institution, either public or private, to be ranked in the top 10 nationally and for two additional universities to rank among the top 30. For 2015, the goal is for two public research institutions to be in the top-ten national rankings for public research institutions, and four in the top 30.<sup>262</sup>

THECB uses the rankings from *U.S. News & World Report*, which produces the best-

known ranking in this field, as one source to evaluate this measure.<sup>263</sup> The publication uses a wide variety of criteria, including acceptance, retention and graduation rates, class size, faculty measures, expenditures per student, peer assessment, alumni giving, student selectivity and other measures.<sup>264</sup>

For the upcoming 2008 year, *U.S. News & World Report* ranked UT 13th among public institutions, and Texas A&M University, 23rd.<sup>265</sup> UT has steadily improved its ranking, from 17th in 1999; but A&M has fallen from 15th, a place it held from 1999 through 2002.<sup>266</sup>

For public and private research institutions, THECB employs rankings from Arizona State University's Center for Measuring University Performance.<sup>267</sup> The center uses criteria based on factors such as research and development expenditures, including federally sponsored research expenditures; endowments; significant faculty awards; doctorates granted; the number of postdoctoral appointments supported; and median entering student SAT scores (as an indicator of student competitiveness).<sup>268</sup>

In 2006, according to the Center for Measuring University Performance rankings based on 50 criteria, among public and private institutions, UT tied at 28th nationally, A&M ranked 32nd and Baylor College of Medicine tied at 40th. Among public institutions only, the center ranked UT tied at 13th with the University of Florida and A&M at 16th.<sup>269</sup>

On the other hand, the plan is on target for meeting national recognition goals for excellence in certain programs, including those of community colleges. In addition, the plan calls for increasing the state's share



of federal research and development funding for science and engineering research, a goal that is slightly below target as of 2007.<sup>270</sup>

The plan's other research goal — to increase overall research funding in real dollars — is on target for meeting its 2015 goal.<sup>271</sup> Increased research funding, and particularly an increased share relative to other institutions, is one measure of quality since it demonstrates the degree of confidence that funding sources have in an institution's capability.

### Funding

State appropriations to higher education, including federal and other funds, totaled \$16.9 billion in 2006-07 — 11 percent more than in the previous biennium.<sup>272</sup>

Higher education received \$10.1 billion in state general revenue appropriations for operations support for the 2006-07 biennium, an 8 percent increase from 2004-05. Of this amount, public universities received \$4.3 billion; health-related institutions, \$2.4 billion; community and technical colleges, \$2.1 billion; and other higher education programs, \$1.3 billion.<sup>273</sup>

In fiscal 2006, total revenue for Texas public undergraduate universities amounted to \$7.1 billion, excluding funds from the Permanent

University Fund and the Higher Education Fund that are used for capital expenditures. Of this total, 36.4 percent came from state appropriations; 28 percent from tuition and fees; 19.3 percent from the institutions' funds; and 16.3 percent from federal funds. The fiscal 2006 general revenue appropriation per full-time equivalent (FTE) student was \$6,259, 8.4 percent more than in fiscal 2004. Total revenue per FTE student was \$17,185, an 18.2 percent increase since fiscal 2004. The difference was due mostly to higher tuition and fee revenue.<sup>274</sup>

Community colleges receive funding for their operations primarily from tuition and fees and state appropriations, augmented by local tax revenue; local tax revenue pays for their infrastructure and equipment. State appropriations are based on a dollar amount per "contact" hour — each hour a student spends in class with a professor. The state's technical two-year colleges receive funding primarily from tuition and fees and state appropriations.

Average general revenue funding per contact hour for community colleges declined from \$7.47 in 2000-01 to \$6.62 in 2006-07 — about 11.4 percent — after reaching a high of \$7.71 in 2002-03. Funding will increase to \$7 per contact hour for these institutions in 2008-09.<sup>275</sup>

### Education Questions for Further Consideration

- What can Texas do to keep the costs of higher education affordable for all Texans?
- What can Texas do to increase the number of bachelor's and associate's degrees awarded?
- What can Texas do to draw in more research dollars for institutions of higher education?
- How do we prepare non-college bound Texans for careers that will provide economic benefit to them, their families and the state?