



REPORT OF THE
SELECT COMMISSION ON HIGHER EDUCATION AND GLOBAL COMPETITIVENESS

January 2009

Preface

In connection with House Concurrent Resolution No. 159 of the 80th Texas Legislature, Regular Session, 2007, in mid-2008, the Texas Governor Rick Perry, Lieutenant Governor David Dewhurst, and Speaker of the House of Representatives Tom Craddick created the Select Commission on Higher Education and Global Competitiveness with a charge to draft a Texas Compact that reflects a long-term vision and step-by-step plan to attain the following goals by 2020:

- (1) Educating the population of Texas to levels comparable to the highest performing competitor states and nations;
- (2) Achieving global recognition for Texas public colleges and universities for excellence in their core missions and for innovations that strengthen the state's economy and improve the quality of life for its citizens; and
- (3) Serving different regions of Texas in ways that respond to each region's unique higher education needs.

The members of the Commission were:

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John Baldwin
Michelle Brock
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Bernie Francis
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Beth Robertson
Kern Wildenthal

In carrying out its responsibilities, the Commission members reviewed a substantial amount of information dealing with the Texas workforce and economy. Particular attention was directed to information that placed Texas in a national and international context. From among a much larger array of information, key items were selected for inclusion in the report.

In addition, the Commission also received testimony from experts on a variety of topics central to its charge. These experts were drawn from both Texas and elsewhere in the United States. The work plan for the commission, including the list of presenters and the topics each addressed, is attached as Appendix A to this report.

Throughout its deliberations, the Commission relied heavily on Commissioner Raymund Paredes and other staff members of the Texas Higher Education Coordinating Board. Their assistance is especially appreciated. In addition, the Commission would also like to thank Dennis Jones and Aims McGuinness of the National Center for Higher Education Management Systems for their contributions and counsel.

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Executive Summary

The Select Commission on Higher Education and Global Competitiveness envisioned for Texas a dynamic economy that is competitive with the best economies in the world and that ensures opportunity for a high quality of life for all citizens of the state. This vision can be accomplished only if Texas commits to:

- Educating a highly skilled workforce capable of functioning effectively in a global economy.
- Developing an expanding and innovating economy that can take full advantage of the skills of this workforce.

Texas is not globally competitive. The state faces a downward spiral in both quality of life and economic competitiveness if it fails to educate more of its growing population (both youth and adults) to higher levels of attainment, knowledge and skills. The rate at which educational capital is currently being developed is woefully inadequate. Texas also needs an innovation-based economy in all the state's regions that can fully employ a more capable workforce. It must generate more external research funding, and commercialize ideas and intellectual property at a volume substantially greater than currently taking place.

In order to address these systemic problems, the Select Commission recommends that Texas:

1. Give renewed urgency to moving more students successfully through the P-12 education pipeline prepared for postsecondary-level learning.
2. Promote a college-going culture in Texas among all generations of Texans.
3. Make developmental education a statewide priority.
4. Shift from funding enrollment to funding for priority results.
5. Contain cost increases and promote cost-effective expansion of capacity.
6. Use state appropriations and student aid policy, not regulation, to contain increases in the cost of going to college in Texas and ensure affordability.
7. Reinforce and enhance existing research institutions and increase the number of top tier nationally competitive research universities by providing state incentive matching funds for research.
8. Utilize research capacity to enhance competitiveness of Texas employers and link with regional strategies to improve competitiveness.
9. Align finance policy with goals, specifically:
 - Establish a new framework for affordability of higher education through coordinated decisions on funding institutions, student aid, and tuition.
 - Recast the general appropriations formula to reflect payment for results.
 - Adopt the recommendations of the Task Force on Higher Education Incentive Funding created by Executive Order RP 67.
 - Create new funding mechanisms for creation and maintenance of institutional assets (the capital component of the budget).
 - Reform the state's approach to student financial aid.
10. Strengthen statewide policy leadership capacity to follow through on these recommendations by:
 - Creating a statewide group of business and civic leaders to monitor progress on goal achievement and ensure continued attention to long term goals as a complement to the critical

policy leadership, planning and coordinating role of the Texas Higher Education Coordinating Board (THECB).

- Establishing a point of responsibility for statewide leadership on community college issues within the structure of the THECB.

Introduction

A Call to Action

The Select Commission Higher Education and Global Competitiveness has based its work on the vision that Texas should have a dynamic economy that is competitive with the best economies in the world and ensures opportunity for a high quality of life for all citizens of the state. This vision can be accomplished only if Texas commits to:

- Educating a highly skilled workforce capable of functioning effectively in a global economy.
- Developing an expanding and innovating economy that can take full advantage of the skills of this workforce.

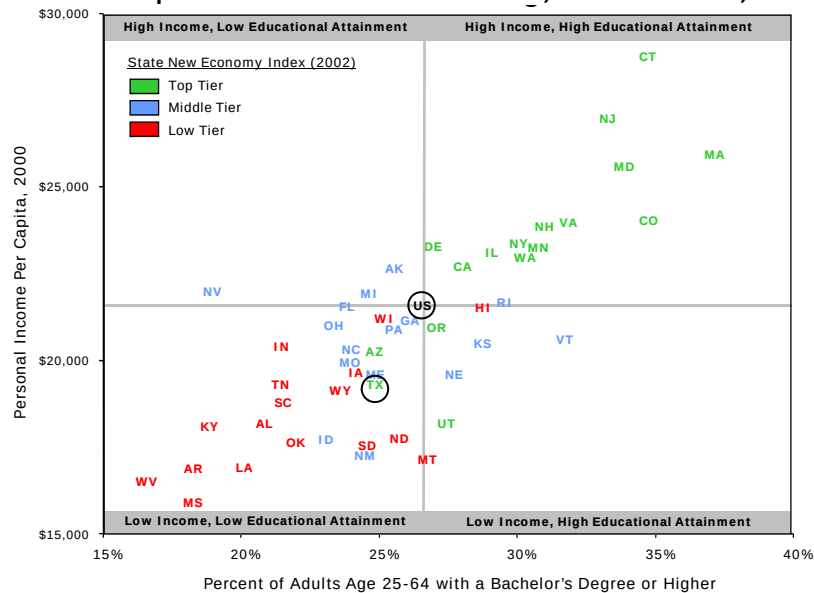
Texas is not globally competitive. The state faces a downward spiral in quality of life and economic competitiveness if it fails to educate more of its growing population (both youth and adults) to higher levels of attainment, knowledge and skills. The rate at which educational capital is currently being developed is woefully inadequate. The state also needs an innovation-based economy in all regions that can fully employ a more capable workforce. It must generate more external research funding, and commercialize ideas and intellectual property at a volume substantially greater than currently taking place.

Information that places the Texas workforce and economic competitiveness in a broader context is presented in this section of the report.

The Texas Workforce

All states in the U.S. with high per capita incomes also have highly educated populations. As shown in Figure 1, Texas is among these states with low education attainment and low per capita income.

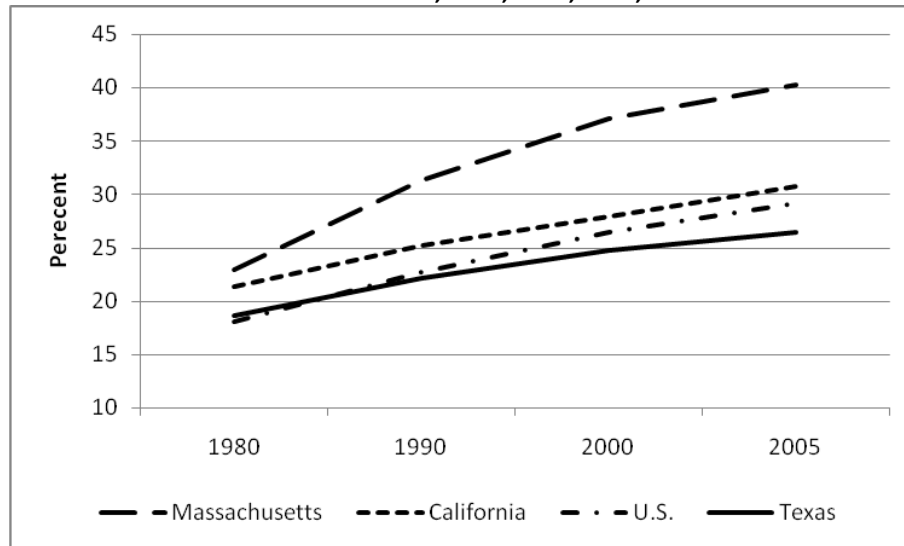
Figure 1. Relationship Between Educational Attainment, Personal Income, & Economic Strength



The relationship between the education levels of the population and per capita personal income grew considerably stronger during the 1980-2005 period (See Appendix B, Figure 29).

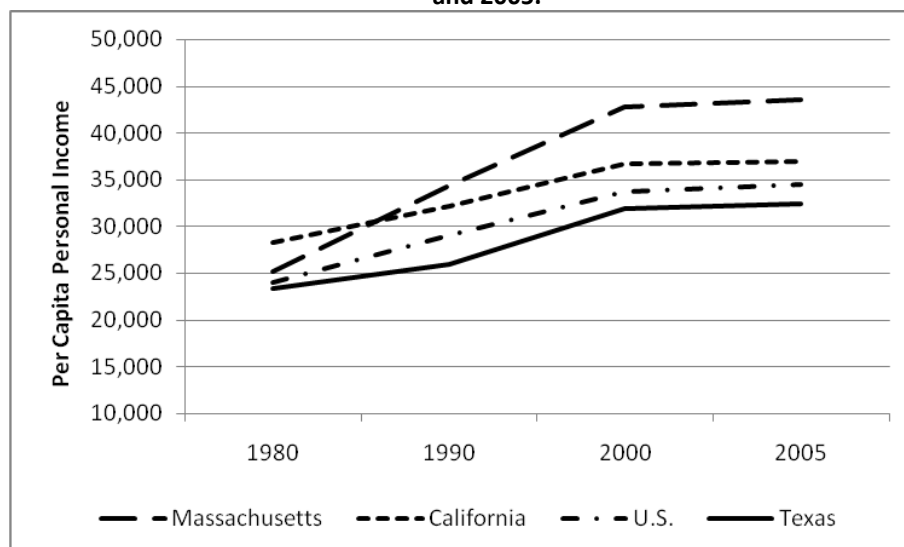
As many states have moved ahead in education attainment and per capita income over the past 25 years, Texas has increased only modestly. In fact, the percentage of the Texas population with bachelor's or higher degrees dropped from above the national average to below, while the top performing state moved even higher.

Figure 2. Percent of Population Ages 25 to 64 with Bachelor's Degree or Higher in U.S., Texas, California, and Massachusetts, 1980, 1990, 2000, and 2005



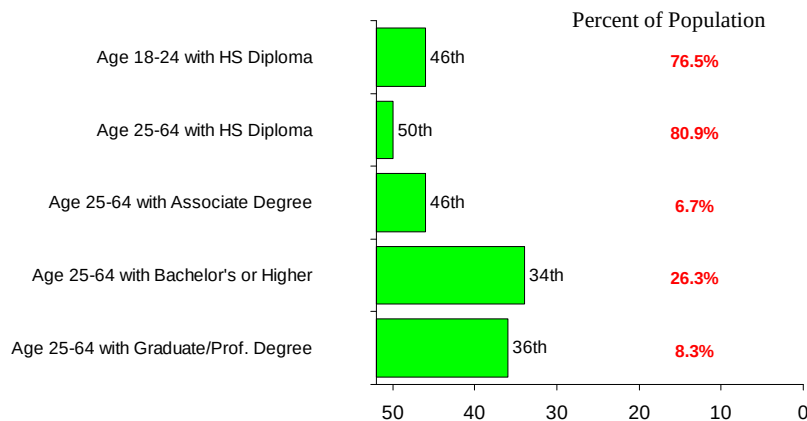
During the same period, the Texas per capita income increased only slightly while other states moved sharply higher. See figure below for graphic representation of how the position of states has changed over time.

Figure 3. Per Capita Personal Income for U.S., Texas, California and Massachusetts, 1980, 1990, 2000, and 2005.



The focus in the preceding displays is on baccalaureate degree attainment. Texas is in the bottom third nationally at all levels of education attainment.

Figure 4. Educational Attainment and Rank Among States - Texas 2005 (Percent)



Source: U.S. Census Bureau, 2005 ACS

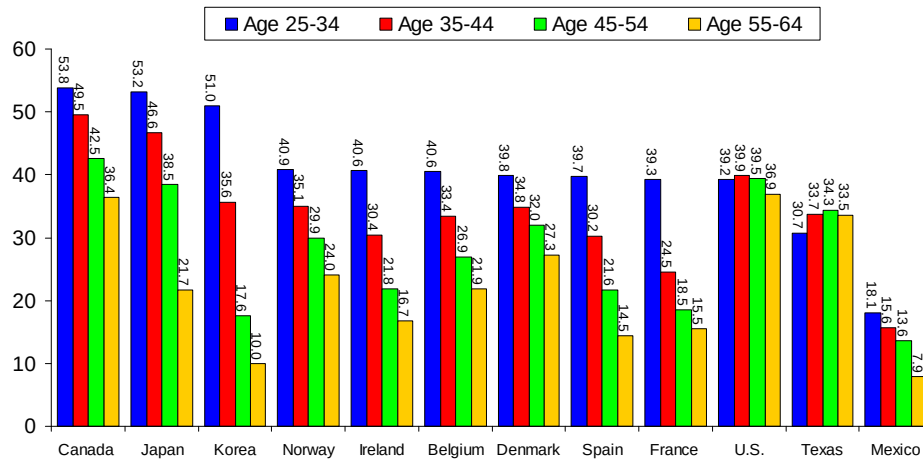
Much of the problem associated with low education attainment levels of the state's workforce can be traced to the failure of Texas to educate its young adults. The younger age group in Texas is less well educated than the older age groups. A failure to reverse this trend will mean a steady decline in the state's per capita performance income. Only 30.7% of the Texas population ages 25-34 have an associate degree or higher compared to 33.7% for those 35-44; 34.3% for those 45-54; and 33.5% for those 55-64. All age groups in Texas are educated at lower levels than the same groups nationally.

When the U.S. is compared to other Organisation for Economic Co-operation and Development (OECD) countries¹, not only is the U.S. population less educated than many other countries, but the U.S. is one of two OECD countries (the other being Germany) where the younger population is less educated than the older population.

Approximately 55% of the young population age 25-34 in the best performing country (Canada) now has an associate degree or above. This compares with 39.2% of the U.S. population and only 30.7% of the Texas population in that age group. According to Andreas Schleicher, head of the Indicators and Analysis Division of OECD, several OECD countries are moving rapidly toward the level of 70% of their working-age population with the equivalent of an associate degree or higher. In many cases, this expansion is at the non-university higher education level, including postsecondary technical degrees and certificates.

¹ Organisation for Economic Co-operation and Development (OECD) is an economic research and policy analysis organization of 30 of the world's major industrialized democracies. OECD countries are common reference point for international comparisons. See www.oecd.org

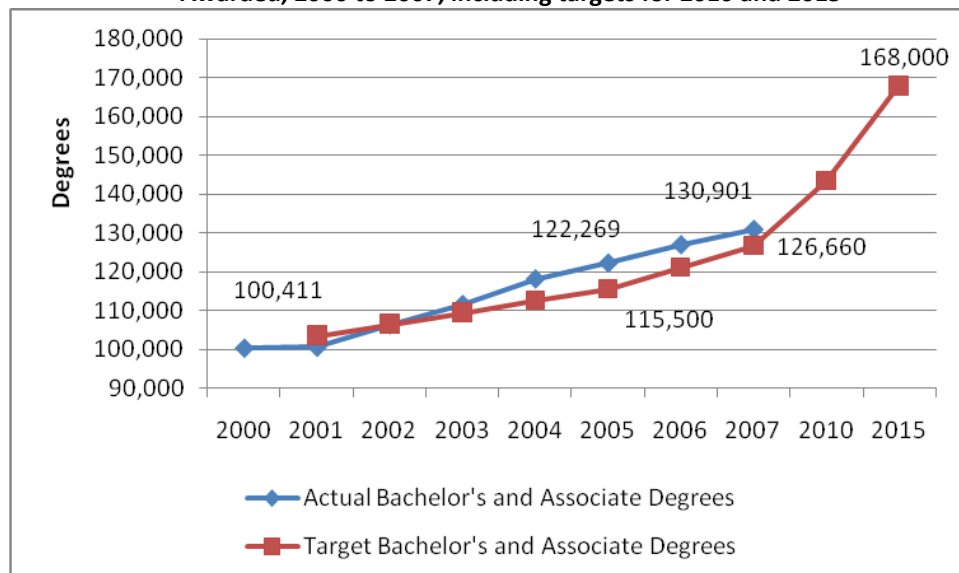
Figure 5. Percent of Adults with an Associate Degree or Higher by Age Group - US, Texas, Mexico and Leading OECD Countries



Source: OECD, *Education at a Glance 2007*

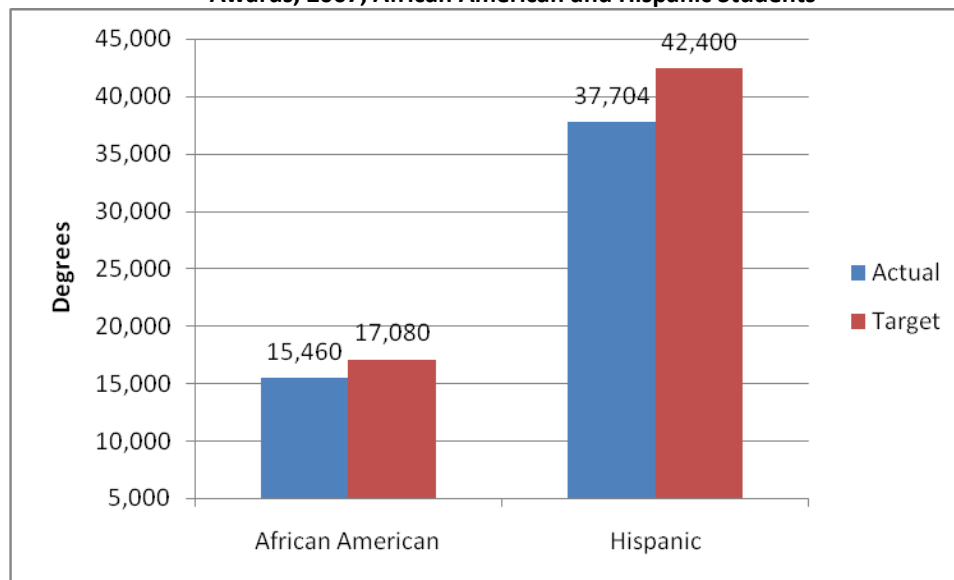
If Texas is to achieve the vision of a globally competitive workforce, it must make dramatic gains in the education attainment of its population. This is a fundamental goal of *Closing the Gaps*. The goal of *Closing the Gaps*, as established by the Texas Higher Education Coordination Board (THECB), is to reach a level of 168,000 bachelor's and associate degrees awarded annually by 2015.² The target for total bachelor's and associate degrees as well as certificates (BAC) is 230,000. As shown in Figure 6, Texas has made significant progress toward the *Closing the Gaps* targets, although progress has slowed in recent years. Increases in awards to Hispanic and African American students remain significantly below targets. (See Figure 7.)

Figure 6. Closing the Gaps. Difference between Target and Actual Bachelor's and Associate's Degrees Awarded, 2000 to 2007, including targets for 2010 and 2015



² See Appendix F for background information on *Closing the Gaps* and summary of revised goals and targets.

Figure 7. Closing the Gaps. Difference between Target and Actual Bachelor's and Associate's Degrees Awards, 2007, African American and Hispanic Students



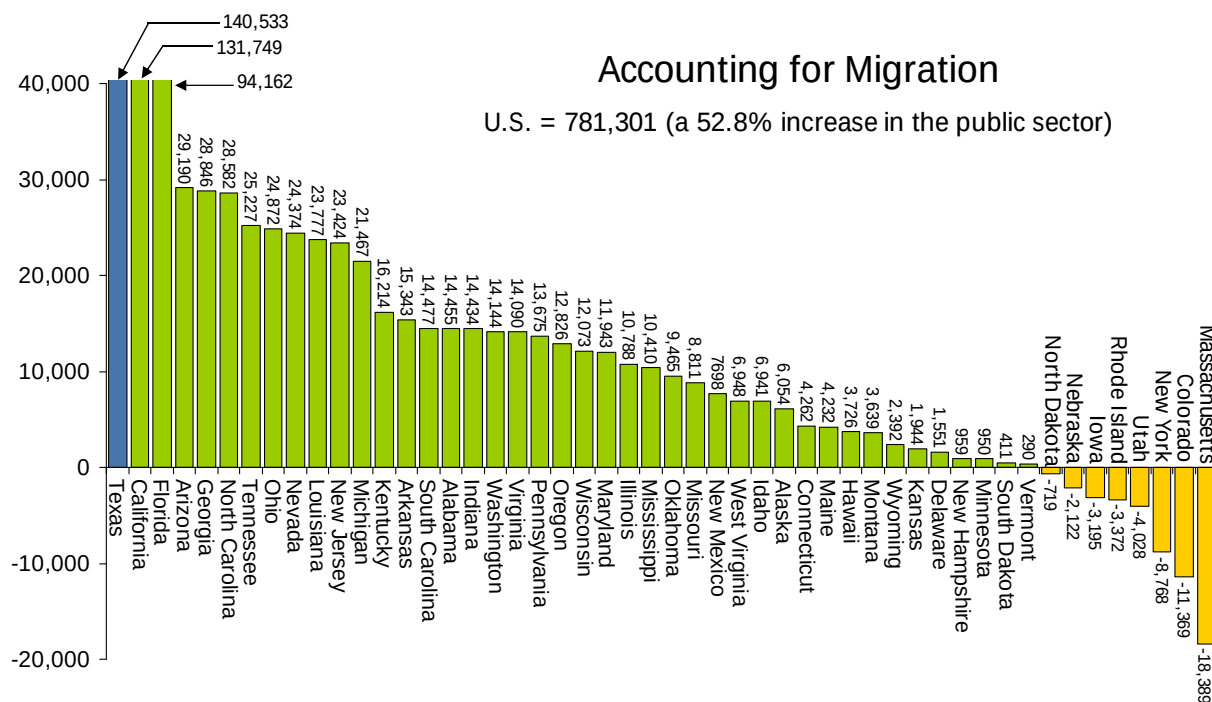
Source for Figures 6 & 7: THECB (2008). *Closing the Gaps Progress Report 2008*. Appendix B-1, B-2

Texas must more than double annual degree production to reach the level of the best performing country of 55% of the population ages 24-64 with an associate degree or higher by 2025. Even with the significant progress in increasing degree production toward the *Closing the Gaps* targets, degree production in Texas is not increasing at a rate necessary to keep pace with global competition.

After accounting for increases in the population with bachelor's and associate degrees resulting from population increase and net migration from 2005 to 2025, Texas must realize an additional 2,509,881 degrees between 2005 and 2025, an average annual increase of 125,494 or 102.6% beyond the 2005 level of 122,269 for every year through 2025. The requirement to meet the challenge of global competitiveness requires an annual level of degree production of nearly 100,000 higher than the target of 168,000 bachelor's and associate degrees set by *Closing the Gaps* for 2015. While improvements to level of the best performing state in the education pipeline at the P-12 level will be essential, the largest gain in degrees (750,399) can be achieved *within* higher education by getting more students already enrolled to complete at rates comparable to the best performing state. (See Table 5 in Appendix B for details of this calculation.)

The size of the gap facing Texas is greater than that for any other state.

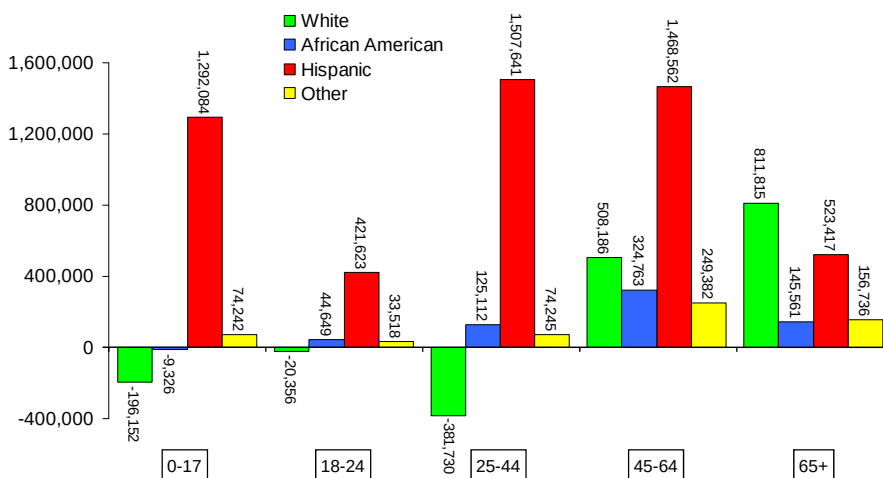
Figure 8. The "Gap" - Difference in Annual Degrees Currently Produced and Annual Degrees Needed to Meet Benchmark



Source: U.S. Census Bureau, PUMS and Population Projections, IPEDS Completions Survey 2004-05

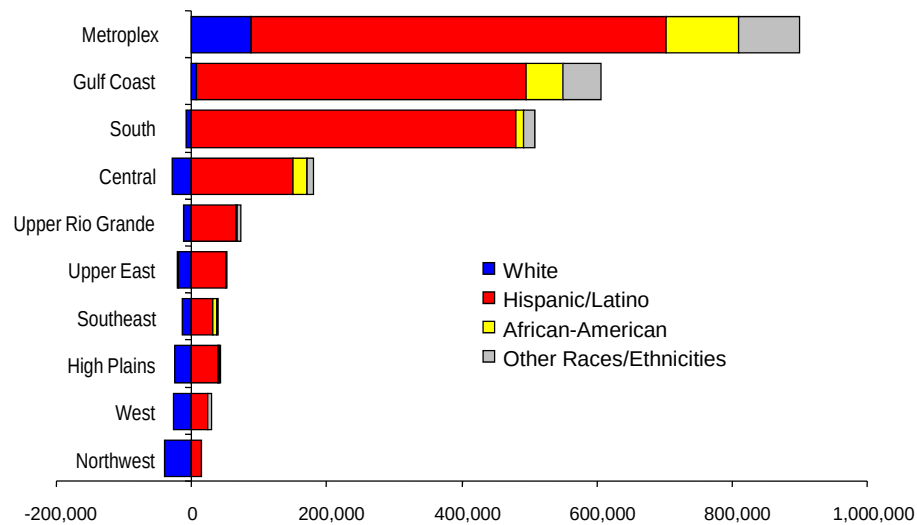
The college-age population of Texas is projected to grow substantially. Almost all the growth will be among individuals of color (predominantly Hispanics) and will be concentrated in just a few regions of the state.

Figure 9. Projected Change in Texas Population by Age and Race/Ethnicity, 2000-20



Source: Texas State Data Center, Office of the State Demographer

Figure 10. Projected Growth in Number of Residents Aged 18-24 by Race/Ethnicity and Region, 2000-20

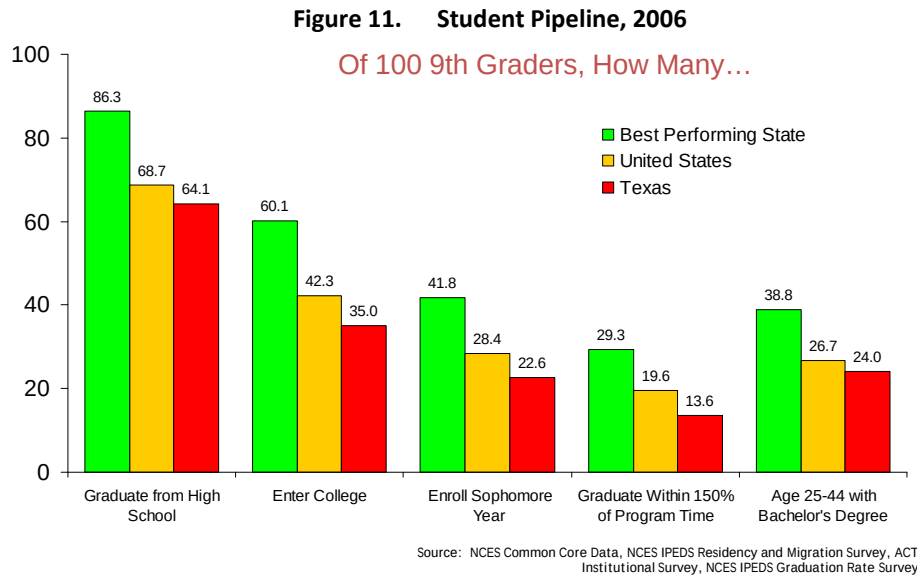


Source: Texas State Data Center, Office of the State Demographer

The growing population is least likely to be successful in attaining a postsecondary degree or certification. Since the initiation of *Closing the Gaps*, the number of Hispanics obtaining bachelor's degrees, associate degrees, or certificates grew 61.3% from fiscal year 2000 to fiscal year 2007. However, this rate of increase slowed in 2007, dropping below the target for the first time since 2002.³ As shown in Figure 7, certificates and degree awarded to Hispanics are below *Closing the Gaps* targets.

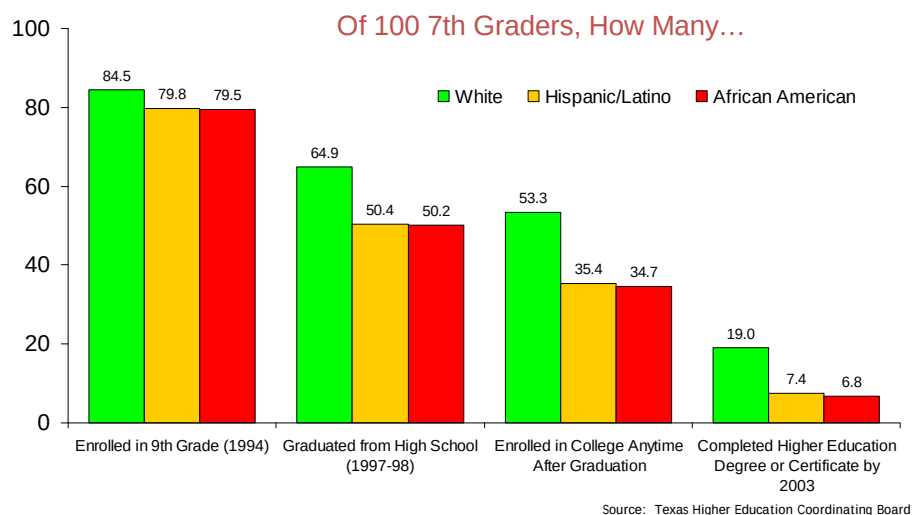
Texas must make dramatic improvements at every stage of the education pipeline. Of every 100 9th graders, only 64.1 graduated from high school four years later, compared to 68.7 across the U.S., and 86.3 in the best performing state. Just 35 entered college, only 22.6 were still enrolled in the sophomore year and only 13.6 graduated either with an associate degree in three years or with a bachelor's degree in six years.

³ THECB (2008), *Closing the Gaps by 2015: 2008 Progress Report*, p. 10.



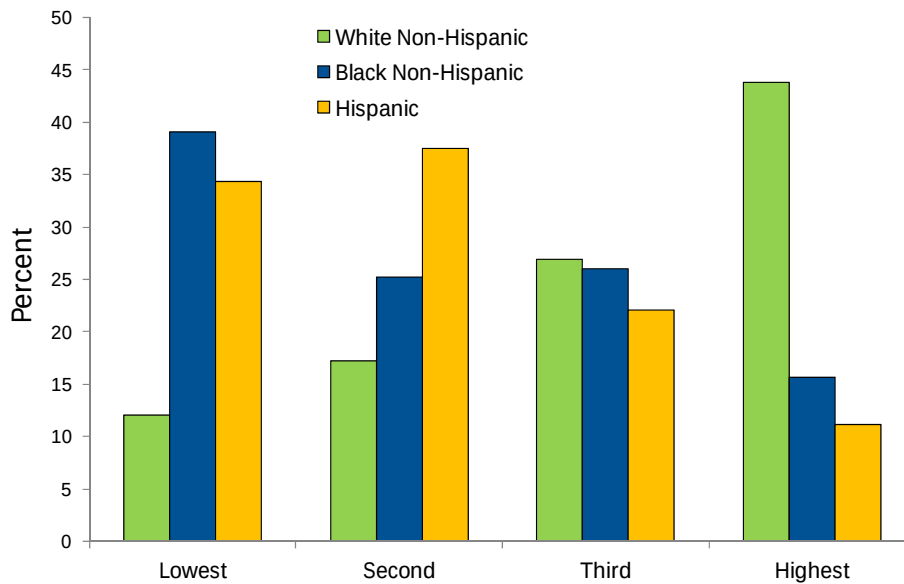
A further analysis of the education pipeline by race/ethnicity reveals that African American and Hispanic students are significantly less successful than white students. Of 100 students in the 1994 cohort of 7th graders, only 7.4 Hispanic and 6.8 African American students completed a higher education degree or certificate by 2003—one-third the number of white students.

Figure 12. Student Pipeline by Race/Ethnicity - Transition Rates from 7th Grade to College Completion



As evident from the information presented in Figure 10 and Figure 12, the great preponderance of growth in the 18-24 year old population will be individuals of color, especially those subpopulations that are least likely to achieve a postsecondary degree. The challenge of serving these students in ways that will help ensure their academic success is exacerbated by the fact that these potential students will come from families of limited economic means. Figure 13 shows the distribution of family incomes by race/ethnicity. Success for these students will require additional academic and student support services as well as student financial aid programs that will provide them with an economic safety net.

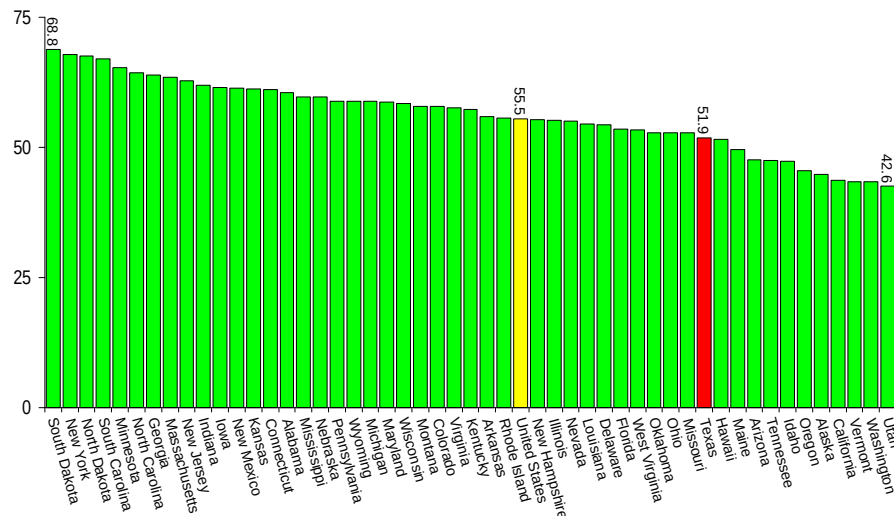
Figure 13. Percent of Texas Families with Children 17 & Younger by Income Quartile



Source: US Census Bureau: American Community Survey

Texas high school graduates participate in higher education at a rate far below the national average.

Figure 14. College-Going Rates - First-time Freshmen Directly out of High School as a Percent of Recent High School Graduates, 2004



Source: Tom Mortenson, Postsecondary Opportunity (2004 data update 02-06-07)

As previously noted, in order to reach the goal of globally competitive levels of education attainment by 2025, Texas must generate 750,399 more degrees than will result from population increases and from the current levels of degree production and net migration. As can be seen in Table 1, Texas has made progress in increasing degree production, especially since the initiation of *Closing the Gaps*. Nevertheless, the state's performance remains significantly below that of the top performing states.

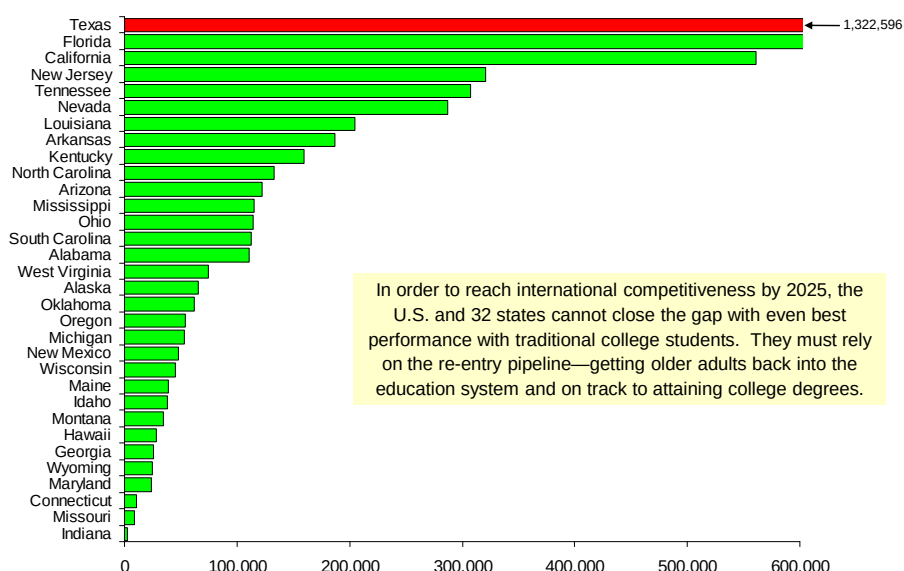
Table 1. Change in completion and comparison of Texas with top states

Indicators	Early 1990s	2008 Measuring Up	Top States	Source
1st year community college students returning their second year	41% (1988)	50% (2007)	66%	NCES, IPEDS
Freshmen at 4-year colleges/universities returning their sophomore year	73% (1998)	72% (2007)	82%	NCES, IPEDS
First-time, full-time students completing a bachelor's degree within 6 years of college entrance	44% (1997-97)	50% (2006)	65%	NCES, IPEDS
Certificates, degrees, diplomas at all colleges & universities per 1,000 adults with no college degree	17 (1991-92)	21 (2006-2007)	44	U.S. Census Bureau, 2006 ACS; NCES, IPEDS
Certificates, degrees, diplomas at all colleges & universities per 100 undergraduate students	12 (1990)	15 (2007)	21	NCES, IPEDS

Source: National Center for Public Policy and Higher Education (2008). Measuring Up 2008.

Even with an increase in performance in the education pipeline for traditional-age students to the top states, Texas would still need to generate an additional 1,322,596 degrees from the adult population. This dependence on success in educating returning adults is greater in Texas than in any other state.

Figure 15. Even Best Performance with Traditional College-Age Students at Each Stage of the Educational Pipeline Will Leave Gaps in More than 30 States



The goal of increasing education attainment by getting adults who return to complete a certificate or degree will require a dramatic turnaround from current trends. It will require an improvement in the state's efforts to serve the large adult population without a high school diploma (or equivalent) and adults with a high school diploma but no postsecondary education certificate or degree. Adults completing a General Educational Development certificate (GED) or other high school equivalency must be a source of the required number of certificates and degrees. Getting more adults through to postsecondary and workforce readiness would have significant benefits to the individuals in terms of being able to work at a living wage job but also to the state in terms of increased earnings and reduced costs that are closely related to low levels of education attainment. But the challenge is daunting:

- Texas has the highest percentage of any state of its adult population age 18-64 (19.8%) without a high school diploma or the equivalent. This equates to 2,741,541 adults, second only to California. About 50% of these adults have some education at the level of grades 9 through 12, but have not completed high school or a GED.
- Texas has the fourth highest percentage of any state of its young adult population age 18-24 (23.1%) without a high school diploma or the equivalent. This equates to 516,073 young adults.
- Texas serves fewer adults in its state-administered adult education programs and gets fewer adults through to a GED than most states. Texas annually awards only 6.8 GEDs per 1000 adults age 25-44 with less than a high school education.⁴ Only two states do worse on this measure. (Appendix B, Figure 30)
- Almost 10% of the working age population of Texas speaks English poorly or not at all. But English as a Second Language (ESL) programs enroll only 45 out of every thousand of these adults having limited English proficiency. Only one other state has an enrollment level lower than Texas. (Appendix B, Figure 31 and Figure 32)

These data point to a critical need to address a workforce skills problem that has been largely ignored in Texas.

⁴ U.S. Census Bureau, American Community Survey, 2005 and 2006. GED Testing Services

At the higher education level, Texas enrolls just 180.1 per 1,000 adults ages 25 to 39 who have only a high school diploma, compared to the national average of 190.8. The state enrolls in any form of higher education a smaller percentage (4.7%) of adults age 25 to 49 without a degree compared to the top state (8.9%). The Texas performance decreased from 7.3% in 1991.⁵ As summarized in Table 1 above, Texas produces less than one-half the number of certificates, degrees, diplomas per 1,000 adults with no college degree (21) than the top states (44).

In summary, to reach the vision of a highly skilled workforce capable of functioning effectively in a global economy, Texas must:

- Produce 2,509,881 associate and bachelor's degrees over and above the increase that can be expected from current levels of degree production, population growth and net migration. This will require more than doubling the annual degree production between now and 2025.
- Achieve improvements in the movement of students through each stage of the education pipeline to reach the 2025 goals. The most significant challenge will be in getting more Hispanic and African American students through high school, into higher education and through to a certificate or degree.
- Improve college completion rates. While improvements in the education pipeline at the P-12 level will be essential, the largest gain in degrees (750,399) can be achieved *within* higher education by getting more students already enrolled to complete at rates comparable to the best performing state.
- Place a new level of emphasis on nontraditional students. Even with an increase in performance in the education pipeline for traditional-age students to the levels of the best performing states, Texas would still need to generate an additional 1,322,596 degrees from the adult population. The goal of increasing education attainment by getting adults returning to complete a certificate or degree will require a dramatic turnaround from current trends.

The Texas Economy

Higher education plays a central role in developing and sustaining an economy that can take full advantage of the skills of a highly educated population. On the recently published *2008 New Economy Index*, Texas ranks in the top quartile of states on several key indicators.

Texas Rankings on Key New Economy Index Scales, 2008	Rank
Overall Ranking	18
IT professionals: Information Technology jobs: Employment in IT occupations in non-IT industries as a share of total jobs	12
Workforce education: A weighted measure of the educational attainment (advanced degrees, bachelor's degrees, associate's degrees, or some college coursework) of the workforce	41
Gazelle jobs: Jobs in gazelle companies (forms with annual sales revenue that has grown 20 percent or more for four straight years) as share of total employment	16

⁵ NCES, IPEDS Fall Enrollment Survey; U.S. Census Bureau, 2005 American Community Survey (Public Use Microdata Samples).

Fast growing firms: Number of Deloitte Technology Fact 500 and Inc. 500 firms as share of total firms	8
Entrepreneurial activity: The adjusted number of entrepreneurs starting new businesses	28
Patents: Number of patents issued to companies or individuals per 1,000 workers	17
Inventor patents: Number of independent inventor patents per 1,000 people	28
High-tech jobs: Jobs in electronics manufacturing, software and computer-related services, telecommunications, and biomedical industries as a share of total employment	17
Scientists & engineers: Scientists and engineers as a percentage of the workforce	25
Industry-performed research and development as a percentage of total worker earnings	16
Non-industry research: Non-industry (federal state, non-profit) investment in research and development as a percentage of gross state product	41
Venture capital: Venture capital invested as a share of worker earnings	9
U.S. migration of knowledge workers: The average education attainment of recent migrants from within the U.S.	41
Immigration of knowledge workers: The average education attainment of recent migrants from abroad	46

Source: Kaufman Foundation (2008). *The 2008 New Economy Index: Benchmarking Economic Transformation in the States*. Kansas City, November 2008, pp. 22-23.

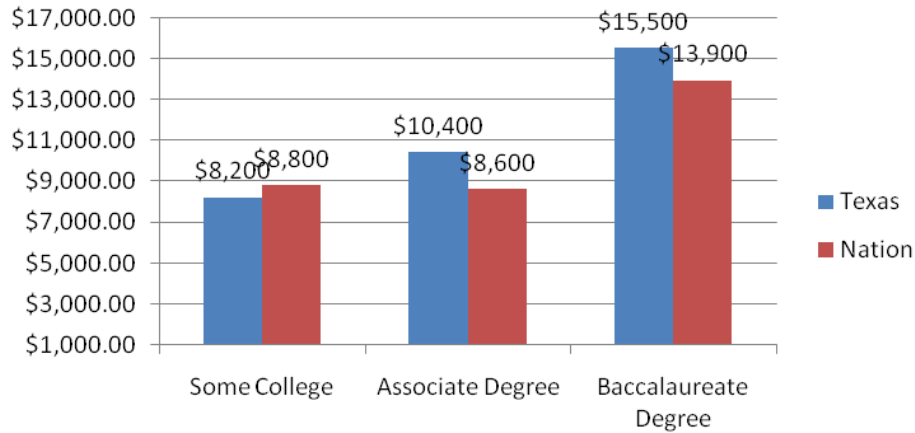
http://www.itif.org/files/2008_State_New_Economy_Index.pdf

The indicators on which the state performs in the lowest quartile relate consistently to the quality of the workforce, the state's ability to attract highly educated professions from within the U.S. and other countries, and the important area of non-industry (federal, state, and non-profit) investment in R&D. These indicators are directly relevant to the role of higher education in Texas.

Level of education is critical to the ability of individuals to earn a living wage. In 2006, Texas had 18.6% (compared to the national average of 14.5%) of its population age 18-64 with a high school education or less living in families with incomes below a living wage (200% of poverty). This is the 5th highest level in the U.S. exceeded only by Arkansas, Louisiana, West Virginia, and Mississippi. (U.S. Census Bureau, 2006 American Community Survey, Public Use Microdata Samples). In absolute numbers terms, this equates to more than three million individuals, second only to California. (See Appendix B, Figure 43)

Postsecondary education also makes a significant difference in an individual's income, more so in Texas than on average in the U.S. In Texas in 2000, the medium earnings of a person with an associate degree were \$10,400 more than a person with only a high school diploma and \$15,500 more for a person with a bachelor's degree.

Figure 16. Difference in Median Earnings from High School Diploma, 18-64 Year Olds, 1999

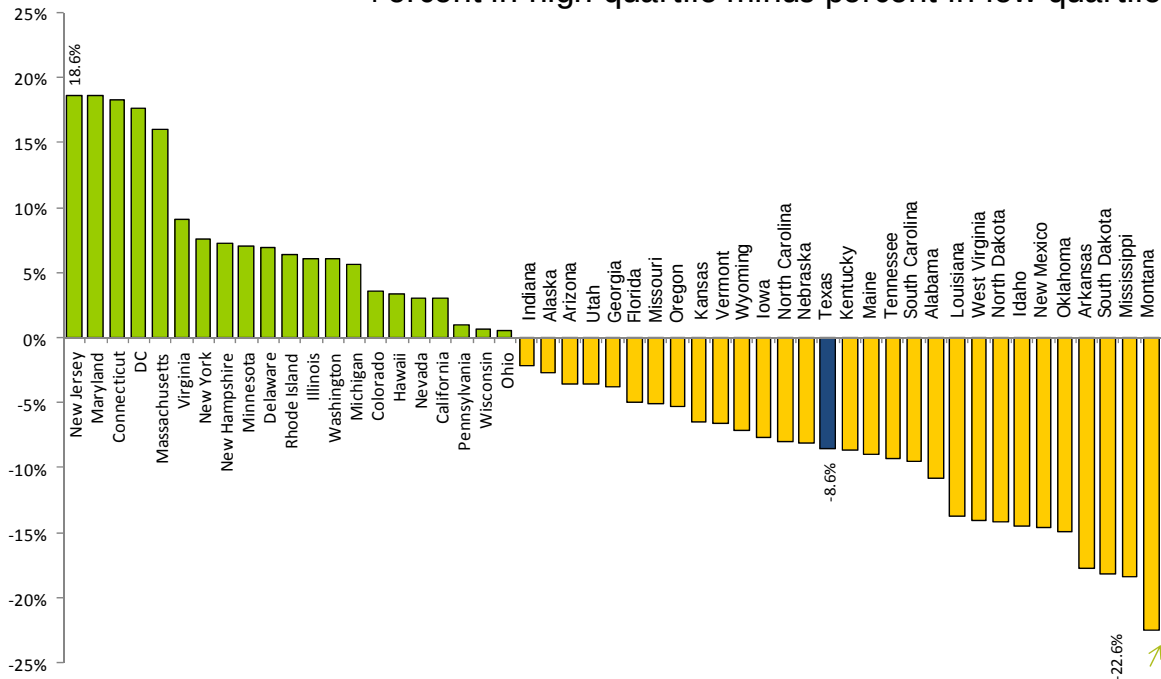


Source: U.S. Census Bureau, 2000 Census

Overall, the Texas economy is such that it employs far more individuals in low-income jobs (those in the bottom quartile of the U.S. economy) than in high-income jobs (in the upper quartile nationally). The comparative standing of Texas in this regard is shown in the following figure.

Figure 17. Percentage of Full-Time Employees with Earnings in the U.S. Quartiles (2006)

Percent in high quartile minus percent in low quartile



Source: 2006 American Community Survey (Public Use Microdata Samples)

There are significant disparities among Texas regions in earnings of full-time employees. Only in the Metroplex and Gulf Coast do the distributions of earnings compare favorably to the national figures. In most regions of the state, the gaps between high wage and low wage jobs are substantial. These

differences are revealed in Figure 18. (The definition of the regions is presented in Figure 33 in Appendix B.)

Figure 18. Full-Time Earnings Compared to National Average (Percent in high quartile minus percent in low quartile)



Source: 2006 American Community Survey

Clearly, Texas needs to expand its economy and create employment opportunities for many more highly skilled workers if it is to realize its aspirations for a globally competitive economy and a higher quality of life for its citizens.

Principles/Criteria

The problems facing Texas are so large that minor changes to the current policy framework and adherence to the traditional approaches to delivering education will be insufficient. In order for Texas to succeed in achieving the goals recommended by the Select Commission, it will be necessary to build a policy framework that is consistent with the goals being pursued and with the following principles:

- Build on *Closing the Gaps* and other initiatives whenever possible in order to sustain the momentum of reform and avoid unnecessary duplication.
- Achieve solutions within the current governance structure.
- Maintain a focus on performance regarding:
 - Completion of academic programs (degrees or certificates)
 - Student learning
 - Research competitiveness and commercialization of results
 - Contributions to regional economic development/innovation-based economies
- Benchmark against global competitors whenever possible.
- Emphasize regional as well as statewide solutions. Reinforce the notion that institutions are responsible for promoting the economic and societal well-being of the regions in which they are located.
- Utilize incentives rather than regulations to the extent possible for achieving:
 - Student performance
 - Institutional performance
 - Research performance
 - Regional collaboration
 - Public-private partnerships
- Require cost-effective approaches in pursuit of the goals; solutions must be affordable from the perspective of both students/families and the state's taxpayers. Improved productivity is a necessary component of affordability.
- Emphasize transparency regarding performance and financing for students, policy makers and the general public.

Findings and Recommendations Concerning the Workforce Gap

Recommendation 1: Give renewed urgency to successfully moving more students through the P-12 education pipeline prepared for postsecondary-level learning

Charge the THECB, the State Board of Education, and the Texas Education Agency (TEA) to intensify implementation of the provisions related to College Readiness and Success,⁶ contained in the HB 1 enacted by the 79th Texas Legislature, Third Called Special Session (see Appendix C for summary of relevant HB 1 provisions).

The message is clear: Texas must redouble its efforts to get more students through the P-12 education pipeline and to ensure students are significantly better prepared with the knowledge and skills necessary for a living-wage job and for postsecondary-level learning. Despite evidence of progress, Texas continues to lag far behind the nation and the best performing states.

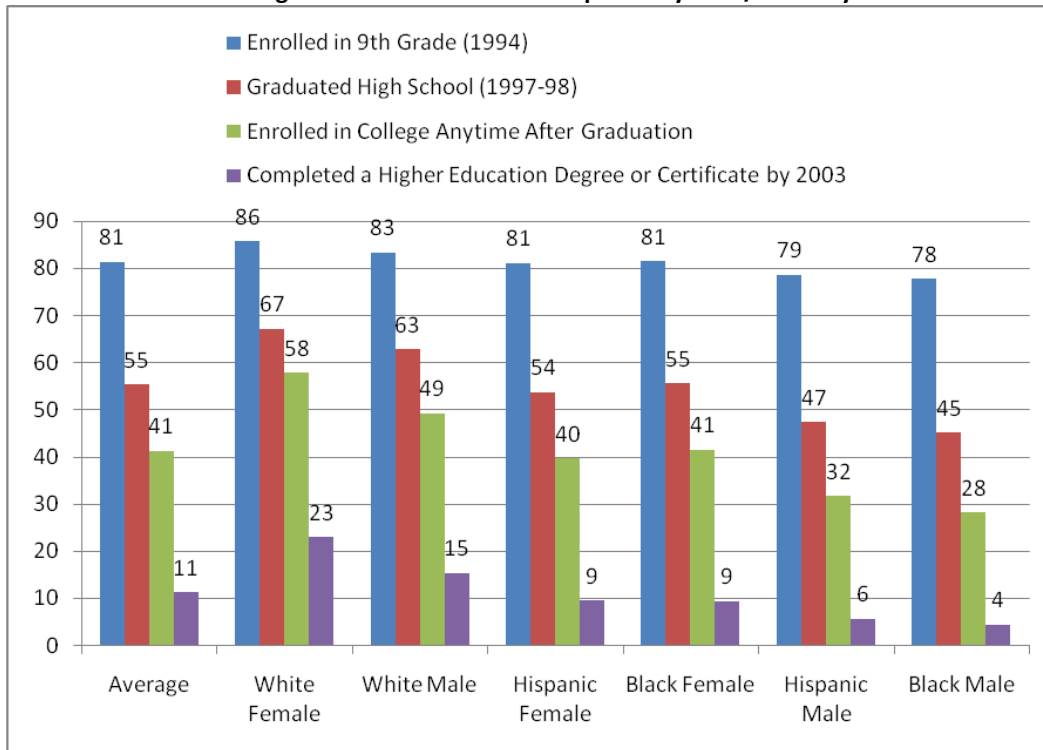
As indicated earlier, only 64.1% of ninth graders graduate from high school within four years, only 35% enter college, only 22.6% enroll in sophomore year, and only 13.6% graduate either with an associate degree in three years or with a bachelor's degree in six years (150% of program time).

Texas is making slow, steady progress but at rates that are totally inadequate to move the state to national – let alone to globally – competitive levels. From 2000 to 2006, the percentage of ninth graders getting through to an associate or bachelor's degree in 150% of program time increased from 11% to 13.6%. (Appendix B, Figure 34). Data from the national report card, *Measuring Up 2008*, shows steady progress over the past decade in increasing the chances that ninth graders will enroll in college by age 19 and in 18 to 24 year olds enrolled in college. On both of these measures, however, Texas performs far below the top states. On the measure of how well the state is getting adults with no degree to return to postsecondary education, the state's performance has actually declined over the past decade and remains far below the top performing states. (See Table 4, page 33)

An analysis of the cohort of students entering 7th grade in 1992 by race/ethnicity and gender reveals that the challenge of getting more students through the pipeline is especially daunting for African American and Hispanic students, and in particular for boys (See Figure 19). Of 100 7th graders, 81 entered 9th grade two years later in 1994, but only 55 graduated from high school four year later, 41 enrolled in college anytime after graduation, and only 11 completed a higher education degree or certificate by 2003. Hispanic and African American girls performed close to the statewide average with about the same number getting through high school and enrolling in college but slightly fewer (9 compared to 11) eventually obtaining a college degree or certificate. In sharp contrast, only 47 Hispanic and 45 African American boys completed high school, and only 6 Hispanic and 4 African American boys eventually got a college degree or certificate.

⁶ The Select Commission uses the word "college" to refer to postsecondary education at the certificate, Associate and Bachelor's Degree Levels.

Figure 19. Texas Student Pipeline by Race/Ethnicity



Source: THECB

Texas is also making progress in the preparation of students for postsecondary-level learning. But again, the gap between the state's performance and the best performing states remains wide in most areas. A remarkable achievement is the increase in the percentage of the state's 8th graders performing at or above "proficient" on the National Assessment of Education Progress (NAEP) in math – rising from 18% to 35% from the early 1990s to today. At the same time, significantly more students are taking upper-level math courses in high school, a critical determinant of readiness for postsecondary education. Little performance improvement, however, has been achieved in reading, science and writing.

Table 2. Preparation: Change in performance and comparison with top states

Indicator	Early 1990s	2008 Measuring Up	Top States
8th graders scoring at or above "proficient" on the National Assessment exam in math	18% (1992)	35% (2007)	41%
8th graders scoring at or above "proficient" on the National Assessment exam in reading	28% (1998)	28% (2007)	39%
8th graders scoring at or above "proficient" on the National Assessment exam in science	23% (1996)	23% (2007)	41%
8th graders scoring at or above "proficient" on the National Assessment exam in writing	31% (1998)	26% (2007)	46%
Low-income 8th graders scoring at or above "proficient" on the national assessment exam in math	6% (1996)	21% (2007)	24%
9th to 12th graders taking at least one upper-level math course	38% (1991-1992)	64% 2005-2006	64%

Source: National Center for Public Policy and Higher Education (2008). *Measuring Up 2008*; <http://nces.edu.gov/nationsreportcard/about/state.asp>; Council of Chief State School Officers

Further, according to benchmarks established by American College Testing (ACT), only 19% of Texas' ACT test-takers are fully prepared. Performance on the overall score and on each of the subject-area tests (English Composition, Algebra, College Social Science and College Biology) has shown improvement over the past five years. However, Texas lags the nation as a whole on each measure. (See Table 3)

Table 3. Five Year Trends - Percent of Students Meeting College Readiness Benchmarks

	Five Year Trends - Percent of Students Meeting College Readiness Benchmarks									
Grad Year	College English Composition		College Algebra		College Social Science		College Biology		Meeting All Four	
	State	Nation	State	Nation	State	Nation	State	Nation	State	Nation
2003	61	67	35	40	45	52	21	26	16	20
2004	61	68	36	40	45	52	21	26	17	21
2005	60	68	37	41	45	51	21	26	17	21
2006	61	69	40	42	46	53	22	27	18	21
2007	62	69	41	43	47	53	24	28	19	23
	ACT English Benchmark Score= 18		ACT Math Benchmark Score=22		ACT Reading Benchmark Score=21		ACT Science Benchmark Score=24		Students Meeting All 4 ACT Benchmark Scores	
Note: A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college course. Source: ACT High School Profile Report The Graduating Class of 2007, Texas, pp. 6-7.										

House Bill 1 includes several excellent provisions to address the state's challenges related to postsecondary preparation. Among other points, the bill:

- Mandates the development of college readiness standards
- Mandates a "default" college-preparatory curriculum for all high school students
- Requires the P-16 Council to develop an Action Plan for College Readiness and Success
- Mandates that school districts use funds from the high school allotment to implement or administer a program that provides opportunities for students to take academically rigorous course work, including four years of mathematics and four years of science at the high school level (4 X 4 high school curriculum)

The most recent status reports from the THECB document steady progress in implementing the requirements of HB 1. Nevertheless, the pace and breadth of progress of implementation at the state and local levels falls significantly short in comparison to the depth of the challenge facing Texas. There are excellent examples of projects and initiatives in regions and individual school districts throughout Texas. For example, the Select Commission heard of exciting developments in Central Texas under the leadership of the E3 Alliance as well as the long-standing success of the Education Collaborative in El Paso. Despite these positive developments, progress is far from systemic and statewide. Significant barriers remain in terms of the basic capacity of teachers, school districts and regions to implement reforms.

HB 1 provides the basic framework for significant improvement. What is lacking is the commitment to move from plans and projects and relatively isolated examples of best practice, to sustained, systematic, statewide implementation. Only with that dramatically increased commitment will Texas make the kind of quantum leap required to become globally competitive. Texas must overcome the major barriers of lack of alignment of high school standards, curriculum, and assessments with the College Readiness Standards and the significant deficits in the capacity of teachers to teach to the level expected of these standards. Building this capacity across the diversity of Texas' highly decentralized education system will

be a major undertaking requiring full commitment of, and extensive collaboration between, the TEA and the THECB. It will also require the full support of the State Board of Education. The Select Committee recommends that the Legislature advance implementation of the provisions of HB 1 by:

- Establishing a target date (e.g., the beginning of the 2015 academic year)⁷ by which every part of Texas must have:
 - Established a P-16 Council with a full-time staff.
 - Implemented high school standards, curricula and assessments aligned with the College Readiness Standards (CRS).
 - Taken actions necessary to ensure that teachers are prepared to teach at the level required by the CRS, including (but not limited to) completing an extensive professional development program for teachers.
- Mandate that the THECB, in collaboration with the TEA and other key partners, lead in a fundamental reform of teacher preparation to ensure that all incoming teachers are prepared to teach at the level required by the CRS.
- Mandate a region-by-region⁸ initiative in which regions and school districts are competitively selected to participate in a phased implementation of the changes listed above. Implementation should take place in phases with the goal of including all regions and districts by the beginning of academic year 2015 (e.g., one-fifth of the districts in each of five phases). The Legislature should provide significant state funding for capacity development to the selected regions and districts. The Legislature might consider establishing incentives/sanctions to motivate districts to participate and make necessary changes.
- Strengthen the authority of the state P-16 Council to oversee implementation, including providing leadership in reform of standards, curricula, and assessments. If the current state governing structure continues to be a barrier to reform, consider major governance reform to establish a P-16 leadership capacity in Texas.

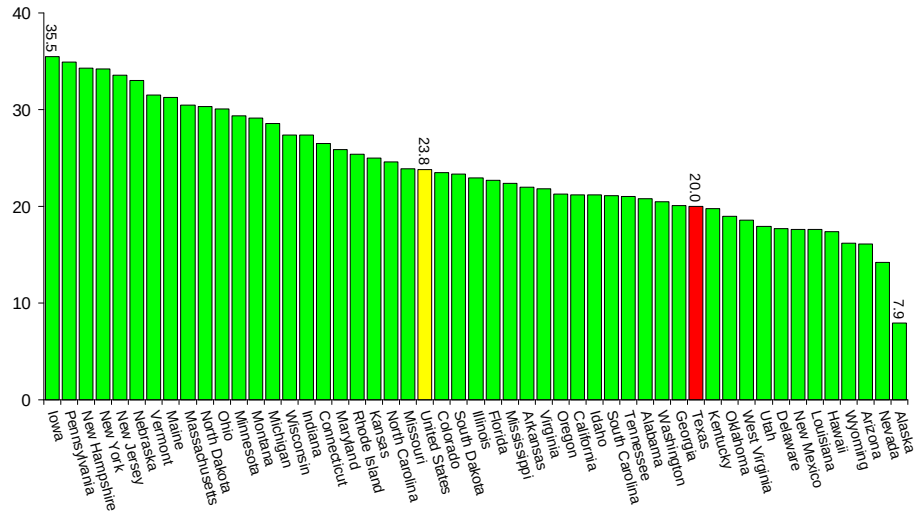
Recommendation 2: Promote a college-going culture among all generations of Texans

To reach the desired level of economic competitiveness, Texas must promote a college-going culture throughout the state, especially among populations that are participating at significantly lower rates, as displayed earlier in this report. Texas also has a participation rate for students from low-income families significantly below the national average.

⁷ In recommending the target date of 2015, the Selection Commission does not intend that any of the earlier deadlines established by HB 1 be delayed.

⁸ The Select Commission recognizes that the regions served by existing P-16 councils have developed “organically” and do not follow pre-established regions such as those defined by the THECB. The Select Commission anticipates that P-16 Councils will continue to evolve in this manner. The intent of the proposed mandate is that implementation take place in every part of Texas without regard to the specific regional configuration.

Figure 20. College Participation Rates by State for Students from Low-Income Families, 2006



Data summarized by *Measuring Up 2008* shows improvements in the measures of the chance of students for college by age 19, and 18 to 24-year-olds enrolled in college. However, the performance of Texas remains significantly behind best performing states.

Table 4. Participation in higher education: Improved performance & comparison with top states

Indicator	Early 1990s	2008 Measuring Up	Top States	Source
Chance for college by age 19	29% (1992)	35% (2006)	57%	Tom Mortenson, Postsecondary Opportunity
18- to 24-year-olds enrolled in college	28% (1991)	30% (2007)	44%	NCES, IPEDS 2007 Fall Enrollment Survey; U.S. Census Bureau, 2007 Population Estimates
25- to 49- year- olds enrolled in any type of postsecondary education with no bachelor's degree or higher	7.3% (1991)	4.7% (2007)	8.9%	U.S. Census Bureau, 2006 ACS, NCES, IPEDS 2007 Fall Enrollment Survey

Source: National Center for Public Policy and Higher Education (2008), *Measuring Up 2008*

Information about College-Going

Some suggest that low participation rates, especially among African American and Hispanic populations, indicate that members of minority groups, compared to other populations, do not place a high value on higher education. Evidence from research indicates just the opposite. A national survey conducted in 2000 by Public Agenda found that in response to the question of whether parents agreed with the statement, “A college education has become as important as a high school diploma used to,” 71% of African American high school parents, 76% of Hispanic high school parents, and 62% of White high school parents said they “Strongly agreed.” When asked how important a college education is for success in life, only 35% of respondents from the general public indicated that it was “most important” (citing other points), but 65% of Hispanic parents and 47% of African American parents cited a college education as “most important.”⁹ Other studies have affirmed the same point. For example, a survey of 1,054 parents in Los Angeles, Chicago and New York published by The Tomás Rivera Institute found

⁹ John Immerwahr (2000). Great Expectations: How the Public and Parents-White, African American and Hispanic-View Higher Education. A Report of Public Agenda. San Jose: National Center for Public Policy and Higher Education. <http://highereducation.org/reports/expectations/expectations.htm>.

that 96% of Latino parents want their children to attend college. The key barrier was not the value placed on a college education for their children but rather the lack of meaningful information that helps them understand the process: understanding what is needed to be “college ready” in terms of taking the right courses, paying for college, applying for financial aid, and other details. Drawing on the recommendations of that report, the following proposed actions are especially relevant to Texas in its effort to increase participation from the growing Hispanic/Latino population are:

- Make increased college attendance a performance metric for the ongoing assessment of secondary schools.
- Initiate a long-term public service announcement program campaign encompassing both Spanish-language and English-language radio and TV to encourage college attendance and provide information on how to enroll.
- Launch more in-depth and focused college knowledge outreach programs directed at Latino parents in low socio-economic status communities. The purpose is to help parents understand the importance of a college education and what students must do to be prepared for college.¹⁰

Other studies have reinforced these points and underscored the importance of information about financing higher education. A study of financial aid as a barrier to Latino students found that both youths and parents have similar high levels of value for higher education (87% for youths and 94% for parents), but the study found that lack of familiarity with financial aid opportunities was a significant barrier. The study concluded, “Familiarity with student aid alone will not cause higher enrollment rates; rather, familiarity with financial aid opportunities allows students to plan a clear pathway to college and should complement other interventions that encourage academic achievement and career planning.”¹¹

Adult participation and success

The Select Commission is especially concerned about the low participation rate for adults. As emphasized at the beginning of this report, Texas must increase the degrees granted to returning adults if it is to reach globally competitive levels of education attainment. Recounting the facts presented earlier in this report:

- Texas has the highest percentage of any state of its adult population age 18-64 (19.8%) without a high school diploma or the equivalent. This equates to 2,741,541 adults, second only to California. About 50% of these adults have some education at the level of grades 9 through 12, but have not completed high school or a GED.
- Texas has the fourth highest percentage of any state of its young adult population age 18-24 (23.1%) without a high school diploma or the equivalent. This equates to 516,073 young adults.
- Texas serves fewer adults in its state-administered adult education programs and gets fewer adults through to a GED than most states:

¹⁰ Louis G. Tornatzky et al (2002). *College Knowledge: What Latino Parents Need to Know and Why They Don't Know*. Los Angeles: The Tomás Rivera Institute.

¹¹ Maria Estella Zarate and David Fabienke (2007). Financial Aid as a Perceived Barrier to College for Latino Students. *American Academic*, Vol. 3, p. 129-139.

- o Few adults (only 43.7 per 1,000 compared to the national average of 101.7) age 18-64 without a high school diploma enroll in state-administered Adult Basic Education (ABE) programs¹². Only two other states enroll a lower percentage.
- o Only 32.3 GEDs are awarded per 1,000 adults age 18-24 with no high school education, compared to the national average of 43.1. This is the third worst performance among states.
- o Only 6.8 GEDs are awarded per 1,000 adults age 25-49 with no high school education, compared to the national average of 8.7. This is the fourth worst performance among states.¹³

At the higher education level, Texas enrolls 180 per 1,000 adults ages 25 to 39 who have only a high school diploma, compared to the national average of 190.8. The state enrolls in any form of higher education a smaller percentage (4.7%) of adults age 25 to 49 without a degree compared to the top state (8.9%). The Texas performance decreased from 7.3% in 1991.¹⁴

Texas is among the states that continue to administer federal adult education programs through the state agency responsible for P-12 education, the TEA. Although the TEA is responsible for adult basic education in Texas, it contracts out all programmatic services to one organization, Texas LEARNS. The memorandum of understanding between the TEA and Texas LEARNS assigns the state leadership role to Texas LEARNS. Texas provides the minimum required match of 25 percent for federal funds. In contrast, California provides a match of 88 percent, Florida's match is 90 percent and New York's match is 65 percent. Texas ABE programs serve approximately 100,000 individuals each year—a number that is far below the estimated 5 million people who could benefit from such services.¹⁵

Section 50 of the General Appropriations Act (House Bill 1) of the 80th Texas Legislature called for the Texas Higher Education Coordinating Board, in coordination with TEA, “to develop and implement immediate and long-range coordinated action plans to align Adult Basic Education (ABE) and postsecondary education.” In developing these action plans, Section 50 identified several issues as important for consideration and study:

- The current and projected future demand for ABE in Texas.
- The types of programs and instruction necessary to serve current and projected future populations of adult learners.
- The social and economic outcomes of providing varying levels of ABE services in Texas.
- A comparative analysis of ABE programs offered in other states.
- Best practices in ABE.
- The current organizational structure and agency roles in Texas in providing ABE.

¹² Adult Basic Education (ABE) as used in this report refers to the state-administered federal programs of adult education and literacy services authorized by Title II of the Workforce Investment Act. The programs provide instruction in reading, numeracy, GED preparation, and English literacy. The programs are limited to adults and out-of-school youth age 16 and older.

¹³ U.S. Census Bureau, American Community Survey, 2005 and 2006.

¹⁴ NCES, IPEDS Fall Enrollment Survey; U.S. Census Bureau, 2005 American Community Survey (Public Use Microdata Samples).

¹⁵ THECB (2008). Adult Basic Education: Aligning Adult Basic Education and Postsecondary Education. September 30, 2008, p. iii.

A THECB report prepared in response to the legislative mandate emphasizes that Texas must act not only to increase the population served through adult basic education but also to increase the transition of that population to postsecondary education. Among the recommendations are that Texas should:

- Make postsecondary and workforce readiness the new mission of the adult education and workforce skills system and include this mission in the long-range action plans for ABE.
- Consider merging adult literacy activities with postsecondary education and workforce skills training in the long-range action plans.
- Align standards to Texas' College Readiness Standards to prepare adult students for college.¹⁶

The continued separation of adult education leadership from postsecondary in Texas contrasts with the trend in a number of states (e.g., Illinois, Indiana, Kentucky, Louisiana, Oregon, Virginia and Washington) to develop a policy leadership capacity linked more directly with higher education (especially community colleges), while maintaining essential collaboration with the state workforce agency, the K-12 state agency and other entities concerned with adult education and literacy. Continuation of the current structure in Texas is likely to be a serious barrier to the kind of the comprehensive long-range strategy needed to raise the education attainment of the state's adult population.

To address the challenges related to participation of youth and adults in postsecondary education, the Selection Commission recommends that Texas:

- Charge the THECB and TEA to design and implement a program to create a culture within P-20 schools that focuses on the importance of postsecondary education as a necessary precursor to economic security and a high quality of life. This program must be a statewide campaign that is implemented through P-16 Councils and other public/private partnerships in every part of Texas. The campaign should enlist cooperation of Texas employers to send the message that "education matters" in getting a job and/or a promotion.
- Develop an initiative, drawing on best practice of existing initiatives, to be implemented within each region of Texas, focused on providing better information and guidance to parents on steps necessary to prepare students for postsecondary education, including academic preparation, career guidance, and planning for paying for college.
- Develop a transparent student aid program that will make clear the preconditions for receiving need-based and need plus merit-based aid (e.g., taking a rigorous high school curriculum) and allow straightforward calculation of aid that can be expected. In short, sending a message that college will be affordable.
- Substantially increase the state match for federal Adult Education and Literacy funding (Title II of the Workforce Investment Act). The level of state funding should clearly signal that Texas is committed to moving adult education from its current status as a *federal program* undertaken with state assistance to a *state program* undertaken with federal assistance.
- Establish a state matching fund under the jurisdiction of the THECB to match private and regional/local funding for innovative modes to deliver services to adults and assist them to prepare for and transition to postsecondary education and the workforce. Project Quest, Inc. in San Antonio, Project VISA in the Rio Grande Valley, Capital IDEA in Austin, and Project ARRIBA in El Paso are examples of such initiatives (see text box on Project ARRIBA).

¹⁶ THECB (2008), p. iv.

Project ARRIBA, a private not-for-profit organization providing long-term high skilled training and case management services to eligible El Paso County residents, has demonstrated significant success in preparing low-income adults with significant learning needs to enter and complete higher education. The project's goal is to assist adults to obtain the skills necessary for employment in high demand occupations that pay a living wage of at least \$11 per hour, with benefits and a career path. The added dimension to Project ARRIBA is that it serves to meet existing in-demand occupations and takes a group of individuals who now can be directed to completion of higher education for an in-demand job that will pay a living wage based on their educational credentials.

<http://www.projectarriba.org>. For examples of similar projects see: www.capitalidea.org, www.vidacareers.org, and www.quests.com

- Charge the THECB to lead, in collaboration with the Texas Workforce Commission and TEA, the development of a comprehensive adult education strategy emphasizing postsecondary and workforce readiness.
- Consider the formal transfer of responsibility of adult education from TEA to the THECB unless there is substantial progress before the 82nd Legislature in developing and implementing a new long-range plan, completing alignment of adult education standards and curriculum with the CRS, and significant efforts to provide professional development for teachers and other actions necessary to increase the capacity of the adult education system.

Recommendation 3: Make developmental education a statewide priority

The single most important strategy for increasing numbers of college graduates is ensuring the success of students who enroll. A major factor in poor retention rates is failure to successfully complete required developmental education courses.

THECB data on college-readiness and developmental education underscore the challenge. In fall 2003:¹⁷

- Far more students attending community colleges compared to those attending universities were not college-ready. At four-year institutions, 71% of first-time-in-college (FTIC) students were college ready in contrast to only 39% at two-year institutions. In other words, 60% of students entering community colleges were in need of developmental education compared to 29% in four-year institutions. (Appendix B, Figure 35)
- More African American and Hispanic students compared to white students at both community colleges and universities were not college ready.
 - At two-year institutions, 75% of African American FTIC students and 69% of Hispanic students required developmental education compared to 51% of white students. (Appendix B, Figure 36)

¹⁷ "College ready" is determined by assessments required by the legislatively mandated Texas Success Initiative (TSI). The TSI requires that first-time-in-college (FTIC) students be assessed to diagnose their basic skills in reading, mathematics, and writing, and be placed in developmental instruction to strengthen academic skills that need improvement. Minimum passing scores are established for assessments approved by the THECB, including the Texas Higher Education Assessment (formerly TASP), COMPASS and ASSET (ACT assessments), and ACCUPLACER (a College Board assessment). Students may take any one of these assessments.

- At four-year institutions, 56% of African American FTIC students and 43% of Hispanic FTIC students required developmental education compared to only 18% of white students. (Appendix B, Figure 37)
- Students directly out of high school were better prepared than older students. It is especially important to note that the students most in need of developmental education were returning adults:
 - At two-year institutions, 70% of FTIC students less than 18 years of age were college ready, compared to only 33% age 18 to 21, 35% of those age 22 to 24, and 40% of those 24 years and older. (Appendix B, Figure 38)
 - At four-year institutions, 73% of FTIC students less than 18 years of age and 71% of those age 18 to 21 were college-ready, compared to only 38% of those age 22 to 24 and 33% of those 24 years and older. (Appendix B, Figure 39)
- Of those students enrolled in developmental education, fewer than half achieved college readiness - 28% in math, 49% in reading and 44% in writing. (Appendix B, Figure 40)
- Students completing developmental education were more successful in completing their first college-level courses, but more than 30% still did not pass.
 - Of the FTIC developmental education students who completed developmental education, attempted and completed the first college-level course, 65% passed math, 68% passed reading and 71% passed writing. (Appendix B, Figure 41)
 - Of the developmental education students who completed developmental education, the percentages of students who attempted and successfully completed the first college-level course were 65% in math, 68% in reading and 71% in writing. (Appendix B, Figure 41)

Because of the importance of effective developmental education, the Select Commission recommends that Texas:

- Make successful developmental education a statewide priority, recognizing that many of the students requiring developmental education are returning adults.
- Recognize the primary responsibility of community colleges for developmental education with the expectation that they achieve nationally recognized expertise in cost-effective delivery of developmental education.
- Reinforce the THECB developmental education initiative, but emphasize the need to move from pilot programs and identification of “best practice” to system-wide implementation.
- Continue to support the expansion of course redesign using the principles developed by the National Center for Academic Transformation as initiated by HB 1. Develop an approach to delivering developmental education that relies heavily on technology for presentation of material and guiding student interaction with that material while also providing the necessary face-to-face help (a high-tech/high-touch approach). Use this initiative to develop a national model for cost-effective delivery of developmental education on a large scale. (See text box on course redesign)
- Make successful completion of developmental courses and other intermediate milestones components of the incentive funding program for community colleges.
- Provide non-course based funding for developmental education (current funding is provided only on a formula basis for traditional courses, but effective developmental education is often delivered in modules and other non-course modes).

- For students requiring developmental education before they are prepared for college-level work, make success in achieving college readiness in at least one area (math, reading, or writing) during the first semester of college enrollment a prominent element of institutional accountability.

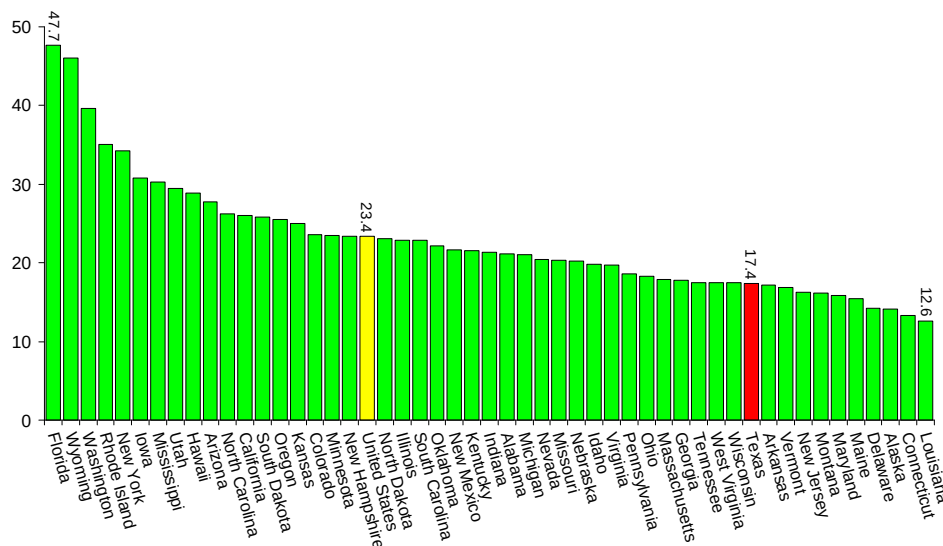
Recommendation 4: Shift from funding enrollment to funding for priority results

The goals stated previously make it clear that degree and certificate completion is a priority. It must be a priority for Texas to get more students through the P-12 pipeline and enrolled in postsecondary education. However, the single biggest gain in degrees toward the goal of globally competitive workforce can be achieved by getting more students *already enrolled* through to a certificate or degree.

Texas graduates students at the associate degree and bachelor's degree levels at rates significantly below the national average when measured in terms of degrees awarded per 100 high school graduates either in 3 years for an associate degree or 6 years for a bachelor's degree.¹⁸

- In 2004, associate degrees awarded per 100 high school graduates three years later were 17.4 (40th among states) compared to 23.4 for the nation and 47.7 for the best performing state. (Figure 22)

Figure 22. Associate Degrees Awarded per 100 High School Graduates Three Years Earlier, 2004

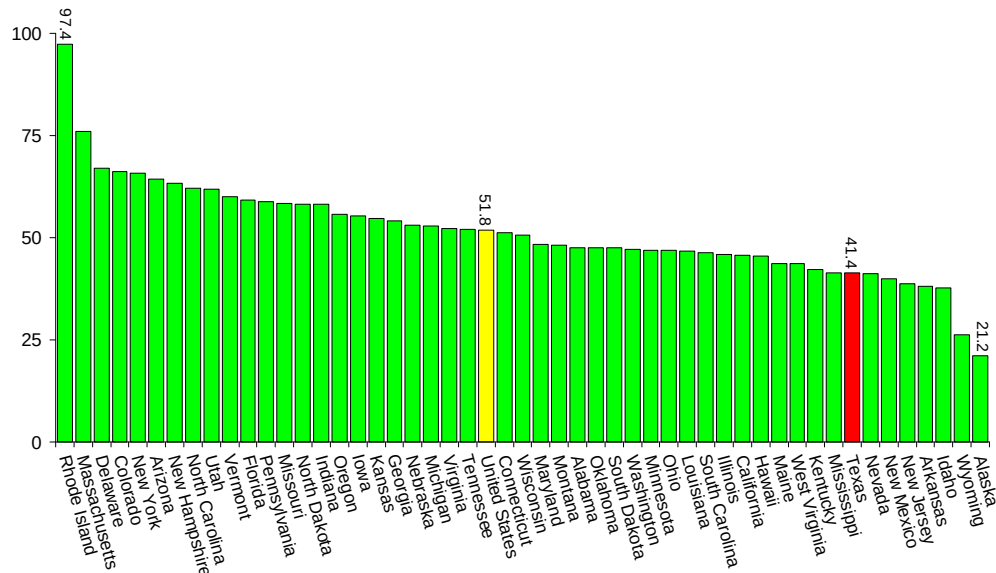


Source: NCES-IPEDS Completions Survey, WICHE

- In 2004, bachelor's degree awarded per 100 high school graduates 6 years earlier were 41.4 (43rd among states) compared to 51.8 for the nation and 97.4 for the best performing state. (Figure 23)

¹⁸ Three years for an associate degree or 6 years for a bachelor's degree are the common metrics for comparing graduation rates (150% of program time), but should not be seen as the goal. For Texas to reach degree production goals, more students must get through the system more expeditiously than three or six years.

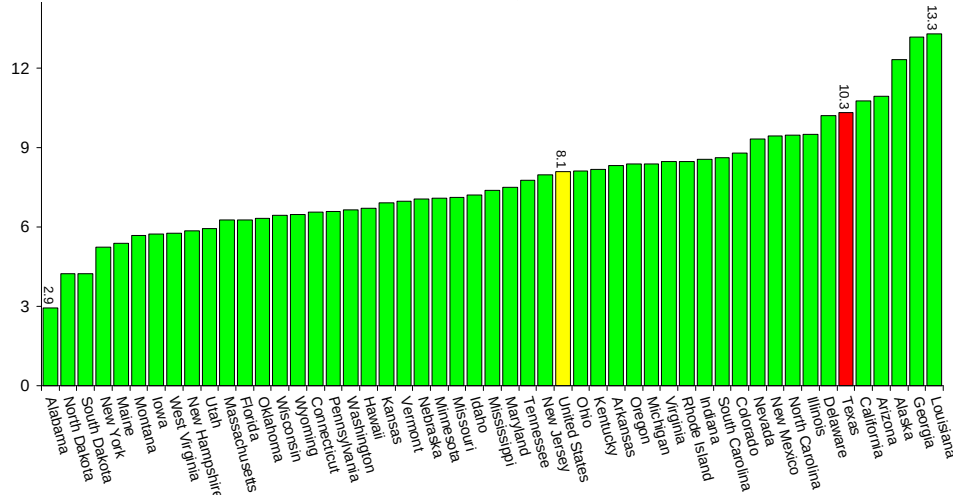
Figure 23. Bachelor's Degrees Awarded per 100 High School Graduates Six Years Earlier, 2004



Source: NCES-IPEDS Completions Survey, WICHE

- In 2004, community colleges enrolled 10.3 full-time equivalent students to yield one associate degree (45th highest among the states) compared to 8.1 for the nation and 2.9 for the best performing state.

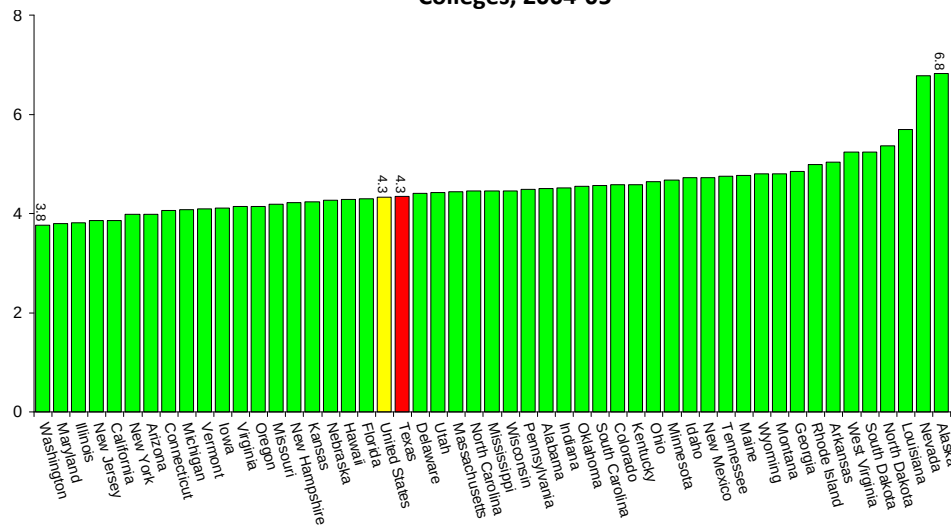
Figure 24. Ratio of FTE Enrollment to Associate Degrees Produced at Public Two-Year Colleges, 2004-05



Source: NCES, IPEDS Enrollment and Completions Surveys

- Public universities do much better than community colleges in granting degrees in relationship to enrollment. In 2004, universities yielded a bachelor's degree for every 4.3 full-time equivalent students enrolled—right at the national average but still higher than the best performing state at 3.8.

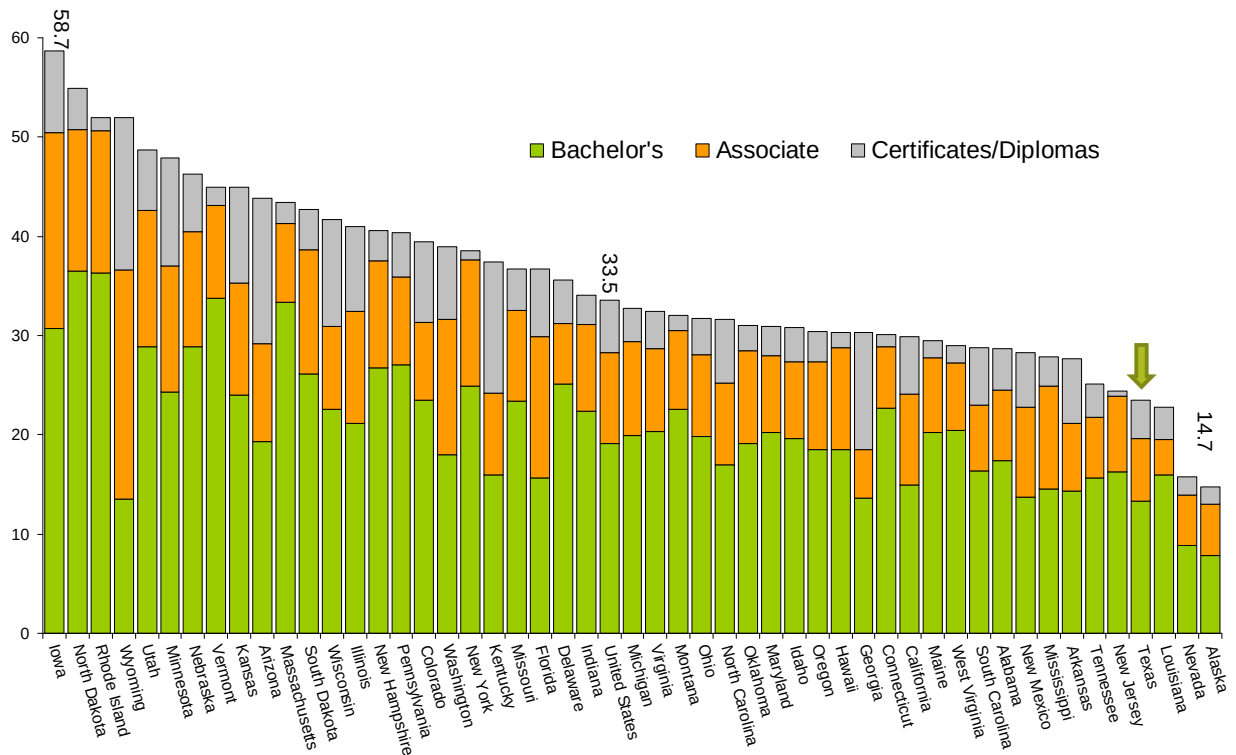
Figure 25. Ratio of FTE Enrollment to Degrees Produced (Associate and Above) at Public Four-Year Colleges, 2004-05



Source: NCES, IPEDS Enrollment and Completions Surveys

- In 2006, Texas awarded only 23.5 (47th in the U.S.) undergraduate credentials and degrees at all institutions per 1,000 adults 18-44 with no college degree. This compares with 33.5 for the nation and 58.7 for the best performing state.

Figure 26. Undergraduate Credentials & Degrees Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2006



Sources: NCES, IPEDS Completion Survey, and American Community Survey

The Select Committee recognizes that many students attend community colleges for single courses without intending to complete a certificate or degree. Nevertheless, it is important to encourage those students who do seek a certificate or associate degree to move more expeditiously to completion, including transfer. While Texas has made progress in the past decade in the rate of completion of certificates, associate degrees, and bachelor's degrees, and in the rate of transfer from community colleges to universities, the data summarized above underscore that completion rates remain far below the national average and best performing states.

A considerable cost to students, institutions and the state occurs when students enroll in a course at the beginning of the semester and subsequently drop the course. Understandably, students should have the flexibility to add and drop some courses, but improved advising and other means can be used to improve the match between student's academic needs and interests and course-taking. The THECB estimates that the failure of students to complete courses in which they enroll costs the state approximately \$300 million a year.

Consistent with the principle calling for payment for outcomes, the Select Commission strongly recommends aligning the state's resource allocation mechanisms with achieving an increased number of program completers. The Select Commission recommends that Texas make changes in the base formula funding of institutions, incentive funding, performance funding and targeted funding for important regional initiatives as follows:

- Revise the funding formulas for community colleges, general academic institutions and health institutions to fund course completions instead of course enrollments. These changes should be phased in over time to make adjustments in policy based on evaluation of institutional response and to allow time for institutional planning and adjustment.
- Support the recommendations issued by the Incentive Funding Task Force (Appendix D), including the extension of the Incentive Funding program to community colleges and health institutions.
- Provide performance funding to general academic institutions, community colleges and health institutions for increasing the numbers of degrees and certificates awarded as well as increasing the numbers of transfers from two year institutions to universities.
- Incorporate into the incentive funding calculations for community colleges, factors for
 - Successfully completing at least one developmental education course in the first term of enrollment.
 - Successfully completing at least 20 student credit hours in the first year of enrollment.
- Utilize the capacity of accredited for-profit career and technical postsecondary institutions to increase production of certificates and degrees, especially to meet critical workforce demands.
- Support regional community-based programs designed to move high-risk students through education and into high wage jobs (e.g., Project ARRIBA in El Paso, Project Quest in San Antonio, etc.). These projects are good examples of initiatives to address the adult education needs mentioned above.

Recommendation 5: Contain cost increases and promote cost-effective expansion of capacity

By most measures, the Texas higher education system is considerably less productive at the undergraduate level in terms of degree production in relationship to funding than most other states. (Appendix B, Figure 42). In order to accommodate the amount of enrollment growth required to meet degree production goals, Texas must:

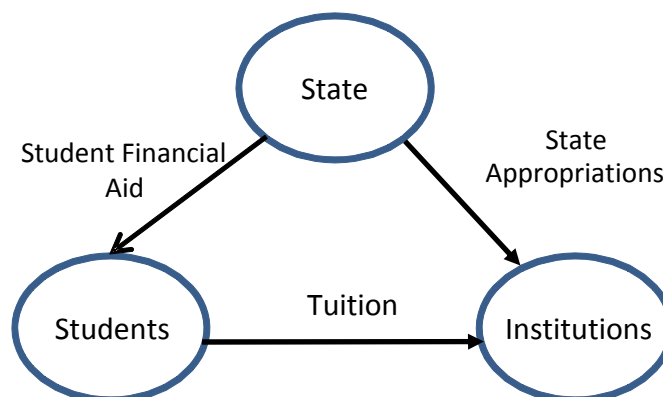
- Expect more degree productivity from the institutional capacity already in place.
- Take advantage of the contributions made by private institutions (including for-profit).
- Expand the public university capacity carefully and creatively.

Therefore, the Select Commission recommends that Texas:

- Make more strategic use of community colleges as the point of access to postsecondary education. Because they are less expensive and, often, more geographically accessible to students not now being served, community colleges must play a more central role in meeting the education and workforce needs of the state. The role envisioned extends well beyond developmental education and vocational training to encompass the basic preparation of students whose goal is a baccalaureate degree. Transfer arrangements will have to become more effective if this piece of the overall strategy is to be successful.
- Rationally expand institutional capacity in the high-growth areas of the state, including targeted investment in facilities.
- Set expectations for productivity improvement (e.g., 25% of additional degree production addressed by enhanced institutional productivity). The recommendations concerning funding course completions rather than enrollments will contribute to this goal.
- Create a public institution to provide competency-based upper-division programs (similar to Western Governors University). The Western Governors University (WGU) grants degrees based on certification of competence, not on the traditional accumulation of degree credits. WGU does not deliver academic courses but certifies the competencies that students have obtained from other institutions and other means. This new approach makes it possible for the University to certify prior student learning, serve students who learn on-line and through other non-traditional means, and move students through to degrees faster and at lower cost. Such an institution should be open to all students but could be especially useful to place- and time-bound students such as community college graduates and adults with some postsecondary education but no degree.
- Support establishment of a statewide “open” on-line certificate and degree granting university, independent of existing institutions with a mission to offer high quality academic programs that can be designed and delivered in a cost-effective manner on a large-scale basis.
- Provide greater encouragement to nationally accredited for-profit institutions seeking to operate in Texas. As part of this encouragement, support the participation of such institutions in the Texas Common Course Numbering System to ease the transfer of courses to public institutions of higher education.

Recommendation 6: Use state appropriations and student aid policy, not regulation, to contain increases in the cost of going to college in Texas and ensure affordability

A fundamental best practice of postsecondary education finance is the alignment of state policies related to state appropriations, tuition and student financial aid. The following illustrates these three policy dimensions.



State policy should consider:

- Affordability for students in terms of the level of tuition and fees and the availability of student financial assistance. Is the net price (price of attendance less student aid from all sources) reasonable relative to students' personal or family income?
- Affordability for state taxpayers—a realistic assessment of the capacity of the state taking into consideration revenue levels and other financial commitments.
- Adequacy of funding for institutions. Do they have sufficient resources, from the combination of tuition and state appropriations, to achieve their assigned missions?

The only way for a state to ensure that it meets these three objectives is to develop a strategic budgeting process that deliberately synchronizes policy decisions regarding state appropriations, tuition policy and student financial aid.

This diagram emphasizes the interplay between state support and tuition revenues. State appropriations create the basic capacity that allows tuition prices to be held in check. When state appropriations are less than required to meet the “adequacy benchmark,” the common response is to seek tuition increases to fill the gap. The safety net for students is student financial aid that helps ensure that student affordability is not compromised.

Texas has made significant advances in funding of student financial aid over the past decade, increasing from 7% of federal need-based aid in the early 1990s to 32% today. Nevertheless, the state investment of 32% lags far behind 89% in the best performing state. (see Appendix B, Figure 44, Figure 45, and Figure 46)

The Select Commission recommends that Texas:

- Pursue actions to improve productivity and cost-effective delivery as summarized above. This will help constrain the cost of adequacy and aid in maintaining affordability for both students and the state.

- Take legislative action on General Fund appropriations for institutions and for state student financial aid programs at the same time so that deliberate actions are taken to ensure that one is not funded without considering the impact on the other.
- Continue tuition deregulation but within the framework of a “shared responsibility” model of student financial aid. This model uses market forces rather than regulation to moderate tuition increases and offset tuition increases with student aid.
- Reform the state’s approach to student financial aid in a two stage process:
 - In the short run, implement a need-plus-merit approach within the framework of the Texas Grant Program. Include incentives for students to make academic progress toward their goals at community colleges through the Texas Educational Opportunity Grant Program. Emphasize incentives for students to be prepared for postsecondary-level learning.
 - Utilize a legal framework for development prior to the 2011 legislative session of a simplified, integrated, more transparent student financial aid program based on the principle of shared responsibility among students, families, the state, the federal government and institutions. (See Appendix E for a description of the Oregon Shared Responsibility model).
 - Implement this shared responsibility model as an alternative to re-regulating tuition.
- Within the framework of a shared responsibility model of student financial aid, establish a goal of increasing on a step-by-step basis the state’s investment in need plus merit-based student financial aid as a percentage of federal need-based aid to the level of the best performing states by 2015.¹⁹
- Utilize the following criteria/principles in developing a shared responsibility model for Texas:
 - Establish an “authorized” cost of attendance for different types of public institutions (community colleges, general academic institutions, research universities, etc).
 - Provide clear information for students about reasonable contributions to their college education to serve as a basis for planning. The goal should be to constrain the amount that students are working and taking on debt.²⁰
 - Three-fourths of Texas undergraduates currently work while enrolled in school (35% full-time and 41% part-time).
 - Too much work affects persistence. Fewer than half of U.S. freshman who work full-time their first year remain in school for three years.
 - Too much work affects completion. Only 8 percent of U.S. freshman who work full-time their first year complete a bachelor’s degree in six years.
 - Establish a reasonable expectation and academically responsible definition of the student’s contribution. This contribution would be that a student should be responsible for no more than what he or she could earn in a part-time minimum-wage job working no more 10 hours a week during term-time and during the summer break (e.g., about \$5,000 to \$6,000 dollars maximum).

¹⁹ “Need plus merit-based” student aid refers to student aid programs such as Texas Grants which are need-based that include incentives for students to be prepared for college and to make academic progress once enrolled.

²⁰ THECB (2008). State of Student Aid and Higher Education in Texas, July 2008, Section 6.

- Provide for students to be able to “buy down” their contribution through earned merit-based scholarships or by demonstrating commitment to stay in school, take a rigorous curriculum and perform well in terms of the college readiness standards.
- Allow students to borrow their shared responsibility obligation, but discourage borrowing for community college and first-year university students.
- Require parents to make their contribution in accordance with current Expected Family Contribution (EFC) calculations. The Shared Responsibility Model essentially separates student and parent expected contributions.
- Maximize utilization of federal student aid and tax credits prior to the application of state student aid.
- Maximize the impact of existing state student aid programs (e.g., Texas Grants, Texas Educational Opportunity Grants, B-On-Time) by integrating these programs within the model. The “shared responsibility” model is not an entirely new program; it is a framework to integrate existing programs and to make the sum greater than the individual programs.
- Provide predictability for students, parents, institutions and the state regarding shares of responsibility. Through the process of establishing the level of student responsibility (e.g., linked to changes in family income) and authorized cost-of-attendance (tuition, fees, frugal budget and other costs), each of the parties will have a clear picture of expectations on which to base planning.
- Ensure simplicity and transparency to communicate clearly to students and parents the costs of college attendance and the roles that the student, parents, the federal government, the state and institutions can play to make college affordable.
- Provide a framework to link state actions on institutional appropriations, funding of student aid and tuition policy. Decisions regarding the variables of cost-of-attendance and student contribution would provide transparent means to communicate to each of the parties their reasonable responsibilities.
- Encourage building coalitions supporting increased state student financial aid. Institutions and the state would recognize the benefits of a supporting both state funding for institutional subsidy (e.g., the formula) as well as state student aid programs.

Findings and Recommendations Regarding the Creation and Application of Innovation

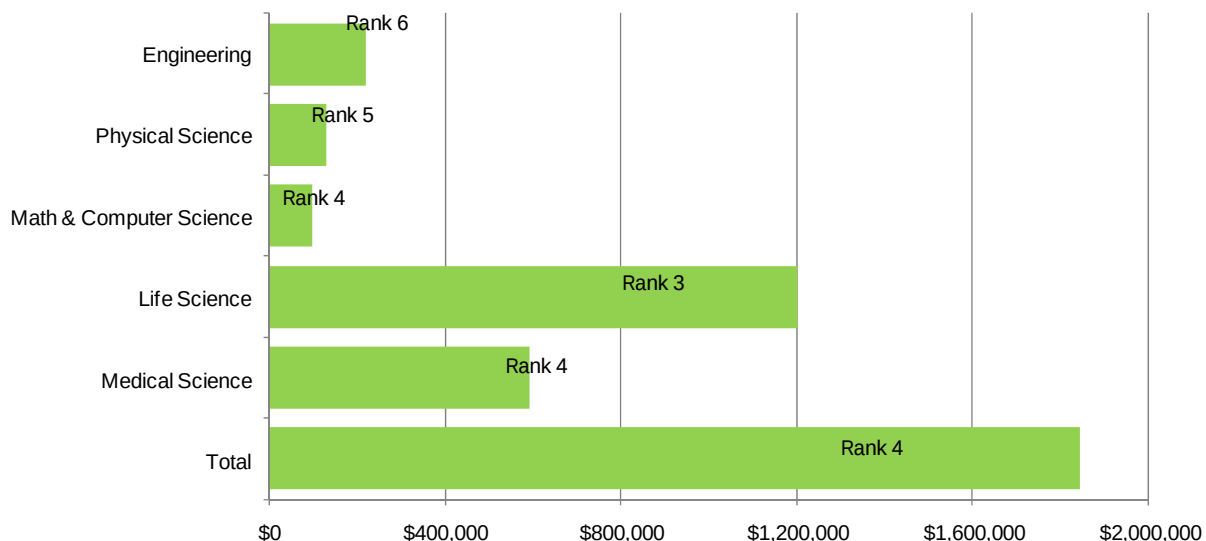
For Texas to be globally competitive, it must not only develop a world-class workforce, it must also create high wage jobs that fully utilize the talents of this workforce. To that end, Texas must:

- Enhance its research capacity; and
- Commercialize research much more effectively.

Recommendation 7: Reinforce and enhance existing research institutions and increase the number of top tier nationally competitive research universities by providing state incentive funds for research

Nationally, Texas ranks 4th in the level of academic R&D expenditures funded by the federal government. This measure serves as a useful benchmark since most federal research funds are awarded on a competitive basis. Given that Texas is the second most populous state, it should logically strive to be at least second in federal R&D funding.

Figure 27. Federal Research & Development Expenditures, Texas 2007

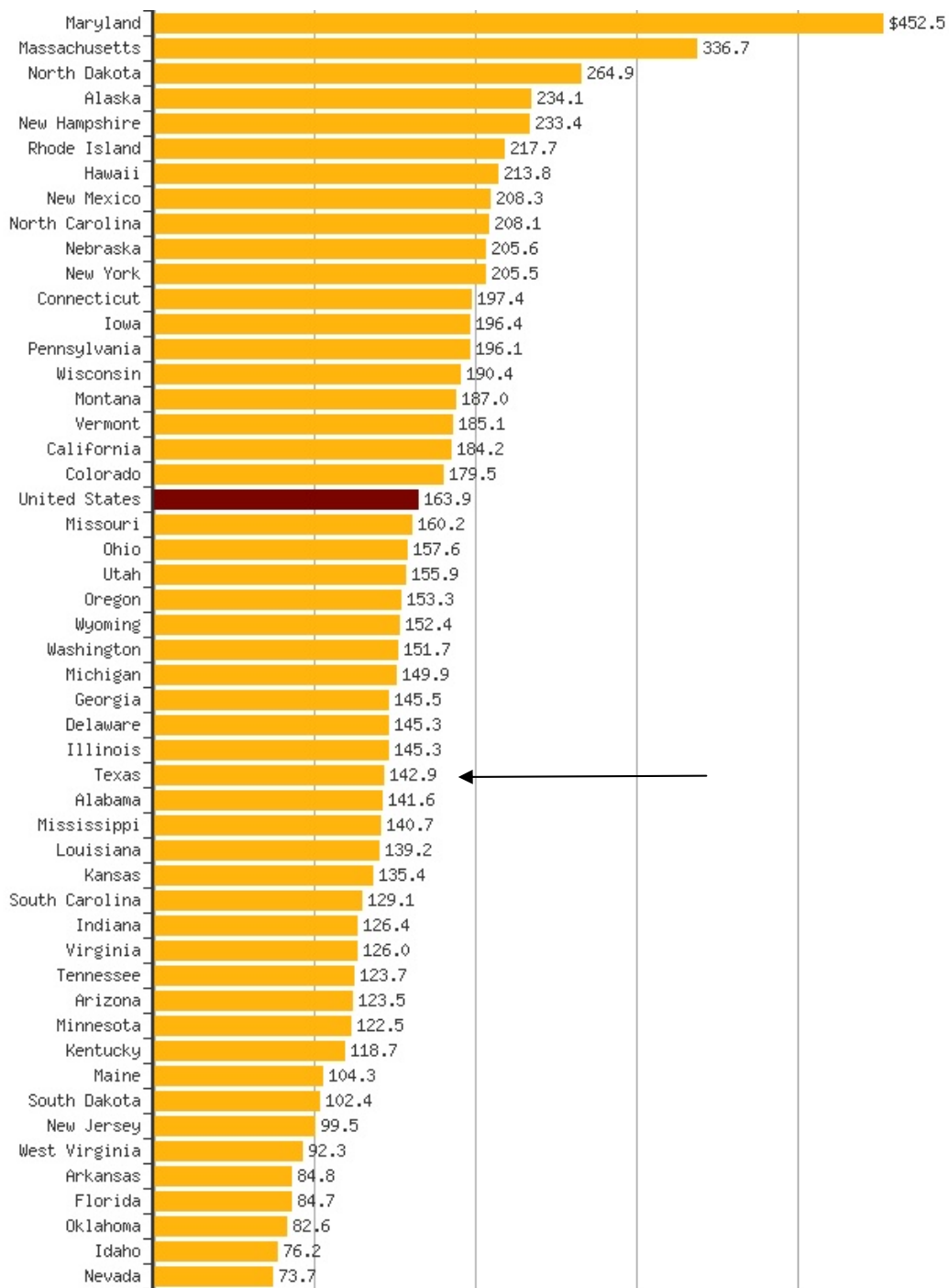


Source: National Science Foundation

On a per capita basis, federal R&D funding in Texas reflects a substantial lack of competitiveness, ranking 32nd overall. It is not surprising that many smaller states perform well on this measure, but California as well as numerous other states with which Texas competes economically (Maryland, Massachusetts, Colorado, Pennsylvania, New York, and Washington) also perform much better on this measure.

Figure 48 in Appendix B provides additional information about the research competitiveness of Texas universities.

Figure 28. Research and Development Expenditures Per Capita, 2007



Source: Bureau of Economic Analysis, US Census Bureau, National Science Foundation

On these bases alone, it can be argued that Texas needs more university-based research capacity. It can further be argued that more commercialization of research activity is needed to spur the creation of high-skill, high-wage jobs. The data presented earlier in this report about the mix of high-wage versus low-wage jobs in the state reinforce this conclusion.

It also can be argued that more tier-one research universities are needed to provide spaces in Texas for high-performing high school students seeking admission to a selective public university.

Data in Appendix B, Figure 47 reveal that Texas is a large net exporter of college students, particularly at the four-year level (both public and private). The list of out-of-state institutions in which Texas students enroll reveals that the preponderance of these students are attending research universities in another state, mostly in nearby states (Appendix B, Table 6). These data suggest lack of Texas capacity to serve students capable of thriving in a research university setting.

The capacity of the top-tier institutions to accommodate a competitive student body is also challenged by the Top 10% rule on university admissions. The Top 10% rule, HB 588 enacted in 1997, provides that, “Each general academic teaching institution shall admit an applicant for admission to the institution as an undergraduate student if the applicant graduated with a grade point average in the top 10 percent of the student’s high school graduating class in one of the two-years preceding the academic year for which the applicant is applying for admission.”²¹

The Select Commission recognizes that the Top 10% rule has had a positive impact on the aspirations of Texas students to get good grades in high school. It has also increased the chances of going to college for students from many high schools that did not have a record of sending students to college before the law was enacted. The Select Commission is concerned, however, about the long-term impact of the rule on expectations for College Readiness in Texas and on the competitiveness of its existing tier-one universities.

The requirements of the Top 10% rule convey a misleading message to parents and students that only grade point average and class rank are required for “College Readiness.” The rule also limits the ability of the state’s current tier-one universities to admit high-performing high school students using a broader set of selection criteria than grade point average and class rank, criteria that are aligned with the College Readiness Standards (CRS). This concern is especially relevant to UT Austin where 64% of all first-time undergraduates (in-state and out-of-state) in 2007 were admitted under the Top 10% rule, compared to 43% at Texas A&M and 28.2% at UT Dallas, the institution with the next highest percentage of Top 10% students. Focusing only on entering freshman at UT Austin from Texas high schools, 81% percent of these entering freshmen in fall 2008 were Top 10% students. This means that UT Austin was able to use its more comprehensive admissions criteria for only 19% of its entering freshman from Texas high schools.^{22,23}

²¹ Texas Education Code, Sec. 51.803.

²² The University of Texas at Austin, Office of Admissions (2008). Implementation and Results of The Texas Automatic Admissions Law (HB 588) at the University of Texas at Austin Demographic Analysis of Entering Freshmen, Report 11.

²³ For admissions other than those admitted under the 10% rule, UT Austin uses an Academic Index (AI) including high school record (class rank, completion of UT required high school curriculum, extent to which students exceed the UT required units), and SAT/ACT score⁵, and a Personal Achievement Index (PAI) (scores on two essays, leadership, extracurricular activities, work experience, service to school or community, and special circumstances such as socio-economic status of family, single parent home, language spoken at home, family responsibilities, socio-economic status of school attended, average SAT/ACT of school attended in relation to student's own SAT/ACT, and race).

The Select Commission recommends that Texas:

- Reinforce the research missions of those institutions that have already achieved national competitiveness in research. Strengthen and support greater funding for the state's existing flagship institutions – the University of Texas at Austin and Texas A&M University – and the health institutions.
- Invest selectively in those institutions that have comparative strength in the fields that need bolstering.
- Recruit and retain top tier research faculty who can bring increased research funding to Texas.
- Continue and enhance research incentive funding. Adopt recommendations of the Incentive Funding Task Force for FY 1010-11 and beyond, for the state's general academic and health related institutions. Specifically, the state should provide significant incentive/performance-based general revenue funding for research to all general academic and health-related institutions based on a percentage of the amount each institution expends from externally-generated research funds (federal, private non-profit, private for-profit, gift funds, private endowment earnings, and other local or regional funding); to be meaningful, such funding should be in excess of 10% of externally generated amounts (for comparison, FY 2008 appropriations to eligible institutions via the Research Development Fund were 19.6% of the amount expended on research by those institutions from external funds in FY 2007).
- Create additional nationally competitive research universities. Toward this end, the state should establish a Challenge Trust Fund (over and above the research incentive funding recommended above) to provide sustained substantial additional matching funds (allocated as described above) to those institutions that: a.) meet eligibility criteria established by the THECB; b.) prepare long-term plans documenting a strategy by which they can become nationally recognized research universities; and c.) submit these plans for review and approval by the THECB. The Challenge Trust Fund would not be available to UT Austin or Texas A&M, in view of their having access to Available University Funds.
- Amend the Top 10% Rule to establish a reasonable limit (e.g., 40% to 50%) on the percentage of students that an institution must admit under the Top 10% rule, to address the issues of capacity and competitiveness at the University of Texas at Austin and Texas A&M University. By acting on the Select Commission's recommendations to implement rigorous College Readiness Standards (CRS) and to create additional nationally competitive research universities, the state, over time, could greatly reduce, if not eliminate, the need for the Top 10% rule.

Recommendation 8: Utilize research capacity to enhance competitiveness of Texas employers and link with regional strategies to improve competitiveness

A case has already been made (Figure 18) regarding the need to create many more high-skill high wage jobs in all regions of Texas. In order to move the whole state forward and reduce regional disparities, the Select Commission recommends that Texas:

- Expand the size of the Emerging Technology Fund, and use it to create incentives for regional stewardship emphasizing the connection of institutions of higher education to their regions. The investment pools should be matched by funds generated regionally. They could be used to fund

institutional involvement in research or problem-solving initiatives of particular importance to the region or to build new academic capacity needed to address priority issues in the region.

- Create (statewide) investment pools matched by employers in selected industry clusters and used to fund research or problem-solving initiatives defined as being of high priority to that industry in Texas. The funds could also be used to create new instructional or research capacity in an institution identified by the industry.
- Add commercialization metrics to the research incentive funding program.

Indicators for Measuring Success in Achieving Economic Competitiveness

Percent employment in high tech establishments, benchmarked against top performing of the 10 largest states

Trends in commercialization of university and health Institution intellectual property, benchmarked against results in the 10 largest states:

- Licenses and options executed
- Cumulative active licenses
- Start-ups
- Invention disclosures
- Invention disclosures
- Patents issued
- New patent applications
- License income

Trends in number and percent of high-wage jobs - calculated regionally and statewide, benchmarked against top performing of the 10 largest states.

Improvement in the measure (proportion of full-time wage-earners in the top U.S. quartile) minus (proportion of full-time wage earners in the bottom U.S. quartile). Benchmarked against best performing U.S. state.

Whenever possible, data capacity should be created so that regional, as well as statewide, performance can be assessed and compared.

Recommendations Regarding Finance and Policy Leadership

Recommendation 9: Align Finance Policy with Goals

Throughout the report, suggestions have been made concerning various components of the institutional funding model. The following represents the complete set of recommendations in this regard.

The Select Commission recommends that Texas revise the funding model used in the state to:

- Promote pursuit of the global competitiveness goals.
- Bring the various components of the model into a coherent, coordinated model:
 - General Fund appropriations to institutions
 - Tuition policy
 - State student aid policy
- Emphasize payment for outcomes over payment for activities.
- Maintain affordability to both students and the state.
- Align approach to capital funding with priority needs for capacity expansion.

General fund appropriations

The Selection Commission recommends that Texas:

- Modify the funding model for each major sector of the higher education system:
 - Research institutions
 - Provide special base funding for established research institutions (at the moment UT Austin and Texas A&M) that assures reliable support that can increase according to formulas that do not require growth in undergraduate enrollments
 - One approach—link base support to number of full time faculty, graduate degrees awarded, and external research expenditures
 - Health institutions
 - Provide base funding that assures reliable support that can increase according to formulas that do not require growth in undergraduate enrollments
 - One approach—link base support to number of full time faculty, graduate degrees awarded, resident certifications achieved, and external research expenditures
 - Other general academic institutions: support in concept the THECB recommendations for formula changes including moving to course completion rather than course enrollment base
 - Community colleges
 - Increase the formula base for community colleges
 - Implement formula changes including moving to course completion rather than course enrollment base
- Sustain and expand the incentive funding components of the funding model:

- Adopt the recommendations of the Task Force on Incentive Funding for Fiscal Years 2010-11 and beyond, for general academic institutions, community colleges, and health institutions, with emphasis on inclusion of incentives for successful degree/certificate completion and success in acquiring and expending external research funds.
- For community colleges, add a component to incentivize successful completion of developmental education and other intermediate success measures.
- Develop a funding mechanism for creation and maintenance of institutional assets. The Select Commission recommends that Texas create a funding mechanism for creation and maintenance of institutional assets. This mechanism would provide flexibility for institutions to determine which additional assets are most in line with needs. It would also ensure institutional accountability for maintaining assets once they have been created. To these ends it is recommended that:
 - As an alternative to Tuition Revenue Bonds, create as a regular part of the higher education funding formula an asset development fund that can be used by institutions to add to its stock of assets in ways most consistent with the needs of each institution. These funds could be used to enhance technology, pay for construction of new facilities through a bonding process or add new faculty in critical areas (or create endowments for endowed chairs). The objective factors utilized in calculating the allocation of these asset development funds to each institution should be determined by the THECB.
 - Adopt a policy stating that institutions are responsible for maintaining physical assets once acquired. To this end institutions should be required to essentially fund depreciation—replace equipment/technology on a life cycle basis and maintain buildings at a rate that prevents adding to the deferred maintenance backlog. This means that institutions would be held accountable for annually spending funds for asset maintenance equal to the annual life cycle replacement cost of technology and 2 to 2-1/2% of the replacement value of the buildings on each campus. Expenditures made to gain energy efficiencies should be considered as legitimate renewal and renovation expenditures. Should additional facilities be acquired, the annual level of expenditures for renewal and renovation projects would be increased accordingly. Expenditures could either directly fund renewal and renovation projects or pay debt service on bonds sold to obtain funds for renovation projects. Funds should be provided on a 50-50 match basis, with institutions funding one-half the annual required amounts from resources to which they have access and the state funding the other half of the required amount.
 - Create an investment fund as part of each biennial budget to pay for expansion of educational delivery capacity deemed most important by the THECB. These investments could fund expansion of existing institutions in order to accommodate growth, creation of entirely new institutions or development of entirely new delivery systems (e.g., a statewide, on-line public university).

Recommendation 10: Strengthen Statewide Policy Leadership

Achieving the vision of global competitiveness will require sustained support from the state's business and civic leaders for a long-term strategy extending across changes in political leadership and economic conditions. The Select Commission recommends that Texas formalize a continuing role for a statewide group of business and civic leaders charged with the mission to:

- Sustain public attention on the long-term strategy to achieve the vision of Texas as a globally competitive state.

- Mobilize the state's business and civic leaders to support a statewide and region-by-region campaign to develop a culture of college-going in Texas.
- Publish an annual report card on progress toward the goal of global competitiveness.
- Convene an annual conference of the state's policy, business and civic leaders to assess progress and identify policy changes or other actions necessary to keep Texas on course toward long-term goals.

The Select Commission views the proposed statewide group of business and civic leaders as a complement to -- but by no means a replacement for -- the critically important policy leadership, planning and coordinating role of the THECB.

Community colleges must play a central role in addressing the issues identified in this report. The contributions will involve all dimensions of these institutions' mission from providing certificate and degree programs for youth and adults, preparation of students for transfer to four-year institutions and workforce development. Community colleges are also the primary providers of developmental education and adult education. In light of the importance of these institutions to the future global competitiveness of Texas, the Select Commission recommends that a point of responsibility for statewide leadership on community college issues be established within the structure of the THECB. How this is organized would be the responsibility of the THECB and Commissioner, but the critical function would be to engage the highly decentralized network of locally controlled community colleges in addressing statewide priorities such as developmental education, adult education, articulation and transfer and workforce development.

Conclusion

Texas faces a daunting challenge to achieve the vision of a highly skilled, globally competitive workforce and an expanding and innovating economy that can take full advantage of the skills of this workforce. If Texas fails to educate more of its growing population (both youth and adults) to higher levels of attainment, knowledge and skills, it faces a downward spiral in quality of life and economic competitiveness. To develop an innovation-based economy that can fully employ a more capable workforce, Texas must enhance and expand globally competitive research university capacity, increase external research funding, accelerate the commercialization of knowledge and intellectual property, and advance the economic vitality of all the state's regions.

This report presents the contours of a Compact for Texas that defines a long-term vision for higher education and global competitiveness and a step-by-step plan by which Texas can achieve that vision. The proposed Compact reflects a commitment to the people of Texas that the state will pursue the long-term vision across changes in political leadership and economic conditions.

APPENDICES

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Appendix A. Select Commission on Higher Education and Global Competitiveness Work Plan

1. Strengthening the link between higher education and strategies for increasing education attainment and economic competitiveness—regional strategies

Goal: To gain Select Commission commitment to the efficacy of deliberate policies to use regional strategies for linking higher education to increasing the education attainment and economic competitiveness of each of the state's regions.

Actions: To recommend approaches to creating incentives for institutions to respond to the unique educational and economic development needs of their regions. To recommend means to recognize and enhance the role of community colleges in meeting regional education and workforce development needs.

Goal: To develop the Select Commission understanding of the principles and criteria that could be used in reaching agreement on approaches to enhancing research university competitiveness.

Action: To recommend implementation strategies to achieve this goal.

September 23 (Regional Strategies):

- Francisco Marmolejo, CONAHEC, University of Arizona
- John Butler, IC² - McCombs School of Business, University of Texas
- Susan Dawson, E3 Alliance

October 28 (Research Competitiveness):

- Kern Wildenthal, UT Southwestern
- Larry Faulkner, Houston Endowment

October 28 (Community Colleges):

- Kay McClenney, Community College Leadership Program, University of Texas

November 18 (Commercialization of Research):

- Mark Ellison, Texas A&M University System

2. Goals and benchmarks

Goal: To gain Select Commission commitment to raise the expectations regarding goals to the level of global competitiveness, to develop a picture of the magnitude and location of the likely demand, to reach general consensus on the kinds of indicators and benchmarks that should be used to measure progress toward long-term goals.

Action: To recommend parameters for benchmarks and indicators.

September 23:

- Raymund Paredes, Commissioner of Higher Education
 - Closing the Gaps
- Dennis Jones & Aims McGuinness, NCHEMS
 - Governor's Business Council report "Leading the Way"
- Dennis Jones & Aims McGuinness, NCHEMS
 - Proposed Benchmarks Education and Research

3. Capacity and strategies to meet demand

Goal: To provide the Select Commission with concrete examples of alternative modes of delivery that may be more effective and productive as means to meet projected demand. These examples can then provide the foundation for discussion of policy alternatives (e.g., finance policies) that would encourage such alternative delivery systems.

Actions: To recommend general strategies for expanding capacity in the selected regions of Texas where there is increased demand. To recommend actions designed to address capacity needs in new ways and to deliver more effectively some parts of the curriculum (e.g., developmental education or the common core needed for transfer).

Goal: To gain a greater understanding of the role of community colleges as cost-effective means for expanding capacity

Action: To recommend actions which provide incentives for community colleges to respond to regional capacity demands.

September 23 (Presentation of Analytic Findings – Supply vs. Demand)

- Raymund Paredes, Commissioner of Higher Education
- Dennis Jones, NCHEMS

October 28 (Alternative Delivery Systems/Strategies to Meet Demand):

- Randy Best, Higher Education Holdings

- Craig Swenson, President of Argosy University
- Ernie Cortés, Industrial Areas Foundation
- Carolyn Jarmon, The National Center for Academic Transformation

October 28 (Community Colleges):

- Kay McClenney, Community College Leadership Program, University of Texas

November 18 (Career Colleges and Schools):

- Jeanne Martin, Career Quest

December 2 (Texas Automatic Admissions Law)

- Michael D. McKinney, MD, Chancellor, The Texas A&M University System
- William Powers, Jr., President, The University of Texas at Austin
- Dennis Jones, NCHEMS
 - National Perspective on Automatic Admissions Laws

4. Tuition and Student Financial Aid: Building a Sustainable Strategy to Increase Student Access and Success

Goal: To provide concrete examples of how other states have addressed tuition and student aid policies and to reach Select Commission consensus on the principles that should guide policies regarding tuition and student financial aid.

Action: To recommend steps to better align the state's student aid programs so as to help more students succeed in college while most effectively using student aid funds from all sources.

November 7 (Tuition & Financial Aid):

- Raymund Paredes, Commissioner of Higher Education
 - THECB report on study of student financial aid

November 18 (Tuition & Financial Aid):

- David Longanecker, President, Western Interstate Commission for Higher Education

December 2 (Tuition Deregulation):

- Michael D. McKinney, MD, Chancellor, The Texas A&M University System

- William Powers, Jr., President, The University of Texas at Austin
- Dennis Jones, NCHEMS
 - National Perspective on Tuition Deregulation

5. Strengthening Policy Leadership

Goal: To develop the Select Commission understanding of the need to more effective statewide policy leadership and the alternatives to achieving this increased capacity.

Action: To recommend implementation strategies to achieve this goal.

November 18

- Pat Callan, National Center for Public Policy and Higher Education
- Raymund Paredes, Commissioner of Higher Education

6. Aligning Finance Policy with Stated Priorities

Goal: To develop Select Commission understanding and support for principles to guide reforms in institutional funding (formula, incentive and performance) and capital financing.

Action: To recommend changes in Texas' approach to higher education financing and resource allocation.

November 7 (Finance Policy):

- Aims McGuinness, NCHEMS
 - An Overview of Finance Policy
- Raymund Paredes, Commissioner of Higher Education
 - Institutional Finance
 - Capital Financing of Necessary Capacity

November 18 (Options Related to Capital Finance):

- Raymund Paredes, Commissioner of Higher Education
 - Briefing from THECB
- Aims McGuinness, NCHEMS
 - Additional perspective

December 2 (Options Related to Capital Finance):

- Dennis Jones, NCHEMS

Appendix B. Selected Figures and Tables

Figure 29. Correlation Between Per Capita Income and Percentage of the Population Ages 25-64 with a Bachelor's Degree, U.S., 1980, 1990, 2000, and 2005

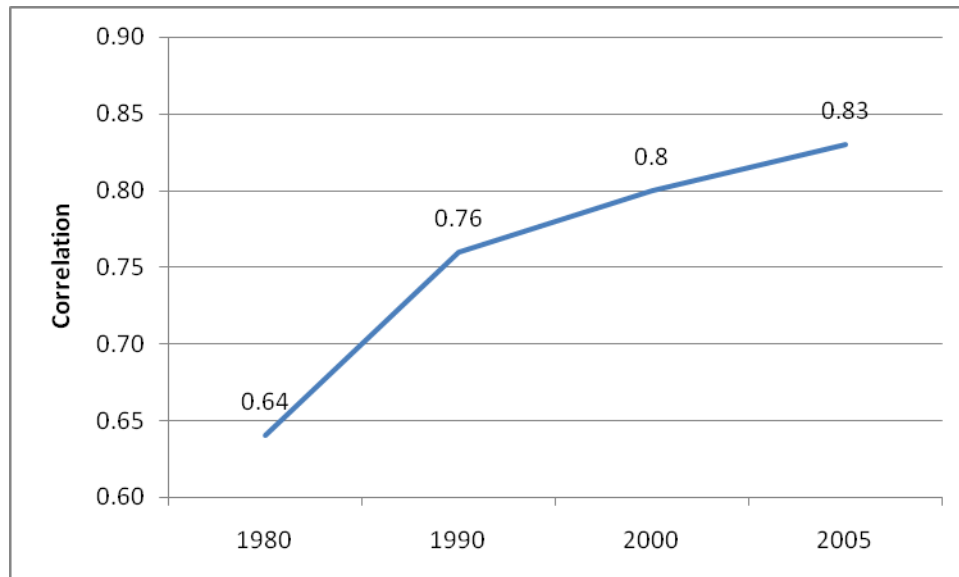


Figure 30. GEDs Awarded per 1,000 Adults Age 25-44 with Less than a High School Diploma, 2005

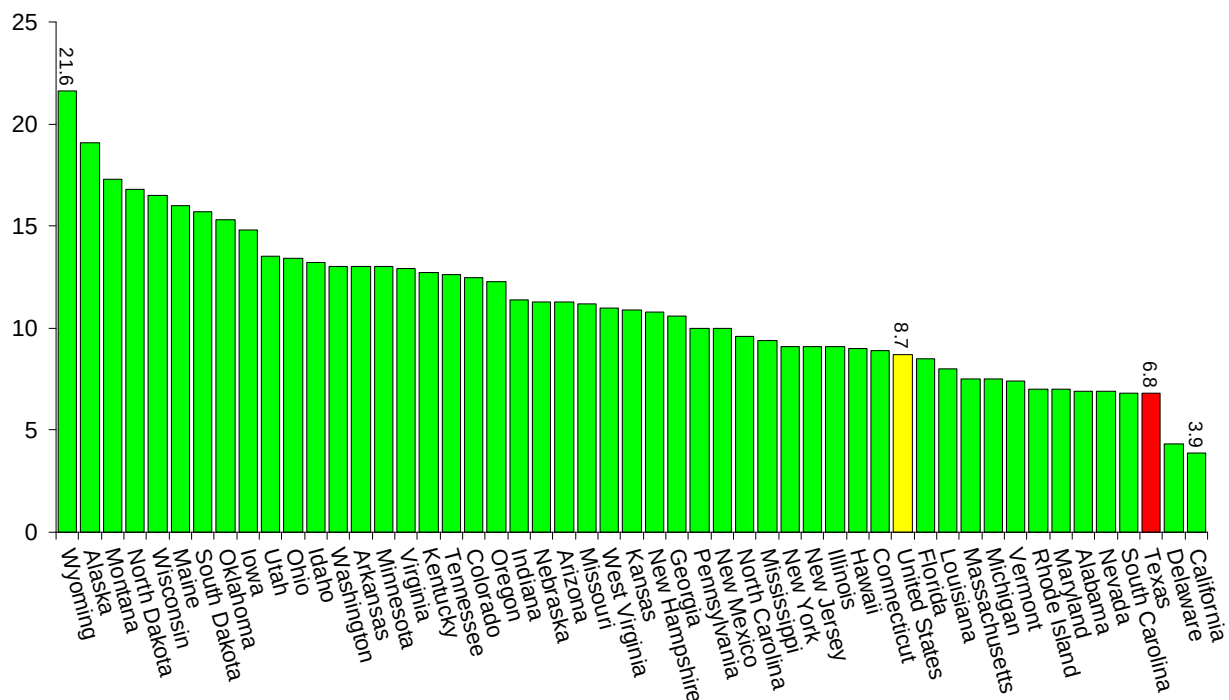


Figure 31. Adults Age 18-64 Who Speak English Poorly or Not at All, 2006

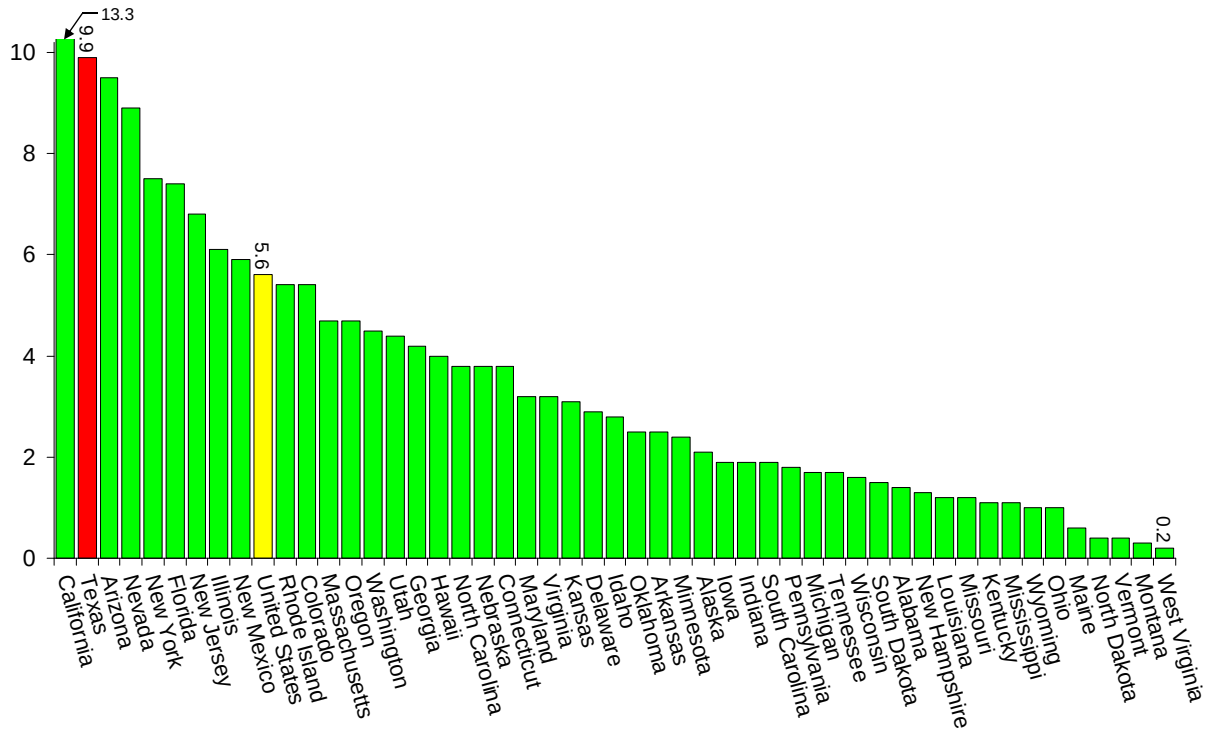


Figure 32. Enrollment in ESL per 1,000 Adults Age 18-64 with Little or No English Proficiency, 2006

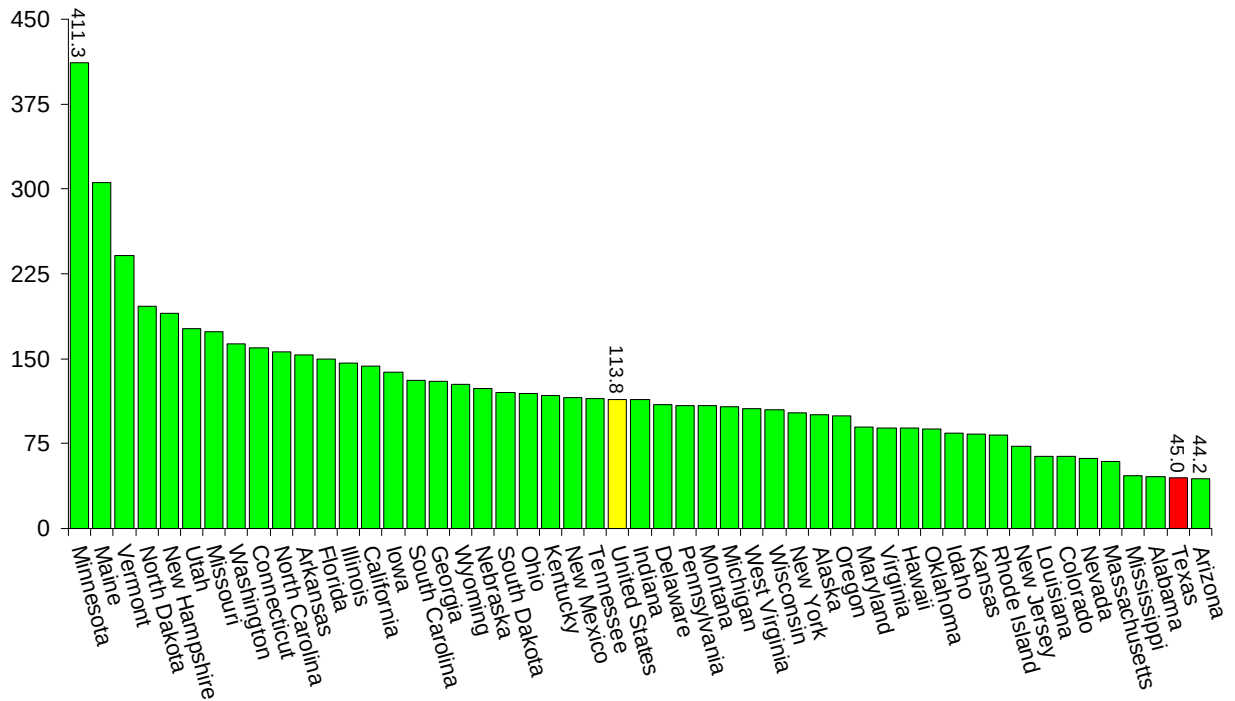
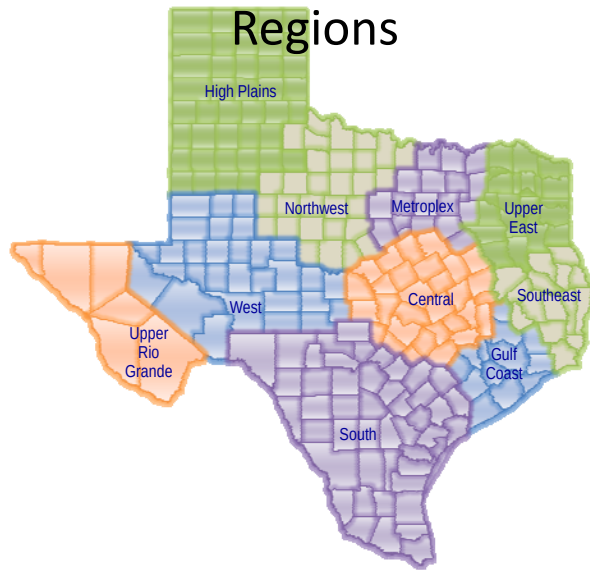


Table 5. Degree production necessary to achieve the percentage of the population ages 25-64 with an associate degree and above by 2025 at the level of the best performing country (55%)

	Degrees in Population Ages 25-64	Degrees Per Year	Percent Increase from 2005
A. Population (age 25-64) with an associate degree and above to match best performing countries by 2025 (55% of population)	8,167,585		
B. Population (age 25-64) currently with associate degree and above (2005)	2,112,582		
C. Degrees needed to meet best performing countries (A minus B)	6,055,003		
D. Degrees produced at rate in 2005 (122,269) for 20 years	2,445,380	122,269	
E. Additional degrees from population growth (2005 to 2025)	289,725	14,486	11.8%
F. Additional degrees from net migration	810,017	40,501	33.1%
Subtotal: Additional degrees from current production, population growth and migration (D+E+F)	3,545,122	177,256	145.0%
Remaining Gap: 6,055,003 minus 3,545,122	2,509,881	125,494	102.6%
G. Improvements in Pipeline Performance (Cumulative):			
• Reaching Best State Performance in High School Graduation Rates in U.S. by 2025	105,221	5,261	4.3%
• Reaching Best State Performance in U.S. in College-Going Rates by 2025	331,665	16,583	13.6%
• Reaching Best State Performance in U.S. in Degree Production per FTE Student	750,399	37,520	30.7%
Subtotal: Improved Pipeline Performance	1,187,285	59,364	48.6%
Remaining Gap	1,322,596	66,130	54.1%
H. Degrees Earned by Returning Adults	1,322,596	66,130	54.1%

Figure 33. Texas Post Secondary Education Regions

Texas Postsecondary Education Regions



Source: Texas Higher Education Coordinating Board

Figure 34. Change in Education Pipeline, 2000-2006

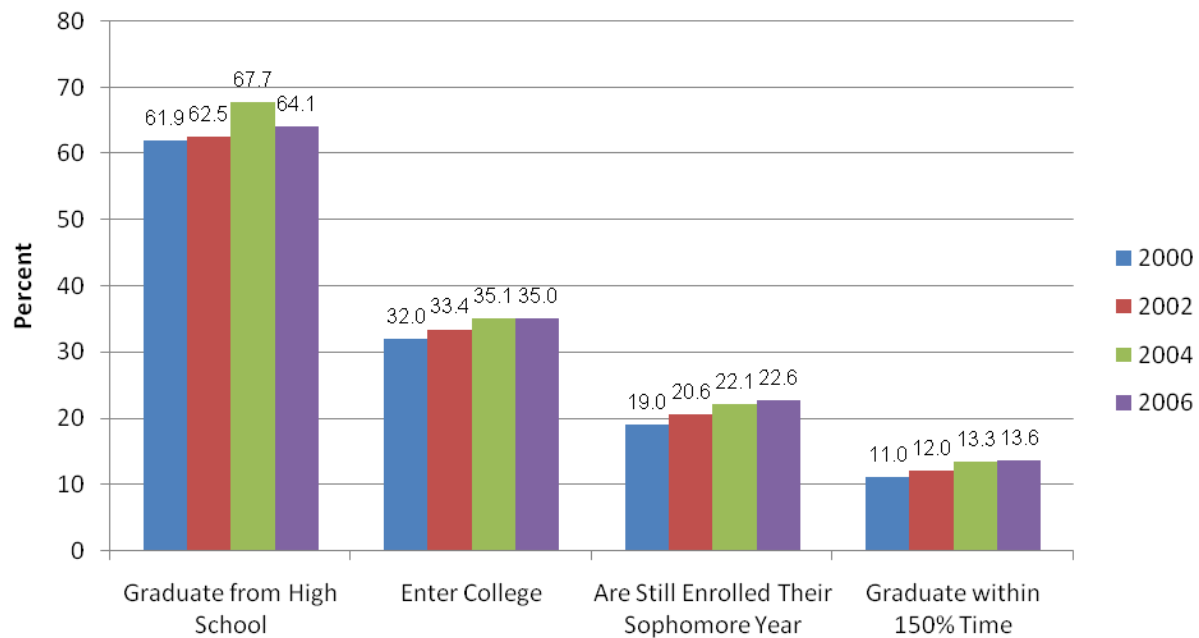
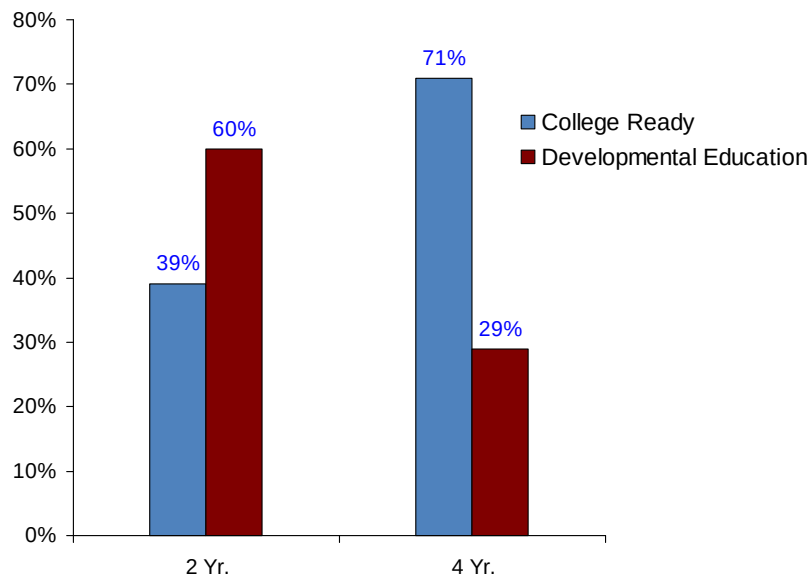
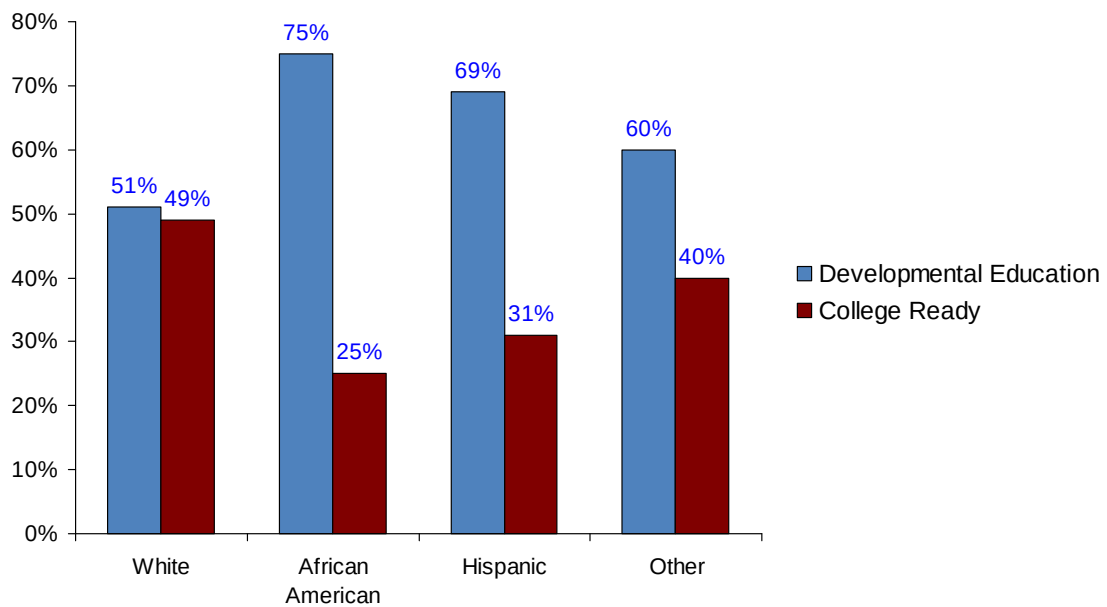


Figure 35. 1st Time-in-College (FTIC) Students in 2- & 4-Year Institutions by College Readiness, Fall 2003



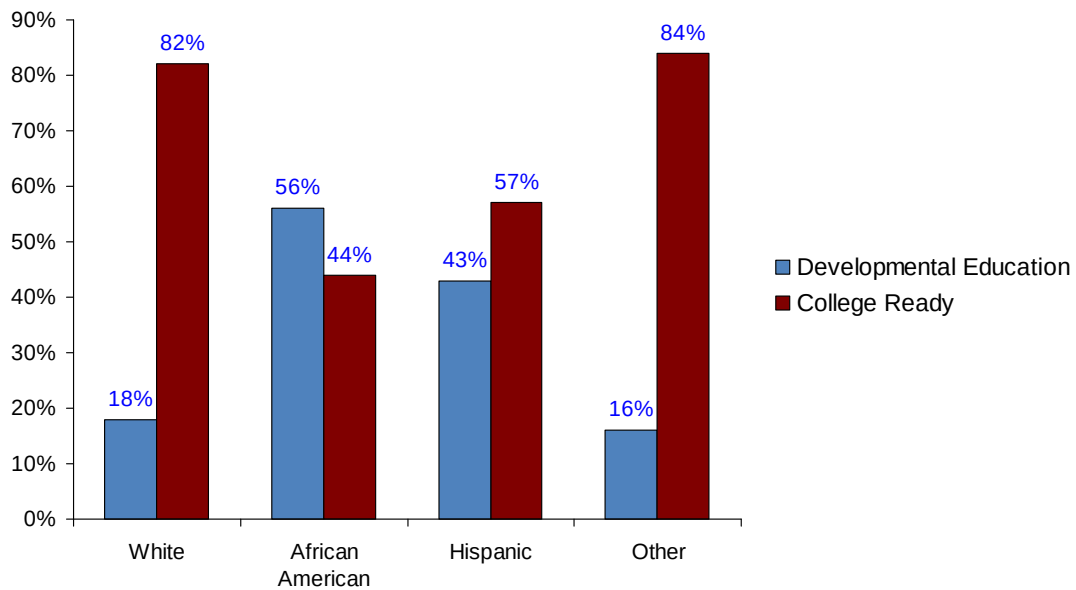
Source: THECB

Figure 36. 2-Year FTIC Students by College Readiness and Ethnicity, Fall 2003



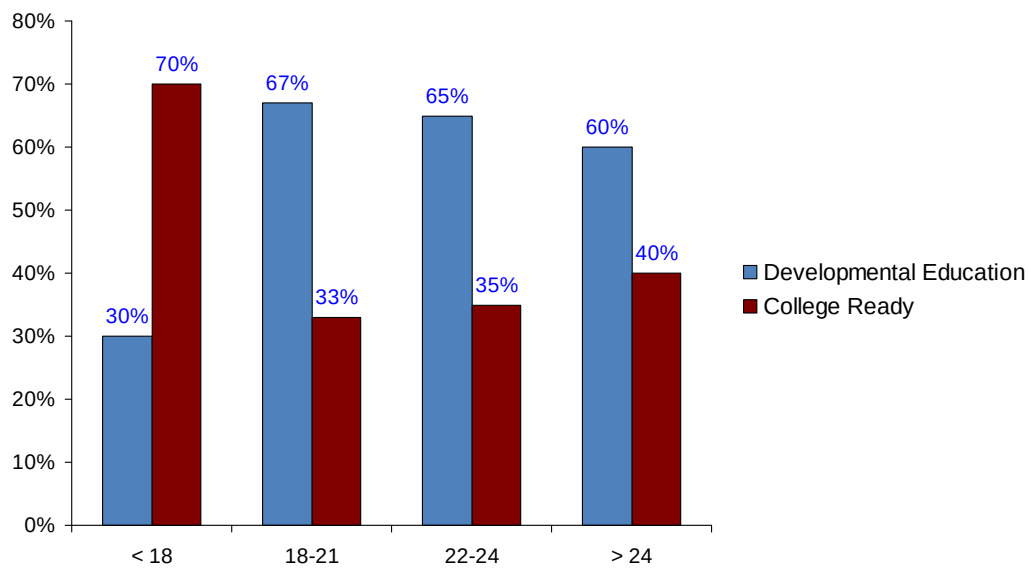
Source: THECB

Figure 37. 4-Year FTIC Students by College Readiness Status and Ethnicity, Fall 2003



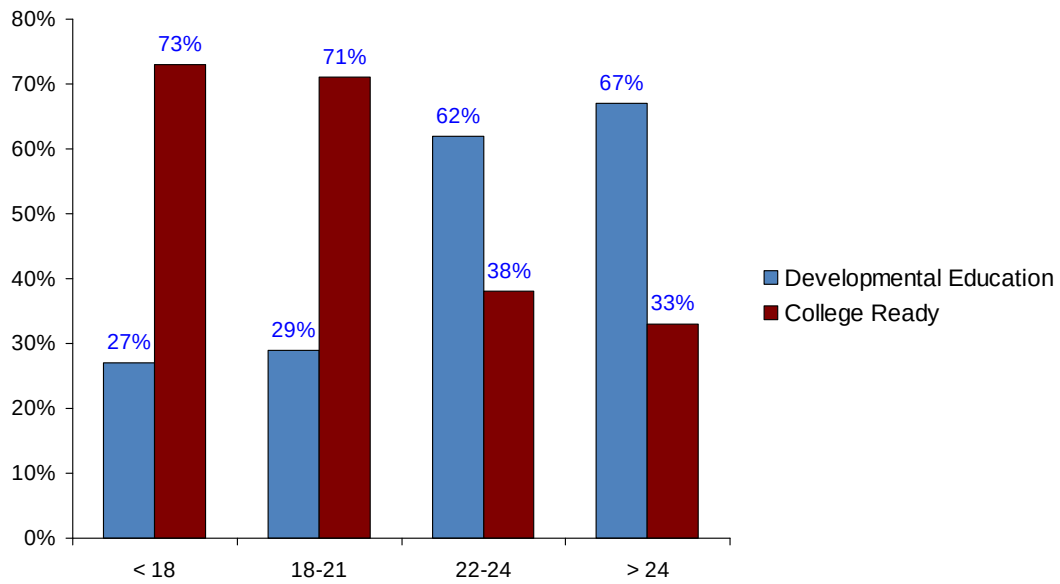
Source: THECB

Figure 38. 2-Year FTIC Students by College Readiness Status and Age, Fall 2003



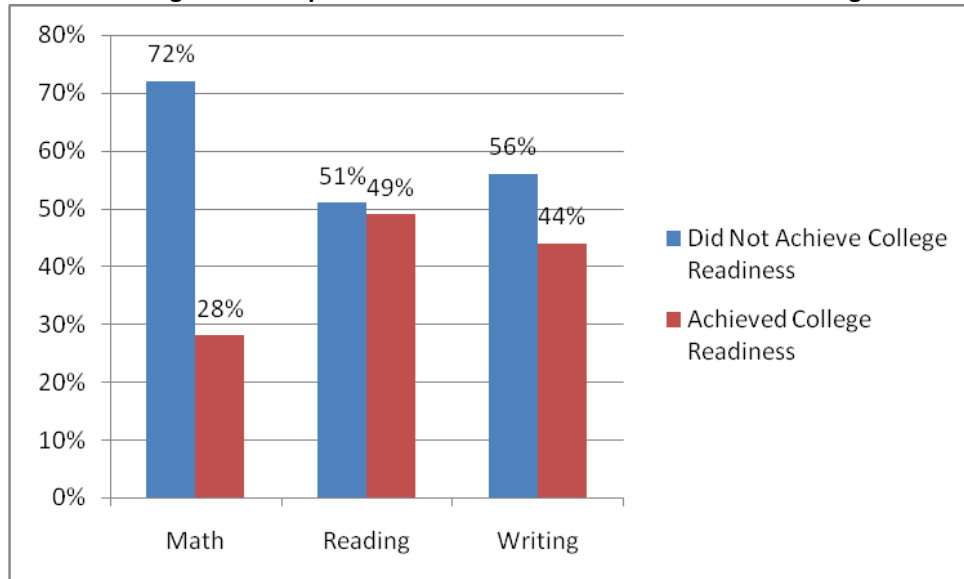
Source: THECB

Figure 39. 4-Year FTIC Students by College Readiness and Age, Fall 2003



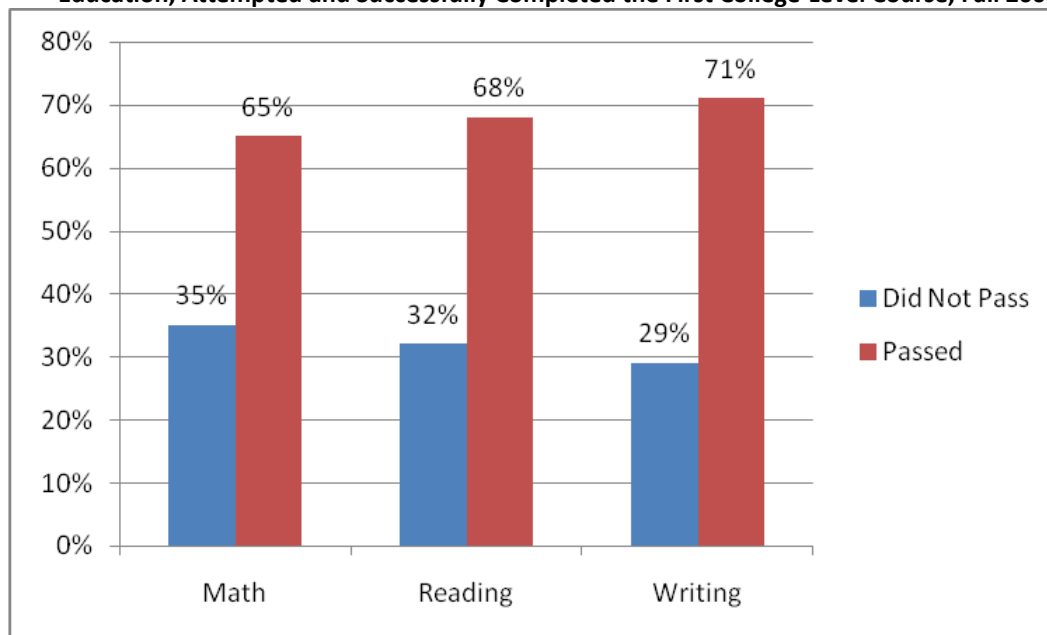
Source: THECB

Figure 40. Percentage of Developmental Education Students Who Achieved College Readiness, Fall 2003



Source: THECB

Figure 41. Percentage of FTIC Developmental Education Students Who Completed Developmental Education, Attempted and Successfully Completed the First College-Level Course, Fall 2003



Source: THECB

Figure 42. Undergraduate Credentials Awarded per 100 FTE Undergraduates, 2002-03

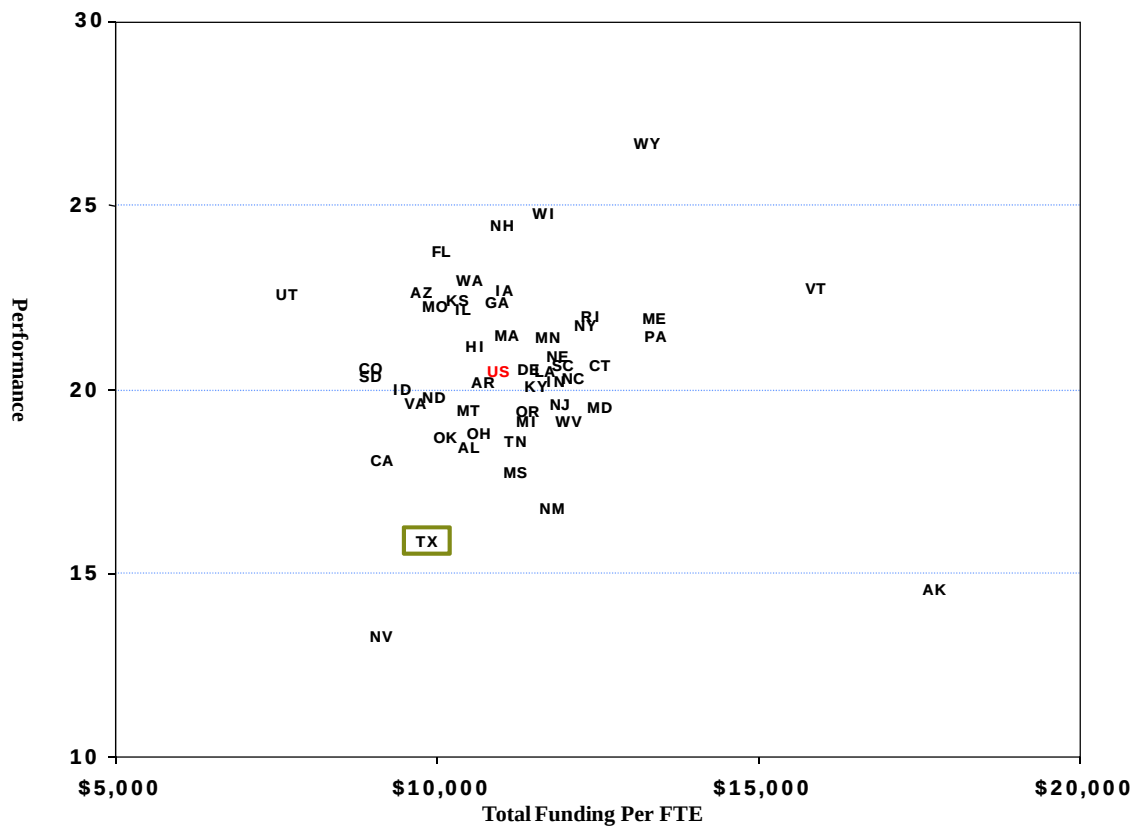
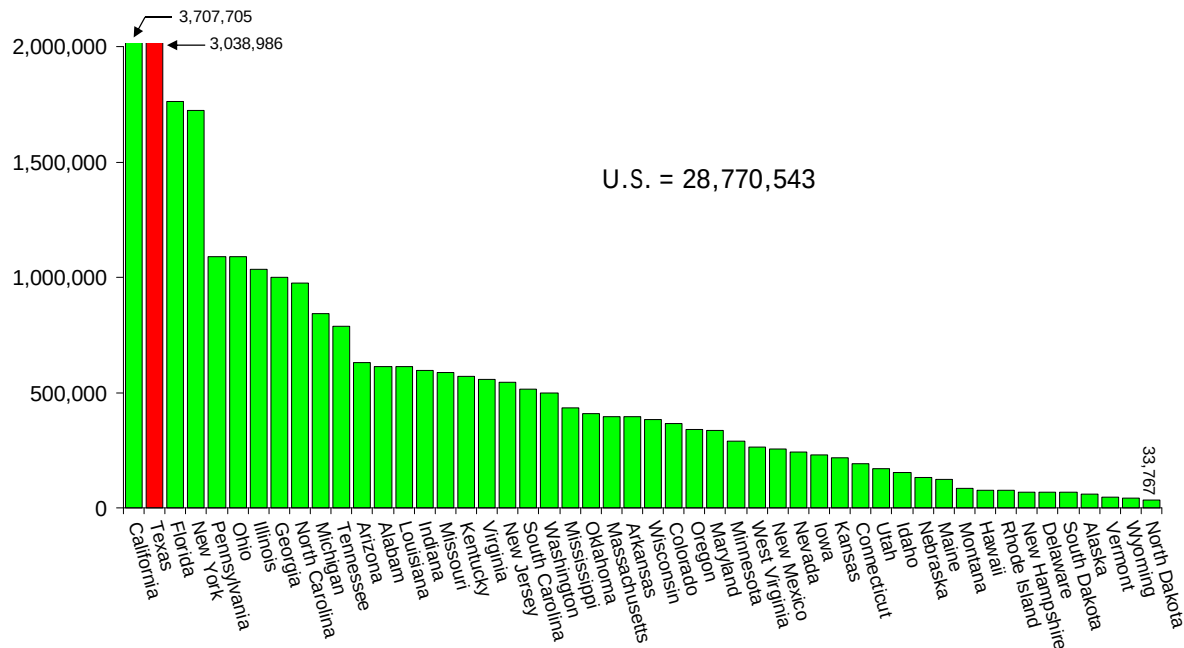


Figure 43. Number of Adults Age 18-64 with Only a High School Diploma or Less in Families with Incomes Below a Living Wage* by State, 2005



*200% of Poverty Level. Source: U.S. Census Bureau, 2005 ACS

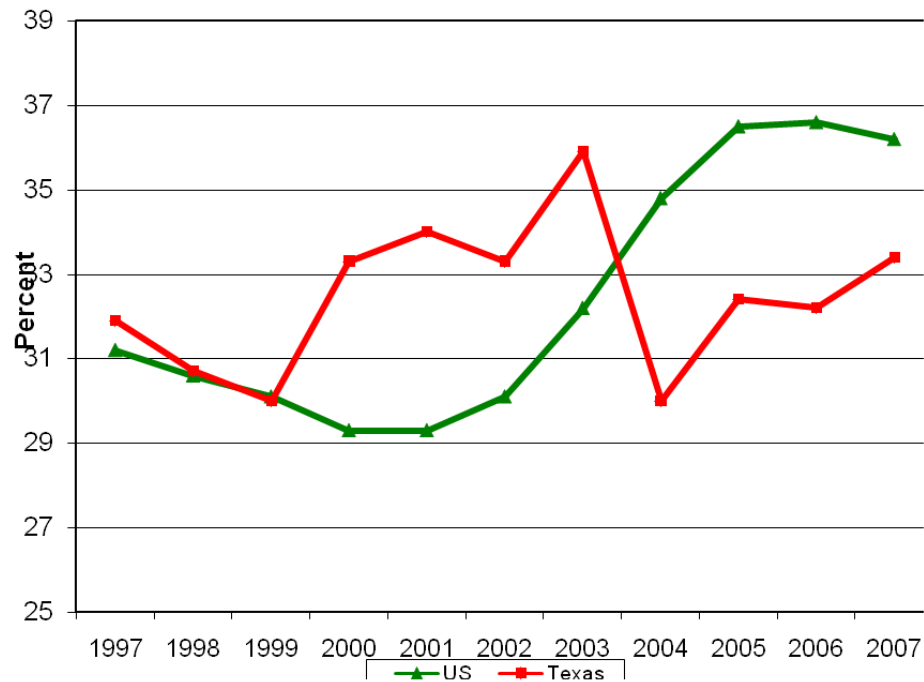
Figure 44. Measuring Up 2008, Affordability

	Early 1990s	Measuring Up 2008	Top State	Source
Percent of income (average of all income groups) needed to pay for college expenses minus financial aid:				
• At community colleges	15% (1990-00)	21% (2007)	13%	NCES IPEDS, U.S. Census Bureau, 2006 ACS
• At four-year public colleges/universities	18% (1990-00)	26% (2007)	10%	NCES IPEDS, U.S. Census Bureau, 2006 ACS
• At four-year private colleges/universities	42% (1990-00)	67% (2007)	30%	NCES IPEDS, U.S. Census Bureau, 2006 ACS
State investment in need-based financial aid as compared to the federal investment	7% (1992-93)	32% 2007	89%	U.S. Department of Education, Office of

				Postsecondary Education
At lowest-priced colleges, the share of income that the poorest families need to pay for tuition	8% 1992-93	14% 2007-2008	7%	U.S. Census Bureau, 2006 ACS
Average loan amount that undergraduate students borrow each year	\$2,873 1994-95	\$4,723 2006-7	\$2,619	NSLDS, FY2009 President's Budget Loan Volumes

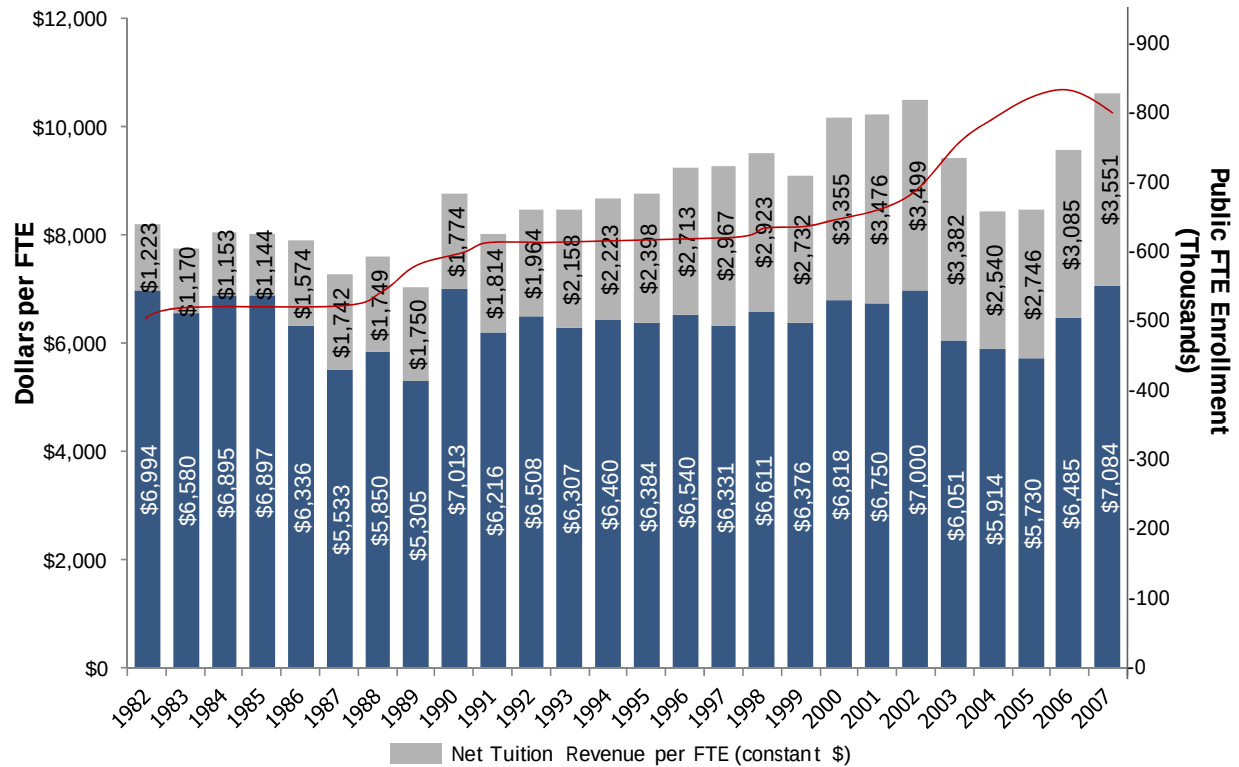
Source: National Center for State Policy and Higher Education (2008). Measuring Up 2008.

Figure 45. Net Tuition Revenue as Percentage of Total Education Revenue, 1997 to 2007, Texas and U.S.



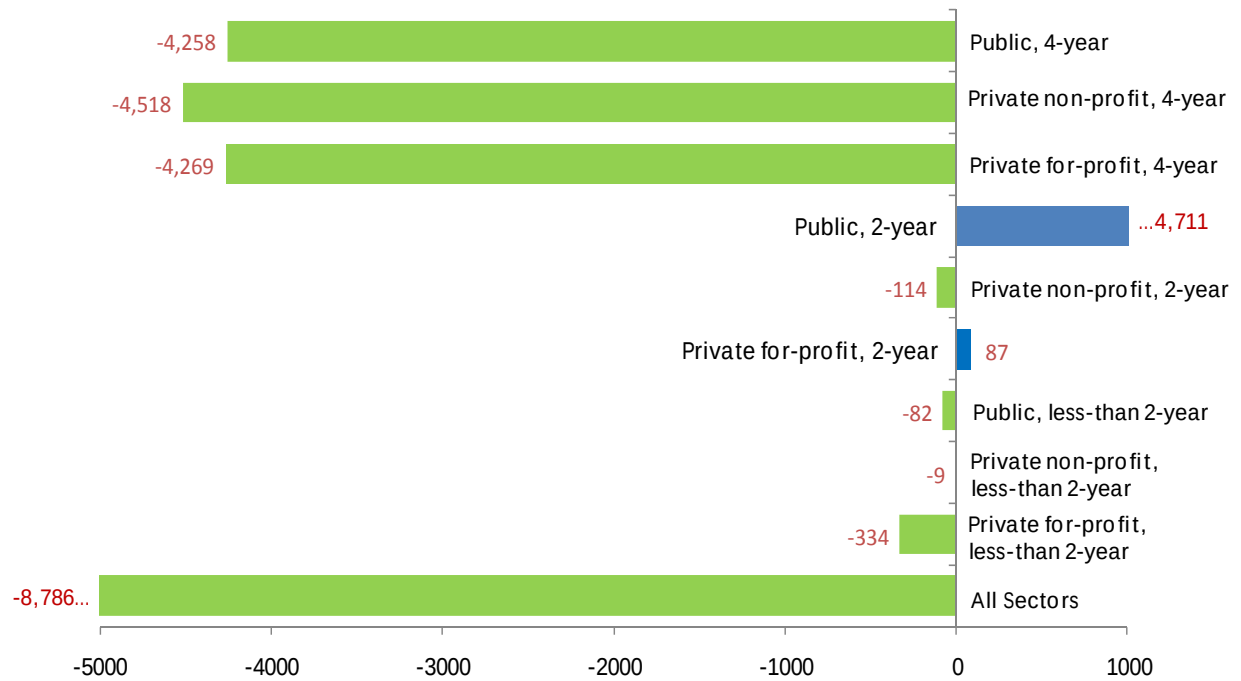
Source: State Higher Education Executive Officers, 2007

Figure 46. Public FTE Enrollment, Educational Appropriations and Total educational Revenue per FTE, Texas - Fiscal 1982-2007



Note: Constant 2007 dollars adjusted by SHEEO Higher Education Cost Adjustment (HECA) **Source:** SHEEO

Figure 47. Texas Net Migration of First-time College Students by Sector (Fall 2006)



Source: NCHEMS NCES IPEDS Enrollment Survey, Part C, Fall 2006

Table 6. Out -of-State Institutions Attended by Texas Residents, Fall 2006

Institution	State	Number of First-Time Undergraduate Students
University of Phoenix-Online Campus	AZ	1242
University of Oklahoma Norman Campus	OK	763
American Intercontinental University Online	IL	717
Western International University	AZ	575
Oklahoma State University-Main Campus	OK	465
Olympian University of Cosmetology	NM	444
University of Arkansas Main Campus	AR	343
Colorado Technical University Online	CO	323
Kaplan University	IA	310
Louisiana State University and Agricultural & Mechanical College	LA	269
Brigham Young University	UT	221
University of Mississippi Main Campus	MS	192
New Mexico State University-Main Campus	NM	166
The University of Alabama	AL	165
Harding University	AR	161
Wyo Tech	WY	155
New York University	NY	147
University of Colorado at Boulder	CO	146
University of Kansas Main Campus	KS	145
Vanderbilt University	TN	145
University of Southern California	CA	140
United States Military Academy	NY	134
University of Arizona	AZ	130
University of Missouri-Columbia	MO	129
High-Tech Institute-Phoenix	AZ	127
University of Notre Dame	IN	125
Arizona State University at the Tempe Campus	AZ	120
Ouachita Baptist University	AR	120
Southeastern Oklahoma State University	OK	116
Boston University	MA	115
Northwestern State University of Louisiana	LA	112
United States Air Force Academy	CO	110
Stanford University	CA	109
University of Phoenix-New Mexico Campus	NM	109
Eastern New Mexico University-Main Campus	NM	108
Louisiana Tech University	LA	104
Tulane University of Louisiana	LA	100
Brigham Young University-Idaho	ID	98
Oklahoma Christian University	OK	98
Grambling State University	LA	96
Duke University	NC	95
Purdue University-Main Campus	IN	95
Auburn University Main Campus	AL	94
Washington University in St Louis	MO	93
University of Tulsa	OK	93
United States Naval Academy	MD	92
Northwestern University	IL	91
Southern University and A & M College	LA	90
Florida Metropolitan University-Brandon	FL	90
Colorado State University	CO	86
Full Sail Real World Education	FL	86
Oral Roberts University	OK	85
Emory University	GA	83
Harvard University	MA	79
Langston University	OK	78
Western Governors University	UT	78
Hendrix College	AR	77

Institution	State	Number of First-Time Undergraduate Students
Savannah College of Art and Design	GA	76
University of Nebraska at Lincoln	NE	76
Southwestern Oklahoma State University	OK	76
Southern Arkansas University Main Campus	AR	74
University of Georgia	GA	73
Southern Nazarene University	OK	73
Pepperdine University	CA	72
Cornell University	NY	72
DeVry University-Illinois	IL	71
Massachusetts Institute of Technology	MA	71
New Mexico Junior College	NM	71
McNeese State University	LA	70
New Mexico State University-Dona Ana	NM	70
Henderson State University	AR	69
Howard University	DC	69
Gemological Institute of America	CA	68
University of Central Arkansas	AR	66
Clark Atlanta University	GA	65
Oklahoma Baptist University	OK	65
Centenary College of Louisiana	LA	64
Kansas State University	KS	62
Oklahoma City University	OK	62
Westwood College-Denver North	CO	61
Indiana University-Bloomington	IN	61
New Mexico Military Institute	NM	60
University of Louisiana at Lafayette	LA	59
George Washington University	DC	58
Saint Louis University-Main Campus	MO	58
Belmont University	TN	58
Princeton University	NJ	57
Florida Metropolitan University-South Orlando	FL	56
Georgetown University	DC	55
Rhodes College	TN	55
Southwest Technology Center	OK	55
Embry Riddle Aeronautical University-Daytona Beach	FL	54
University of Pennsylvania	PA	54
University of Miami	FL	53
Georgia Institute of Technology-Main Campus	GA	53
University of Denver	CO	52
Spartan College of Aeronautics and Technology	OK	52
Colorado School of Mines	CO	51
Everest College-Phoenix	AZ	50
Source: NCES, IPEDS		

Figure 48. Different Approaches to Research Rankings

1. Total R&D Expenditures

- By State – 2nd
- By Institution – Top 100
 - 22 Baylor College of Medicine
 - 25 Texas A&M
 - 35 UT MD Anderson
 - 36 UT Austin
 - 42 UT Southwest Medical Center, Dallas
 - 90 UT Medical Branch
 - 97 UT HSC, Houston
 - 99 UT HSC, San Antonio

2. Federally Financed R&D Expenditures

- By State – 4nd
- By Institution – Top 100
 - 20 Baylor College of Medicine
 - 33 UT Austin
 - 42 UT Southwest Medical Center, Dallas
 - 50 Texas A&M
 - 57 UT MD Anderson
 - 80 UT HSC Houston
 - 85 UT Medical Branch
 - 99 UT HSC San Antonio

3. Total R&D Expenditures, Institutions Without MD Granting Medical School – Top 20

- 3 Texas A&M
- 4 UT MD Anderson
- 7 UT Austin

4. Shanghai Rankings – Top 100

- 39 UT Austin
- 41 UT SW Medical Center
- 88 Texas A&M
- 97 Rice University

Appendix C. HB 1 Summary

Summary of Key Provisions of HB 1, 79th Legislature, 3rd Called Session

Related to Preparation for Postsecondary Success

- Adds a section to the TEA School District indicator system on the measure of student progress toward preparation for postsecondary success. (sec. 3.10)
- Requires that the Commissioner of Education and the Commissioner of Higher Education establish vertical teams of faculty from public education and higher education. The teams will:
 - Recommend standards and expectations of college readiness for approval by the Coordinating Board and for inclusion by the State Board of Education (SBOE) in the high school curriculum;
 - Evaluate current high school curriculum requirements to determine whether or not they adequately prepare students to meet college-readiness standards;
 - Develop instructional strategies for teaching the curriculum so that students are prepared to successfully perform college-level work;
 - Develop standards for curricula and educational materials in English, mathematics, science, and social studies for students who need additional assistance in preparing to successfully perform college-level course work.
- Requires each school district to implement a program by which a student may earn the equivalent of at least 12 semester credit hours of college credit in high school. Requires institutions of higher education to assist school districts in developing and implementing the program upon request
- Requires the SBOE to require that curriculum requirements for the Recommended and Advanced high school programs include four courses in each subject of the foundation curriculum (English language arts, mathematics, science, and social studies). (Sec. 5.02)
- To the extent practicable, TEA is to ensure that any high school end-of-course assessment instrument is developed in such a way that it may also be used to determine the appropriate placement of a student in a course of the same subject at an institution of higher education.
- Provides that authorized school district uses of the funds generated from the high school allotment include:
 - College-readiness programs that provide academic support to prepare underachieving students for higher education;
 - Opportunities including early college high school and dual credit programs, advanced placement, and international baccalaureate courses;
 - Programs that provide opportunities for students to take academically rigorous course work including four years of math and four years of science;
 - Programs that align curriculum for grades six through 12 with postsecondary curriculum and expectations (sec. 5.06)
- Requires the P-16 Council to recommend to the Commissioner of Education and the Coordinating Board for adoption a college-readiness and success strategic plan designed to decrease the number of students enrolling in developmental coursework in college. The Action Plan is to include:

- Definitions, of the standards and expectations for college readiness that address the knowledge and skills expected of students to perform successfully in entry-level courses offered at institutions of higher education;
- A description of the components of a P-16 individualized graduation plan sufficient to prepare students for college success;
- A manner in which the Texas Education Agency should provide model curricula for use as a reference tool by school district employees;
- Recommendations to the Texas Education Agency, the State Board of Education, and the board regarding strategies for decreasing the number of students enrolling in developmental course work at institutions of higher education (Sec. 5.08)
- Requires the THECB to develop programs to enhance student success including:
 - Summer higher education bridge programs in math, science, and English;
 - Incentive programs for institutions of higher education that implement research-based, innovative developmental education initiatives;
 - Financial assistance programs for educationally disadvantaged students who take college entrance and college-readiness assessment instruments;
 - Professional development programs for faculty of institutions of higher education on college-readiness standards
 - Other programs that support the participation and success goals in *Closing the Gaps*.
- Requires the Coordinating Board to implement a Course Redesign Project under which institutions of higher education selected by the Board will review and revise entry-level lower-division academic courses.
- Mandates that a school district or campus use the high school allotment allocated under Section 42.2516(b)(3) of the Education code to:
 - Implement or administer a college readiness program that provides academic support and instruction to prepare underachieving students for entrance into an institution of higher education;
 - Implement or administer a program that encourages students to pursue advanced academic opportunities, including early college high school programs and dual credit, advanced placement, and international baccalaureate courses;
 - Implement or administer a program that provides opportunities for students to take academically rigorous course work, including four years of mathematics and four years of science at the high school level;
 - Implement or administer a program, including online course support and professional development, that aligns the curriculum for grades six through 12 with postsecondary curriculum and expectations; or
 - Implement or administer other high school completion and success initiatives in grades six through 12 approved by the commissioner.

Appendix D. Task Force on Higher Education Incentive Funding Executive Summary

EXECUTIVE SUMMARY

Governor Rick Perry established the Task Force on Higher Education Incentive Funding by Executive Order RP 67 to develop recommendations for an incentive funding program for all public institutions of higher education that rewards student and institutional outcomes that are aligned with state and regional priorities.

The Task Force was intended to complement the work of the Select Commission on Higher Education and Global Competitiveness created by House Concurrent Resolution No. 159 of the 80th Texas Legislature, Regular Session, 2007.

Specifically, the Task Force was charged with recommending: 1) a structure for higher education funding to reward student and institutional outcomes that are aligned with the objectives of H.C.R. No. 159; 2) use of incentive funds appropriated to the Texas Higher Education Coordinating Board by the 80th Texas Legislature for the public general academic teaching institutions (House Bill No. 1, page III-241, Section 55(4)); and 3) a system of incentive funding for all public institutions of higher education for consideration by the 81st Texas Legislature in making appropriations for the 2010-11 fiscal biennium. By agreement among state leadership, the Task Force was also asked to develop an incentive funding plan for fiscal year 2009 for the state two-year institutions and to recommend an amount for the two-year institutions in the event that funds become available.

Many diverse, competing ideas were proposed, discussed and voted upon. It is the consensus of the Task Force that our recommendations not only address the Governor's directive, but also can achieve a level of institutional and legislative support necessary for effective implementation.

As referenced above, the 80th Texas Legislature appropriated \$100 million for higher education incentive funding in fiscal year 2009. An unspecified amount of those funds was authorized for scholarships for undergraduate students who have graduated with a grade point average in the top 10 percent of their high school graduating class. Many students who enroll in Texas universities fail to graduate, especially those who enter as "at risk" students by virtue of their background. In addition, Texas has critical shortages of degrees in technology, nursing, and allied health, and a shortage of math and science teachers.

RECOMMENDATIONS FOR FISCAL YEAR 2009

1. The Task Force recommended that of the \$100 million appropriated to the Coordinating Board for fiscal year 2009, that:
 - A. \$20 million is allocated for scholarships for Top 10 percent high school graduates enrolled in state four-year or two-year institutions. The criteria and distribution is to be determined by the Coordinating Board.

B. \$80 million is allocated to the public general academic teaching institutions as follows:

- \$40 million to be distributed based on the annual average number of degrees awarded at each institution during the three most recent fiscal years (2006, 2007, and 2008), with a weight of 1.0 for each degree, an additional 1.0 if the degree is in a “Critical Field”, and an additional 1.0 for each bachelors degree recipient who was an “At- Risk” student.
 - \$40 million to be distributed based on the increase in the number of degrees awarded in the two most recent fiscal years (2006 and 2007), compared to the annual average of the two previous fiscal years (2004 and 2005), with weightings the same as above.
2. The Task Force recommended that an additional \$40 million be made available for the public two-year institutions based on the average number of Certificate Recipients, Associate Degree Recipients, and students who transferred to a four-year or health-related institution in the three most recent fiscal years (2006, 2007, 2008), all with a weighting of 1.0. An additional weight of 0.5 is applied for each student who was “At-Risk” and another 0.5 for each Certificate or Associate Degree Recipient in a Critical Field.

For purposes of these recommendations, “Critical Fields” are those identified in the Coordinating Board’s 15-year master plan for higher education entitled *Closing the Gaps*. For the general academics, these are engineering, computer science, math, physical science, allied health, nursing and education (math and science teacher certificates only). For the two-year institutions, these are engineering technology, computer science, math, physical science, allied health, and nursing. “At-Risk” students are defined as students who meet any of the following conditions: ACT/SAT scores below the national mean, low-income (Pell Grant recipient), 20 years of age or older when entered college for the first time, entered college as a part-time student, or earned a GED within the last six years.

RECOMMENDATIONS FOR FISCAL YEARS 2010-11 AND BEYOND

The task force recommended an average annual increase of \$470 million for incentives at general academic institutions, two-year institutions, health-related institutions, in addition to existing appropriations for “Higher Education Incentive Funding,” including research excellence incentives that total \$120 million per year and student success incentives averaging \$57 million per year. \$470 million represents an average annual increase of approximately 11 percent over FY 2008-09 GR Appropriations to these institutions. These amounts provide incentives to increase the number of graduates (success) and externally funded research (excellence). The amounts to reward graduations were chosen because they reflect approximately nine percent of general revenue and approximate the levels proposed by Governor Perry to the 80th Legislature in 2007.

For the general academic institutions, the Task Force recommended \$185 million per year (\$370 million for the biennium) to be distributed based on a combination of the total graduates, increases in the number of graduates and the number of graduates who received an acceptable score on an optional standardized exam. A higher weight would be given if a degree is in a critical field or if a degree recipient was an at-risk student. The \$185 million per year would be an average annual increase of approximately \$135 million per year beyond the student success

incentives appropriated as “Higher Education Incentive Funding” for FY 2008-09, which currently averages \$50 million per year. The Task Force also recommended that a total of \$185 million per year (\$370 million for the biennium) be provided for incentives to increase external research funding. This would be a net increase of \$98 million per year above and beyond the incentives appropriated in FY2008-09 as “Higher Education Incentive Funding” through the Research Development Fund and the Competitive Knowledge Fund (which currently total \$87 million per year).

The Task Force recommended \$92.5 million per year (\$185 million for the biennium) for the two- year institutions to be based on certificate and associate degree recipients and transfers to four-year or health-related institutions. Similar to the general academic teaching institutions, the distribution would be based on a combination of total recipients/transfers, increases in recipients/transfers, and an acceptable score on optional standardized exams, with additional weights for critical fields and at-risk students.

For the health-related institutions, the recommendation is to provide \$92.5 million per year (\$185 million for the biennium) to be distributed based on a combination of total certificate and degree recipients and medical residency completers, increases in recipients and completers, and the number of recipients and completers who received an acceptable score on an optional standardized exam. The Task Force also recommended \$92.5 million per year (\$185 million for the biennium) be provided for incentives to increase external research funding. This would be a net increase of \$59 million per year beyond the research incentives already provided through the current Health Related base formula, which is currently funded at \$33.3 million per year (\$66.6 million for the biennium).

Note the Texas Higher Education Coordinating Board has recommended in their 2010-11 Biennium Funding Formula Recommendations that a new element entitled “performance” be added to the base formulas for general academic and two-year institutions, which would be distributed based on graduations and completions, and transfers. If the THECB “performance” recommendation were fully adopted, a portion of the recommended funding of this Task Force would be funded in the base formulas. Note also that \$7.35 million per year was appropriated in both FY2008 and FY2009 as “Higher Education Incentive Funding” for Nursing Shortage Reduction, and if continued, a portion of the recommended funding of this Task Force would be funded through this mechanism.

BENEFITS OF THE RECOMMENDATIONS

1. The proposal is simple and understandable.
2. To maximize funding, institutions will have to improve the following:
 - Retention
 - Time to degree
 - Four-, five-, and six-year graduation rates
 - Number of transfers from two-year institutions
 - Space utilization
 - Counseling to reduce wasted credit hours

- Course completion
 - Remedial or developmental education
3. The proposal rewards student and institutional outcomes that are aligned with state and regional priorities. Institutions receive larger rewards for:
 - Degrees awarded in critical fields that are necessary to assure the workforce needs of the Texas economy in the decades ahead.
 - Degrees awarded to at-risk students, which should improve educational attainments in groups affecting the state's dramatically changing demographic trends.
 - Students who do well on appropriate standardized exams, which assures quality academic programs.
 4. The proposal rewards the aspect of research most crucial to the State, that of bringing in external dollars.
 - External dollars brought to Texas will enhance economic development.
 - External funding is generally received from competitive sources, ensuring a high quality of research is available to provide quality graduate degrees.
 5. The proposal does not:
 - Reward institutions for everything they do well.
 - Reward inputs or processes.
 - Include redundant measures.

Appendix E. Oregon Shared Responsibility Model

The basic premise of the Shared Responsibility Concept is that assuring affordable higher education, from a public policy perspective, many partners either share responsibility or concern for assuring college affordability.

The Responsible Partners: Four partners legitimately *share responsibility* for financing the costs of attending college.

The Student Expectation - The first partner in this shared partnership is the student, who, after all, is the principle beneficiary of the education being received. All Oregon students should be expected to contribute at least \$4,750 (in 2006 dollars) annually toward the costs of their education. This amount will be increased annually by the Consumer Price Index (CPI) to reflect the annual increased earning capacity of these students. To earn this amount a student would have to work about 15 hours per week at minimum wage for the full year or 10 hours per week while in school and full-time during the summer. On the other hand, if the student chose to borrow this amount rather than work, the equivalent debt of \$9,500 would result in a debt burden that would be quite manageable, given the average earnings of a student with a two-year degree or certificate.

A student attending an Oregon public university would be able to pay through ***the combination of*** work and borrowing. This reflects the philosophy that there should be a cost of choice, but that this cost of choice should still assure affordable higher education in Oregon. Students attending public universities in the state should be expected to contribute the same \$4,750 from earnings that are expected of community college students, but that they should also be expected to borrow \$2,750 annually. This borrowing expectation would leave these students with a debt of between \$11,000 over four years or \$13,750 over five years, on average.

Furthermore, students who have ***earned*** scholarships for the current or past academic performance would be able to use them toward their expected contribution. Treating scholarships and other financial awards as part of the students' contribution, rather than as an offset of the State's responsibility, has two positive effects. First, it rewards students appropriately for accepting their responsibility to prepare and perform well academically. Second, it provides a positive incentive for civic and philanthropic partners to provide student assistance, which they can be assured will benefit the individuals they seek to assist and not simply substitute for public support.

The Family's Expectation - After the student, the parents of a dependent student, or the spouse if a student is married, should clearly accept responsibility, to the extent that they can, for educating their child or mate before they expect others to do so from tax-supported public funds. But to the extent possible they should be expected to contribute. Recent changes in federal law increase the incentive for parents to save for their children's college education through state savings and tuition prepayment plans, further reinforcing the ability of parents to meet this responsibility.

Maximizing the Federal Partnership - The third responsible partner is the federal government, which through the federal Pell grant program assists virtually any student from a low and moderate income family, and through tax credits and deductions assists most students from middle-income backgrounds. .

Oregon's Share (Filling the Gap) - The fourth shared responsibility partner is the State. If the student and her or his parents have contributed all they reasonably can contribute, and federal resources have been taken full advantage of, then the state must do what ever it can to fill the gap or accept the reality the college won't be truly affordable.

Source: David Longanecker, Western Interstate Commission on Higher Education (WICHE).

Appendix F. Closing the Gaps

Background

In October 2000, the Texas Higher Education Coordinating Board adopted *Closing the Gaps by 2015: The Texas Higher Education Plan*. The goal of the Plan is to close educational gaps within Texas and between Texas and other leading states by focusing on the critical areas of participation, success, excellence, and research. When introduced, *Closing the Gaps* was greeted by strong support from educational, business, and political communities. The plan has maintained a high level of visibility and support from these and other entities because of its potential to strengthen Texas' economic base, attract businesses and faculty, generate research funding, improve quality of life, and enhance the overall stature of the state.

At the plan's inception, a primary goal and a number of supporting objectives were adopted for each *Closing the Gaps* goal. Goals for 2015 were set relative to 2000 benchmarks. To assess progress toward meeting the goals, intermediate targets for 2005 and 2010 were identified. Some targets were modified in 2005 in response to new population projections and accelerated progress toward the goals. Adjustments were also made to incorporate the contributions of independent higher education institutions toward *Closing the Gaps*.

Closing the Gaps Goals and Targets Summary

Closing the Gaps in Participation

Revised Goal: By 2015, close the gaps in participation rates to add **630,000** more students.

Revised Targets:

- Increase the overall Texas higher education participation rate from 5.0 percent in 2000 to **5.6 percent** by 2010 and to 5.7 percent by 2015.
- Increase the higher education participation rate for the African-American population of Texas from 4.6 percent in 2000 to **5.6 percent** by 2010, and to 5.7 percent by 2015.
- Increase the higher education participation rate for the Hispanic population of Texas from 3.7 percent in 2000 to **4.8 percent** by 2010, and to 5.7 percent by 2015.
- Increase the higher education participation rate for the White population of Texas from 5.1 percent in 2000 to **5.7 percent** by 2010, and to 5.7 percent by 2015.

Closing the Gaps in Success

Revised Goal: By 2015, **award 210,000 undergraduate** degrees, certificates and other identifiable student successes from high quality programs.

Revised Targets:

- Increase the overall number of students completing bachelor's degrees, associate's degrees and certificates to **171,000** by 2010; and to **210,000** by 2015.

- Increase the number of students completing bachelor's degrees to **100,000** by 2010, and to **112,500** by 2015.
- Increase the number of students completing associate's degrees to **43,400** by 2010; and to **55,500** by 2015.
- Increase the number of students completing doctoral degrees to **3,350** by 2010, and to **3,900** by 2015.
- Increase the number of African-American students completing bachelor's degrees, associate's degrees and certificates to **19,800** by 2010; and to **24,300** by 2015.
- Increase the number of Hispanic students completing bachelor's degrees, associate's degrees and certificates; to **50,000** by 2010; and to **67,000** by 2015.
- Increase by 50 percent the number of students who achieve identifiable successes other than with certificates and degrees by 2015. Exceed the average performance of the 10 most populous states in workforce education provided by community and technical colleges.

Closing the Gaps in Success: Allied Health and Nursing

Revised target: Increase the number of students completing allied health and nursing bachelor's and associate's degrees and certificates to **20,300** by 2010; and to **26,100** by 2015.

Closing the Gaps in Success: Teacher Education

Revised targets for All Teacher Certification Routes:

- Increase the number of teachers initially certified through **all teacher certification routes** to **34,600** by 2010; and to **44,700** by 2015.
- Increase the number of math and science teachers certified through **all teacher certification routes** to **6,500** by 2015.

Closing the Gaps in Research

Revised Goal and Target: By 2015, increase the level of federal science and engineering research and development obligations to Texas institutions to **6.5** percent of obligations to higher education institutions across the nation.

- Increase federal science and engineering obligations to Texas universities and health related institutions from 5.6 percent of the obligations in 2000 (or \$1.1 billion in 1998 constant dollars) to **6.2** percent in 2010, and to **6.5** percent of obligations to higher education by 2015.
- Increase research expenditures by Texas public universities and health-related institutions from \$1.45 billion to \$3 billion by 2015 (approximate 5 percent increase per year).

See THECB website for further information: <http://www.thecb.state.tx.us/ClosingTheGaps/default.cfm>

Appendix G. Glossary/Acronyms

ABE---Adult Basic Education

The state-administered federal programs of adult education and literacy services authorized by Title II of the Workforce Investment Act. The programs provide instruction in reading, numeracy, GED preparation and English literacy. The programs are limited to adults and out-of-school your age 16 and older.

BAC---Bachelor's, Associates, and (postsecondary) Certificates

As used in this report the total of undergraduate postsecondary awards granted by all institutions in a state.

CRS---College Readiness Standards

House Bill 1, enacted by the 79th Legislature, 3rd Called Session, requires that the Commissioner of Education and the Commissioner of Higher Education establish vertical teams of faculty from public education and higher education. Among the tasks assigned to the vertical teams was to recommend standards and expectations of college readiness for approval by the Coordinating Board and for inclusion by the State Board of Education (SBOE) in the high school curriculum.

EFC---Expected Family Contribution

The amount of funds, as calculated using federal student aid methodologies that parents should be expected to contribute to their children's higher education. The calculation considers factors such as family income, assets, no. of children in college, etc.

GED---General Educational Development

Sometimes referred to as a General Equivalency Diploma. A series of five subject area tests that (if passes) indicate that an individual has academic skills consistent with those of a high school graduate in the US.

IPEDS---Integrated Postsecondary Education Data System

The data base of information collected by the federal government about colleges and universities.

NAEP---National Assessment of Educational Progress

Sometimes called the Nation's Report Card, NAEP is the only nationally representative and continuing assessment of what US elementary and high school students know and are able to do in various subject matter areas.

NCES---National Center for Education Statistics

The data collection agency within the US Department of Education.

NCHEMS---National Center for Higher Education Management Systems

A private, nonprofit research and development organization whose mission is to improve strategic decision-making in institutions and agencies of higher education in the US and abroad.

NCPPHE---National Center for Public Policy and Higher Education

A nonprofit, nonpartisan organization that promotes public policies that enhance Americans' opportunities to pursue and achieve education beyond high school. NCPPHE produces **Measuring Up**, the biennial report card on states' performance in higher education.

New Economy Index

An index prepared by the Information Technology and Innovation Foundation that compares states on their relative standing on a variety of scales related to the extent to which the states' economies reflect the "new", technology-based economy. The primary categories of scales used to calculate the index include knowledge jobs, globalization, economic dynamism, transformation to a digital economy, and technological innovation capacity.

OECD---Organisation for Economic Co-operation and Development

An economic research and policy analysis organization of 30 of the world's major industrialized democracies. OECD countries are common reference points for international comparisons.

PUMS---Public Use Microdata Sets

Data sets made available by the Census Bureau that allow analysis of a wide variety of statistics regarding areas with populations of approximately 50,000 individuals.

SBOE---The Texas State Board of Education

An elected 15-member board that oversees the public (p-12) education system of Texas in accordance with the Texas Education Code.

TEA---Texas Education Agency

The agency within state government in Texas responsible for guiding and monitoring activities and programs related to public education in the state.

THECB---Texas Higher Education Coordinating Board

The state agency charged with “providing leadership and coordination for the Texas higher education system to achieve excellence for the college education of Texas students.” THECB is the agency responsible for planning, recommending funding, and assessing progress of the higher education system of Texas.