12 TEXAS INDEX

Texas Workforce Investment Council

The Mission of Texas Workforce Investment Council

Assisting the Governor and the Legislature with strategic planning for and evaluation of the Texas workforce development system to promote the development of a well-educated, highly skilled workforce for Texas.

Texas Index 2012

September 2012

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Introduction

Texas Workforce Investment Council and Texas' Workforce System

The Texas Workforce Investment Council (Council) was created in 1993 by the 73rd Texas Legislature. The Council is charged with promoting the development of a highly skilled and well-educated workforce for the State of Texas. The Council is also charged with assisting the Governor and the Legislature with strategic planning for and evaluation of the Texas workforce system (system).

The system is comprised of the workforce programs, services, and initiatives administered by eight state agencies, 28 local workforce development boards, community and technical colleges, and local adult education providers. System partners include:

Economic Development and Tourism
Texas Association of Workforce Boards
Texas Department of Criminal Justice
Texas Education Agency
Texas Health and Human Services Commission and its Department of Assistive and Rehabilitative Services
Texas Higher Education Coordinating Board
Texas Juvenile Justice Department
Texas Veterans Commission
Texas Workforce Commission

One of the key responsibilities of the Council is to work with its system partners to develop a strategic plan that focuses on the critical objectives that the workforce system must achieve over the next five to 10 years. *Advancing Texas: Strategic Plan for the Texas Workforce System (FY2010-FY2015)* is posted on the Council's website at: **http://governor.state.tx.us/twic/work/**.

The system strategic plan for FY2010-FY2015 was presented for consideration and approval by the Council at its September 2009 quarterly meeting. The plan was approved by the Governor in October 2009. The strategic plan is devised on a six-year time frame to align with the Texas Strategic Planning and Performance Budgeting System. The plan lays out long term objectives (LTO), action plans and performance measures that are to be achieved during the life of the plan. The LTO related to developing the Texas Index states:

Annually, the Council will produce a data set whereby system stakeholders can ascertain Texas' position relative to key indicators of competitiveness.

Development of the Texas Index

The Texas Index was created to provide a series of indicators that give system stakeholders a snapshot of the state's general workforce, education and economic health.

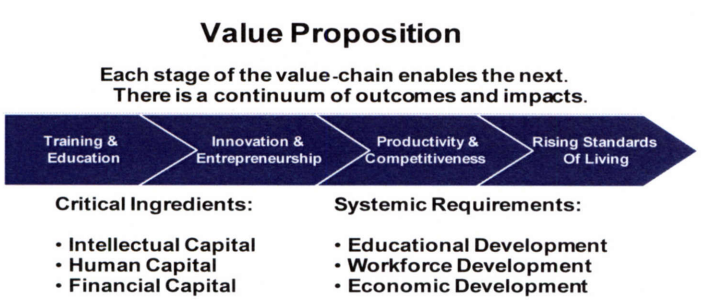
The *Texas Index 2012 (Index)* is the seventh release, providing trend data for a series of 38 indicators across four domains:

- Training and Education (10)
- Research and Development (10)
- Market Composition and Characteristics (10)
- Participant Access and Contribution (8)

The foundation of the *Index* is a value proposition based on four critical, interrelated elements:

- Intellectual capital and the availability of a well-educated population are required to support innovation and commercialization.
- Human capital and the availability of a well-trained labor supply are required to support the business needs of employers and increases in worker productivity.
- Financial capital and the availability of funds to support both basic and applied research, product commercialization, and firm birth and growth, are required to ensure continued innovation and increased competitiveness in the global marketplace.
- An enhanced standard of living for Texans is related to the successful outcome of activities that support the first three value elements.

Value Proposition



Each of the four value-chain elements in the graphic represents one of the four domains in the *Index*. Like the value-chain elements, the indicators and data sets within each domain are related to and affected by indicators in the other domains. The included indicators provide a measure of Texas' performance and can be benchmarked against the U.S. average, competitor states, other countries or Texas' longitudinal performance.

Within each domain, the *Index* establishes trends and comparisons to indicate the extent of change for each indicator. The elements of the value-chain are represented in the *Index* as:

The state's efforts to improve intellectual, human and financial capital are paramount to building Texas' assets for the future. Decisions in the policy areas of education, workforce and economic development all affect the value-chain. For example, a decision in the education arena may have an effect on economic development due to the interrelatedness of education, labor supply, and business growth.

System Evaluation and Growth Challenges

Most evaluation is conducted at the program level, typically developed around a series of input and output measures. While providing valuable information about the relative success of various programs and their effectiveness for specific client populations, program-level evaluation does not provide a complete evaluative picture. Therefore, the *Index* pulls together a series of indicators that attempt to look at the system in a more holistic manner.

The landscape of efforts to promote economic growth continues to change, partly in recognition of the critical need for continued growth, sustainability, and diversification. Job growth in high-tech and knowledge-based industries is more likely in regions with ready access to a qualified workforce. Other key factors that indicate economic growth potential include strong performance related to venture capital availability, patent production, and higher levels of research and development.

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Indicator Report Card - 2012

Trend	Indicator	Value	Page
↑	Associate's Degrees Granted as a Percent of the 18- to 24-Year-Old Population	2.1%	13
↑	Average Annual Pay per Worker	$43,090	33
↑	Average Annual Unemployment Rate	7.9%	31
↑	Bachelor's Degrees Granted as a Percent of the 18- to 24-Year-Old Population	4.1%	14
↑	Export Orientation	0.191%	35
↑	Exports per Capita	$9,732	35
↑	Gross State Product per Capita	$50,945	34
↑	Industry R&D Expenditure per $1,000 of Gross State Product	$13.45	24
↑	Labor Productivity	$61.04	32
↑	Median Home Value	$128,100	44
↑	National Assessment of Educational Programs (NAEP) Test Scores - Math	101.60	18
↑	National Assessment of Educational Programs (NAEP) Test Scores - Science	101.41	18
↑	Per Capita Income	$39,593	40
↑	Per Capita Income Annual Average Growth Rate	4.9%	41
↑	Percent of Bachelor's Degrees Granted in Science and Engineering	14.8%	15
↑	Percent of Graduate Degrees Granted in Science and Engineering	14.6	17
↑	Percentage of Population Enrolled in Degree-Granting Institutions	6.1%	12
↑	Percent of Population 25 Years and Older with a High School Diploma	80.7%	11
↑	Science and Engineering Graduate and Postgraduate Students	37,774	16
↑	Venture Capital Invested as a Percentage of Gross State Product	0.074%	22
↑	Venture Capital Invested per $1,000 of Gross State Product	$0.74	22
↑	Venture Capital per Capita	$35.28	21
→	Business Establishment Entry	51,619	37
→	Business Establish Exit	51,252	37
→	Labor Force Participation Rate	65.6%	30
→	Median Household Income	$48,615	43
→	National Institutes of Health (NIH) Support to Texas Institutions per Capita	$41.55	26
→	National Science Foundation (NSF) Funding per Capita	$10.43	27
→	Number of Patents	7,842	20
→	Total R&D Expenditure per $1,000 of Gross State Product	$14.85	23
→	Workforce Educational Achievement	13.93	10
↓	Academic-Performed R&D Expenditure per $1,000 of Gross State Product	$2.84	25
↓	Average Annual Amount of SBIC Funds Dispersed per $1,000 of GSP	$0.096	28
↓	Home Ownership Rate	64.3%	46
↓	Number of Technology Fast 500 Companies per 10,000 Business Establishments	0.56	36
↓	Percent of Population Living Above 200% of the Federal Poverty Threshold	59.4%	42
↓	Percent of Population Living Above the Federal Poverty Threshold	81.6%	42
↓	Residential High-Speed Internet Access	53.6%	45

Indicators and Analysis

Structure and Key

The report's narrative sections are intended to be concise. Each domain includes an introductory section with summary information and an overview of issues to be considered when reviewing the data and accompanying narrative.

Key	
	Positive change in last reporting cycle
	No significant change in last reporting cycle
	Negative change in last reporting cycle
	Data unavailable
	Watch alert

The summary includes general information about the number of indicators included in the domain, as well as the number and percentage for the following:

- Trend – Each indicator is assigned one of four symbols to denote directional change in the last available reporting cycle. The percentage value for each trend symbol category is calculated based on the total number of indicators in the domain. The total of all percentages in the four symbol categories equals 100 percent.

  It is important to note that the directional arrows are used to indicate positive, non-significant or negative change in the last reporting cycle, and not an increase or decrease in the actual numeric value. This is necessary to ensure commonality of assessment as, by definition, a few of the indicators are counterintuitive in nature. For example, a decrease in the Percent of Population Living Above the Federal Poverty Threshold is a negative change, while a decrease in the Average Annual Unemployment Rate is a positive change.

- Watch alert – The symbol is used to denote an indicator flagged to watch in the next reporting cycle. Reasons for flagging include: recurring negative change over multiple years; significant negative change in the most recent reporting cycle; legislative changes; anticipated modifications to reporting requirements or processes; or indicator remains low on a comparative basis. The percentage value for indicators flagged for watch alert is calculated based on the total number of indicators in the domain.

In addition to the domain summary, brief narratives are provided for each indicator. In some cases indicators are grouped to facilitate explanation or comparison across related indicators.

Data Notes

Included data – Data is presented for the most recent ten years for which data is available. In some cases, ten years – or ten consecutive years – of data is not available for a variety of reasons including: (1) data was not collected for a particular year; (2) testing did not occur; (3) the methodology changed; or (4) a primary data source contained fewer years of data.

Rounding convention – The data points contained in the graphs in this report are based on actual data source numeric values. Data values referenced in the *Index* narrative have been rounded to one or two decimal places based on the standard rounding convention: .001 to .004 has been rounded down to .00; .005 to .009 has been rounded up to the next highest hundredth.

Point in time – Many publicly available data sources continue to be updated for months and years after the initial data release. This is typically due to corrections or clarifications that result from contract reporting finalization or performance audits. Data is verified and updated, as applicable, during the *Index's* development stage. Therefore, due to these changes, data in the *Index* may sometimes differ from corrections to the source data.

Comparative data – Where data are available for each indicator, state and international comparative data are provided. Generally, there are two state comparisons. The first is a time series graph that compares Texas and the U.S. with other large states. The second is a state ranking table that lists the four top ranking states, followed by Texas, with the U.S. value listed at the bottom. Where Texas is listed as one of the top four states, the fifth-place state is also included.

Where data are available, an international comparison table lists the top three Organization for Economic Co-operation and Development (OECD) countries* and two of the selected emerging economy countries, followed by the U.S. data. These selected emerging economy countries are Brazil, Russia, India, and China, commonly referred to as the "BRIC" countries. According to Goldman Sachs, by 2039 the combined BRIC economies could be larger than the combined economies of the U.S., Japan, the United Kingdom, Germany, France, and Italy. Brazil and China are steadily becoming more efficient economies by changing their political systems to embrace global capitalism. Goldman Sachs states the BRIC countries will be dominant suppliers of manufactured goods and services by 2050 and for this reason, these countries were chosen for tracking and comparative purposes. In some instances, international data may not be identical to the domestic data used, but it will provide an indication of the relative health of selected international countries compared to the U.S. regarding each indicator. Differences are discussed in the indicator analysis text.

The National Center for Educational Statistics (NCES) is the source for all educational data contained in the *Index*. NCES data is used for both Texas and state comparative data.

Population base level data – The Texas population count is increasing, rising from 21.7 million in 2002 to 25.7 million in 2011. Over the same period, the nation's population increased from 307 million to 311.6 million. Projections from the Texas State Data Center indicate that the state's population is expected to exceed 35.8 million people by 2040, a 71.5 percent increase from 2000. Several significant changes are expected in population composition: increase in Hispanic population; substantial aging; and variable growth rates for regional and metropolitan areas.

GSP base level data – As of the October 26, 2006 release, the U.S. Department of Commerce – Bureau of Economic Analysis (BEA) renamed the gross state product (GSP) series to gross domestic product (GDP) by state. GDP by state is considered the most comprehensive measure of state economic activity. It is the sum of all value added by industries within the state (i.e., employee compensation, taxes on production and imports, gross operating surplus). Because GDP refers to both state and national gross domestic product, for the purposes of this publication, state GDP will be referred to as GSP, its former working label.

Data normalization – For many of the indicators, data is normalized by common factors (e.g., per capita, per 1,000, percent of GSP) to assist in providing equivalent measurement of data year-to-year. In addition, normalization helps to facilitate cross-indicator review as well as global and national comparisons, where applicable.

* The OECD consists of 30 member countries. Twenty of these countries became members on December 14, 1960, when the convention establishing the organization was signed. The others have joined over the years. In May 2007, OECD countries agreed to invite Chile, Estonia, Israel, Russia and Slovenia to open discussions for OECD membership. The Organization offered enhanced engagement with a view to possible membership to Brazil, China, India, Indonesia and South Africa. For the purposes of the *Index*, these countries will be referred to as non-members.

Source information – Sources for the data sets in the tables and graphs included in this publication are noted in the bibliography section. Detailed data tables, methodologies and accompanying documentation are retained at the Council's office.

Recession, recovery, and data lag – The *Index* does not fully reflect the economic recovery effects following the recent recession due to lag times in data reporting. The *Index* uses the most recent available 12 months (annual) data sets on all indicators. Due to the nature of calculating some of the data sets, this edition of the *Index* contains most recent data sets from 2008-2011. The 2013 edition will display an even more comprehensive account of the post-recession recovery when the *Index* adds an additional year of data.

Foreign Direct Investment – The FDI indicator was not updated this *Index* cycle due to a discontinuation of the Bureau of Economic Analysis' program data source. This indicator will not be a part of the *Texas Index 2012* publication.

How to Read the Indicator Analysis

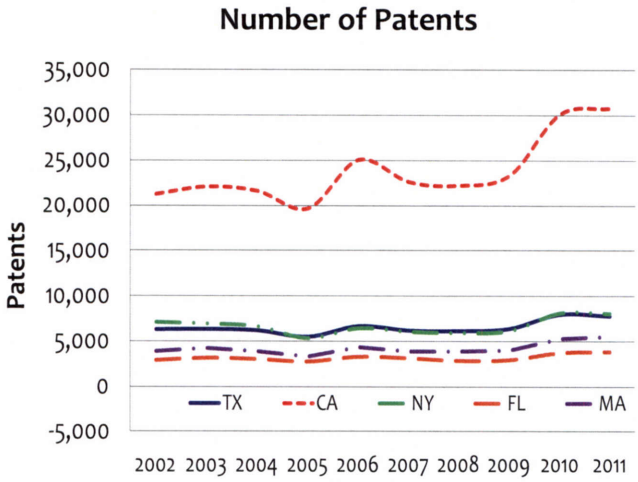
The purpose of this page is to describe and explain each indicator. Each indicator analysis page will include an explanation of why the indicator is important in general and the parameters and limitations of the data. Definitions of terminology and the identification of key institutions will also be included in this section.

■ Paragraph one will explain chart one. It will contextualize the Texas data series in the chart and interpret the trend for Texas over the displayed timeline. Comparisons will be made between Texas and the U.S. average, as well as other large states. The states chosen for comparison represent those states with similar populations and economies to Texas.

■ Paragraph two will describe the table comparing Texas with other states in rank order to highlight Texas' comparative performance for the indicator. Where comparative data are available, the top five states will be listed followed by the bottom ranked state for the indicator. If Texas does not rank within the top five, the top four states will be listed followed by Texas and the last ranked state. The U.S. average will also be available for comparison. Text here will explain the variables that may have influenced a state to be top ranked and discuss disparities between Texas and top ranked states.

■ Paragraph three will focus on the international comparisons for Texas in relation to the indicator. The top three OECD countries for the indicator, two of the emerging BRIC competitor countries, and the U.S. will be compared here. Text will indicate where the U.S. stands compared to other countries, the factors involved that drive performance related to the indicator, and why these countries are performing well. The data listed will be an internationally comparative number, percentage or dollar figure used by the OECD or other noted international organization. Data limitations will also be noted on the indicator page.

The final paragraph is the "so what," or conclusive section. It will tie the page together by stating why this indicator is important to the competitive position of Texas and where it falls into the value proposition chain.



State Comparison		
	Rank	2011
California	1	30,750
New York	2	8,045
Texas	3	7,842
Illinois	4	5,526
Massachusetts	5	5,266
Alaska	50	32
United States		121,261

International Data		
	OECD	2010
Canada	Member	19,120
Japan	Member	222,693
Korea	Member	68,843
China	Non-Member	135,110
Russian Federation	Non-Member	30,322
United States	Member	219,614

Source: World Intellectual Property Organization Patent Statistics, 2011

Domain 1 - Training and Education

The Training and Education domain includes 10 indicators that provide data about the training and education levels of Texans and the Texas workforce. General educational attainment data is included, as well as detailed information pertaining to science, mathematics, and engineering. Performance changed for the last available reporting cycle: nine of the indicators experienced a positive change (90 percent) and one indicator (10 percent) experienced no significant change. One indicator related to high school level educational attainment was flagged with a watch alert for the next reporting cycle.

Domain 1 Summary			
Number of Indicators - 10			
		No.	%
	Positive change in last reporting cycle	9	90%
	No significant change in last reporting cycle	1	10%
	Negative change in last reporting cycle	0	0%
	Data unavailable	0	0%
	Watch alert	1	10%

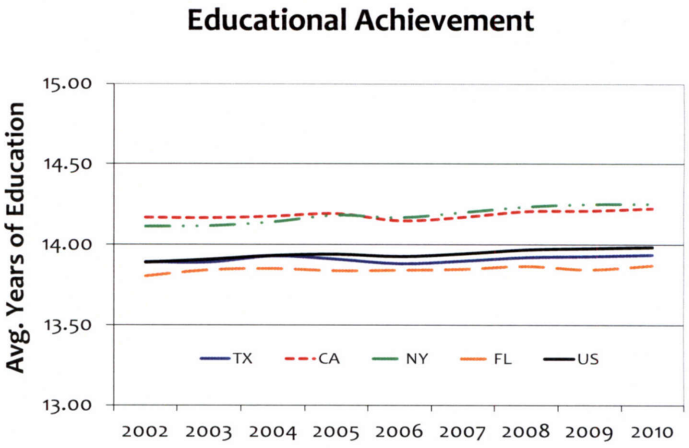
Workforce Educational Achievement

This indicator reflects the average level of education completed, in years, by the adult population 25 years and older. The calculation accounts for high school graduates (diploma or equivalency), completion of some college credit, and attainment of postsecondary degrees (i.e., associate's, bachelor's, graduate). A specific level of educational attainment is often viewed as a required credential for employment, and has been positively correlated to lifetime earnings of individuals.

New York and California led the nation's large states in years of educational achievement for the adult population at 14.25 and 14.23 respectively. The U.S. average remained level at 13.98. Florida trails the large states at 13.87 just under Texas' 13.93. Educational attainment in Texas needs to be improved, as nearly four million individuals meet the federal definition to qualify for adult education services. This number is projected to reach almost eight million by 2040. The view that education is the key to individual economic security is supported by the recent unemployment numbers. While the U.S. average unemployment rate in 2010 was 9.6 percent, the unemployment rate was 4.5 percent for individuals with a bachelor's degree or higher, 6.8 percent for individuals with some college or an associate degree, 9.7 percent for high school graduates with no college, and 15.7 percent for those with less than a high school diploma, as reported by the U.S. Bureau of Labor Statistics.

Massachusetts again led the country in educational achievement, followed by Maryland, Colorado, and Connecticut. Without an increase in the proportion of adults who hold a postsecondary degree or credential, states cannot successfully compete in today's global and technology-based economy. By 2018, 63 percent of all jobs will require some postsecondary education. However, the U.S. currently does not have enough skilled workers to fill these positions, with less than half of the current labor force holding an associate's or higher-level degree. It is estimated that millions of individuals beyond those currently pursuing a degree, will need to obtain a postsecondary credential to ensure that employers have access to a qualified workforce. Community college certificates and degrees have great promise as a source of skills and credentials that can provide pathways into well-paying jobs.

Increasing the overall education level of the workforce is essential to ensuring economic growth. Texas must maintain its ability to compete in a global marketplace with other countries, which often have higher levels of overall educational attainment. So that Texas is not faced with potential labor shortfalls in fields where skilled individuals are most needed, it is critical that the state develops a large, well-educated labor force.



State Comparison		
	Rank	2010
Massachusetts	1	14.45
Maryland	2	14.34
Colorado	3	14.33
Connecticut	4	14.32
Texas	23	13.93
West Virginia	50	13.37
United States		13.98

"By 2018, more than 63 percent of prime-age workers will need some type of postsecondary instruction."

- Help Wanted: Projections of Jobs and Education Requirements Through 2018, Center on Education and the Workplace, 2010

Percent of Population 25 Years and Older with a High School Diploma

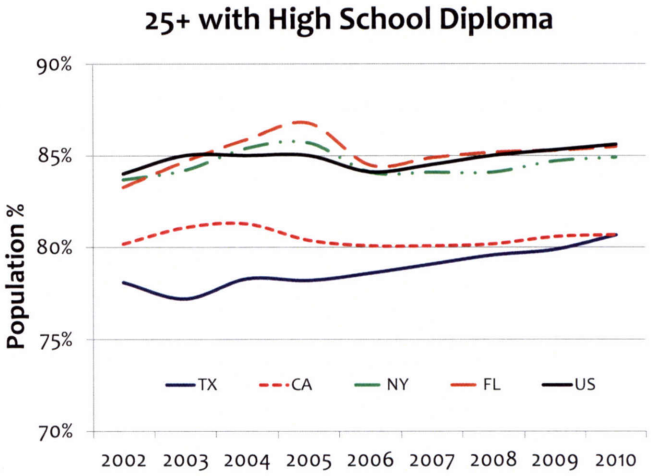
An educated workforce is considered to be a more productive workforce, with many employers viewing attainment of a high school diploma or equivalency as a basic credential indicating work-readiness. Individuals with high school credentials tend to have higher employment rates. This indicator is calculated annually by the U.S. Census Bureau's American Community Survey.

Florida equaled the U.S. average of those 25 and older with a high school diploma. The New York high school graduation rate rose slightly to 84.7 percent, and California rose by four-tenths of a percentage point to 80.6 percent. While the Texas high school diploma rate has increased steadily from 78.2 percent in 2005 to 80.7 percent in 2010, it still lags all other large state's high school completion performance. Due to this, the Texas high school diploma rate will remain under a watch alert for the next reporting cycle.

Wyoming continued as the state with the greatest high school diploma rate among the 25 and older population, increasing to 92.3 percent. Minnesota, Montana, New Hampshire, and Alaska ranked in the top five each having over 91 percent high school equivalency for their respective adult populations. Thirty-two state's high school diploma rates ranked higher than the U.S. average. Despite percentage gains, Texas remained ranked at 49. However, it is worth mentioning the Texas Education Agency reported that the Texas high school on-time graduation rate for the class of 2010 soared to the highest level during the Texas Assessment of Knowledge and Skills (TAKS)-testing era. Texas increased to its highest high school diploma completion rate in 2010, equaling California's 80.7 percent.

The OECD equivalent to high school education is termed upper secondary education. This indicator profiles the educational attainment of the adult population as captured through formal upper secondary educational qualifications. As such, it provides a proxy for the level of knowledge and skills in OECD countries. The U.S. (89 percent) remained among the top of OECD and emerging economies such as the BRIC countries. Czech Republic maintained its top-ranked position with the highest level of upper secondary educated adult population at 91 percent in 2009.

During these times of shrinking state budgets and in the wake of a national economic recession that profoundly affected those with the least education, increasing postsecondary education is a key strategy for strengthening the economy. The Georgetown University Center on Education reported that 63 percent of jobs in the U.S. economy in the next decade will require some postsecondary education. Therefore, prioritizing high school completion is a key strategy for economic growth as research repeatedly shows a direct correlation between education and economic prosperity.



State Comparison		
	Rank	2010 (%)
Wyoming	1	92.3
Minnesota	2	91.8
Montana	3	91.7
New Hampshire	4	91.5
Alaska	5	91.0
Texas	49	80.7
United States		85.6

International Data		
	OECD	2009 (%)
Czech Republic	Member	91
Estonia	Member	89
Slovak Republic	Member	91
Brazil	Non-Member	41
Russian Federation	Non-Member	88
United States	Member	89

Source: OECD *Education at a Glance 2011* (Population Aged 25-64)

Percent of Population Enrolled in Degree-Granting Institutions

This indicator is calculated by dividing the total number of students enrolled in degree granting institutions by the total state population. Enrolled students are based on the total population enrolled in public and private degree-granting institutions, including public universities, independent senior colleges and universities, public community and state colleges, public technical colleges, independent junior colleges, and both public and independent health-related institutions.

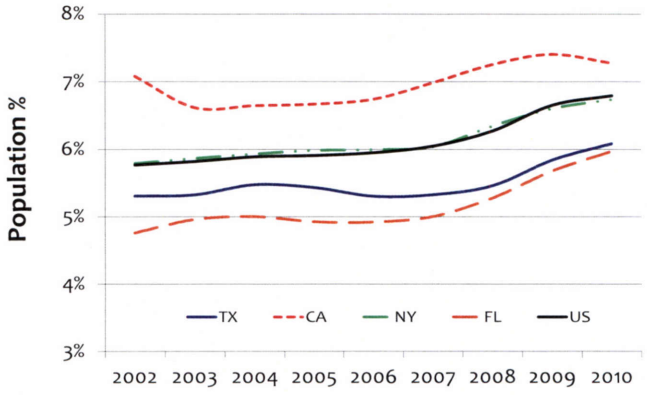
Student enrollment in degree-granting institutions increased for each of the large states with the exception of California, which declined by a tenth of a percent in 2010. During that same year, 6.8 percent of the U.S. population was enrolled in a degree program, the fifth consecutive year of growth since 2005 when the percentage held steady at 5.9 percent. While Texas gained three-tenths, rising to 6.1 percent, it is seven-tenths of a percentage point below the U.S. average.

A total of 20 states ranked higher than the national average. Iowa, the top ranked state in this indicator, also ranked in the top four among the associate's and bachelor's degree attainment indicators. Texas moved to the 33rd ranked state with 6.1 percent enrollment, tied with Oklahoma and North Carolina. By improving postsecondary attainment rates among adults, particularly those with low skills, Texas can increase individual talent while also meeting local industry demands. Furthermore, according to Achieve, Texas is the first state to meet all the American Diploma Project's five key college and career readiness measures. Achieve reported, "Texas has the most comprehensive approach to college and career ready accountability."

Finland again led the OECD countries, after dipping in 2009 to 41.4 percent of the population aged 20-29 enrolled in tertiary degree programs. While this is not a direct equivalency with the U.S. data, it is presented as proxy data. Denmark (36.9 percent) and Iceland (35 percent) closely followed Finland in this indicator. According to OECD's *Education at a Glance 2010*, on average across OECD countries among adults 25-64 years of age, 29 percent had only primary or lower secondary levels of education, 44 percent obtained upper secondary education and 28 percent reached the tertiary education level.

The 2012 *Closing the Gaps* annual progress report reflected data for the period 2000-2011. In the first eleven years of *Closing the Gaps*, statewide participation increased by 533,000 students. That leaves the state with four years to close 16 percent of the 630,000-student gap in enrollment by 2015. Enrollment growth in fall 2011 increased by 47,000 from the previous fall. The average increase in 2011 followed record-breaking increases of 122,000 and 84,000 students in 2009 and 2010, respectively.

Enrolled in Degree-Granting Institutions



State Comparison

	Rank	2010 (%)
Iowa	1	12.5
Arizona	2	12.4
Utah	3	9.1
Minnesota	4	8.8
Texas	33	6.1
Alaska	50	4.7
United States		6.8

International Data

	OECD	2009 (%)
Denmark	Member	36.9
Finland	Member	41.4
Iceland	Member	35.0
Brazil	Non-Member	20.8
Russian Federation	Non-Member	20.0
United States	Member	24.4

Source: OECD *Education at a Glance 2011* (Percent of 20-29 year old Population)

Associate's Degrees Granted as a Percent of the 18- to 24-Year-Old Population

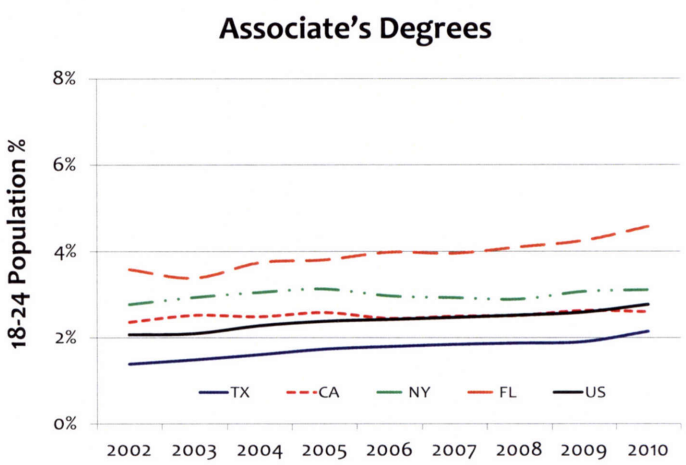
Many jobs require the acquisition of a formal degree as a requirement for employment. As with all of the education indicators, degree attainment correlates to increased earning potential and employment options, including preparation for advanced education. This indicator is calculated as a percentage of the 18- to 24-year-old population (including non-residents), the traditional age range for acquisition of an initial postsecondary degree.

Florida again led the large states in associate's degree attainment, as it increased to 4.6 percent. New York remained at 3.1 percent and California remained at 2.6 percent. Texas increased in associate's degrees to 2.1 percent. A postsecondary credential can substantially impact a student's lifetime earning potential. The U.S. Census Bureau reported that those with lower levels of attainment (associate's) may have higher earnings than those with higher levels (bachelor's), provided their degree is in a technical field. For instance, adults with an associate's degree in engineering earned an average of $4,800 per month, while bachelor's holders in arts and humanities earned $3,200.

Arizona led the nation with the highest associate's degree attainment at 7.9 percent of 18- to 24-year-olds. Texas improved to the 38th ranked state at 2.1 percent. There were 15 states that ranked above the U.S. average of 2.8 percent. According to the Association for Career and Technical Education, global economic competition is increasing and the need to develop a workforce with advanced skills is critical. Career and technical education (CTE) is evolving and adapting its programs to meet the needs of business and industry. CTE-related credential holders may earn on average between $5,000 and $15,000 more a year than a person in other associate degree areas. However, those with CTE credentials in high-demand fields such as healthcare can average almost $20,000 more a year in earnings.

Graduation from tertiary-type B programs (the OECD equivalent of a U.S. associate's degree) is a significant feature of the tertiary system in only a few countries, most notably Ireland, Japan, Slovania, and New Zealand. Trends in graduation from tertiary-type B programs vary throughout the OECD. For instance, in Spain, the sharp rise in tertiary-type B graduation rates between 1995 and 2008 is attributable to the development of new advanced level vocational training programs.

Investment in human capital through postsecondary education that meets the needs of industries high-demand skills leads to greater sustained income gains. A symbiotic relationship between education and industry can yield a stronger attachment to the labor force than short-term training or quick job placement assistance.



State Comparison		
	Rank	2010 (%)
Arizona	1	7.9
Iowa	2	5.2
Wyoming	3	5.1
Florida	4	4.6
Texas	38	2.1
Louisiana	50	1.2
United States		2.8

International Data		
	OECD	2009 (%)
Ireland	Member	26
Japan	Member	26
Slovania	Member	26
N/A	Non-Member	N/A
N/A	Non-Member	N/A
United States	Member	11

Source: OECD *Education at a Glance 2011* (Tertiary B Graduates as % of Population 19-25)

Bachelor's Degrees Granted as a Percent of the 18- to 24-Year-Old Population

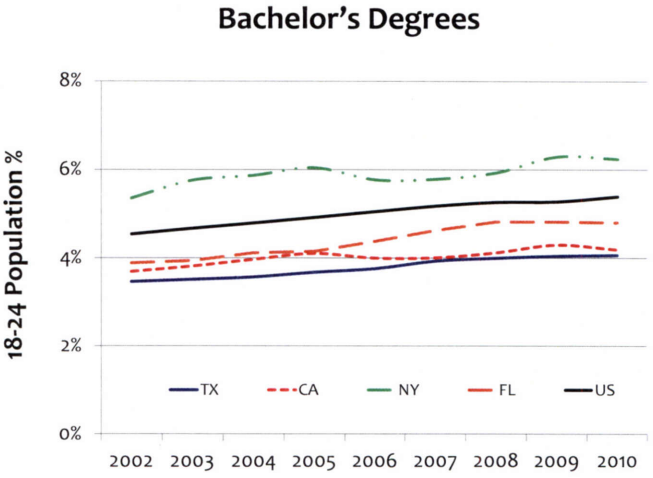
Many individuals seek a bachelor's degree as their first postsecondary credential. Bachelor's degree requirements may encompass most, if not all, of those required for a related associate's degree. This indicator is calculated as a percentage of the 18- to 24-year-old population (including non-residents), the traditional age range for acquisition of an initial postsecondary degree.

New York remained on top of the large states in 2010 and ahead of the U.S. at 6.2 percent in bachelor's degree attainment for the typical graduating-aged population. California edged downward to 4.2 percent, below the national average of 5.4 percent. Florida remained unchanged, but at a higher rate than California and Texas. Florida's 4.8 percent is its highest bachelor's degree attainment rate since 2002. Texas improved to 4.1 percent, although lagging behind the other large states.

Iowa and Vermont led the nation in this indicator as the only states above the nine percent mark. Rhode Island's and Massachusetts' rankings round out the top four at 8.9 percent and 7.7 percent respectively. Texas dropped a position in the state ranking to 46th. The Georgetown Center on Education and the Workforce reported that since 1992, the proportion of workers with bachelor's degrees in the U.S. labor force has grown from 28 percent to 34 percent. Bachelor's degree holders earn 84 percent more than those with a high school diploma. However, shares among specific majors vary greatly. The highest earning majors are related to Science, Technology, Engineering, and Math (STEM) fields, while the lowest earning majors are in art, humanities, and early childhood education. More people with bachelor's degrees majored in business management than any other major, according to the Georgetown Center study.

According to the OECD, trends in attainment gains over time provide a picture of the changes in human capital available to the economy. In 1998, on average across OECD countries, 21 percent had completed tertiary education. The proportion of the adult population with a tertiary education rose to 28 percent in eight years. In 2009, 38 percent held this credential among the population aged 19-25 in the U.S. compared to 61 percent in Slovac Republic, 51 percent in Iceland, and 50 percent in New Zealand.

Adults with higher levels of education generally have higher labor force participation rates than adults with less education. *The Digest of Education Statistics 2010* reported that among people 25- to 64-years old, 86 percent of those with a bachelor's or higher degree participated in the labor force in 2009, compared with 76 percent of those who had completed only high school.



State Comparison		
	Rank	**2010 (%)**
Iowa	1	9.9
Vermont	2	9.1
Rhode Island	3	8.9
Massachusetts	4	7.7
Texas	46	4.1
Alaska	50	2.2
United States		5.4

International Data		
	OECD	**2009 (%)**
Iceland	Member	51
New Zealand	Member	50
Slovak Republic	Member	61
N/A	Non-Member	N/A
N/A	Non-Member	N/A
United States	Member	38

Source: OECD *Education at a Glance 2011* (Tertiary A Graduates as % of Population 19-25)

Percent of Bachelor's Degrees Granted in Science and Engineering

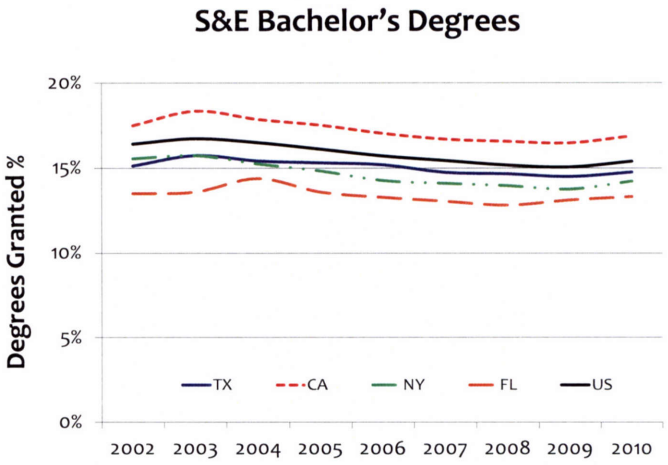
The importance of science and engineering (S&E) education is increasing, primarily due to the need for a larger labor supply for the growing number of knowledge-based, technology-intensive jobs. Bachelor's degrees in S&E account for 70 percent of all S&E degrees awarded. This indicator is calculated by dividing the total number of bachelor's degrees in S&E by the total number of bachelor's degrees awarded for the most current year available.

After increasing in 2010, California was again the only large state with a percentage of bachelor's degrees in S&E above the U.S. average of 15.4 percent. All the large states and the nation as a whole increased in this indicator. New York rose to 14.2, while Florida increased to 13.3 percent. Texas' percentage of S&E bachelor's degrees increased to 14.8 percent, the highest since 2006. The data trend for the nation indicates that S&E bachelor's degree attainment is slowly increasing.

The percentage of U.S. bachelor's degrees in S&E increased from 15.1 percent in 2009 to 15.4 percent in 2010. According to the National Science Foundation (NSF), research on how students learn, as well as concern for the number of young people entering S&E, have driven numerous efforts to improve instructional materials and practices and to assess the effectiveness of S&E curriculum. The bachelor's is the most prevalent S&E degree, accounting for more than 70 percent of all S&E degrees awarded. S&E bachelor's degrees have consistently accounted for approximately one-third of all bachelor's degrees for the past 15 years. Twenty-three states, led by Alaska (21.7 percent) ranked higher than the nation in S&E degrees. Texas dropped in the ranking to 29th in 2010, with 15,400 bachelor's degrees awarded in S&E.

According to OECD's *Education at a Glance 2011*, Finland led the OECD nations in S&E tertiary type-A (the equivalent of a U.S. bachelor's degree) graduates at 35.6 percent in 2009. Korea (34.9 percent) edged out Germany (33.4 percent) in 2009 to rank second in the OECD. More than four million students worldwide earned their first university degrees in the S&E fields in 2009, roughly one-third of all first university degrees worldwide.

The NSF states that S&E educational attainment of the U.S. population has long been among the highest in the world, but that other countries are catching up. The U.S. now lags behind several OECD nations in S&E bachelor's degree output. This could hinder the increased innovation needed to generate and implement new products and technologies that are valued in today's competitive markets.



State Comparison		
	Rank	2010 (%)
Alaska	1	21.7
Wyoming	2	19.4
South Dakota	3	19.3
Maryland	4	19.1
Texas	29	14.8
Delaware	50	11.1
United States		15.4

International Data		
	OECD	2009 (%)
Finland	Member	35.6
Germany	Member	33.4
Korea	Member	34.9
Brazil	Non-Member	14.9
Russian Federation	Non-Member	25.2
United States	Member	14.6

Source: OECD *Education at a Glance 2011* (Tertiary A Graduates in S&E)

Science and Engineering Graduate and Postgraduate Students

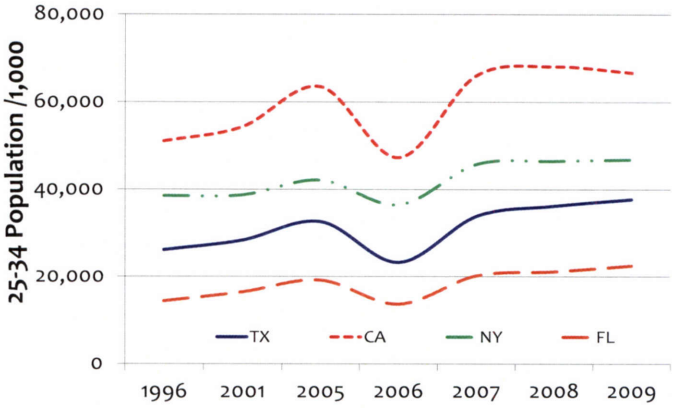
Graduate students in the science and engineering (S&E) fields will lead the U.S. into a technology-based future. According to the National Science Foundation (NSF), the ratio of S&E graduate students to a state's 25-34 year old population is a state's relative measure of its population with graduate training in S&E. Data on the S&E graduate students were collected by NSF by surveying all public and private academic institutions in the U.S. that offer master's degree programs in S&E fields including physical, life, earth, ocean, atmospheric, computer, social sciences, mathematics, engineering, and psychology. NSF calculates the number of graduate and postgraduate students through annual enrollments per 1,000 individuals of the 25-34 year old population of the state.

California led the large states and the nation with 66,695 S&E graduate students in 2009. This is a decrease of 2 percent from 2008. New York increased to 46,786 S&E graduate students, while Texas increased to 37,774, a 4.2 percent rise in S&E graduate students in 2009. Florida matriculated 22,486 S&E graduate students in 2009, an increase of 6.5 percent. According to NSF, increases occurred in most major science fields, although the number of master's degrees awarded in engineering and computer sciences have dropped since 2004.

The number of S&E graduate students was highest in California, New York and Texas between 2008 and 2009. The number of S&E graduate students in the nation increased by 2.9 percent from 508,001 to 522,511 during the same timeframe. According to NSF, following a long period of growth, U.S. graduate enrollment in S&E declined in the latter half of the 1990s. However, it increased steadily since 1999. First-time full-time enrollment, an indicator of future trends in enrollment, has also increased since the late 1990s. U.S. graduate enrollment in computer sciences and engineering decreased in recent years, although first-time full-time enrollment in these fields increased in 2005 and 2007. Globalization of higher education continues to expand and the U.S. continues to attract the largest number of foreign students to its institutions of higher education.

Texas workers with advanced S&E credentials are needed to support the growing knowledge-based economy. As the Texas economy continues to become ever more global in scope, S&E workers with advanced training will be in demand to sustain a competitive advantage by creating new products and technologies. According to the RAND Corporation, there is a pressing need for continuous analysis of science and technology indicators to ensure that program decision makers are well informed of the S&E needs of tomorrow's workforce.

S&E Graduate Students



State Comparison		
	Rank	2009
California	1	66,695
New York	2	46,786
Texas	3	37,774
Illinois	4	25,617
Massachusetts	5	25,120
Vermont	50	655
United States		522,511

"Over the last several decades, the industrial economy based on manufacturing has shifted to a service economy driven by information, knowledge, and innovation."

- 21st Century Skills, Education and Competitiveness, Partnership for 21st Century Skills, 2008

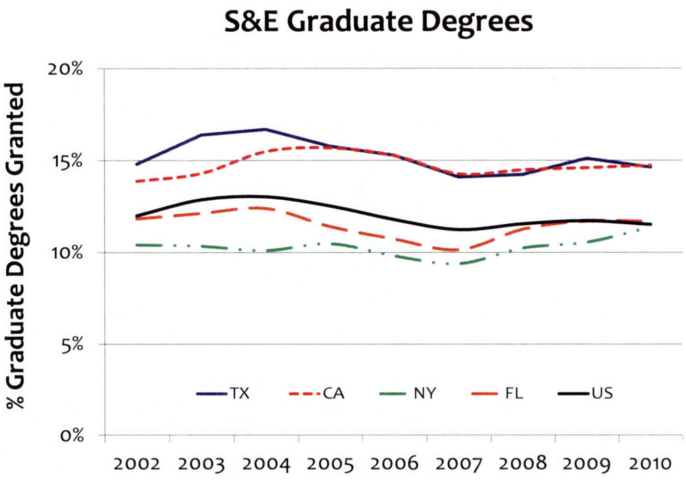
Percent of Graduate Degrees Granted in Science and Engineering

The National Science Foundation (NSF) collects data on science and engineering (S&E) graduate students by surveying all public and private academic institutions in the U.S. that offer master's programs. This indicator shows the extent to which a state's higher education programs in S&E contribute to the graduate level. The S&E areas that are recognized are: natural science, computer science, mathematics, and engineering. Healthcare graduate degrees, social science, and psychology fields are not included in this indicator. **This indicator is calculated by dividing the total number of graduate degrees in S&E by the total number of graduate degrees awarded for the most current year available.**

Graduate level S&E degrees awarded in Texas and California were level at nearly 15 percent in 2010. The percentage of S&E graduate degrees awarded in Texas was 14.6 percent of all graduate degrees, while California's percentage stood at 14.7. This is the third consecutive increase in this indicator for California. New York remained below the national rate of 11.5 percent in 2010, while Florida surpassed the nation at 11.6 percent.

Wyoming, at 20.1 percent, led the 23 states that ranked higher than the U.S. average for S&E graduate degrees awarded. Texas improved to the eighth ranked state, at 14.6 percent. Additional data from NSF revealed that in 2010 foreign students made up a much higher proportion of S&E master's and doctoral degree recipients than of bachelor's degree recipients. According to the NSF, foreign students received 24 percent of S&E master's degrees, 33 percent of S&E doctoral degrees, and 4 percent of S&E bachelor's degrees in 2009. The U.S. remains the destination of the largest number of foreign graduate students worldwide, although total numbers of foreign students in Texas decreased from 25 percent in 2000 to 20 percent in 2007. The international influx of students and highly skilled workers expanded over the past two decades. There are a steadily increasingly number of foreign students from developing countries, as well as Europe and Asia entering the U.S.

Advanced S&E degrees create a knowledge foundation that is conducive to training individuals as innovators and entrepreneurs. Competing in today's global economy requires advanced students to master the innovation thought processes taught in Science, Technology, Engineering, and Math (STEM) disciplines. A new workforce of problem solvers who are self-reliant and able to think logically is a critical foundation that drives innovation and generates economic activity.



State Comparison		
	Rank	2010 (%)
Wyoming	1	20.1
New Jersey	2	19.1
Maryland	3	18.4
Connecticut	4	16.5
Texas	8	14.6
Arizona	50	3.6
United States		11.5

"Sixty percent of all foreign students in graduate programs at U.S. institutions were enrolled in S&E fields."

- Science and Engineering Indicators: 2012, National Science Foundation

NAEP Test Scores - Math
NAEP Test Scores - Science

The National Assessment of Educational Progress (NAEP) tests are given in several subjects at grade levels four, eight, and 12 in public and non-public schools. Also known as The Nation's Report Card, the NAEP is required by law with responsibility assigned to the National Center for Education Statistics (NCES). The NAEP tests are currently the only measure of student performance that is uniform across participating states. Comparative achievement is reported by a scale score. This score represents the numeric summary of what students know and can do in a particular subject.

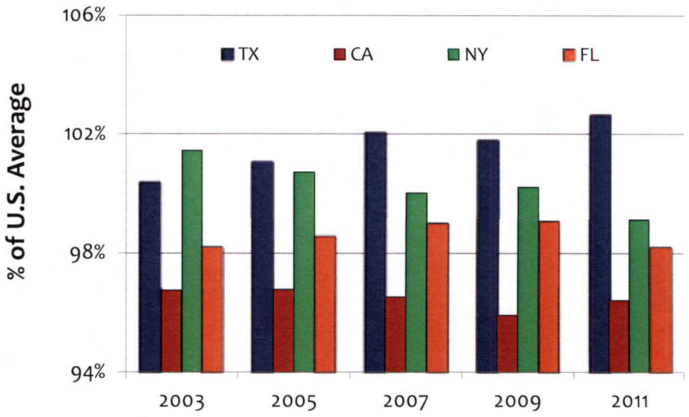
Texas' 2011 NAEP math scores reflect an above average performance compared to the rest of the nation and continues to outperform other large staes. The average score for all states in the U.S. fell into the basic category for the 2011 math assessment according to the American Institutes for Research (AIR). Massachusetts recorded an indexed math score of 105.48, the highest in the nation. The 2011 indexed Texas math score of 101.60 remained level from 2009, however, the state gained in ranking from 25th to the tenth position.

NAEP science scores from 2011 revealed that 35 percent of Texas eighth-graders performed at a basic level, demonstrating a partial mastery of the knowledge and skills fundamental for proficient work in science. Thirty percent of students performed at or above the proficient level, and two percent demonstrated the knowledge and skills associated with the advanced level. North Dakota's indexed score of 108.80 is the highest in the nation and still considered at the basic level by AIR.

Comparable international data is not available. However, as a proxy, the Programme for International Student Assessment (PISA) is an internationally standardized assessment administered to up to 10,000 15-year-olds per country. PISA evaluates mathematics, reading, and science literacy as well as problem solving skills. It is administered in 57 countries including the U.S. The countries that stand out with advanced scores are Canada, Finland, and Japan. These countries invest their resources in maintaining high quality Science, Technology, Engineering, and Math (STEM) education programs.

Scale scores provide an indicator of how well students are mastering math and science at the middle school level. Math and Science represent critical educational requirements for occupations and industries considered key to the state's future economic growth.

NAEP Math Scores



State Comparison

Math 2011 *		Rank	Science 2011 *	
Massachusetts	105.48	1	108.80	North Dakota
Minnesota	104.22	2	108.35	Montana
New Jersey	103.94	3	108.08	Vermont
Vermont	103.85	4	107.66	New Hampshire
Texas	101.60	10|28	101.41	**Texas**
Alabama	95.09	50	91.12	Mississippi

*Indexed to the U.S. average (Math 283 = 100; Science 151 = 100)

International Data

	OECD	Math 2009	Science 2009
Finland	Member	546	554
Korea	Member	541	538
Switzerland	Member	534	517
Brazil	Non-Member	386	405
Russian Federation	Non-Member	468	478
United States	Member	487	502

Source: PISA scores, OECD 2010

Domain 2 - Research and Development

The research and development (R&D) domain includes 10 indicators that describe the state of the Texas economy in areas such as patents, venture capital investment and federal grant awards. Four of 10 indicators (40 percent) increased, while this domain showed two indicators (20 percent) declining. The four remaining indicators had no significant change over the last reporting cycle.

Domain 2 Summary			
Number of Indicators - 10			
		No.	%
↑	Positive change in last reporting cycle	4	40%
→	No significant change in last reporting cycle	4	40%
↓	Negative change in last reporting cycle	2	20%
●	Data unavailable	0	0%
⚑	Watch alert	0	0%

Indicator	Page	Alert	Trend
Number of Patents	20	-	→
Venture Capital per Capita	21	-	↑
Venture Capital Invested as a Percentage of GSP	22	-	↑
Venture Capital Invested per $1,000 of GSP	22	-	↑
Total R&D Expenditure per $1,000 of GSP	23	-	→
Industry R&D Expenditure per $1,000 of GSP	24	-	↑
Academic-Performed R&D Expenditure per $1,000 of GSP	25	-	↓
National Institutes of Health (NIH) Support to Texas Institutions per Capita	26	-	→
National Science Foundation (NSF) Funding per Capita	27	-	→
Average Annual Amount of Small Business Investment Companies (SBIC) Funds Dispersed per $1,000 of GSP	28	-	↓

Number of Patents

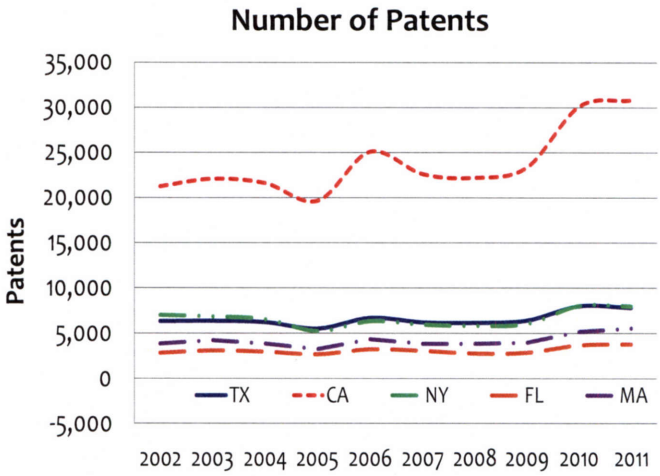
Patent counts are calculated by the U.S. Patent and Trade Office based on the number of patents and statutory invention registrations filed by Texas entities. The origin of a patent is determined by residence of the first-named inventor. In addition, many patents result from research conducted by academia, singularly or through collaborative ventures with industry. Given the recent decline in some types of research and development (R&D) funding support, demonstration of innovation becomes even more critical to support the growth of knowledge-based enterprises and the industry clusters such as those in the Governor's Industry Cluster Initiative.

California outpaced other large states in the number of patent registrations in 2011. California's registered patents increased by 2.2 percent over the year to 30,750, a full 22,908 more patents than Texas. Texas registered 7,842 patents in 2011, 2.3 percent less than the previous year for the first yearly decline since 2006. New York recorded 8,045 patents, a decrease of 0.6 percent from 2010. Florida and Massachusetts both increased over the year to 3,841 and 5,526 respectively.

Technology progress is the central driver of long-run productivity gains and higher standards of living. This is reflected in the high volume of patents registered in California, Texas, New York, Illinois, and Massachusetts, all of which are regarded among the most innovative states in the nation. Total U.S. patents rose from 107,792 in 2010 to 121,261 in 2011. At this pace a record high number of patents will be granted, according to the U.S. Patent and Trademark Office. The U.S. is not alone in the rising number of patents. The World Intellectual Property Organization (WIPO) and the European Patent Office also reported increases in patent production. The U.S., Japan, Korea, Germany, and China account for three quarters of the world patent production.

WIPO patent statistics indicated that in 2010 Japan led the OECD countries in patent production with 222,693 patents followed by the U.S. (219,614), and Korea (68,843). The global economic downturn prompted a slowdown in patent applications across the globe. However, China continued to see positive growth despite challenging global economic conditions. China's economy has shifted focus, moving away from traditional agriculture and manufacturing toward research and development. China led the BRIC countries and most OECD countries in patent production in 2010.

Generation of ideas that are then commercialized into new products and technologies potentially increase business output and, often, the ability to pay higher wages. Patent production demonstrates the ability of Texas' businesses to convert new ideas developed through applied research into real gains for the state's economy.



State Comparison

	Rank	2011
California	1	30,750
New York	2	8,045
Texas	3	7,842
Illinois	4	5,526
Massachusetts	5	5,266
Alaska	50	32
United States		121,261

International Data

	OECD	2010
Canada	Member	19,120
Japan	Member	222,693
Korea	Member	68,843
China	Non-Member	135,110
Russian Federation	Non-Member	30,322
United States	Member	219,614

Source: World Intellectual Property Organization Patent Statistics, 2010

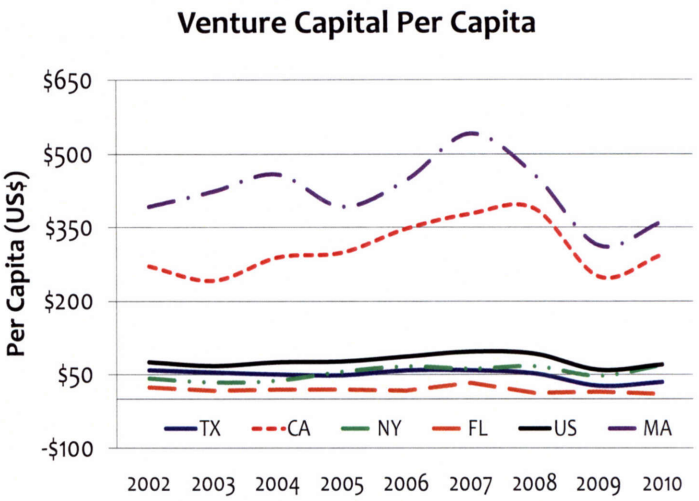
Venture Capital per Capita

Venture capital are private funds typically provided to immature, high-potential, growth companies in the interest of generating a healthy return on investment. Venture capital firms often play a key role in both the start-up and expansion of growth industries, and in taking the company public at a later date. Higher levels of venture capital investment typically indicate the presence of investment opportunities, crucial for developing industries and entrepreneurial companies in a rapid-growth mode. This indicator is calculated by taking the total venture capital invested in the state and dividing by the population for comparison.

Massachusetts and California continue to lead the nation in procuring the bulk of per capita venture capital, however venture capital investment per capita in these states has declined significantly since 2007. In 2010 Massachusetts recorded $362 per capita, down 33 percent from its peak of $541 per capita in 2007. While California posted $294 per capita in 2010, down 17.5 percent from its peak in 2008. Texas increased by 25 percent to $35 per capita and New York increased by 47 percent to $69 per capita in 2010. Meanwhile Florida fell by 33 percent to $10 in venture capital per capita. The nation's venture capital per capita average increased to $71 in 2010 after a dip in 2009 due to the recession.

Colorado and Washington are again within the top four ranking positions, with California in the second position and Massachusetts leading the nation. According to the Information Technology and Innovation Foundation, states at the top generally have strong university science and engineering programs and an existing base of high-tech companies. Both of these elements can be the source of entrepreneurial start-ups or spinoffs. There is also considerable continuity over the last few years: four of the top five states have been within the top six states in 2002, 2007, and 2008. Texas lowered in ranking position from 17th to 18th and only four states were above the nation's venture capital per capita figure. According to the State Science and Technology Institute, U.S. venture capital investment per capita increased by 18.6 percent in 2010. Note, this increase represents recovery from the the effects of plunging investment levels of 2008 and 2009 due to the recession.

To be successful, increased venture capital and research and development support must be leveraged. Data indicate that venture capital backed companies outperform non-ventured counterparts' employment growth and sales, which translates into job creation at higher salaries, according to Global Insight's *Venture Impact*.



State Comparison		
	Rank	2010 ($)
Massachusetts	1	361.99
California	2	294.02
Colorado	3	92.72
Washington	4	90.91
Texas	18	35.28
South Carolina	45*	1.10
United States		70.61

*45th is the last place ranking for this indicator

"U.S. venture capital investment per capita rose 19 percent from 2009 to 2010. This increase however represents a partial rebound from the plunging investment levels of 2008 and 2009 due to the recession."

- *State Venture Capital Dashboard*, State Science and Technology Institute and the PricewaterhouseCoopers Moneytree Report, 2010

Venture Capital Invested as a Percentage of GSP
Venture Capital Invested per $1,000 of GSP

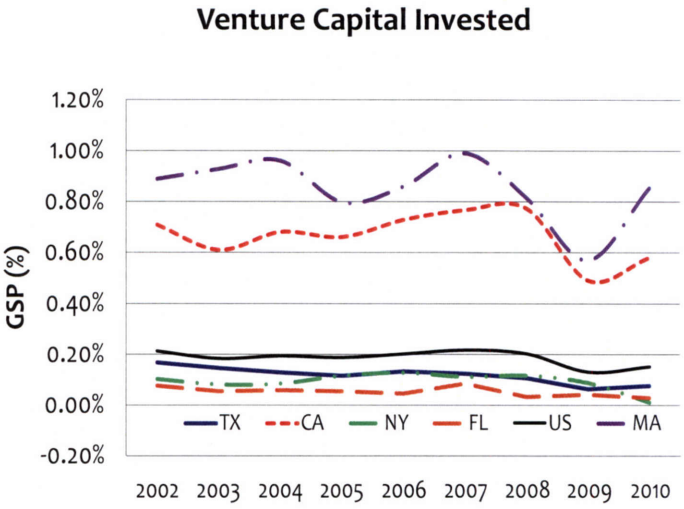
Venture capital (funds invested in new and unproven businesses) as a percent of GSP amounts to a small share of the overall capital markets, but its value goes beyond a simple dollar figure. Venture capital spurs growth at the critical early stages of a company's development. These indicators are calculated by dividing the total venture capital invested in Texas-based companies by the GSP, and then dividing by 1,000.

Leading states Massachusetts and California continued to outperform the other states in venture capital investment as a percentage of GSP despite drops in 2008 and 2009. Massachusetts led at 0.63 percent in 2010, up from 0.57 percent in 2008. California increased from 0.49 percent in 2009 to 0.58 percent in 2010. New York rose from 0.09 percent in 2009 to 0.12 in 2010. Although Texas (0.07 percent) was below the national figure of 0.15 percent, it outperformed Florida at 0.03 percent. Recovery from the recession is evident in this indicator in the form of rising venture capital that is vital to business start-ups and sustaining essential growth of companies in their early stages.

Washington remained in the top four states in venture capital invested as a percentage of GSP, having replaced New Hampshire in 2009. Texas moved down in ranking from 17th to 19th place. More than two-thirds of Texas venture capital investment occurs in the five largest metropolitan areas. According to the Dallas Federal Reserve Bank, in 2010, Texas venture capital investment was $891 million, nearly $250 million more than its 2009 level. The nation's increase venture capital investment was 19.3 percent. At the same time, Texas' share of total U.S. venture capital edged downward to 4.1 percent in 2010 from 4.6 percent in 2009.

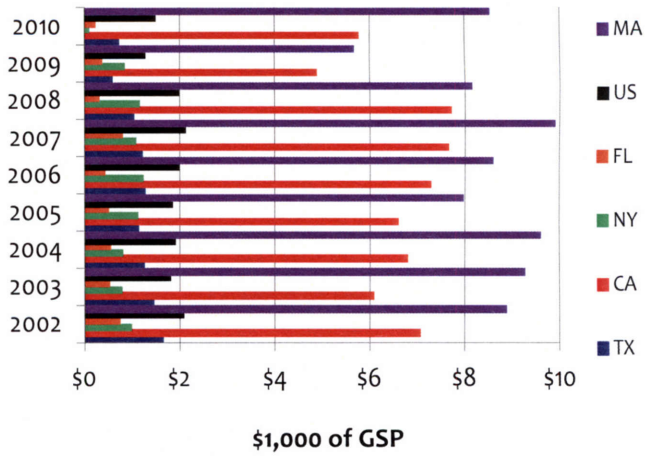
Another way of measuring venture capital is by dividing the total dollars invested by the GSP, further dividing by $1,000. Total U.S. venture capital invested per $1,000 of GSP in 2010 was $1.50, an increase from $1.29 the previous year. Texas totaled $0.74 while the top-ranked states (Massachusetts and California) led the nation with $6.27 and $5.77 per $1,000 GSP respectively.

Venture capital is an important source of funding for new, fast-growing entrepreneurial companies. In effect, venture capitalists identify promising innovations and help bring them to the marketplace. Venture-backed companies are also a vital source of new and innovative concepts and ideas that will keep the Texas economy growing.



State Comparison		
	Rank	2010 (% GSP)
Massachusetts	1	0.627
California	2	0.577
Colorado	3	0.182
Washington	4	0.180
Texas	19	0.074
Alabama	46*	0.001
United States		0.150

*46th in the last place ranking for this indicator



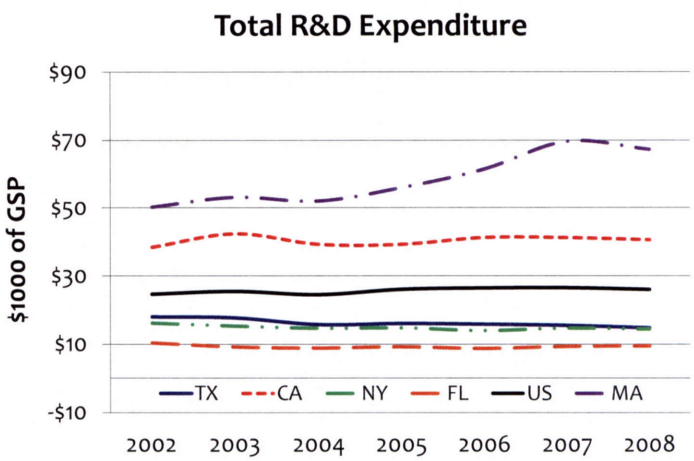
Total R&D Expenditure per $1,000 of GSP

Research and development (R&D) expenditure rates provide an indication of government and private sector efforts to obtain, or increase, competitive advantage in science and technology. Ongoing development of new products, production techniques and technologies is important to sustaining a healthy, growing economy. This indicator is calculated by dividing total R&D expenditures (industry, academic, federally funded R&D centers, and non-profit performers) by GSP, and then dividing by 1,000.

Massachusetts led the large states in R&D expenditure at $67 per $1,000 of GSP in 2008, a decrease of $3 from 2007. California ($40.59) trailed in second while Texas remained near $15 in 2008 for the third consecutive year. Texas was below the U.S. average of $26.11, just ahead of New York ($14.37) and Florida ($9.57). Total R&D expenditures in Texas fell by 18.1 percent from 2002 to 2008. One key area of Texas' total R&D spending is the aerospace industry research-related activity. Six of the top 10 recipients of federal R&D contracts in Texas for fiscal year 2008 were in the aerospace, aviation, and defense industry areas. Texas companies Lockheed Martin, Boeing, Raytheon, M-7 Aerospace, and L-3 Communications Holdings were among the federal R&D contract recipients, listed by the Alliance for Science & Technology Research in America.

States with the highest total R&D to GSP ratio are New Mexico ($73) and Massachusetts ($67), attributable to a high concentration of academic-based research facilities and high technology industries. Maryland, following at nearly $50, is home to several major government research facilities. While Texas ranked 29th in the nation, it was higher than other large states such as New York (ranked 31st) and Florida (ranked 40th). The National Science Foundation (NSF) estimates that overall spending on R&D conducted in the U.S. was $373 billion (current dollars) in 2008, up from $372 billion in 2007. U.S. R&D expenditures remained level in 2008. However, the most recent data available in 2008 do not fully reflect the effects of the downturn in U.S. and global economic conditions that began in late 2007. Over the past 20 years, growth in R&D spending has averaged 5.6 percent ahead of the average pace of gross domestic product growth over the same period, as reported by NSF.

While industry R&D, with its applied research approach, is clearly product-oriented, academic R&D endeavors and funding generally tend toward basic research. The challenges for the Texas economy in this area are: (1) to maintain basic research funding at levels sufficient to make institutions of higher education in Texas powerhouses in innovation and in attracting faculty; and (2) to stimulate applied research in Texas' academic environment, as supported by the Texas Emerging Technology Fund.



State Comparison		
	Rank	2008 ($)
New Mexico	1	73.39
Massachusetts	2	67.16
Maryland	3	50.17
Michigan	4	46.35
Texas	29	14.85
Wyoming	50	3.31
United States		26.11

"Texas companies Lockheed Martin, Boeing, Raytheon, M-7 aerospace, and L-3 Communications Holdings were among the federal R&D contract recipients."

- Texas R&D 2010: Research & Engineering Investments for Economic Growth, Alliance for Science & Technology Research in America

Industry R&D Expenditure per $1,000 of GSP

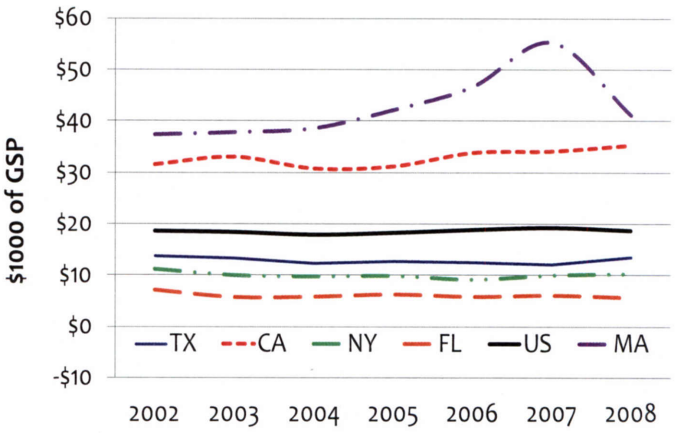
Industrial research and development (R&D) focuses on projects that are expected to yield new or improved products and services. Higher values in this indicator reveal that companies and industries within the state are investing heavily in their R&D activities. This indicator essentially measures the emphasis private industry places on R&D. The indicator value is derived by dividing the total industry R&D expenditure dollars by the GSP, and then dividing by 1,000.

Industrial R&D investment in Massachusetts remained the highest among the large states, however decreasing to $41 per $1,000 of GSP. California follows in industrial R&D expenditures, remaining level at $35 in 2008. Disparity between these two states dimishished as Massachusetts declined quickly and California increased. Texas increased to $13, above New York ($10) and Florida ($6). The U.S. posted a $19 investment average per $1,000 of GSP in 2008. The National Science Foundation (NSF) reported that companies spent $267 billion on R&D performed in the U.S. during 2008, compared with $269 billion in 2007.

The dollar figures in this ranking represent the amount of money spent by private industries on R&D calculated per $1,000 of GSP in the most recent data available. Ten states reported higher industry R&D investment than the national average of $19. Connecticut tops the 50-state ranking table trailed by Washington, Massachusetts, and New Jersey. Texas ranked at 26th, just ahead of Kansas. States with significant corporate R&D laboratory facilities or a large number of high-tech firms normally rank higher. According to the Information Technology & Innovation Foundation, business provides just under two-thirds of all R&D funding. Business-funded R&D as a share of GSP climbed to its highest point ever in 2000 and remained at a high level despite the onset of the economic recession. Industry R&D increased by 8 percent between 2007 and 2008.

R&D yields product innovations, adds to the knowledge base of industry, and is a key economic growth driver. The computer and electronic product manufacturing industries performed 22 percent of the nation's total business R&D, but the shares of this performance were larger in Massachusetts (45 percent), Illinois (33 percent), California (33 percent), and Texas (32 percent). These states have clearly defined regional centers of high-technology research and manufacturing, including Cambridge and Route 128 in Massachusetts; Champaign County, Illinois; Silicon Valley, California; and the Silicon Hills of Austin, according to the NSF. The majority of R&D performed in the U.S. in 2007 was by computer and electronic products companies located in Texas, Massachusetts, California, and Washington. Continued efforts by Texas' companies will drive innovation in the state, leading to business start-ups and expansions.

Industry R&D Investment



State Comparison

	Rank	2008 ($)
Connecticut	1	46.55
Washington	2	41.49
Massachusetts	3	41.10
New Jersey	4	39.40
Texas	26	13.45
Alaska	50	1.40
United States		18.74

"U.S. small business is closely associated with the development of new technologies in many of the science-based industries likely to be important to future economic growth."

- Indicators of U.S. Small Business's Role in R&D, National Science Foundation, 2010

Academic-Performed R&D Expenditure per $1,000 of GSP

Academic research and development (R&D) is less product oriented and more basic than industrial R&D. Academic R&D can be the foundation for future economic development. High values in this indicator reflect an academic R&D funding system that can successfully compete for federal, state, and industry dollars. This indicator measures the academic research performed by the state relative to the size of the state's output. This is calculated by dividing the total number of academic performed R&D expenditures by the GSP, and then dividing by 1,000.

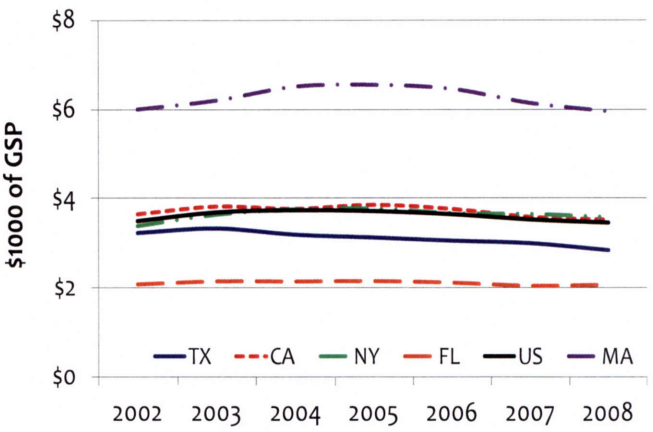
Massachusetts led the large states in academic R&D expenditures exceeding $5 per $1,000 of GSP in 2008, down 3 percent from 2007 and significantly outpacing other large states. While California posted $3.52 and New York $3.58, both declined slightly from 2007. Texas dropped to $2.84 in 2008 from $3 in 2007. Although declining annually since 2003, Texas remains ahead of Florida ($2.07) but continues to be below the national average of $3.46.

Maryland topped the 50-state ranking for academic R&D, mainly due to expenditures by Johns Hopkins University. The university supports the Department of Defense (DOD), the National Science Foundation (NSF), the National Institutes of Health (NIH), and the National Aeronautics and Space Administration (NASA). Johns Hopkins University performed $1.68 billion in medical, science and engineering research in 2008, making it the leading U.S. academic institution in research and development spending for the 30th year in a row, according to NSF.

Despite U.S. performance, other countries significantly outperform the U.S. in this indicator. From 2000-2008 the U.S. ranked 22nd out of 30 countries in government–funded university research. Countries such as China, Korea, and the United Kingdom are significantly outperforming the U.S., according to the Information Technology & Innovation Foundation.

Universities play an important role in Texas' overall R&D effort especially by contributing to the generation of new knowledge and ideas through basic research. By pairing industry with university researchers, Texas can capitalize on commercialization opportunities. The Emerging Technology Fund assists companies and universities to accelerate the transformation of innovative ideas into commercial products or services.

Academic R&D Investment



State Comparison		
	Rank	**2008 ($)**
Maryland	1	9.03
Massachusetts	2	5.95
North Dakota	3	5.35
New Mexico	4	5.32
Texas	36	2.84
Nevada	50	1.43
United States		3.46

"An estimated 73 percent of all patents granted in the U.S. are attributable to scientific research initially funded by taxpayers through the federal government especially university research operations. "

- Texas R&D 2010: Research & Engineering Investments for Economic Growth, Alliance for Science & Technology Research in America, 2010

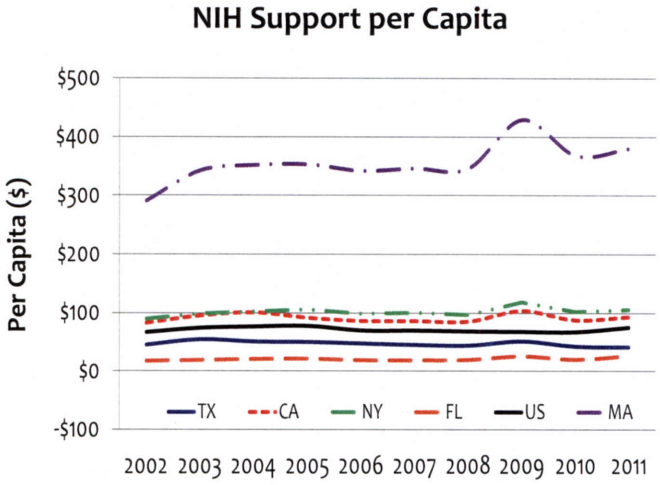
National Institutes of Health (NIH) Support to Texas Institutions per Capita

As a part of the U.S. Department of Health and Human Services, the National Institutes of Health (NIH) is the primary federal agency for conducting and supporting medical research globally and nationally. It provides financial support to researchers – annually investing over $28 billion in medical research. Primarily through competitive grants, NIH supports research at hospitals, universities and medical schools. This indicator is calculated by dividing the total NIH support by the population.

Massachusetts was again ahead of the large states in receiving $380 per capita of NIH support in 2011. This is still an increase of 3.3 percent from 2010, though funding was supplemented by the American Recovery and Reinvestment Act (ARRA) in both 2009 and 2010. California's NIH funding rose to $93 per capita, a total of $3.53 billion in terms of total funding dollars. New York increased its NIH support to $105 per capita. California and New York both exceeded the U.S. per capita value of $75. Florida acquired $25 per capita and Texas remained level at $42 per capita.

More than 80 percent of NIH's total annual budget directly funds research that is performed outside of the NIH campus at non-governmental facilities across the country. This research is done by 325,000 scientists at more than 3,000 institutions in all 50 states. The value of NIH state awards ranged widely, from $3.53 billion (California) to $8 million (Wyoming). Seven states received more than $1 billion in research dollars via the regular NIH budget including California, Massachusetts, New York, Maryland, Pennsylvania, Texas, North Carolina and Maryland. Maryland's $1.68 billion in NIH grants trailed only Massachusetts in the 50-state per capita ranking for 2011. Texas increased its NIH support in 2011 by taking in $1.06 billion, but nonetheless fell to 29th in the national ranking. NIH economic activity supported several hundred thousand jobs across the nation. According to a report published by United for Medical Research, NIH's overall research support from its regular 2011 budget supported an estimated 432,000 jobs.

A multitude of important health and medical discoveries result from research supported by the NIH. The NIH translates research results into interventions and communicates research findings to patients and their families, health care providers and the general public. NIH research funds are critical to Texas institutions to support medical research.



State Comparison		
	Rank	2011 ($)
Massachusetts	1	380.70
Maryland	2	289.57
Rhode Island	3	145.36
Washington	4	135.57
Texas	29	41.55
Idaho	50	5.89
United States		75.41

"The National Institutes of Health (NIH) research investment supported 432,000 jobs in 2011."

- United for Medical Research, March 2011

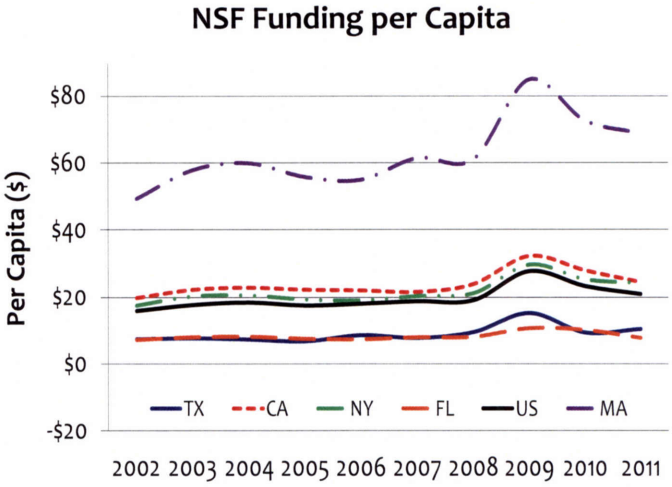
National Science Foundation (NSF) Funding per Capita

The National Science Foundation (NSF), established by Congress in 1950 as an independent federal agency, is the funding source for approximately 20 percent of all federally supported basic research conducted by U.S. colleges and universities. The NSF's fiscal year 2010 investment was $7.2 billion to advance the spectrum of research and education in science and engineering. These NSF investments in new knowledge and talent development are vital to advance scientific discovery and to ensure that America remains a global leader in science and technology. This indicator is calculated by dividing the total NSF funding by the population.

Massachusetts led the large states in 2011 even though it dropped to $69 per capita ($453 million awarded) in NSF funding. It was followed by California at $24 per capita ($1.04 billion awarded), and New York at $25 per capita ($920 million awarded). Florida and Texas remained below the national average of NSF funding at $10 and $8 per capita, respectively. NSF funding in Texas institutions increased from $236 million to $267 million in 2011. Funding for general science and basic research grew in Texas by 2.6 percent between 2008 and 2010 according to the NSF.

Nineteen states ranked higher than the national average for NSF funding per capita figure of $21 in 2011. Massachusetts was the top-ranked state and was awarded $453 million, $69 per capita in 2011. To be at the forefront of innovation, states must successfully transition from traditional manufacturing to new high-tech fields such as biotechnology, clean energy, information technology, and advanced manufacturing. Middle-skill jobs play a central role in the Science, Technology, Engineering and Math industries (STEM). According to the NSF, the availability of middle-skilled technicians in fields such as advanced manufacturing, biotechnology, nanotechnology, environmental technology, information technology, cyber security, and telecommunications influences decisions about where new companies locate and what products they make.

According to the U.S. Department of Labor, the challenge facing the STEM workforce pipeline is not just about the supply and quality of the baccalaureate and advance degree earners. A large percentage of the workforce in industries and occupations that rely on STEM knowledge and skills are technicians, including others who enter and advance in their field through subbaccalaureate degrees and certificates or through workplace training. High levels of NSF funding for research and development efforts can indicate the presence of a strong postsecondary educational system. This, in turn, produces an environment conducive to supporting high-tech start-ups and expansion efforts.



State Comparison		
	Rank	2011 ($)
Massachusetts	1	68.84
Colorado	2	66.38
Virginia	3	50.04
Alaska	4	44.46
Texas	40	10.43
Arkansas	50	5.35
United States		20.91

"SBIR and the Small Business Technology Transfer Research Program stimulates technology innovation in the private sector by transforming the federally supported research into commercial application leading to wealth creation and societal benefit."

- Matchmaker Program Technology Prospectus, National Science Foundation and Small Business Innovation and Research, 2010

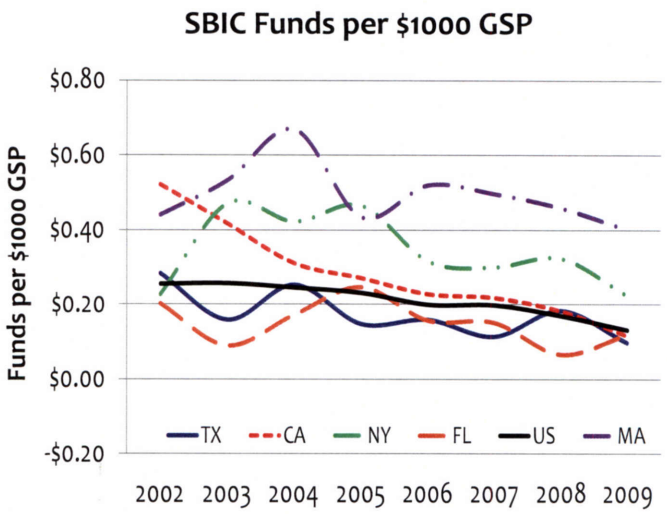
Average Annual Amount of Small Business Investment Companies (SBIC) Funds Dispersed per $1,000 of GSP

The Small Business Investment Companies (SBIC) program is a part of the U.S. Small Business Administration. Created in 1958, the SBIC program is designed to help fill the gap between the availability of venture capital and the needs of small businesses for start-up or growth. This indicator represents the amount of SBIC funds dispersed, normalized by $1,000 of GSP. The SBIC program does not target specific industries. However, with a 10-year obligation timeline, it is not necessarily a viable option for all business strategies.

California experienced yet another drop in SBIC funds per $1,000 of GSP, falling to $0.11 in 2009 from $0.19 in 2008. Massachusetts declined from $0.46 in 2008 to $0.40 in 2009, yet leads the large states and is the second highest state in SBIC funds dispersed. New York decreased by $0.10 to $0.22. Florida SBIC funding reversed its four-year declining trend to post an increase of $0.06 in 2009 to reach $0.12. Texas decreased from $0.18 in 2008 to $0.10 in 2009, falling below the national average of $0.13. Texas' SBIC funding high point in the last eight years was in 2002 when it stood at $0.28. Nevertheless, the Small Business and Entrepreneurship Council named Texas one of the best states for small businesses, based on the state's low tax environment. Small businesses are supported by Texas' reasonable regulatory environment and its skilled and educated workforce.

Fifteen states surpassed the U.S. average of $0.13 in SBIC funds per $1,000 of GSP. The top state Utah gained $45.3 million in SBIC funds in 2009. A positive correlation can be drawn between the top ranking states for this indicator and venture capital indicators. States that excel in securing venture capital dollars also succeed in securing SBIC funds. Massachusetts garnered $145.9 million in SBIC funding. New York procured $244 million. Texas gained $109.9 million for 2009, and Colorado gathered $86.2 million in SBIC funds. While much of the focus of the recession has been the impact on banks and major financial institutions, sales and earnings at small businesses have also suffered. The percentage of small business owners who reported that finding new customers was the most challenging aspect of new business ownership was high. This percentage more than doubled and business failure rates rose from June 2007 to June 2009, according to the Office of Advocacy of the U.S. Small Business Administration. Nationally, business bankruptcies increased 79 percent from the first quarter of 2007 to the first quarter of 2009.

Venture capital inflow through vehicles such as SBIC investing, is a key driver to increasing the contribution that small business and its workforce make to the GSP. Texas will need to improve its SBIC allotments in proportion to its share of national GSP to help support the positive effect of small businesses on the state's economy.



State Comparison		
	Rank	2009 ($)
Utah	1	0.401
Massachusetts	2	0.399
Colorado	3	0.341
New Hampshire	4	0.257
Texas	16	0.096
West Virginia	45	0.001
United States		0.131

"Business bankruptcies in the U.S. increased 79 percent from the first quarter of 2007 to the first quarter of 2009."

- Second Quarter 2010: The Economy and Small Business Quarterly Indicators, Office of Advocacy of the U.S. Small Business Administration, 2010

Domain 3 - Market Composition and Characteristics

The 10 indicators in this domain provide information about the state's workforce and employers. Data elements include employment-related indicators such as labor force participation, unemployment, gross state product, and Texas export information. Texas normally performs well within this domain. Even with the impact of the recession, 60 percent of these indicators showed a positive change during the reporting cycle.

Domain 3 Summary			
Number of Indicators - 10			
		No.	%
↑	Positive change in last reporting cycle	6	60%
→	No significant change in last reporting cycle	3	30%
↓	Negative change in last reporting cycle	1	10%
●	Data unavailable	0	0%
⚑	Watch alert	0	0%

Indicator	Page	Alert	Trend
Labor Force Participation Rate	30	-	→
Average Annual Unemployment Rate	31	-	↑
Labor Productivity	32	-	↑
Average Annual Pay per Worker	33	-	↑
Gross State Product per Capita	34	-	↑
Exports per Capita	35	-	↑
Export Orientation	35	-	↑
Number of Technology Fast 500 Companies per 10,000 Business Establishments	36	-	↓
Business Establishment Entry	37	-	→
Business Establishment Exits	37	-	→

Labor Force Participation Rate

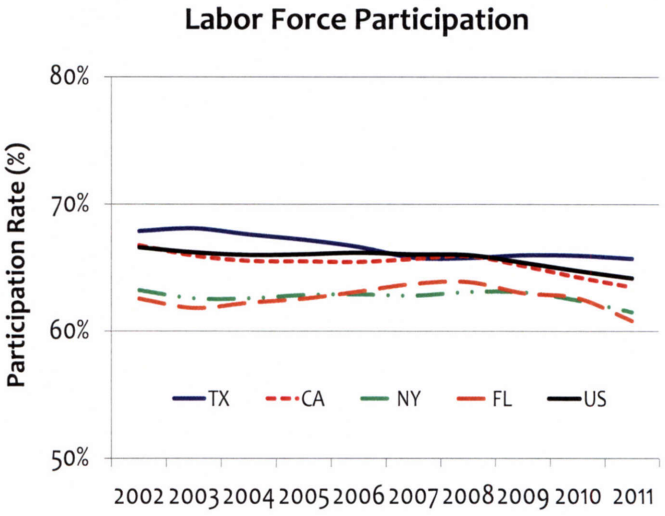
The labor force participation rate is determined by calculating the civilian labor force as a percent of the civilian non-institutional population. It is a basic indicator of the availability of workers. However, an available worker is not necessarily the right match for a given employer, occupation, or job. As noted in the Training and Education section, employer preferences related to applicant skill sets and education backgrounds should be considered, particularly as the state focuses on the growth of technology-based jobs.

All the large states and the nation as a whole experienced a reduction of labor force participation in 2011. The Texas labor force participation rate declined from 65.9 to 65.6 percent compared to the national decline to 64.1 percent. California declined from 64.2 percent to 64.1 percent. New York and Florida reduced to 61.5 percent and 60.8 percent. According to the Perryman Group, employment statistics show that in 2011 job creation in Texas fared better than the rest of the country. The number of wage and salary workers is up compared to 2010. The Texas economy is projected to achieve substantial growth in key sectors such as health services and trade.

North and South Dakota, Minnesota, and Nebraska continued to lead all the states. Texas remained 23rd in the state ranking for this indicator. According to the Perryman Group, Texas began to experience job losses later than most areas of the nation and continued to grow during the recession due to the strength of the Texas economy. That advantage remained as Texas experienced overall job gains in 2011. Since 2008, approximately 70 percent of all net new jobs in the U.S. were created in Texas. Over most of 2011, job creation in Texas was strong and widespread. As baby boomers begin to retire, many industries will likely face shortages of qualified workers. The Perryman Group also reported that an inflow of approximately 1,200 people are being added to the state's population daily, creating varying challenges. This wave of new Texans can be helpful in enabling the state to maintain a competitive advantage.

OECD labor force data indicate that there was no major change in participation rate trends during the economic crisis. The labor force participation rate fell slightly in 13 OECD member countries and rose incrementally in 17 other OECD member countries in 2010. The OECD's top participation rate leaders are smaller, wealthy, and efficient economies such as Luxembourg, Iceland, and Canada.

Texas has weathered the aftermath of the recession better than other states. As baby boomers retire and the global market opens the doors for competition, it will be imperative to attract, train, and retain workers for the jobs of the future.



State Comparison		
	Rank	2011 (%)
North Dakota	1	71.9
Minnesota	2	71.7
Nebraska	3	71.6
South Dakota	4	71.4
Texas	23	65.6
West Virginia	50	53.8
United States		64.1

International Data		
	OECD	2010 (%)
Canada	Member	56.9
Iceland	Member	57.3
Luxembourg	Member	74.3
Brazil	Non-Member	70.7
China	Non-Member	73.7
United States	Member	53.1

Source: OECD Statistical Extracts, 2012

Average Annual Unemployment Rate

This indicator represents the number of unemployed individuals as a percent of the Texas labor force. Based on the Bureau of Labor Statistics' (BLS) definitions, this includes individuals that were not working but were waiting to be recalled to a job following a temporary layoff. The indicator does not account for individuals who were never in the labor force or who stopped seeking work.

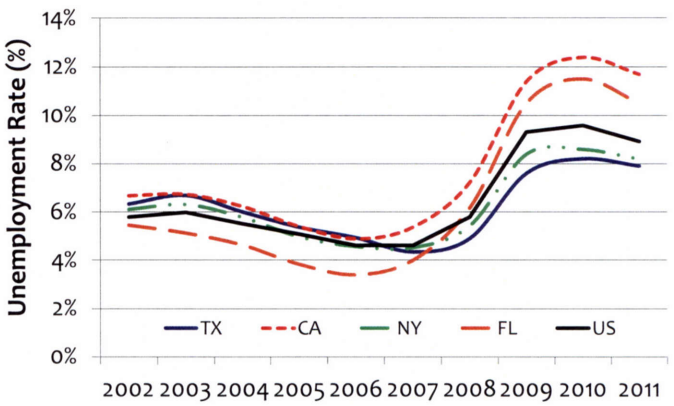
In 2011, the U.S. unemployment rate rebounded from three years of steady increases. The nation's unemployment rate escalated to 9.3 percent in 2009 and peaked at 9.6 percent before dropping to 8.9 percent in 2011. In 2011, annual average unemployment rates declined in 48 states and rose in two states, as reported by the BLS. The Texas unemployment rate fell to 7.9 percent, while New York unemployment was 8.2 percent and California and Florida exceeded 10 percent for the year. The unemployment rate is a lagging indicator of the health of the economy and is normally the last labor market indicator to rebound during a recovery. Significant job creation continues in Texas and the state unemployment rate remains below other states and the national average by at least one percent. The Perryman Group reports that as steadfast recovery and growth continues in Texas, an acceleration in economic growth is expected to occur.

Eight states reported unemployment rates of 10 percent or more in 2011, according to the BLS. Nevada again posted the highest unemployment rate, 13.5 percent, followed by California, 11.7 percent. North Dakota registered the lowest jobless rate among states for the third year in a row, 3.5 percent, followed by Nebraska, 4.4 percent. Overall, 28 states had unemployment rates that were significantly lower than the U.S. rate of 8.9 percent, while 10 states recorded rates significantly above it.

Norway surpassed all countries in the OECD, mainly due to high employment to population ratio and a low number of unemployed (3.3 percent unemployment rate). Korea had similar attributes and registered an unemployment rate of 3.4 percent. However, due to the effects of the global financial crisis, the rise in unemployment continued in OECD countries in 2010. OECD reports that 44.1 million were unemployed at the end of 2010, when the average unemployment rate was 8.3 percent, including the partner non-member BRIC countries.

Changes in the unemployment rate influence the Texas economy and its citizens in significant ways. A higher unemployment rate has negative effects including: loss of current jobs; decrease in job growth rates; decrease in discretionary spending; financial problems for individuals and households; and underemployment.

Annual Unemployment Rate



State Comparison		
	Rank	**2011 (%)**
North Dakota	1	3.5
Nebraska	2	4.4
South Dakota	3	4.7
New Hampshire	4	5.4
Texas	24	7.9
Nevada	50	13.5
United States		8.9

International Data		
	OECD	**2011 (%)**
Austria	Member	4.1
Korea	Member	3.4
Norway	Member	3.3
Brazil*	Non-Member	8.3
China*	Non-Member	4.3
United States	Member	9.0

Source: OECD Statistics Standardized Unemployment Rates
* World Development Indicators 2010 data

Labor Productivity

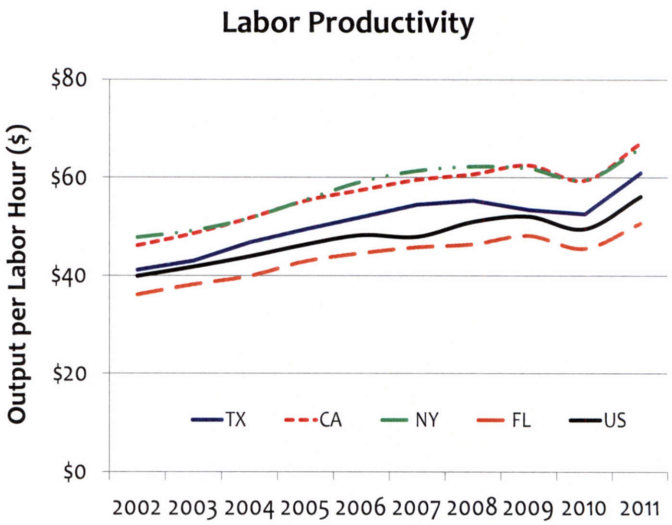
Labor productivity measures the ratio of output per hour as determined by the gross state product (GSP) divided by the total hours worked by the Texas workforce. From a business standpoint, increases in productivity indicate economic health driven by decreased costs, rising profits, development of innovative production methods and the ability to better compete in national and global markets. For the labor force, productivity growth may also indicate wage and salary increases.

California observed the highest labor productivity output among the large states at $67.10 per labor hour in 2011, up from $59.47 in 2010. Florida was the only large state with labor productivity below the national average. Florida produced $50.68 of output per labor hour in 2011, up from $45.54 in 2010. New York rose to $66.06 while Texas increased to $61.04. Texas' labor productivity rose by 17.4 percent over the last five years.

Seventeen states ranked higher than the national average in the 2011 level of GSP per hour worked. New York, California, and Texas remained the only large states within the top ten, while smaller states such as Alaska, Delaware and Connecticut constituted the top five. U.S. productivity continued to grow throughout the post recession because dramatic cuts in working hours exceeded decline in output. The Conference Board determined that growth in productivity will remain slow as gross domestic product growth remains slow and the labor market gradually recovers.

Despite the slow rise in labor productivity in 2011, U.S. labor productivity remains among the highest in advanced world economies. In 2011, output per hour worked was $62.14 in the U.S. as measured by purchasing power parity (allowing international comparison). This is above the levels of France, Germany, the United Kingdom, and only significantly behind two smaller economies: Norway and Luxembourg. The Conference Board reported that the outlook for the emerging economies is positive. Brazil is realizing a strong recovery in total labor hours worked and productivity is up 4.4 percent following the global financial crisis. Chinese labor productivity rose above 8 percent in 2011. The global crisis had a limited impact on China's productivity as output growth remained strong and employment growth stable.

Research indicates productivity shifts among sectors and industries reflect recent events and economic conditions, as well as the long-term structural shifts taking place in the economy. Notable in the structural category are the declining importance of goods-producing sectors versus service-providing sectors, the rapid growth of information technology, and the increased use of outsourcing and off-shoring, as reported by the Bureau of Labor Statistics.



State Comparison		
	Rank	2011 ($)
Alaska	1	80.16
Delaware	2	78.37
Connecticut	3	68.76
California	4	67.10
Texas	10	61.04
Arkansas	50	34.96
United States		56.13

International Data		
	OECD	2011 (US$)
Luxembourg	Member	75.93
Netherlands	Member	61.35
Norway	Member	72.87
N/A	Non-Member	N/A
N/A	Non-Member	N/A
United States	Member	62.14

Source: The Conference Board and Groningen Growth and Development Centre

Average Annual Pay per Worker

Higher wage levels are often correlated with higher job quality and standard of living. In addition, higher wages may increase employers' options when seeking to attract or retain qualified workers. This is increasingly important given Texas' goal of job and business growth in the high-tech and knowledge-based industry sectors. The average annual pay per worker is the total pay of Texas employees measured quarterly and annualized through the Occupational Employment Statistics survey.

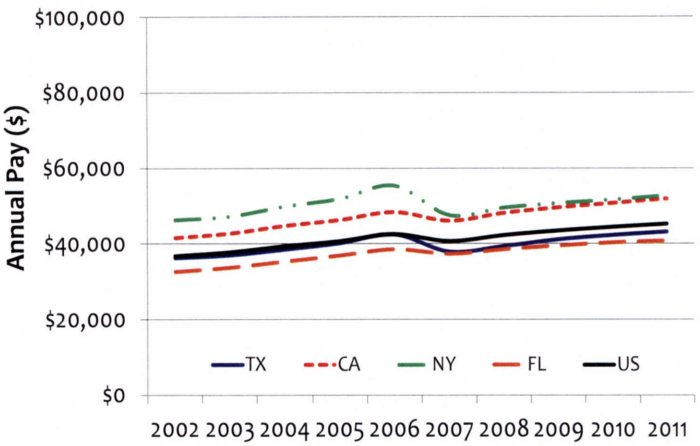
The average pay per worker increased for all of the large states and for the nation in the wake of the deepest recession in recent history. New York and California both registered an average annual worker pay above $50,000, which is higher than the U.S. average of $45,230. Both Texas ($43,090) and Florida ($40,750) fell just below the U.S. average. Texas annual pay per worker increased by 13.8 percent since the beginning of the recession in 2007, while Florida increased by 9.3 percent. This is Texas' fourth consecutive annual average pay per worker increase since the beginning of the national recession.

The top wage earning states remained constant throughout the economic recession recovery. Massachusetts, Connecticut, New York, and California again reported the highest pay per worker. The Conference Board reports that the average company budgeted just three percent of its salary pool for wage increases in 2011, barely exceeding inflation. This is the first time in 20 years this figure has fallen to three percent or lower. The 2011 salary adjustment scale for all employee categories was at 2.9 percent or less for most companies, which was lower than the Conference Board's inflation rate of 3.2 percent. Post recessionary effects are expected to continue to limit wage growth for most states throughout the recovery period that is expected to extend through 2013.

Switzerland and Norway led OECD countries as the top paying economies of 2010. The strong link between industry and trade with foreign countries and the achievements of the services industry are the keys to Switzerland's high economic results. In 2010, related service occupations drove Switzerland wages up to $80,153 in the wake of a global financial crisis. Norwegian wealth comes from a rich endowment of natural resources. Norway's hourly productivity levels, as well as the average wage of $72,237 were among the highest in the OECD in 2010. The U.S. wages, as measured by the OECD, increased by 3.4 percent to $52,607.

In general, the greater the disposable income afforded through increases in the average annual pay, the more increased spending on goods and services across the economy. This increase in consumption can improve gross state product, economic growth, and job creation.

Annual Average Pay per Worker



State Comparison

	Rank	2011 ($)
Massachusetts	1	54,740
Connecticut	2	52,830
New York	3	52,810
California	4	51,910
Texas	22	43,090
Mississippi	50	34,770
United States		45,230

International Data

	OECD	2010 (US$)
Denmark	Member	68,280
Norway	Member	72,237
Switzerland	Member	80,153
N/A	Non-Member	N/A
N/A	Non-Member	N/A
United States	Member	52,607

Source: OECD Statistical Annex, 2012

Gross State Product per Capita

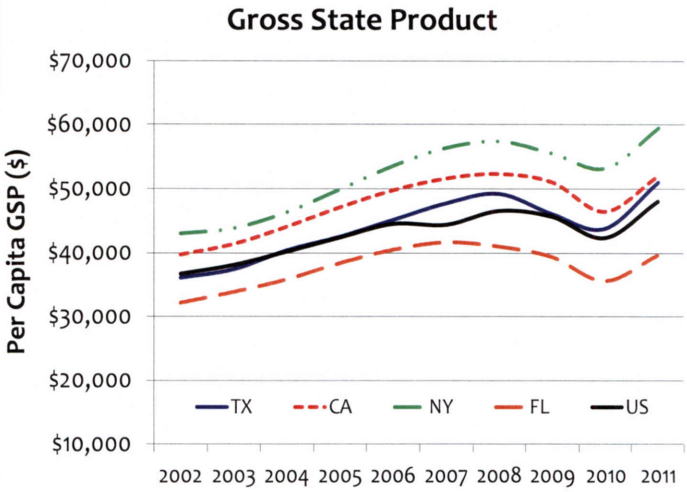
Gross State Product (GSP) is typically considered to be the most comprehensive measure of a state's overall economic activity. It is estimated as the sum of three components: employee compensation; taxes on production and imports; and gross operating surplus. For this indicator, GSP is presented on a per capita basis, providing a measure of the resources available to a country or state relative to the size of its population.

Texas' GSP per capita decreased for two consecutive years until 2011 when the GSP rose by 16.4 percent to $50,945, surpassing pre-recession levels. During the last decade the population of Texas increased faster than any other state (20.6 percent according to the U.S. Census) and the Texas Workforce Commission states that over 1,000 people move into Texas each day. In 2011, Texas remained above the national average of $48,079. New York increased from $53,241 to 59,491 per capita in 2011, while California expanded from $46,382 to $51,974. Florida trails the large states with a GSP per capita of $39,564, as the only large state below the national average. Texas passed New York over the decade to become the nation's second-largest economy, according to a *USA Today* examination of data released by the Bureau of Economic Analysis (BEA). This GSP per capita decline from 2009 to 2010 can be partially attributed to the rapidly increasing population in Texas.

Delaware's per capita GSP of $72,486 was the highest in the nation, 50.8 percent above the national average. On the opposite end of the rank, Mississippi's per capita GSP of $32,839 was the lowest in the nation, 46.4 percent below the national average. According to the BEA, durable goods manufacturing contributed to substantial growth in GSP in Indiana, Oregon, Michigan, Wisconsin, and Tennessee.

Luxembourg ranks as the top OECD-member country in Gross Domestic Product (GDP) per capita. Emerging economies such as Brazil, China, India, and the Russian Federation are among the top 10 countries with rising GDP per capita and reserve holdings. These large reserve holdings can help economies recover from the global financial crisis and strengthen the confidence of investors. While the U.S. trails Luxembourg by 85.7 percent in GDP per capita, the U.S. maintains the highest overall GDP of the OECD countries at nearly $15 billion in 2011.

GSP is a measurement of the economic output of Texas and is the sum of all value added by industries within the state. Therefore, rapid GSP growth indicates a strong economy, while a slow or declining growth rate is indicative of economic downturn or recession.



State Comparison		
	Rank	**2011 ($)**
Delaware	1	72,486
Alaska	2	71,087
Wyoming	3	66,209
Connecticut	4	64,258
Texas	16	50,945
Mississippi	50	32,839
United States		48,079

International Data		
	OECD	**2009 (US$)**
Luxembourg	Member	84,848
Norway	Member	54,568
Switzerland	Member	44,840
Brazil	Non-Member	10,453
Russian Federation	Non-Member	19,023
United States	Member	45,674

Source: *OECD Factbook, 2011*

Exports per Capita
Export Orientation

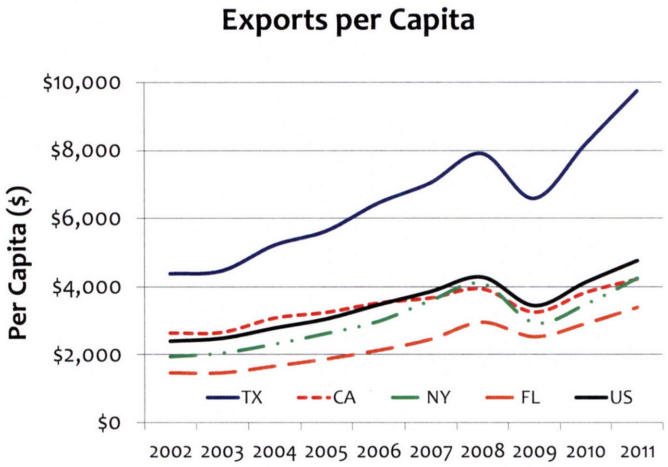
A strong export sector is generally viewed as a favorable indication of the ability to compete in both national and global markets. Economies that are more open tend to be more productive, and stronger exports are seen during robust economic times. Export data is reported with two indicators: (1) a per capita basis; and (2) through export orientation as a percentage of Texas GSP. Per capita exports indicate the total state exports, divided by the Texas population.

Texas continued in 2011 as the top exporting state in the U.S. in terms of volume ($250 billion) and second in per capita exports at $9,732. Texas is the top exporting state in the nation for the tenth year in a row. Texas exports per capita have expanded by 38.3 percent since the beginning of the recession in 2007, despite the dip in 2010 due to the global financial crisis. Texas' exports per capita grew by 19 percent from 2010 to 2011. Since 2005, the fastest growing export markets have been Latin America and China. By industry, exports of petroleum and coal products have surged, while agriculture and food exports also showed substantial increases in 2011.

While Texas ranked first in total exports in the nation and second in exports as a proportion of the GSP, Louisiana held the number one spot in 2010. Exports per capita in Louisiana at $12,049 again led the nation in 2011, a 32.7 percent increase from 2010. Louisiana exceeded Texas by $2,317 per capita, based on its continued exports of oil and gas equipment, machinery parts, consumer goods and food products. The value of U.S. exports per capita increased from $4,132 to $4,752 in 2011.

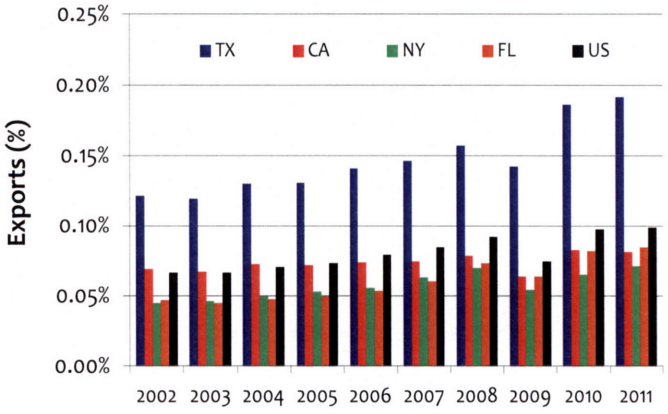
Export orientation can be defined in terms of a trade openness ratio expressed as a percentage of GSP. The U.S. surge, aided by an increase in global demand and a falling dollar value, was largely driven by a significant increase in sales to the nation's North American Free Trade Agreement partners, Mexico and Canada. Demand for Texas exports also rose in Asia, Latin America and Europe. In addition, the higher price of oil relative to natural gas has made chemical production competitive in the U.S., fueling high demand for chemical exports. As its trading partners' economies strengthen, Texas continued to see export gains in late 2011. This was mainly due to Mexico, the state's largest trading partner, moving into economic recovery, as reported by the Dallas Federal Reserve Bank.

Technology exports have become increasingly important in today's economy. Increasing export orientation, and its contribution to the state's GSP, is desirable. More goods exported by Texas businesses represent more capital investment, higher wages, and more new jobs.



State Comparison

	Rank	2011 Exports per Capita ($)
Louisiana	1	12,049
Texas	2	9,732
Washington	3	9,463
Alaska	4	7,248
Vermont	5	6,780
Hawaii	50	661
United States		4,752



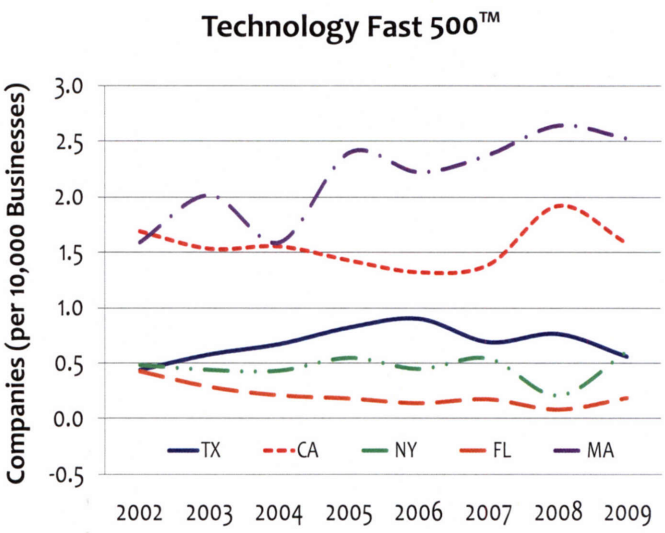
Number of Technology Fast 500 Companies per 10,000 Business Establishments

The Technology Fast 500™ (Tech Fast 500) North America is one of three industry rankings, accompanied by Asia Pacific 500 and EMEA 500 (Europe, Middle East and Africa), created by Deloitte to recognize the 500 fastest growing technology companies in each region. The Tech Fast 500 includes public and private companies in all areas of technology including the Internet, biotechnology, medical/scientific and computers/hardware. To be considered, a company must: (1) own proprietary technology that contributes to a significant portion of the company's operating revenues, and (2) devote a significant proportion of revenues to research and development of technology. Other factors are: companies must be headquartered in North America; have been in business a minimum of five years; and have base operating revenues of at least $50,000 USD, with current year operating revenues of at least $5 million USD.

Tech Fast 500 data is presented per 10,000 established businesses. The ratio of Tech Fast 500 companies in Texas fell to 0.56 in 2009 from 0.77 in 2008. This was the lowest ratio of Tech Fast 500 companies in Texas since 2002 when the ratio was 0.44. Massachusetts (2.52) and California (1.67) led the large states in 2009, while New York and Florida stood at 0.60 and 0.18 Tech Fast 500 companies per 10,000 business establishments respectively.

There were a greater number of Tech Fast 500 companies in Massachusetts than in any other state in 2009. The Deloitte Tech Fast 500 list for 2009 announced that Massachusetts boasts 43 companies. The Tech Fast 500 ranks the fastest-growing technology, media, telecommunications and life sciences companies in North America. Companies were selected based on percentage revenue growth from 2004 to 2008. California, Connecticut, and Maryland were also top ranked states in 2009, averaging over 1.4 Tech Fast 500 companies per 10,000 businesses. Connecticut (1.67) ranked second followed by California with a 1.59 Tech Fast 500 score. California and the New York Tri-State area (New Jersey, New York and Connecticut combined) were among the top technology centers in the nation in 2009.

As defined by Deloitte, the Tech Fast 500 are "the companies that rally behind innovation by breaking down obstacles and systematically defying the odds." The Deloitte Tech Fast 500 program recognizes the work of these companies, making the Tech Fast 500 a list of the elite. Those chosen must outperform other companies represented by Deloitte's 15 regional U.S. and Canadian programs. The Tech Fast 500 seeks to reward companies that have demonstrated cutting edge business strategies, vision, and solid management. Texas benefits greatly from these companies by attracting talented professionals to the state, as well as creating an environment in which other businesses can thrive.



State Comparison		
	Rank	2009
Massachusetts	1	2.52
Connecticut	2	1.67
California	3	1.59
Maryland	4	1.47
Texas	13	0.56
Ohio	31*	0.04

* 31st is the last ranked state - 19 states listed no Technology Fast 500™ companies

"Texas had the fifth largest number of Technology Fast 500™ companies in the U.S. totalling 29 companies in 2009."

- Deloitte, *Fast 500 Highlights & Trends 2010*

Business Establishment Entry

Business Establishment Exits

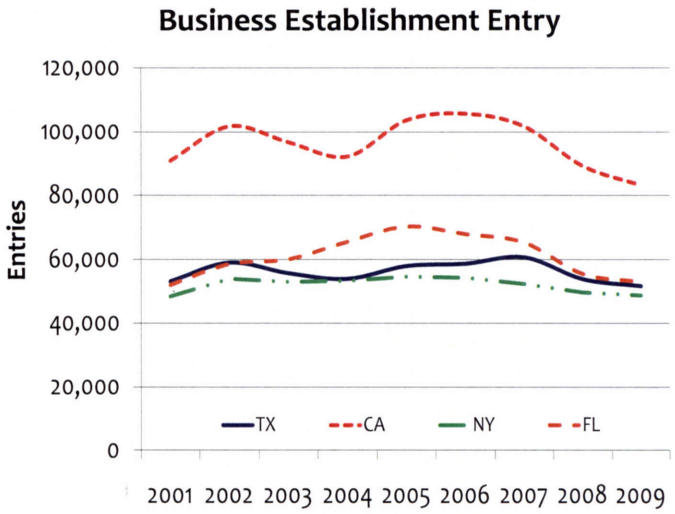
Business establishment entry and exits are components of the Business Dynamics Statistics (BDS). BDS are a product of the Center for Economic Studies of the U.S. Census Bureau. One feature of the BDS is that business start-ups and closings can be tracked on a comprehensive basis for U.S. private, non-agricultural businesses. BDS calculates the number of business entry and exits from 1977 to 2009 for all 50 states. There will be subsequent yearly updates based on changes over consecutive two-year periods.

Business start-ups continued to occur in the large states, however decreases resulting from the recession were evident from 2007-2009. California added 101,707 businesses in 2007, but only 83,344 in 2009. Florida contracted from 65,336 business start-ups in 2007 to 52,950 in 2009. Texas added 51,619 businesses in 2009, a 17.6 percent decline due to the recession. However, Texas still added more jobs than any other state during the recession and continues to grow steadily today. New York decreased in business entry by 7.1 percent through the recessionary period, ending with 48,848 in 2009.

The U.S. listed 662,228 entries and 794,784 business closings in 2009. According to BDS, data showed a slowing in gross job creation from existing firms as well as start-ups during the recession. Despite this, in 2009 Texas ranked third among all 50 states in business entries. Between 2005 and 2010, Texas was selected as the destination for one in every 21 foreign software and IT projects and one in every nine foreign coal, oil, and natural gas projects locating in the U.S. This is more foreign direct investment projects than 150 independent countries, according to the consulting firm FDI Intelligence.

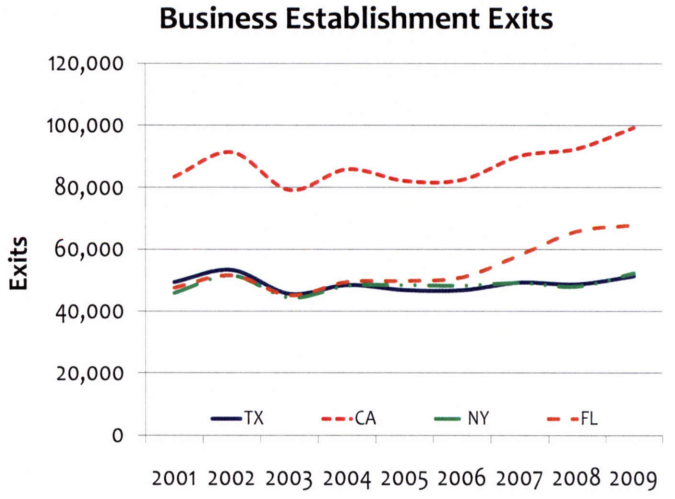
California also led the large states in business closings, increasing from 90,807 to 99,101 a year from 2007-2009. Florida's shutdowns grew during the recession from 58,089 in 2007 to 67,935 in 2009. Texas and New York mirrored each other in firm closings, remaining within the 50,000 range for the three-year period. This represented little difference as compared to the pre-recession period. The BDS showed that the average percentage of total employment contributed by start-up companies from 1980-2006 was three percent a year. During the recession, the U.S. had a negative (-1.0 percent) annual average net employment growth. This shows that the U.S. lost more jobs than were created and highlights the importance of new business entry for job creation in the U.S. economy.

Texas leads the states in employment gains. The state is also the nation's leader in fostering an economic climate that creates jobs, promotes innovation and opens the door to unlimited opportunity. Fiscal policies, including low taxes, fair courts and predictable regulations, keep Texas the top destination to live, work, grow a business and raise a family.



State Comparison

	Rank	2009 (Entries)
California	1	83,344
Florida	2	52,950
Texas	3	51,619
New York	4	48,848
Illinois	5	26,519
Vermont	50	1,651
United States		662,228



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Domain 4 - Participant Access and Contribution

The Participant Access and Contribution domain is comprised of eight indicators of citizens' economic status and self-sufficiency, including traditional income and poverty indicators. Household access to computer technology is considered as well as the level of home ownership. Three indicators in this domain, including per capita income and median home value, incurred a positive change in the last reporting cycle reflecting improvement in Texan's general economic health. Poverty indicators, home ownership, and high speed internet access were negatively affected by the recession. Indicators measuring the median home value and median household income remained steady despite the nation's slow economic recovery.

Domain 4 Summary			
Number of Indicators - 8			
		No.	**%**
↑	Positive change in last reporting cycle	3	38%
→	No significant change in last reporting cycle	1	12%
↓	Negative change in last reporting cycle	4	50%
●	Data unavailable	0	0%
⚑	Watch alert	0	0%

Indicator	Page	Alert	Trend
Per Capita Income	40	-	↑
Per Capita Income Annual Average Growth Rate	41	-	↑
Percent of Population Living Above the Federal Poverty Threshold	42	-	↓
Percent of Population Living Above 200% of the Federal Poverty Threshold	42	-	↓
Median Household Income	43	-	→
Median Home Value	44	-	↑
Residential High-Speed Internet Access	45	-	↓
Home Ownership Rate	46	-	↓

Per Capita Income

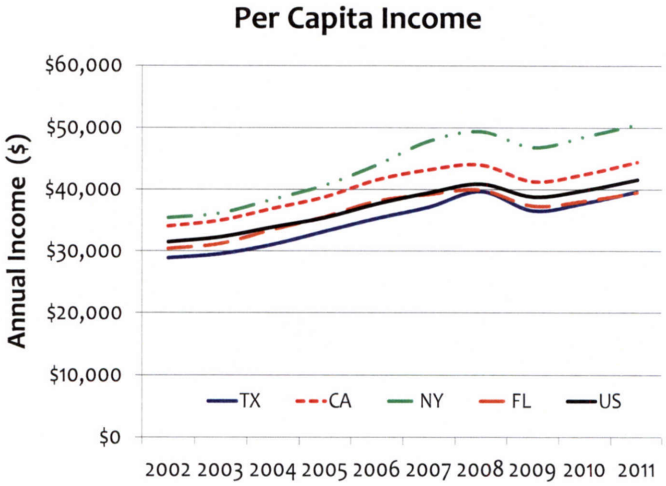
Per capita income represents the annual, total personal income of Texas residents, divided by the Texas population. Data has been normalized for comparative purposes, representing all Texans rather than just those who work. Traditionally, personal income includes wage earnings, rental income, personal dividend and interest income, and personal current transfer receipts (e.g., unemployment insurance, Medicare/Medicaid).

Per capita income increased over the year among the large states as steady improvement in labor market conditions was manifested by the pick-up in payroll growth during the year. Texas income rose by 4.9 percent to $39,593 per capita, pulling just ahead of Florida which recorded a per capita income increase of 3.5 percent to $39,563. New York ($50,545) and California ($44,481) both increased and remain above the national per capita income level of $41,663.

State personal income increased by an average 5.1 percent in 2011 after rising 3.7 percent in 2010, according to estimates released by the U.S. Bureau of Economic Analysis. State per capita personal income ranged $32,200 to $56,900. Texas fell in the 50-state ranking from 23rd to 26th in 2011. Texas remained ranked among the middle states, ahead of Florida and Louisiana. Connecticut led the nation with a per capita income of $56,397. From a national perspective, the Bureau of Economic Analysis reported that earnings increased in all industry sectors (private) in 2011 except administrative services and accommodations.

Norway leads the world in per capita Gross National Income (GNI) in the OECD, with a GNI of $84,640. Norway's economy is focused on innovation. For instance, the government's objectives include promoting economic diversification, enhancing the competitiveness of companies and building a knowledge-based society. However, the cost of living in the small countries such as Norway, Denmark, and Switzerland is also among the highest. Developing economies such as Brazil and the Russian Federation are expected to continue to grow exponentially faster than higher-income economies due to labor surpluses, higher returns on investment of physical capital, and access to technology already established by high-income economies.

Per capita income is linked to and affected by fluctuations in the economy. Innovative economies with competitive industries typically display a higher per capita income. Investing in productive skills and technical knowledge to train and educate workers and produce entrepreneurial activity is critical for success in the global economy.



State Comparison

	Rank	2011 ($)
Connecticut	1	56,889
Massachusetts	2	53,621
New Jersey	3	53,181
Maryland	4	51,038
Texas	26	39,593
Mississippi	50	32,176
United States		41,663

International Data

	OECD	Per Capita GNI 2010 (US$)
Denmark	Member	59,060
Norway	Member	84,640
Switzerland	Member	65,430
Brazil	Non-Member	8,070
Russian Federation	Non-Member	9,340
United States	Member	46,360

Source: *World Development Indicators*, World Bank, 2011

Per Capita Income Annual Average Growth Rate

The annual average growth rate of personal income is an indicator that measures the individual's earnings and fluctuations over time. Personal income is the income received by all persons from all sources. It is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars, according to the U.S. Bureau of Economic Analysis (BEA).

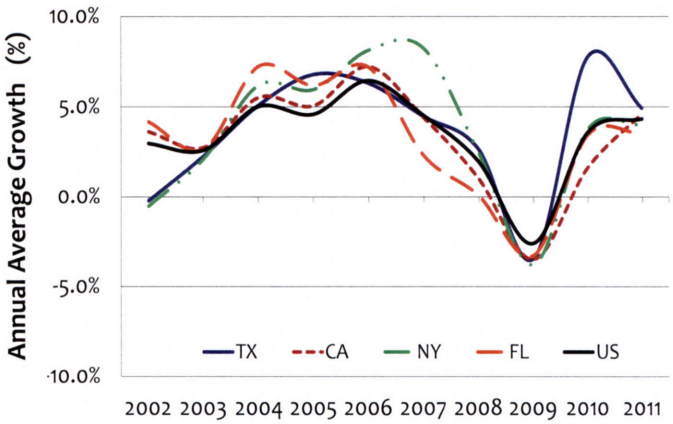
Per capita income annual average growth rate rebounded for each of the large states as well as the nation in 2011. Texas outpaced the other large states and the nation with a growth rate of 4.9 percent. Steady job growth in Texas post recession is reflected in this indicator. The national average rose to 4.3 percent, while California's per capita income increased to 4.6 percent, despite the lingering effects of its high unemployment rate. Both Florida (3.5 percent) and New York (4.0 percent) were below the national average.

U.S. earnings in 2011 recovered to their pre-recession levels and reached new peaks in 45 states, according to the BEA. Arizona, Florida, Michigan, Nevada, and Oklahoma are still below peaks reached in 2007 or 2008. Twenty-three states posted per capita income growth higher than the national average, with North Dakota on top. Maine and Alaska remain at the bottom of the income growth ranking. Across the states, per capita personal income growth ranged from 2.9 percent in Alaska to 6.7 percent in North Dakota.

Norway is the OECD country with the largest growth in gross national income (GNI) per capita, with a 2.5 percent increase in 2010. Finland and Slovac Republic followed each with a 1.8 percent growth rate from 2009-2010. BRIC countries are currently experiencing erratic growth rates in GNI. In 2009, growth rates were nearly three times more than that of some of the more established OECD economies. In 2010, Brazil's manufacturing sectors experienced growth, yet GNI per capita growth rate posted a negative 20.6 percent. GNI per capita normally increases as a result of this surging income and lowered unemployment rate. However, global economic instability has caused fluctuating growth cycles.

In order for Texas to continue its growth in per capita income, it must focus on educating career-ready graduates. This will create a highly trained and globally competitive workforce to support the jobs of the future. A strong workforce is the foundation on which to increase competitiveness and spur innovation, which will lead to job creation and income growth for Texans.

Per Capita Income Growth Rate



State Comparison

	Rank	2010-2011 (%)
North Dakota	1	6.7
Iowa	2	6.4
Oklahoma	3	5.3
South Dakota	4	5.2
Texas	9	4.9
Alaska	50	2.9
United States		4.3

International Data

	OECD	Per Capita GNI 2009-2010 (%)
Finland	Member	1.8
Norway	Member	2.5
Slovac Republic	Member	1.8
Brazil	Non-Member	-20.6
Russian Federation	Non-Member	0.5
United States	Member	-0.2

Source: *World Development Indicators*, World Bank, 2011

Percent of Population Living Above the Federal Poverty Threshold
Percent of Population Living Above 200% of the Federal Poverty Threshold

As basic measures of economic self-sufficiency, these indicators are calculated by setting the total Texas population at 100 percent. The percentage of population living below the federal poverty threshold is subtracted. The formula is repeated by subtracting those living below the poverty threshold multiplied by two, which is equal to 200 percent below the federal poverty threshold. Note: the poverty level used in this indicator is for a family of four; the poverty threshold for a family of four in 2010 was $22,314.

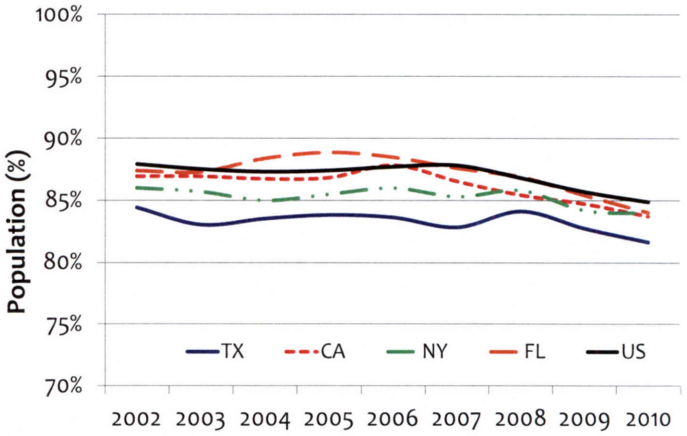
There were more Americans living in poverty in 2010 than in 2009. Those living above the federal poverty level declined from 85.7 percent to 84.9 percent. This was the third statistically significant annual decrease in those living above the poverty threshold since 2004. In 2010, according to the U.S. Census Bureau, 46.2 million people were in poverty, up from 43.6 million in 2009, as a direct result of increased unemployment levels from the recession. The number of Texans living above the poverty threshold declined from 82.7 percent to 81.6 percent in 2010, however, this indicator is projected to recover faster than the nation.

There was also considerable decline in the number of persons in America living 200 percent above the poverty threshold in 2010 as the effects of the recession reverberated throughout the U.S. There were 204 million people or 66.1 percent of the U.S. population living above 200 percent of the federal poverty threshold in 2010. The number of people in poverty in 2010 is among the largest number in over 50 years for which poverty estimates have been published, according to the U.S. Census Bureau. Poverty increased for those under the age of 18 and those aged 18-64, but decreased for people aged 65 and older in 2010. While still below the national average, the percentage of Texans 200 percent above the poverty level declined at a slightly slower rate as compared to the other large states and is also projected to recover more rapidly.

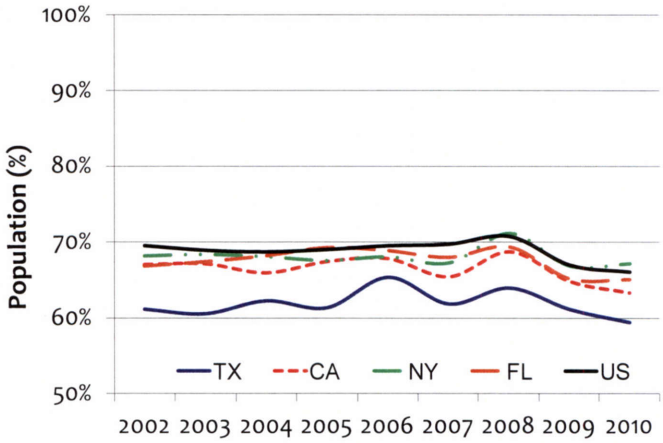
Texas held steady in 2010 by ranking 45th in the percent of population living above 100 percent of the federal poverty threshold. New Hampshire continued to lead the nation with the lowest level of poverty. New Hampshire's population living above the poverty threshold and 200 percent above the threshold stood at 93.4 percent and 80.7 percent respectively. Connecticut and New Jersey ranked in the top ten for both indicators.

These basic measures of poverty incidence may serve as indicators of Texas' economic health and in this cycle of the *Index* were exacerbated by the effects of the recession. Higher rates of poverty are typically correlated with a number of negative factors for Texans, including: high unemployment; lower educational participation; and lower educational completion rates.

Population Living Above Poverty Threshold



Population Living Above 200% of the Poverty Threshold



State Comparison

2010 (100%)		Rank	2010 (200%)	
NH	93.4	1	80.7	NH
CT	97.1	2	78.1	CT
WY	90.4	3	74.4	MD
WI	90.1	4	74.4	MN
TX	81.6	45|47	59.4	**TX**
MS	77.3	50	55.9	MS
US	84.9		66.1	US

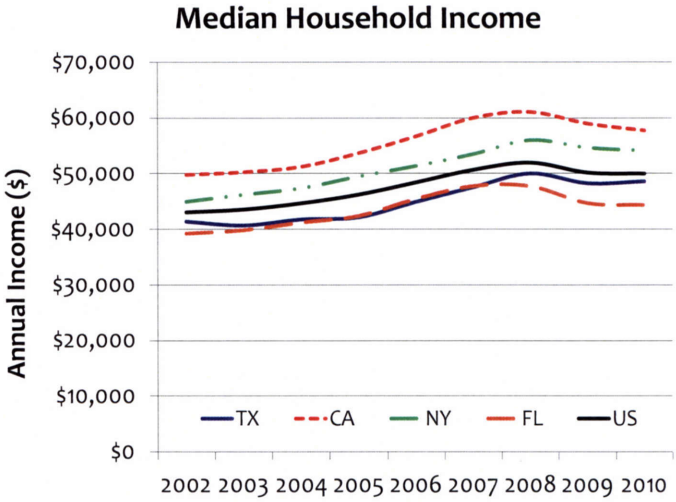
Median Household Income

Median household income divides households into two equal segments. The median is the midpoint with one half of households earning less than the median household income and the other half earning more. Median income is considered to be a better indicator of middle wealth than the average household income as it is not dramatically affected by unusually high or low values. *The Index* uses the median household income estimates generated through the U.S. Census Bureau's American Community Survey (ACS) for reporting annual statistics that are comparable at the state level.

The ACS reported that the median household income in America was $50,046 in 2010. However, the Census Bureau also collects median income data from the Current Population Survey and the Annual Social and Economic Supplement that is slightly different from the ACS numbers. These data resources were used in the Bureau's Income and Poverty report in 2010, which noted 2010 median household income was $49,445, not statistically different from the 2009 median. Since 2007, the year the recession began, median household income has declined 2.6 percent (from $51,965) and is 5 percent below the median household income peak ($52,388) that occurred in 1999. Comparatively, California and New York posted median incomes above both the U.S. and Texas. Florida's household income level remained below Texas' as it fell 0.7 percent to a four-year low of $44,409.

The 2009 ACS median household income estimates ranged from a median of $36,851 to $68,854. Nineteen states had a higher median household income than the U.S. median, with eight states surpassing the $60,000 mark. The Census Bureau noted a trend in household income data based on residence throughout the nation between 2009 and 2010. Households located inside and outside of metropolitan area cities experienced positive changes in median household income. Households inside metropolitan areas experienced a 1.9 percent increase in income, while more rural households experienced a 1.9 percent decline. Moreover, in 2010 households within metropolitan areas but outside the principal cities had the highest median income ($56,600), and households outside metropolitan areas had the lowest ($40,100).

Median household income is a direct measurement of prosperity. However, real gains in household income can be very difficult. For example, since 1980, U.S. gross domestic product per capita has increased by 73.2 percent, while median household income has only increased by 17.2 percent, according to the U.S. Census Bureau. Economic recessions will normally cause household incomes to decrease, often by as much as 10 percent.



State Comparison		
	Rank	2010 ($)
Maryland	1	68,854
New Jersey	2	67,681
Alaska	3	64,576
Connecticut	4	64,032
Texas	24	48,615
Mississippi	50	36,851
United States		50,046

"Over the long-term forecast period, the Lone Star State is predicted to achieve substantial growth in all key indicators, with growth rates exceeding those of the nation as a whole."

- Perryman Group, *The Perryman Report and Texas Letter, December 2010*

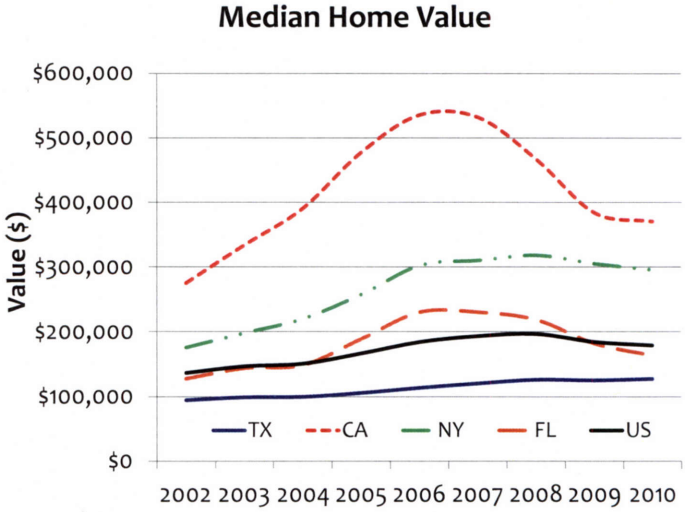
Median Home Value

The median home value is the price that is midway between the least expensive and most expensive home sold in an area during a given period of time. During that time, half the buyers bought homes that cost more than the median price and half bought homes for less than the median price. The median home value is one of the more commonly used measurements to compare real estate prices in different markets, areas, and periods. It is less biased than the average or mean value since it is not as heavily influenced by the top 2 percent of homes sold.

In 2010 California remained the leader among the large states in home valuation with the median home value at $370,900. However, this is a decline by 3.5 percent from the previous year, reflecting a high inventory and low sales. Florida also declined by 9.9 percent to $164,200 in 2010. New York's residence values dropped in 2010 by 12 percent resulting in a median home value of $296,500. In 2010, the U.S. median home value declined by 2.9 percent to $179,900. Texas' median home value was the only one to increase in 2010, by 1.8 percent to $128,100.

The top five states with high housing values were Hawaii, California, New Jersey, Massachusetts, and Maryland incurring median home values ranging from $301,000 to $525,400. Twenty-one states posted a median home value that exceeded the national value of $179,900. Texas moved up one position since 2009, from ranking 39th to 38th in 2010. U.S. housing demand has slumped since the start of 2010 as unemployment remained near an average 9.5 percent. According to the Federal Housing Finance Agency's home price measure, based on properties with loans backed by mortgage financiers Fannie Mae or Freddie Mac, home prices have fallen as lenders seized homes and sold them at discounted prices. However this was not an issue in Texas due to state foreclosure laws that limit these actions. Foreclosures and short sales, where banks agree to let properties sell for less than their loan balances, have accounted for nearly a quarter of all transactions in 2010, based on the monthly average of data from the National Association of Realtors.

Historically, changes in median home value measure changes in market activity. The Texas housing industry faced another difficult year in 2010. Texas home inventories rose, yet Texas' housing sector remained relatively healthy compared to the national average. Texas metro markets are better positioned than many other parts of the country to thrive when housing demand recovers.



State Comparison		
	Rank	2010 ($)
Hawaii	1	525,400
California	2	370,900
New Jersey	3	339,200
Massachusetts	4	334,100
Texas	38	128,100
West Virginia	50	95,100
United States		179,900

"Despite declining housing values, eight-in-ten Americans see a home as the best long-term investment that the average person can make."

- Pew Research Center, *Home Sweet Home. Still., April 2010*

Residential High-Speed Internet Access

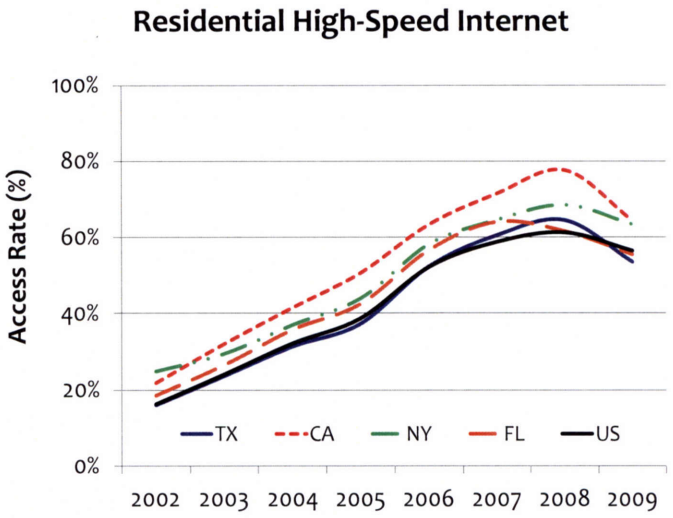
High-speed Internet access allows for easier exchange of data over transmission lines and can provide important educational resources and other data tools to rural and more populated areas that might otherwise be underserved. Twice a year, broadband providers are required to report to the Federal Communications Commission (FCC) basic information about their service offerings and types of customers. The usage percentage is based on this data, divided by occupied housing unit estimates from the U.S. Census Bureau. The FCC has collected basic service information from broadband providers on a semiannual basis since 2000.

Residential high-speed Internet access was affected post-recession by consumer reductions in discretionary expenses, illustrated in the 2009 data. The percentage of broadband lines in Texas (53.6 percent) fell below the U.S. (56.5 percent) over the year. California led the large states at 64.5 percent followed by New York at 63.5 percent and Florida at 55.6 percent.

More than 60 percent of households in America had high-speed Internet access in 2009. This is a 279 percent increase since 2002, when only 16.2 percent of the nation's residences subscribed to a high-speed Internet provider. The FCC reported a pronounced recent slowdown in the growth of new high-speed subscribers indicating that the market may be nearing saturation. According to the Pew Internet and American Life Project, 55 percent of American adults connect to the Internet wirelessly, either through a Wi-Fi connection via their laptops or through a handheld device like a smart phone. Moreover, among older Americans age 50 and over, the growth rate in home broadband adoption from 2008 to 2009 was nearly 30 percent.

The U.S. remained below a select handful of smaller developed nations in personal computer broadband access per 100 users at 27.8 percent in 2009. While this is an increase over the 2008 percentage of 24.3, Denmark, Norway, and Sweden each rose to nearly 40 percent and led internationally, according to The World Bank's 2009 *World Development Indicators*. Government policies and regulations are creating competitive information and communication technology (ICT) markets, and increasing access to ICT services to people everywhere. Innovative use of ICT services are changing people's lives and providing new opportunities in developing economies such as China and the Russian Federation.

Broadband access provides Texans with the technical capability to access a wide range of resources, services, and products, and is an important tool for expanding both educational and economic opportunities for consumers - especially in remote locations. High-speed internet access also allows Texans to take advantage of distance learning opportunities such as college courses and continuing or senior education programs.



State Comparison		
	Rank	**2009 (%)**
Hawaii	1	73.3
Connecticut	2	69.4
New Jersey	3	69.1
Massachusetts	4	67.7
Texas	26	53.6
Mississippi	50	36.4
United States		56.5

International Data		
	OECD	**2009** (per 100 people)
Denmark	Member	37.5
Norway	Member	37.2
Sweden	Member	40.9
China	Non-Member	7.8
Russian Federation	Non-Member	9.1
United States	Member	27.8

Source: *World Development Indicators, World Bank*, 2011

Home Ownership Rate

According to the Joint Center for Housing Studies of Harvard University, home ownership can contribute to life satisfaction. The act of buying a home symbolizes that the owner has achieved a certain socioeconomic status. The home ownership rate is computed by dividing the number of households that are owned by the total number of households (occupied housing units) and expressed as a percentage. This rate is calculated each year by the Housing Economic Statistics Division of the U.S. Census Bureau.

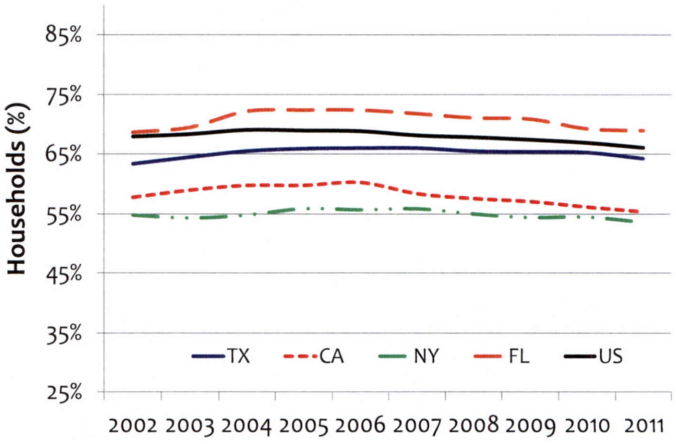
Florida's 2011 home ownership rate (69 percent) experienced its second decline since 2007. Florida's home ownership rate is still positioned above the national average and other large states, reflecting the state's older median age and historically affordable home prices. Texas' 64.3 percent home ownership rate remained above California (55.3 percent) and New York (53.6 percent) over the year. However, each of the large states and the national home ownership rate declined in 2011.

The home ownership declines in 2011 show a continuted downturn in the housing market. According to a Dallas Federal Reserve Bank report, the recession disrupted the future expectations and financial plans of millions of Americans and changed their assumptions about the future. Consumer behavior is changing as a result. The collapse of housing prices and resulting worker immobility changed consumers' appetite for home ownership. Among the higher ranked states were West Virginia at 78.7 percent followed by Mississippi, Vermont, and South Carolina, each exceeding 74 percent. Texas dropped a percentage point in home ownership and remained 44th in the 2011 50-state ranking. According to the Dallas Federal Reserve Bank, mortgage loan-to-income ratios for most Texas counties are below the national average and much lower than the more expensive areas of the country, such as California's Santa Clara County at 3.5 and San Francisco County at 3.3. The average loan-to-income ratio for Texas counties is 1.6, compared with 2.2 for U.S counties, an indication that affordability is high in the state.

As noted in the *Texas Index 2010*, home ownership has become the norm in most OECD countries over the last 20 years. Home ownership in developing countries is a main component of urbanization, which can yield important social benefits such as public services and access to the job market. It also leads to significant demands for services. China's unique policies involving funding and affordable housing place it at the top of the home ownership ranking both in the OECD and affiliate countries.

A high percentage of home ownership normally reflects a thriving economy. New home purchases can be directly coorelated to increases in earnings indicators, such as, per capita income and median household income.

Home Ownership Rate



State Comparison

	Rank	2011 (%)
West Virginia	1	78.7
Mississippi	2	74.9
Vermont	3	74.6
South Carolina	4	74.3
Texas	44	64.3
New York	50	53.6
United States		66.1

International Data

	OECD	2004 (%)
Ireland	Member	81.4
Greece	Member	73.2
Spain	Member	83.2
Brazil	Non-Member	74
China	Non-Member	88
United States	Member	66

Source: *World Development Indicators*, World Bank, 2011

Summary

The *Index* provides system stakeholders with an indication of the state's general workforce, education, and economic health. Trend lines for the 38 indicators show the following changes in the most recent reporting cycle:

- Positive change – 22 of 38 indicators (58%)
- No significant change – 9 of 38 indicators (23%)
- Negative change – 7 of 38 indicators (19%)
- Data unavailable – 0 of 38 indicators (0%)

The *Texas Index 2012 (Index)* reveals some continued effects of the recession as well as indications of recovery. Although Texas fared better than most states, signs of an economy in slow recovery are prevalent in the data over the last reporting cycle. Areas in training and education and market composition thrive, as the majority of indicators in these domains reflect a positive change. Conversely, research and development (R&D) and participant access indicators show stagnant movement indicating that this area of the economy is still recovering from the national recession. A total of 40 percent of the R&D indicators record no significant change and another 40 percent of the R&D indicators record a negative change over the *Index* reporting cycle. These indicators will be monitored closely in the next reporting cycle as data further uncovers the effects of the recession and the state moves through recovery back to an optimally functioning economy.

The Percent of Population 25 Years and Older with a High School Diploma indicator is flagged with a watch alert and deserves close observation. This educational attainment indicator is critical to a knowledge-based economy, the innovation and the commercialization of ideas to the market creating job opportunities, and increased earnings for Texans.

The *Index* data shows that Texas is doing comparatively well, and continues to build assets for the future. Texas proficiently attracts business and creates jobs, and continues to do so through the recovery period. Although, the unemployment rate remained elevated due to natural growth in the workforce and the return of previously discouraged job seekers to those counted among the unemployed, the Texas unemployment rate is still one percent lower than the U.S. average. There is room for improvement in the areas of adult educational attainment, workforce educational achievement, and the funding for Academic R&D. Despite this, education in Texas continues to improve. The state's 2012 *Closing the Gaps* annual progress report showed that Texas added 47,000 students to higher education in fall 2011. The state had nearly 533,000 more students in 2011 than in 2000, shrinking the student gap needed to achieve the 2015 goal of 630,000 students to 16 percent. Furthermore, 2011 National Assessment Educational Programs math and science test results show that Texas eighth grade students scores were higher than New York, California, and Florida.

While there continues to be improvement, there are a number of indicators to note:

- Although the labor force participation rate dropped, labor productivity, the unemployment rate, and the average pay per worker improved. Despite rising per capita income and median household income, the percent of population living above the federal poverty level remained below the national average. Poverty rates are lagging indicators and still reflect the impact of the recession.

- While business establishment entry remains level, an increase in Texas exports helped to improve the gross state product.

- Despite the ongoing home devaluation in the U.S., Texas' median home value increased, yet the rate of homeownership declined.

Four indicators reversed their negative trend from the last Index reporting cycle including: percent of population enrolled in degree granting intitutions; science and engineering graduate and post-graduate students; average annual unemployment rate; and per capita annual average growth rate. This reveals an investment in training and education, which builds the pool of highly skilled human capital to benefit employers. Working Texans benefit through increased earnings. A negative change of 40 percent in R&D indicators this *Index* cycle may indicate a decrease in the potential for innovation, entrepreneurship, and economic growth in the short-term, as Texas makes its way through the economic recovery. Increased funding for R&D, growth in venture capital investment, and financing for business establishment entry and expansion will provide more growth in businesses and, as a result, job creation should return to normal levels. Many economists predict a full recovery by 2013.

Texas' performance across the four domains is mixed. The indicators revealed that despite the effects of the recession, Texas has rebounded more quickly than most states. According to the president of the Federal Reserve Bank of Dallas, 37 percent of all net new American jobs since the recovery began were created in Texas. Current policies have helped keep the state's economy comparatively strong through the recession and into recovery. Texas performed well in indicators such as average annual pay per worker, per capita income, exports, and patent production. The Texas economy continues to receive national recognition. For the sixth year in a row, Texas is America's Top State for Business, according to CNBC's sixth-annual study that scored all 50 states on 51 measures of competitiveness. The state added more new jobs over the past year than anywhere else in the country, with Texas' unemployment rate remaining more than a full point below the national average. According to USA Today, Texas moved past New York as the nation's second largest economy. The Wall Street Journal credits the state's low taxes and employer-friendly environment with helping make Texas the "job creation capital of the nation." Texas is the nation's leading export state for the tenth year in a row and was recently named the "Best State to Do Business" by CEO Magazine for the eighth year in a row. Texas consistently ranks among the top states for Fortune 500 headquarters.

Building on these successes will be instrumental for Texas to continue to thrive in the global economy. The *Index* shows that Texas has several opportunities for improvement. Indicators in the R&D domain need improvement including R&D expenditures. As noted in the training and education domain, Texas' high school diploma attainment performance must improve. Workers in science, technology, engineering, and mathematics (the STEM disciplines) will drive our state's innovation and competitiveness by generating new ideas and creating new companies and industries. Educational preparation of students in the STEM disciplines is needed to stimulate this innovation and to retain a competitive advantage.

In today's global economy, it is imperative that students are on track to graduate career-ready. A report by Georgetown University's Center on Education and the Workplace, *Help Wanted: Projections of Jobs and Education Requirements Through 2018*, June 2010, pg. 15, shows that the U.S. labor market increasingly demands a more educated workforce. "By 2018, more than 63 percent of prime-age workers will need some type of postsecondary instruction." Career and technical education (CTE) is at the forefront of preparing students to be college- and career-ready by equipping students with core academic skills, employability skills, and job-specific technical skills related to a specific career pathway.

The state's efforts to improve intellectual, human and financial capital remain vital to building assets for the future. Several key state initiatives continue to address the need to sustain and grow a dynamic economy. All system partners play an important role through their mandated economic, educational and workforce development responsibilities. Each must continue to work individually, as a cohesive unit, and with private entities to develop an integrated system that meets the needs of employers and citizens today and in the future. Continued areas of emphasis are:

- Early college high school (ECHS) and dual credit programs are workforce and education initiatives in CTE. New programs, particularly those with emphasis in the STEM fields, must be designed to ensure that a well-trained labor supply is available for current jobs with advancing skill requirements, as well as new jobs.

- Business growth and expansion must be supported, including efforts aimed at remaining an employer-friendly environment.

- Innovation and entrepreneurial activity must be encouraged and new ideas rewarded by funding innovative programs that will increase Texas' economic global competitiveness.

The Texas Index is produced annually for distribution to the Council, the Governor, policy makers, workforce system partners and stakeholders.

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Texas Workforce Investment Council

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Texas Department of Criminal Justice
Texas Education Agency
Texas Health and Human Services Commission
Texas Higher Education Coordinating Board
Texas Juvenile Justice Department
Texas Veterans Commission
Texas Workforce Commission

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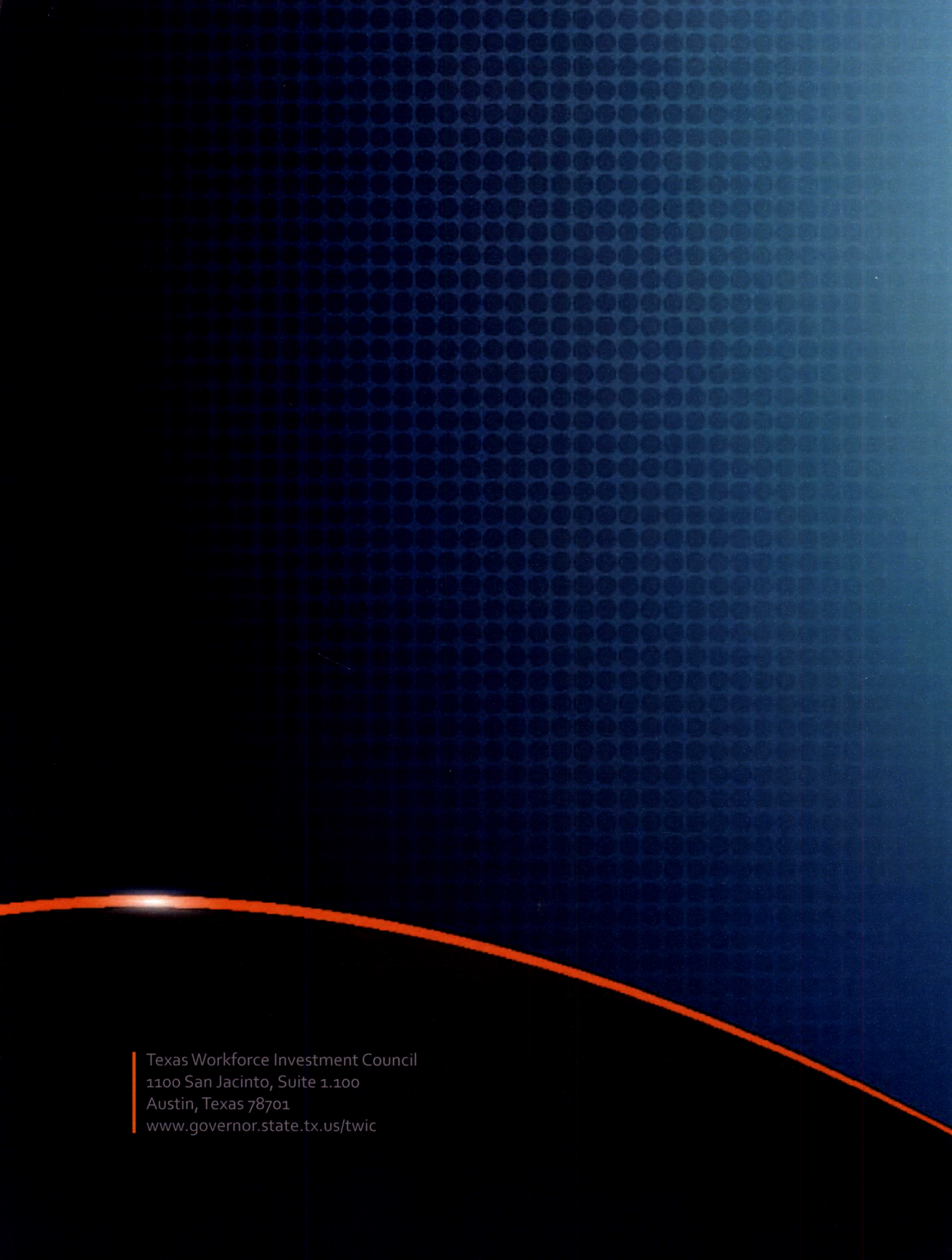

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