

Growth Abounds

A FORECAST OF THE TEXAS LABOR MARKET 2012-2015

TABLE OF CONTENTS

Forward . . .	1
Setting the Stage: Changing Economies. . .	3
Major Texas Industries . . .	7
Texas Economists Predicting Job Growth . . .	15
Texas Regional Snapshots . . .	20
Statewide . . .	31
Epilogue. . .	36



The Labor Market & Career Information department of the Texas Workforce Commission publishes this report every other year. This year, this report covers four components:

- 1) Employment forecasts for Texas** by the contracted economics firm of IHS Global Insights
- 2) Employment forecasts for specific industries** by the IHS Global Insights economists
- 3) National and regional economic insights** by Texas economists
- 4) Anticipated employment growth** in specific industries highlighted by region

FORWARD

Total employment in Texas should rise by 2.1% in 2013 and another 2.3% growth in 2014 and then another 2.4% growth in 2015, according to economists from the highly respected IHS Global Insights, an economic forecasting firm. The economists at IHS Global Insights have pulled employment data for different industries and regions in Texas then applied their national and global economic modeling to the Texas employment data to forecast employment levels in different industries and regions of the Lone Star State.



For additional context and insight, economists at Texas universities and the Federal Reserve Bank were also surveyed regarding their Texas employment forecasts. The results are contained in this report.

Proving that economic forecasting is equal parts art and science, the economists at Texas universities and other institutions are forecasting a broad range of job growth in the Lone Star State. These Texas economists polled are forecasting total employment growth of 0.5% to 2.8% in 2013 followed by forecasts of employment growth of 0.5% to 3.1% in 2014.

This report is designed to give some insight to workforce board directors, community leaders, employers, educators, job seekers and business leaders about the shifting labor economy in Texas.

Readers may learn about why the number of workers is expected to rise (or fall) in different industries and different regions across Texas. The reader also may learn about the complex nature of economic forecasting and about what might happen in Texas in the future. And the reader should find some key pieces of information of value to his or her region of Texas.

FORECASTING

This short report starts with the analysis by the IHS Global team of the U.S. and world economy. Then the report moves on to the Texas economy and discussion of regional economies within the Lone Star State. There are common themes to the forecasts by the IHS Global team and the Texas economists who were polled: They all agree that Texas will be among the leading states for job growth due primarily to more jobs in the energy, health care and professional business services sectors yet this state will still be constrained by a sluggish global economy and a United States economy that continues its slow recovery from the Great Recession.

This report also presents highlights of the detailed economic analysis the IHS Global Insights team conducted on the Texas labor market along with reasons for its forecasts of 2.1% growth in 2013 and 2.3% growth in 2014 and 2.4% growth in 2015. The IHS team also has employment-level forecasts for some of the larger industries in Texas as well as each of the 28 local workforce development board areas. Those forecasts are presented in this report.

IHS GLOBAL

This report is another tool to understand the Texas labor market.

The labor market is complex, especially in Texas. The staff at the Labor Market and Career Information department of the Texas Workforce Commission understands how confusing the Texas labor market can be. This report is meant to give workforce board members and interested Texans a glimpse into the near future for the Texas labor market.

The IHS economists incorporated their national and global economic forecasts into the Texas employment forecast, which is presented here.

The Texas Workforce Commission team also understands that Texas is part of the larger global economy and the U.S. economic ecosystem, which is where this report begins.

United States Economy

While the Texas economy is expected to continue to outperform most others, the Lone Star State's economy is still impacted by the national economy and even global economy, both of which have been experiencing sluggish growth since the financial slumps of the last decade. "Our view is that the recovery from the 'Great Recession' of 2008 continues on a modest track," said the IHS economists in their Texas analysis.

They were specifically referring to the gross domestic product or economic output of the U.S. economy.

"Some of the drivers that were previously supporting growth—exports and business fixed investment—are showing signs of flagging in the face of global economic headwinds and domestic policy uncertainty. As a result, manufacturing has at least temporarily run out of steam, and overall growth in output and employment is likely to remain at only a modest pace."

The IHS economists often point to uncertainty of the U.S. government with regard to tax collections, federal spending and deficit reduction.

"Extreme uncertainty over fiscal policy is likely to remain a fact of life—and a deterrent to risk-taking—well into 2013. The fact that the debt ceiling will need to be raised," stated the IHS economists, "adds an unwelcome extra complication."

That uncertainty is expected to cause both American businesses and consumers to tighten their spending habits in 2013 and 2014.

"Households face too many negatives to allow a robust consumer spending recovery—high debt burdens, low house prices, modest employment growth, and

★

The IHS economists do see two key bright spots in consumer spending: automobile sales and home sales.



a lack of confidence in the government's ability to make things better," stated the IHS economists. Their projection is that consumer spending will continue to grow as the United States recovers from the Great Recession at a modest growth rate of only 1.4% in 2013.

The IHS economists do see two key bright spots in consumer spending: automobile sales and home sales.

The economists point to pent-up demand for cars and trucks as they are forecasting that U.S. light-vehicle sales rise from 14.1 million in 2012 to 14.8 million in 2013.

"Pent-up demand for housing is building as young adults stay at home. It is already supporting a modest improvement in housing activity, and at some point (helped by job growth) will spark a major revival," say the IHS economists. They expect that new home construction starts in the United States will improve greatly to 935,000 new homes in 2013 and 1,230,000 new homes in 2014.

The IHS economists expect home values to continue to rise in 2013 and 2014.

Still, the IHS economists point to only modest growth in buying habits by American companies in 2012 for business equipment as well as software, and foresee that trend continuing into 2013.

World Economy

"IHS expects the Eurozone to remain in mild recession for much of (2013) before recovering. The baseline forecast assumes that a Greek Eurozone exit evokes a strong policy response from the European Central Bank (ECB). The Greek exit, expected in 2013 or 2014, could well be the 'wake-up call' that prompts further economic and financial integration in Europe," the IHS economists stated.

"Although the global macroeconomic impact of a Greek exit and worsening Eurozone crisis may not be large, the ramifications for multinational corporations and specific industries will be greater (e.g. high tech)," stated the IHS economists. "The profits earned by European operations of large global companies are already

being hammered. Moreover, some industries such as high tech, pharmaceuticals, and high-value manufacturing generate more of their top-line growth in Europe. Many of these companies are taking defensive actions such as moving cash back to North America, keeping inventories lean, trimming costs further, and preparing for slower sales."

"Meanwhile, United States financial institutions have been reducing their exposure to Europe and matching assets to liabilities—for example, they are trying to cover loans to Spanish borrowers with funds from Spain. As European banks 'de-globalize', the upside for U.S. banks is that they can increase their market share, especially in emerging markets. This, combined with the greatly improved capital positions of U.S. banks, puts these institutions in a good position to weather all but the worst storms emanating from Europe."

★

"IHS expects the Eurozone to remain in mild recession for much of (2013) before recovering."



China is an acute concern for the IHS team. The IHS economists are concerned about China's real estate and banking sectors.

"China's domestic economy has still not resolved the problems created by the excessive liquidity injections in 2009–2010 intended to combat the global recession. Besides inflation, the massively bloated local government debt, officially reported at 10 trillion renminbi (25% of GDP) that contributed to China's real-estate bubble could be even more dangerous to China's economic well-being. With an increasingly fragile global economy that further dampens China's business conditions, debt payment abilities of the local entities will be even more constrained. A local debt crisis could lead to a banking crisis and trigger a hard landing in China. In such a scenario, investment spending will be severely hampered, as much investment is financed by bank lending. The combination of investment downturn – drag on growth – and real-estate market collapse – drag on wealth – will hurt China's normally resilient consumer demand."

The relative slowdown of the Chinese economy and the European economy is impacting the United States. American manufacturers saw a slowdown in production in mid-2012 due to economic slowdowns elsewhere in the world.

"Export orders in the United States are declining in the face of an unofficial but deepening Eurozone recession and a marked slowdown in growth in the emerging world, largely driven by China," IHS stated. "Global weakness and uncertainty over the policy outlook in Washington are the obvious candidates for blame."

The IHS economists stress that Texas is a player in the world economy, with all the costs and benefits associated for the Lone Star State and its workers.

Texas Economy

The IHS economist team points out that with a compounded annual growth rate of more than 3% for 2011 to 2014, Texas will have the 3rd fastest multi-year growth rate in the nation – and the best growth rate among the high-population states.

Only North Dakota and Alaska are experiencing higher compounded annual growth rates in their economies. Yet, North Dakota and Alaska combined account for less than 0.5% of the gross domestic product (GDP) of the nation. The impact of Texas is bigger. As the Lone Star State's economy has expanded over the past decades, the Texas contribution to the national GDP has increased from 6.7% in 1990 to 8.7% in 2011.

"As one of the leading drivers behind the nation's recovery, the state of Texas is expected to play an increasing role in the U.S. economy even beyond 2014," said the IHS economists. They foresee that trend of Texas growth and dominance relative to the rest of the nation continuing in upcoming years, yet that does not portend smooth sailing for the Lone Star State.

"While one of the best-performing states in the nation, the Texas economy cannot completely escape the shadows of the Eurozone crisis, the impending fiscal cliff, and the ongoing drought," said the IHS economists.



The IHS economists are concerned about China's real estate and banking sectors.





. . . Texas will be challenged economically because it is part of the slowly recovering U.S. economy along with additional challenges from having many long-term unemployed people and a nagging lack of water.



“Weak consumer and business confidence nationally, contributing to slower global growth in manufacturing and energy, will also keep the outlook for Texan manufacturing and mining output moderate. Other industries however, such as professional services, which have not been as susceptible to the global and national crises, also are expected to see a turnaround in Texas as we continue to see more diversification in the local economies.”

Total employment in Texas should still grow by 2.1% in 2013, 2.3% in 2014, and 2.4% in 2015, according to the IHS economic modeling. The jobs outlook for Texas during those years is among the best in the nation, based on the IHS economic forecast.

While employment expansion may be seen as slow, Texas continues to be a top performer nationwide and is 1 of only 7 states to have employment return to its pre-recession level. Texas is joined by only North Dakota, Alaska, Louisiana, West Virginia, New York and the District of Columbia in reaching the employment levels from before the Great Recession – and even surpassing those employment levels.

Still, the IHS economic team points out that Texas will be challenged economically because it is part of the slowly recovering U.S. economy along with additional challenges from having many long-term unemployed people and a nagging lack of water.

Despite growing payrolls, the IHS economic forecast calls for the Texas unemployment rate to shrink gradually from the 7.0% rate of much of 2012 to an annual rate of 6.9% for 2013 and 6.6% for 2014.

“Bringing the unemployment rate down will prove a slow process because there are many previously discouraged workers ready to jump back into the labor force, renewing their job searches as conditions begin to improve. Continued payroll gains will drive wages and personal income higher, but growth rates will remain below those achieved in the pre-recession years,” stated the IHS economists.

“The employment outlook for Texas ranks 3rd in the country in terms of medium-term growth. Unlike Texas, some of the states in the top five, such as Arizona, were among the hardest hit by the recession so they will be posting high growth rates from a very low base. The fastest-growing industry for employment in Texas over the medium term is expected to be professional and business services, while the state is expected to see declines in agriculture, forestry, fishing and hunting as well as government employment.”

Energy ★ Chemicals ★ Renewable Energy ★ Construction ★ Manufacturing ★ Services ★ Educational Services



Energy

Texas currently accounts for approximately 20% of oil extraction and 33% of natural gas extraction in the United States. Out of 254 counties in Texas, 223 are actively producing oil or natural gas. This is according to information compiled by the Federal Reserve Bank of Dallas and the Texas Railroad Commission.

While the oil and natural gas extraction industry accounts for less than 1% of employment in Texas, this energy extraction supply chain has broad impact on employment for the retail, wholesale, manufacturing, transportation, construction, government and even agriculture industries. Those indirect contributions to Texas employment should continue during the next few years despite international volatility.

“Many headlines driving the price of oil in 2012 had the words ‘euro’ or ‘Iran’ in them,” said the IHS economists. “Prices have gyrated as the market alternates between pessimism over the health of the world economy and oil demand and anxiety over the availability and adequacy of future supply. In the meantime, however, the ‘Great Revival’ in U.S. crude oil production that began in 2008 has accelerated. Driven primarily by output from tight crude oil plays such as the Eagle Ford Shale play as well as the Bakken in North Dakota, U.S. production of crude oil, condensate and natural gas liquids has increased about 1.9 million barrels per day from 2008 through the first quarter of 2012.”

IHS and its analysts at Cambridge Energy Research Associates expect tight oil production to continue on that path at least through 2014.

“Of course, there remains great uncertainty about the ultimate pace and sustainability of the current boom in U.S. production, particularly for Texas. For one, it is still the early days for the development of tight oil resources in North America, much less beyond,” said the IHS economists. “There are still many untested plays, and decline rates may ultimately prove steeper than anticipated. Backlash over environmental concerns related to hydraulic fracturing—especially in regions unaccustomed to hydrocarbon production—could also slow growth. Threatening to Texas in particular are U.S. tight oil producers, especially those in North Dakota, who are offering steep price discounts not only to Brent (European oil price basis) but also to West Texas Intermediate (American oil price basis) because of insufficient pipeline capacity to bring new production to market. A WTI price in the

★

IHS estimates that every 1 direct job in natural gas extraction leads to more than 3 indirect jobs for suppliers, contractors and the nearby business community.



\$70s—with Bakken producers receiving well below this—could discourage some upstream capital investment in Texas.”

Commodity prices have remained low for natural gas since 2009, which has resulted in limited gas extraction compared with the supply in much of Texas.

Still, the IHS economists expect that jobs could be added across the state due to the powerful multiplier effect in the natural gas supply chain. IHS estimates that every 1 direct job in natural gas extraction leads to more than 3 indirect jobs for suppliers, contractors and the nearby business community.

“This employment multiplier places the shale gas sector ahead of such notable industries as the finance, construction, and many of the manufacturing sectors. This remarkable employment multiplier is the result of 1 or 2 primary factors that drive the industry’s indirect and induced job creation,” said the IHS economists. “The shale gas sector is capital intensive and spends nearly 50% of revenues on materials and services, with suppliers in construction, fabricated metals, computer design, and chemicals, and in a broad range of service sectors such as legal and financial services. However, it’s not just the large capital expenditures or the wide-ranging supplier base that lead to the impressive employment multiplier. Another critical reason is the strength of domestic suppliers, especially in Texas.”

Chemicals

Many companies are expanding their existing chemical manufacturing plants or recently started constructing new chemical plants up and down the Texas Gulf Coast. One of the key drivers of that chemical production expansion is the raw material fuel that runs many of these plants: natural gas.

“The surge in shale gas production has led to significantly lower prices for gas and electricity than otherwise would have existed,” said the IHS economists. “Natural gas prices are and will continue to be over 2 times lower than they otherwise would have been prior to the ‘shale gale.’”

The commodity price of natural gas has dropped. In 2008, the standard price of natural gas went over \$11 per British thermal unit. By 2012 the price hovered around \$3 per BTU. By mid-2013 the price had risen to \$4 per BTU. IHS projects that the price of natural gas will remain at this low level for possibly the next 20 years due to the massive supply deep under the ground in Texas, Louisiana, Oklahoma, Pennsylvania, North Dakota, Canada and elsewhere in North America.

Among the new chemical plants already under construction are a Dow Chemical plant in Freeport near Galveston, a Chevron Phillips Chemical plant in Baytown near Houston, and a Formosa Plastics plant in Point Comfort near Victoria. Each of those construction projects are creating more than 1,000 construction jobs and are expected to eventually create more than 300 operations jobs.

Renewable Energy

The ‘shale gale’ of natural gas finds has not just lowered the price of natural gas. That excessive supply also has impacted the renewable energy sector. Growth of giant wind turbines from Corpus Christi running up through West Texas and beyond Abilene, Lubbock and Amarillo has tapered off as the emerging wind and solar energy sectors are having a harder time competing with cheap natural gas.

“Despite the rapid increase in renewable energy production, renewable technologies remain relatively more expensive and the state’s clean energy employ-



The ‘shale gale’ of natural gas finds has not just lowered the price of natural gas. That excessive supply also has impacted the renewable energy sector.



ment as a share of total employment is very small,” said the IHS economists. “The extraordinary growth in shale gas production has driven natural gas prices down from their peak of over \$11 in 2008 to about \$3 [in 2012]. Since electricity prices are driven primarily by natural gas prices, it is even more difficult for renewable technologies to remain price competitive. As a result, further increases in consumption of the renewable energy will depend on improvements in production efficiency of the renewable technologies.”

That means the outlook for construction of many more wind turbines on the Texas plains remains limited during the next 2 years.

Construction

“Texas’ construction sector has proved to be relatively more resilient during the economic downturn as compared to the construction sectors in other states. Due to an ample supply of land, less restrictive building policies and more restrictive lending standards, the housing market in Texas did not experience the big boom in housing prices before the recession. As a consequence, the recessionary decline in Texas was relatively mild as compared to the rest of the country. Nonetheless, the market did take a dive,” said the IHS economists.

The United States lost almost 1 in 3 construction sector jobs from 2008 through 2011. Yet in Texas the impact was slightly muted as the Lone Star State lost only about 1 in 6 construction sector jobs. And the IHS economists expect the construction industry in Texas to continue to add jobs thanks to pent up demand for houses along with the building of new manufacturing plants, driven by low natural gas prices.

New demand for construction workers for those new chemical plants is only part of the story in the construction sector. Lower natural gas prices and access to natural gas pipelines are stimulating international energy companies to start projects to build liquid natural gas plants along the Gulf Coast. Freeport LNG is expanding its liquid natural gas plant on Quintana Island near Galveston, and Cheniere Energy is expanding its plant in Sabine Pass, Louisiana, which is near Port Arthur on the Texas border. These are multi-billion dollar projects that are each expected to employ more than 2,000 construction workers.



“In the outlook, employment in construction will be one of the strongest sources of growth in Texas. The sector is expected to grow from 4.6% of the total employment market in 2011 to 4.9% in 2014 . . .”





Texas continues to have one of the fastest growing populations in the United States.



“In the outlook, employment in construction will be one of the strongest sources of growth in Texas. The sector is expected to grow from 4.6% of the total employment market in 2011 to 4.9% in 2014,” said the IHS economists, who expect housing construction to finally return to pre-recessionary levels in 2015.

Texas continues to have one of the fastest growing populations in the United States. That population growth is a contributing factor for why IHS estimates that Texas home prices have appreciated nearly 4% since 2008 – 1 of only 6 states to experience that strong of home price appreciation. Texas has also been experiencing a home foreclosure rate of half the national rate.

The IHS economists continue to point to new estimates from the U.S. Census Bureau, which is forecasting the population of Texas will rise from about 25 million to 33.3 million in 2030. Much of that population increase will take place in the suburban areas around the big metropolitan cities of the “Texas Triangle” – from the Dallas-Fort Worth area south to Austin then over to San Antonio then over to Houston and then back up north to the Metroplex.

Commercial construction should follow residential home building, according to the IHS team. New office parks announced for the outskirts of Dallas, Fort Worth, San Antonio and Houston are further evidence of this suburban trend and should lead to more demand for more construction workers in 2013, 2014 and 2015.

“Housing affordability, relatively low costs of doing business, and a favorable tax environment are what will support the state's ability to attract new businesses,” said the IHS economists.

Manufacturing

Manufacturing employment made a comeback in Texas in recent years, but not enough of a comeback to cause the IHS economists nor the Texas university economists surveyed to expect that sector to continue growing jobs in the Lone Star State.

According to data compiled by the Texas Workforce Commission’s Quarterly Census of Employment and Wages (QCEW), the total number of manufacturing sector jobs in Texas rose 2.5% in 2012 compared with the previous year. Manufacturing employment in Texas had risen 3.8% in 2011 and 0.6% in 2010. Still, to give some context, the chart below shows total manufacturing sector employment for the 4th quarter of each year in Texas along with the year-over-year change.

Total Texas Manufacturing Sector Employment - 4th Qtr

Year	Employment	Year Over Year Change	Year Over Year % Change
2007	940,545 jobs	--	--
2008	915,023 jobs	-25,522	-2.7%
2009	813,135 jobs	-101,888	-11.1%
2010	817,946 jobs	+4,811	+0.6%
2011	848,769 jobs	+30,823	+3.8%
2012	869,946 jobs	+21,177	+2.5%

The IHS economists noticed this trend. They also noticed that output productivity in the manufacturing sector has surged in recent years in Texas. The IHS economists pointed out that the manufacturing sector amounted to about 15% of the state’s gross output. By comparison, the manufacturing sector accounted for a little more than 8% of all employment in Texas in 2012, according to QCEW data.

Still, the IHS economists are not optimistic about manufacturing employment in Texas.

“While Texas’ manufacturing output has more than doubled since 1990, employment in the sector has declined in Texas. From its peak in 1998, to its trough in 2010, more than 276,000 manufacturing jobs – over 25% – have been lost in the state. Especially with increasing advances in technology and incentives to move overseas, this trend in Texas exactly follows the rest of the country; where peak-to-trough declines in employment in manufacturing fell 35% over the same period, 1998-2010. While employment in manufacturing began to grow in 2011, and is expected to continue modestly in the outlook, it is still expected to remain significantly below its pre-recessionary levels through 2014,” said the IHS economists.

Total employment in the giant manufacturing sector fell almost 8% just from 2007 to 2012. Comparing 4th quarter 2007 to 4th quarter 2012 QCEW data, the following sub-sectors within Texas manufacturing saw the most dramatic shifts in total employment, as shown below.

Chemical manufacturing could provide employment growth in Texas. But the IHS economists point out the state’s chemical making industry could be challenged by a key constraint: water.

“Housing affordability, relatively low costs of doing business, and a favorable tax environment are what will support the state’s ability to attract new businesses,” said the IHS economists.

Manufacturing Shifts from 2007-2012 4th Qtr	
Shifts	Sub-Sector
down 28%	Apparel manufacturing
up 5%	Beverage manufacturing
down 1%	Chemical manufacturing
down 15%	Computer & Electronic Product manufacturing
down 4%	Electrical Equipment manufacturing
up 2%	Fabricated Metal Product manufacturing
down 5%	Food manufacturing
down 27%	Furniture Product manufacturing
up 10%	Machinery manufacturing
down 8%	Medical & Miscellaneous Equipment manufacturing
down 14%	Paper manufacturing
down 1%	Petroleum & Coal Product manufacturing
down 16%	Plastics & Rubber Product manufacturing
down 12%	Primary Metal manufacturing
down 23%	Printing & Related Support activities
down 2%	Textile Product Mills
down 6%	Transportation Equipment manufacturing



Texas has become the nation's top petrochemical products producer, accounting for about 60% of total U.S. petrochemical production thanks to more than 200 plants, according to the Texas Chemical Council. Still the IHS economists have concerns about this sector.

"The petrochemical industry's growth is taking place amidst higher concerns over water shortages and pollution. The unusually warm summer and the water-intensive process of hydraulic fracturing have heightened concerns over water supply. Formosa Plastics facility near Point Comfort, for example, already had to adjust to a temporary 20% water reduction as a result of the recent drought," say IHS economists. The IHS economists also note that environmental issues surrounding the petrochemical industry could result in tighter air quality regulations in the future, which could limit employment growth in this sector.

Texas continues to attract existing high-tech companies and be the birthplace of new high-tech companies in the fields of telecommunication equipment, semi-conductor production, video game development, software development, food products, and computer products. Nevertheless, high-tech production employment has continued to shrink. The IHS economists point out that employment in high-tech production fields have been shrinking by 0.2% a year over the past 2 decades and that trend is expected to continue.

Machinery manufacturing has demonstrated robust employment growth in Texas in recent years. The IHS economists point out that many machinery manufacturers have built new factories or have been expanding plants across Texas, most notably the Trane Inc. air conditioner components plant in Tyler and the Caterpillar Inc. construction equipment plants in the Victoria and Seguin areas. The IHS economists expect machinery manufacturing employment to grow in the

Houston region through 2014.

Transportation equipment manufacturing in Texas should grow as Americans continue to buy more vehicles after holding onto their older vehicles during the recession. The IHS economists are forecasting that transportation equipment manufacturing employment in Texas should grow by almost 6% a year through 2014.

It should still be noted that while IHS projects slow net employment growth in Texas manufacturing through 2015, that sector is undergoing a significant shift in skill composition. Demand for more highly educated and technically skilled workers is leading to displacement of many unskilled jobs and creating opportunities for those with the appropriate technical training.

Services

The IHS economists have documented the growth in service-providing industry jobs in Texas and anticipate more.

The services component of the Texas labor economy has not only rebounded but surpassed its employment levels from before the Great Recession. From the 4th quarter 2007 to 4th quarter 2012, the enormous services sector added more than 521,000 jobs in Texas for an increase of almost 8%.



IHS projects slow net employment growth in Texas manufacturing through 2015. That sector is undergoing a significant shift in skill composition. Demand for more highly educated and technically skilled workers is leading to displacement of many unskilled jobs and creating opportunities for those with the appropriate technical training.



Services Employment Change from 2007-2012 4th Qtr

Change	Service Sub-Sector
up 19%	Education & Health Services
down 11%	Information Services
up 3%	Financial Activities
up 11%	Leisure & Hospitality
up 9%	Professional & Business Services
up 3%	Trade, Transportation & Utilities

Comparing total employment from 4th quarter 2007 to 4th quarter 2012, the QCEW data show that total employment in the broad services sector grew from almost 6.8 million jobs to more than 7.3 million jobs. Based on QCEW administrative data, a breakdown of employment level changes from 2007 to 2012 is shown above.

Population growth in Texas should push up employment across many of those services sectors by 2014, according to the IHS economists. U.S. Census Bureau demographers point out that Texas continues to have one of the fastest growing populations in the nation. That growth is only expected to continue as the Texas population is anticipated to grow from 25.7 million people in 2011 to 30 million in 2020.

That population growth is also creating demographic shifts.

“It is the state’s robust economy, favorable business climate, and relatively low cost of living that attract the second highest number of migrants, after Florida,” said the IHS economists. “Across the border, Texas’ proximity with Mexico helps to explain why international migration accounts for slightly more than half of the migration to Texas. As projected by Texas State Data Center, the Hispanic population will account for more than half of the state’s population by 2030.”

Growing numbers of very young and very old Texans – across all races – should cause employment to grow in a key service sector: health care. The IHS economists expect health services employment to grow by almost 3% a year in Texas through 2014. Much of that is driven by aging as more than a quarter million Texans will celebrate their 65th birthday by 2014. At which point Texas will have 3.1 million senior citizens.

According to the IHS researchers, Texas, like the rest of the United States, is dealing with both an aging population and an increasing trend toward obesity. Both of those factors are contributing to increased demand for health care and health care workers in Texas, say the IHS economists.

Smaller employment growth since 2007 in Texas has come in the government services sector. Government services employment levels across all three key categories – local government, state government and federal government – were higher in 2012 than 2007. But the IHS economists do not expect that trend to continue and predict that the government sector will “take the biggest hit” in employment levels by 2014 in Texas.

Governor Rick Perry’s push for significant cuts to state spending is certainly influencing the outlook on employment in government-funded programs and agencies. This is not unlike what other states and local governments are planning.



The massive leisure and hospitality services sector has been surprisingly resilient...

This sector, which includes everything from restaurants to hotels to professional sports teams...saw total employment rise more than 100,000 workers...



“As college graduation levels remain low, the overall quality of the state’s workforce will become an obstacle for the state’s economic growth in the long term,” said the IHS economists.



While IHS does not expect the national economy to go off the ‘fiscal cliff’, extreme uncertainty over national fiscal policy is likely to remain a fact of life—and a deterrent to risk-taking—well into 2013. The fact that the national debt ceiling will need to be raised... in 2013 adds an extra unwelcome complication,” said the IHS economists.

One of the strongest performing services sectors is expected to continue its job growth, according to the IHS forecast. The massive leisure and hospitality services sector has been surprisingly resilient through the recent economic upheavals. This sector, which includes everything from restaurants to hotels to professional sports teams, saw total employment rise more than 100,000 workers from 4th quarter 2007 to 4th quarter 2012 to more than 1 million workers, according to QCEW data. That’s an increase of more than 11%.

“During the recession, Texas lost less than 0.1% of all leisure and hospitality jobs. As consumer spending rebounds, Texas is going to see an increase in employment across all leisure and hospitality sectors,” said the IHS economists.



Education Services

The IHS economists are forecasting strong employment growth for education services in Texas for 2 fundamental reasons: 1) Employers demand skilled workers in Texas and both the state and local governments will be required to respond to remain competitive on the global economic stage and, 2) Texas continues to increase its school-age population.

Education services is one of the most “employment-intensive” industries in Texas and the IHS economists project that this sector should add employment due to the huge numbers of children filtering through every corner of the state. In addition, while Texas has improved high school graduation rates in recent years, the Lone Star State has been near the bottom in the nation in proportion of workers with a high school diploma or even an Associate’s degree. And the IHS economists see that the state and local governments will need to address that workforce problem by increasing education employment.

“As college graduation levels remain low, the overall quality of the state’s workforce will become an obstacle for the state’s economic growth in the long term,” said the IHS economists.

“The education gap is creating a sizeable mismatch between the skills the employers need and the skills that the workers have. While Texas may be a domestic heaven for the companies that would otherwise have offshored low value added jobs, strong economic growth in the longer term will be driven by more demanding jobs requiring higher levels of educations,” said the IHS economists.

The IHS economists have noted that some larger employers have expressed that they cannot find properly skilled workers in the local population so those employers are turning to local leaders for help at developing new pipelines of high-skilled workers in many Texas communities.

Education services is one of the most “employment-intensive” industries in Texas and the IHS economists project that this sector should add employment due to the huge numbers of children filtering through every corner of the state.



PREDICTING MODERATE JOB GROWTH

IHS economists point out that Texas will experience more employment growth than the other states, even if that growth is not as fast as some previous boom periods. In a similar way, economists across Texas were surveyed for this report regarding their own short-term employment forecasts for this state. Two camps emerged. More than half the Texas economists surveyed by TWC forecast “moderate” job growth for the Lone Star State during the next couple years. The other contingent of economists forecast more modest or “limited” job growth for Texas for 2013 and 2014.

Getting the views of economists with boots on the ground in Texas is helpful in gaining additional perspective and validating the forecasts of the IHS economists.

Texas economists who are expecting “moderate” employment growth of more than 2% a year in 2013 and 2014 are:

- Larry Allen at *Lamar University in Beaumont*
- Michael Cosgrove at the *University of Dallas*
- Michael Cox at *Southern Methodist University*
- Alberto Davila at the *University of Texas–Pan American in Edinburg*
- Robert Gilmer at the *University of Houston*
- Daniel Hamermesh at the *University of Texas at Austin*
- Jim Lee at *Texas A&M University–Corpus Christi*
- Keith Phillips at the *Federal Reserve Bank of Dallas–San Antonio branch*

Texas economists who are expecting “limited” employment growth of no more than 2% in 2013 and 2014 for the state are:

- Tom Fullerton at the *University of Texas at El Paso*
- Tom Kelly at *Baylor University in Waco*
- James LeSage at *Texas State University in San Marcos*

Modest Employment Outlook

“Texas has a comparative advantage over most states and as a result has faster employment growth compared to most states,” said Michael Cosgrove, economist at the University of Dallas. “Most Texas metropolitan areas can be expected to add workers in 2013 and 2014 as economic activity expands in the global, U.S. and Texas economies.”

Cosgrove is forecasting that total employment in Texas will grow 2.2% in 2013 and another 2.4% in 2014. This relatively modest outlook for employment levels in Texas is common among economists across the Lone Star State – they’re not expecting Texas to lose jobs but also not expecting a repeat of the employment surge that was seen in 2012.

★

...the health care sector will add workers due to the aging population in Texas along with improving rankings of major hospitals in the Dallas-Fort Worth, San Antonio and Houston areas which are even attracting wealthy patients from Central and South America.



These Texas economists have varying reasons for their modest outlooks.

“In 2013, the energy and export sectors in Texas are likely to weaken as the world economy continues to be weak,” said Keith Phillips, economist in the San Antonio office of the Federal Reserve Bank of Dallas. “Construction is likely to continue to pick up, however, offsetting some of this weakness. Construction strength will be concentrated in the residential sector but there will also be some growth in office construction as vacancy rates have fallen to levels that in the past have led to new construction activity.”

Phillips pays particular attention to construction projects, real estate sales trends and commercial office occupancy rates in the big metro areas when making his employment forecasts. As a result, Phillips is forecasting employment in Texas will grow 2.5% in 2013 and 3% in 2014.

“The rebound in construction activity means that employment in construction and related industries will be a source of strength over the next several years,” said Phillips. “Construction-related manufacturing industries that will add jobs include lumber and wood, stone, clay and glass, furniture and fixtures and fabricated metals. High tech manufacturing and primary metals are very export sensitive and should lose jobs in 2013 with some improvement in 2014.”

“Most regions in the state will add workers over the next two years,” Phillips said. “While energy is likely to slow from very strong rates of growth, the Houston metropolitan statistical area – with about a quarter of all jobs in the state – should continue to grow strongly. The Permian Basin and Eagle Ford areas will continue to play catch up to the growth that has already occurred. This should keep job growth strong in these regions. Europe and its impact on Asia and Latin America will continue to be a source of uncertainty and weakness for Texas manufacturers.

Oil prices are always hard to predict – my baseline assumes oil prices in the range of about \$70 to \$110 a barrel — but a big decline below \$65 would weaken growth in the state.”

Oil and construction activity across much of Texas are key economic indicators to which many economists are attuned.

“Texas has lived on high energy prices and exports to drive strong growth since 2002-2003 – interrupted of course by the financial crisis. The formula has faltered in recent months with the collapse in natural gas prices, a slowdown in the emerging countries that drive global growth, and a U.S. economy that continues to under-perform,” said Robert Gilmer, economist and director of the Bauer Institute for Regional Forecasting at the University of Houston.

“Construction should add workers with the return of new home construction,” Gilmer said. “Conditions have been in place for Texas housing to pick up strongly for some time, and we now see it happening across the state. Also, huge heavy construction projects are scheduled for the Texas Gulf Coast for natural gas processing and petrochemical production.”

Gilmer also expects that employment should rise in state and local governments thanks to an improving economy helping tax revenues bounce back as well as continued employment growth in the oil and gas industry.

Others have similar views as they focus on different industries in Texas.

“Texas will post growth rates above the national average,” Larry Allen, economics professor at Lamar University in Beaumont. “High oil prices do not hurt Texas as they do other states. And Texas has a long history of population growth.”

A growing Texas population and new energy finds should contribute to job growth, according to many economists.

“The sectors that will lead job growth in the next 2 years include mining, construction, transportation, and hospitality,” said Jim Lee, economist at Texas A&M University - Corpus Christi. “Current growth in those sectors is expected to continue through at least the end of this year. Employment growth in the mining, transportation, and hospitality sectors will continue to be driven largely by oil and gas production in the Eagle Ford Shale region.”

Michael Cox, economist and director of the William J. O’Neil Center for Global Markets and Freedom at Southern Methodist University in Dallas, said he expects employment growth across many of the industries in Texas. First, Cox expects the health care sector will add workers due to the aging population in Texas along with improving rankings of major hospitals in the Dallas-Fort Worth, San Antonio and Houston areas, which are even attracting wealthy patients from Central and South America.

“The education sector should also add workers as employers are demanding more educated workers,” Cox said.

Professional and business services should add workers in Texas due to the “growing national trend of what the U.S. brings to the global workplace – high value-added education-based professional services,” said Cox.

Also, Cox anticipates that the leisure and hospitality sector will add workers in Texas simply due to growing population demographics.

“People continue to eat out more and cook less. Texas continues to make its mark as a leisure and hospitality destination,” Cox said.

Meanwhile, Cox expects that if any sector sheds workers over the next two years, it will be the information sector due to overbuilding during the last two decades.

“Government mandated health care and rising taxes will affect all states negatively. Texas will be less hurt – indeed, it already has been less hurt – as we are the second most economically free state in the nation. And that’s what people want—economic freedom. The migration data prove it,” Cox said.

Limited Employment Outlook

Still, some Texas economists are cautious.

“In Texas, the short-term cyclical outlook is fairly encouraging. The same cannot be said, however, for the long-term structural trend outlook for the Lone Star State economy. Looming problems for Texas include public finance constraints in the areas of physical infrastructure, public health and education,” said Tom Fullerton, economist at the University of Texas at El Paso.

“Nearly all industries are likely to add workers in 2013 and 2014, especially construction, business services and professional services. Budgetary decisions in Austin and Washington, D.C., will influence how much growth, or lack thereof,

“The sectors that will lead job growth in the next 2 years include mining, construction, transportation, and hospitality,”
said Jim Lee,
economist at Texas A&M University - Corpus Christi.



“People continue to eat out more and cook less. Texas continues to make its mark as a leisure and hospitality destination,”
Cox said.



will occur in public sector payrolls,” Fullerton said. “Outlooks for the fiscal situation in both Austin and Washington remain precarious. The Eurozone sovereign debt crisis poses additional risks as does the economic performance in China.”

Fullerton is forecasting only 2% employment growth for Texas in 2013 and 2014. Other economists are more pessimistic about employment levels in Texas for different reasons.

Perhaps the most pessimistic is James LeSage, an economist at Texas State University in San Marcos. LeSage is forecasting only 0.5% job growth for Texas in 2013 and 2014. He points out that uncertainty of government decisions along with a lingering water drought, low wages and student graduation rates below national averages probably will be drags on employment in Texas.

“Employment growth is a combination of long-term trend, business cycle and noise components. I agree with IHS that long-term trend factors such as Texas population growth, positive business environment and in-migration are positives, while educational attainment of Texas workers is a negative,” LeSage said. “Overall net trend factors are quite positive. However, business cycle and noise components will exert more impact than long-term trend factors over the next few years. The business cycle component is neutral, neither helping or hurting employment growth, but noise components such as the recent drought, political brinksmanship in Washington and state budget cutting in Austin will have a large negative impact over the next few years.”

“Manufacturing in the areas of fabricated metal, machinery and transportation equipment should be adding workers, while overall manufacturing employment will continue its long-term decline in employment levels accompanied by growth in output,” said LeSage, who is also forecasting those 3 manufacturing sectors will combine to add another 35,000 jobs over the next couple of years.

Still, LeSage is concerned that low wages and economic uncertainty can erode the Texas economy.

“Wholesale and retail trade, which account for around 15% of Texas employment, will see growth over the 2011-2014 period with most growth coming later in this period. Population and continuing household income growth trends are the explanation for this growth. Unfortunately, the low incomes associated with these jobs are not a positive for the Texas economy,” LeSage said. “However, low levels of educational attainment in the Texas population make this a likely source of employment for many workers over the next few years.”

LeSage also points out that government jobs are set to shrink in numbers. The government sector accounted for the lion’s share of employment growth from 2008 to 2010 in Texas – this was during the recession years. But federal spending to states and local governments has been shrinking. Meanwhile, the federal government is trying to shore up massive budget deficits by trimming military budgets and the NASA space programs, which should lead to continued job loss at bases in Texas, LeSage foresees. The impact of federal “sequestration” budget cuts has been felt in 2013 in communities whose local economies are tied to military dollars and other government spending.

★

“Government mandated health care and rising taxes will affect all states negatively. Texas will be less hurt – indeed, it already has been less hurt – as we are the second most economically free state in the nation. And that’s what people want: economic freedom. The migration data prove it,” said Michael Cox, economist at Southern Methodist University in Dallas.



In Waco, economist Tom Kelly has been taking a more comprehensive yet conservative view of the Texas labor economy. Kelly is forecasting only 1.7% employment growth for Texas in 2013 and 1.8% growth in 2014.

“This slower growth rate in employment over the next 2 years will match slower growth in population with fewer migrant workers as the rest of the country recovers more of the jobs they lost during the recession,” said Kelly, economics professor and director of the Center for Business and Economic Research at Baylor University in Waco. “Employers who have been ‘picking the low hanging fruit’ in the labor market will face more difficulty in matching skilled workers with their particular needs. This is not necessarily a negative outcome since Texas will gain some ‘breathing room’ from the impact of rapid population growth in the largest metropolitan areas on over-crowded classrooms, traffic congestion, and available water.”

“The professional and business services sector will experience stronger than average growth in scientific and technical consulting employment as firms seek expertise in the development of newer markets that provide an advantage in the increasingly competitive global marketplace,” said Kelly at Baylor. “Workers with computer systems design skills and the ability to develop new algorithms to improve decision making will be in strong demand in today’s ‘imagination’ age.”

“The energy industry will continue to create employment in oil and gas extraction, refining, and distribution that grew by 18.7% in 2012 as the U.S. relies more on domestic energy sources,” said Kelly at Baylor University.

Meanwhile, Kelly is also pessimistic about the employment prospects for the manufacturing sectors.

“Manufacturing has been an important driver of the recovery from the recession as firms replace workers that were laid off during the 2009 downturn, but rising in-house employment by manufacturing firms will slow as production improves, especially as global markets for exports remain slow,” said Kelly. “Texas manufacturing job growth that has benefitted from state and local tax incentives also may face more resistance from taxpayers who observe the impact of tightened fiscal budgets on school districts and other local jurisdictions.”

“The oil and gas sector will continue to create above-average growth in employment in the Permian Basin and Houston and the Gulf Coast regions,” said Kelly.

He also anticipates employment growth in the biotechnology and health care sectors in the Big Four metro areas of Dallas-Fort Worth, Houston, San Antonio and Austin as more workers in those industries migrate to those growing urban areas in Texas.

Population growth will be an economic driver for other key industries in Texas.

“The population growth driven leisure and hospitality industry will create more jobs as the consumers become more confident of employment and income stability, especially in the Austin, San Antonio and the Houston-Gulf Coast regions,” Kelly said.

All the economists surveyed agree that higher payroll taxes in 2013 should curb consumer spending, economic uncertainty in Europe and Asia could limit Texas exports, and regional population shifts to larger metro areas should drive new job growth around the big Texas cities.



“Workers with computer systems design skills and the ability to develop new algorithms to improve decision making will be in strong demand in today’s ‘imagination’ age.”



Dallas-Fort Worth-Arlington

Population growth across the entire Dallas-Fort Worth-Arlington area is expected to drive job growth across the Metroplex, according to the IHS economists. The IHS economists are forecasting strong employment growth across the services sector for the entire DFW Metroplex. Within the services sector, the IHS economists foresee some of the strongest employment growth to come in the areas of retail services, leisure and hospitality services, professional and business services, as well as the broad professional, scientific and technical services fields.

For the Texas Workforce Commission, the Metroplex is geographically divided into **3 separate workforce development board areas:**

- **Dallas County**
- **Tarrant County**
- **North Central Texas** (which is the surrounding counties)

The IHS economists have forecast for each of these 3 workforce development areas shown below. **1**

Economists within the Dallas-Fort Worth-Arlington region are also projecting employment growth for similar reasons for the Metroplex.

1 IHS Forecasts: Top 7 Growth Industries by WDA for 2012 to 2015

INDUSTRY	DALLAS COUNTY		TARRANT COUNTY		NORTH CENTRAL TX	
	Additional Jobs/Growth Percentage					
Administrative & Support Services	+38,990	+28.7%	+15,270	+28.1%	+10,380	+27.6%
Ambulatory Health Care Services	+10,740	+13.1%	+6,000	+16.4%	+5,520	+13.7%
Professional, Scientific & Technical Services	+10,470	+8.5%	+3,980	+11.9%	+8,700	+20.1%
Specialty Trade Contractors	+6,670	+14.1%	+2,600	+17.5%	+5,130	+25.9%
Merchant Wholesalers of Durable Goods	+4,140	+7.1%	—	—	—	—
Truck Transportation	+3,480	+15.3%	—	—	—	—
Nursing and Residential Care Facilities	+2,850	+17.7%	—	—	—	—
Transportation Equipment Manufacturing	—	—	+5,210	+18.4%	—	—
Hospitals	—	—	+2,870	+9.5%	—	—
Heavy & Civil Engineering Construction	—	—	+2,330	+41.1%	+2,330	+24.8%
Food Services & Drinking Places	—	—	—	—	+6,280	+8.9%
General Merchandise Stores	—	—	—	—	+1,880	+6.8%

The services sector should be where the lion's share of the employment growth comes for the Dallas-Fort Worth-Arlington region primarily due to continued population growth, said Michael Cox, economist and director of the William J. O'Neil Center for Global Markets and Freedom at Southern Methodist University in Dallas. Cox points out that Dallas-Fort Worth-Arlington area hospitals have expanded and gained better reputations nationally for care, which is attracting Americans to move to the Metroplex from other states and even attracting wealthier people from Central America and South America.

Other economists point to general economic recovery continuing in the Dallas-Fort Worth-Arlington region.

"Dallas will continue to grow as the banking sector has healed and residential markets have seen leaner inventories," said Keith Phillips, senior economist with the Federal Reserve Bank of Dallas.

Phillips points out that Fort Worth should continue to add total jobs but may be held back by shrinking employment in manufacturing jobs and federal government jobs.

Houston-Sugar Land-Baytown- The Woodlands-Galveston

A lot of people in the Houston area bought a lot of new cars and trucks in 2012. Sales of new automobiles were up 28% in 2012 compared with 2011, according to research by InfoNation Inc. of Sugar Land and the *Houston Chronicle*. Industry analysts surveyed for those reports said they don't expect such huge sales growth in 2013 but that the Houston region should again surpass more than 300,000 new vehicle sales this year. Those analysts also point out that auto buying is a critical economic barometer of a region that both had pent-up demand for vehicles after the Great Recession along with a strong outlook for the future Houston economy.

The IHS economists also have similar economic expectations for the Houston area. The IHS economists project continued but modest employment growth in the Houston area through 2015. The IHS economists forecast total employment for the 13-county Gulf Coast Workforce Board area in and around Houston from 2012 to 2015 will grow by 8.1%.

IHS researchers see that Houston has traditionally been dependent on energy-related industries. The IHS economists are expecting that machinery manufacturing will continue to add jobs in the Houston region. The IHS researchers are expecting similar machinery manufacturing job growth in the Victoria, Tyler and Laredo communities.

Still, the Houston metro area has seen rapid expansions recently in both education and health care as well as business services. In the IHS economic forecast, education and health care as well as business services sectors are the fastest growing employment sectors in the Houston region, expanding with annual employment growth rates of 4.1% and 3.9%, respectively, through 2014.

The IHS economists aren't alone. The Greater Houston Partnership projects total employment in the Houston region will add about 76,000 jobs to the existing 2.7 million jobs in 2013 for an annual growth rate of 2.8%. The Greater Houston

2 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	GULF COAST WORKFORCE BOARD AREA	
	Additional Jobs	Growth Percentage
Administrative & Support Services	+47,730	+26.4%
Specialty Trade Contractors	+23,930	+27.1%
Ambulatory Health Care Services	+20,330	+15.1%
Professional, Scientific & Technical Services	+17,150	+8.8%
Food Services & Drinking Places	+16,220	+7.7%
Heavy & Civil Engineering Construction	+12,770	+29.0%
Construction of Buildings	+11,180	+24.3%

Partnership economists indicate that employment growth should be driven by stable oil prices, construction at many chemical plants in the region, new housing demand, population growth, income growth and rising international demand for exports from the Houston area.

International business is a hot topic in the Bayou City. In the summer of 2013, Air China will start daily non-stop jet service between Houston and Beijing. In announcing the new service, Mayor Annise Parker pointed out that more than 840 Houston companies have trade ties with suppliers or direct customers in China.

The industries IHS forecasts to have the most employment growth from 2012 to 2015 for the Gulf Coast Workforce Board area are shown above. **2**

Texas economists surveyed for this report expect employment levels to rise in the Houston region with growth in many sectors.

“Houston should also benefit from the revival in U.S. crude oil production,” said James LeSage, economist at Texas State University. “As noted by IHS, direct employment impacts from oil are small, but indirect multiplier impacts on supporting industries can be large.”

Those ripple effects from a growing oil and gas sector should result in job growth in many regions of Texas, say other economists.

“The oil and gas sector will continue to create above-average growth in employment in the Permian Basin, Houston and across the Gulf Coast regions,” said Tom Kelly, economist at Baylor University.

Even Michael Cox at SMU in Dallas is projecting that the Houston region will experience the most job growth in 2013 and 2014 due to expansion in the construction, energy and chemical industries along with most of the services sector.

Others agree.

“Houston should continue to grow,” said Robert Gilmer, economist at the University of Houston. “The price of natural gas is off its high but business is still very good. Outside the state, we see the return of deep water drilling in the Gulf, and high levels of international activity in the energy sector. Both are high revenue ventures for Houston service companies. Also, the national infrastructure to move

and process natural gas is being reworked with the advent of fracking – and many of these pipeline companies work out of Houston.”

“The engineering and construction of new petrochemical facilities brings lots of jobs, both technical and in construction. It is the return of what was once Texas’ #1 export industry,” Gilmer said.

Gilmer points out that the Houston metro area added about 100,000 jobs in 2012, according to the Current Employment Statistics data series by the U.S. Department of Labor and TWC. Gilmer expects that rate of employment growth to slow down in 2013 to about 75,000 jobs for the Houston metro area.

“The overhang of real estate foreclosures is basically over for Texas,” Gilmer said. “In Houston, we’ve worked our way through the backlog of foreclosures and there’s more faith in the economy. We’ve moved past the fear in the market.”

For Gilmer, one of the most important economic indicators is the 20 ethylene chemical plants under construction or announced for construction. And many other chemical plants are also under construction or expanding.

“Chemical plants were a dying industry just a little while ago and now are reinvigorated. They’re building these plants to export. They’re going to be exporting more from Texas. It’s a big turnaround,” Gilmer said.

That’s not the only expansion. A new 50-story office building for energy giant Chevron was recently announced for downtown Houston. Chevron will house multiple business units in the new skyscraper, which is getting partial funding from state government’s Texas Enterprise Fund.

San Antonio-New Braunfels

“This is a city on the rise,” said Ricardo Romo, president of the University of Texas at San Antonio, at an economic forum recently on his campus. “Eagle Ford Shale expands the opportunity spectrum.”

Drilling for oil and natural gas in the Eagle Ford Shale region, which is a 24-county area of South Texas that is mostly rural and generally stretches from just south of San Antonio and out to Victoria, Gonzales, Corpus Christi, Kingsville, Edinburg, McAllen, Eagle Pass and Laredo, has created fast job growth.

Oilfield services companies like Halliburton, Baker Hughes and Weatherford International were busy in 2012 adding regional operations centers in southern San Antonio that have employed more than 2,000 workers who are dispatched south into the Eagle Ford Shale area. Energy production companies like Chesapeake Energy, Marathon Oil and EOG Resources also staffed up with new San Antonio operations centers. Even long-time San Antonio oil and gas drilling firm Lewis Energy announced it was staffing up in its home town.

Total employment in the mining, oil and natural gas industry rose 32% from 4th quarter 2008 to 4th quarter 2012 in San Antonio’s Alamo Workforce Development Area, according to employment data from the Quarterly Census of Employment and Wages. Yet that doesn’t fully explain the employment growth in San Antonio’s energy sector. Many of those employers, like Baker Hughes and Marathon Oil, are based in Houston and many of their employees are still living in Houston while working outside of San Antonio.



3 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	ALAMO WORKFORCE DEVELOPMENT BOARD	
	Additional Jobs	Growth Percentage
Administrative & Support Services	+13,750	+25.4%
Professional, Scientific & Technical Services	+7,220	+16.6%
Ambulatory Health Care Services	+6,870	+11.3%
Specialty Trade Contractors	+5,510	+22.2%
Food Services & Drinking Places	+5,140	+5.9%
Construction of Buildings	+2,420	+21.5%
Credit Intermediation	+2,300	+8.8%

At a recent UTSA economic forum, Adam Haynes, director of government relations for Chesapeake Energy, repeated his concerns that new housing for workers in the Eagle Ford Shale region largely has not been built in the rural communities where drilling is taking place. Instead, most new home construction in South Texas has occurred away from the drilling fields in the San Antonio suburbs, thus diminishing the economic impact to the small towns in the region.

Amid all this, the IHS economists are forecasting that strong employment growth for the Alamo Workforce Development Board area, which is the 12-county area in and around San Antonio, by 2015 should come in the industries listed in the above chart. **3**

In 2012, several energy firms moved into San Antonio and staffed up their new operations centers. With that energy infrastructure largely in place much of the energy hiring boom is mainly completed. The IHS economists are forecasting a modest 3% employment increase in the oil and gas extraction industry from 2012 to 2015 for the Alamo Workforce Development area.

Still, employment growth has been occurring and should continue through 2015, which has local leaders excited.

“We are reminded that we are trying to make San Antonio a more cosmopolitan city and a more workforce ready city,” said Julián Castro, the city’s mayor.

Employment across all industries in the Alamo area is forecasted to grow from 2012 to 2015 by 6.6%, according to the IHS economic models.

“Now there is another Texas Triangle: San Antonio, Laredo and Corpus Christi. And this new Texas Triangle is going to have an impact for many years,” said former San Antonio Mayor Henry Cisneros. “This is an unbelievable opportunity for people who didn’t have an opportunity before.”

Texas economists surveyed tend to agree that the San Antonio region should see employment rise for industries that serve the oil and gas supply chain, serve a growing population or are in manufacturing sub-sectors that are growing.

“San Antonio will benefit from both increased manufacturing employment in fabricated metals and transportation equipment as well as its proximity to the new oil and natural gas sites,” said James LeSage, economist at Texas State University in nearby San Marcos.

Austin-Round Rock-San Marcos

The Austin Technology Council held a CEO Forum recently of regional technology company leaders to discuss key issues. Their main need was simple: more high-skilled, high-tech workers. The CEOs discussed ways to import these high-skilled, high-tech workers into the Austin area because the Texas education system was not filling the need.

High-skilled, high-tech workers cover a broad range of industries and a broad range of occupations. Still, the consensus among the technology CEOs was that they would need more workers with training and work experience in the science, technology, engineering and math (STEM) disciplines.

Such worker needs align with industry employment forecasts by the IHS economists for the Austin metro region, which is divided into the Capital Area Workforce Board area of Travis County and the 9 surrounding counties of the Rural Capital Area Workforce Board area.

The industries in Travis County that IHS forecasts to have the most employment growth from 2012 to 2015 for the Capital Area Workforce Board area are listed below. **4**

4 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	TRAVIS COUNTY CAPITAL AREA WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Professional, Scientific & Technical Services	+11,960	+20.7%
Administrative & Support Services	+11,520	+27.8%
Education Services	+4,870	+7.8%
Ambulatory Health Care Services	+2,870	+11.6%
Specialty Trade Contractors	+2,770	+16.7%
Merchant Wholesalers of Durable Goods	+2,270	+13.7%
Local Government (except schools and hospitals)	+2,050	+8.5%

INDUSTRY	RURAL CAPITAL AREA WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Food Services & Drinking Places	+2,460	+10.2%
Administrative Support Services	+2,410	+25.5%
Specialty Trade Contractors	+2,320	+23.9%
Professional, Scientific & Technical Services	+2,270	+23.7%
Ambulatory Health Care Services	+1,520	+16.8%
Local Government (except schools and hospitals)	+1,100	+10.3%
Hospitals	+930	+19.6%

Steady job growth in the Austin metro area has been noticed by the Texas economists surveyed. But a reliance on government jobs when the federal and state government are trying to control costs and shrink payrolls has made Texas economists concerned about the employment future for the Capital City.

Demand for high-tech workers in the Austin metro area may be confined to high-tech services and not manufacturing. Economists note that manufacturing of electronic and computer components, which has been a cornerstone of the Austin regional economy since the 1980s, has continued to shrink. The IHS economists are forecasting that the Austin metro area will lose 2,890 jobs in the computer and electronic product manufacturing industry by 2015, which would be a loss of 12.4%.

Some Texas economists are also expecting that trend to have an impact on the Austin region.

“Austin, which has been one of the strongest metro areas in the country over the past several years may slow somewhat with the weakening of the high-tech sector, but overall continue to perform very well,” said Keith Phillips, economist with the Federal Reserve. “While high-tech manufacturing has slowed, Austin continues to see companies consolidating to the Austin region from other areas of the country and its residential real estate markets remain tight.”

El Paso

Population growth and transportation growth are the key drivers for El Paso and nearby counties that make up the Upper Rio Grande Workforce Board area, which should experience a 4.1% growth rate from 2012 to 2015 in employment across all industries, according to the IHS economists.

The industries in El Paso County and its 5 eastern counties that IHS forecasts to have the most employment growth from 2012 to 2015 within the Upper Rio Grande Workforce Board area are shown below. ⁵

International trade with Mexico should improve employment levels in this region, say some Texas economists.

5 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	UPPER RIO GRANDE WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Administrative & Support Services	+4,090	+20.3%
Ambulatory Health Care Services	+2,360	+12.2%
Specialty Trade Contractors	+1,410	+19.3%
Food Services & Drinking Places	+890	+3.3%
Construction of Buildings	+880	+21.5%
Professional, Scientific & Technical Services	+630	+7.6%
Truck Transportation	+600	+9.7%

“Key economic developments affecting El Paso in 2013 and 2014 include infrastructure construction, transportation and warehousing rebounds, and ongoing health care expansion,” said Tom Fullerton, economics professor and chairman of the Trade in the Americas program at the University of Texas at El Paso. “[The Texas Department of Transportation] has initiated a number of important projects around the city, especially the expansion of the border highway as part of the southern relief route involving Loop 375. Transportation and warehousing activity have accelerated in response to manufacturing growth in the United States and Mexico.”

“Health sector investments continue on the practitioner side with new clinical and hospital capacity, and on the research side with expansions at Texas Tech and UTEP campuses,” said Fullerton.

Other economists have similar expectations for the border city.

“The border cities from El Paso to Laredo to McAllen to Brownsville should gain employment. This assumes that – as I expect – U.S. manufacturing makes a second-half rebound in 2013,” said Robert Gilmer, economist at the University of Houston. “Mexico has long been the #1 auto parts supplier to the United States, and has replaced Canada as the #2 assembler of autos in North America. The return of auto production and manufacturing generally will mean a rebound in cross-border trade.”

McAllen-Brownsville and the Rio Grande Valley

Population growth and international transportation deep in the Rio Grande Valley around McAllen are much of the reason the IHS economists are forecasting that employment in that region between 2012 and 2015 will grow 5.5%.

The industries that IHS forecasts to have the most employment growth from 2012 to 2015 in the 3-county Lower Rio Grande Workforce Board area are on the chart below. **6**

6 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	LOWER RIO GRANDE WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Ambulatory Health Care Services	+3,540	+8.7%
Administrative & Support Services	+2,050	+20.7%
Hospitals	+1,240	+13.2%
Specialty Trade Contractors	+1,200	+30.6%
Food Services & Drinking Places	+1,020	+5.7%
Professional, Scientific & Technical Services	+810	+16.9%
Local Government (except schools and hospitals)	+800	+7.0%

7 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	BROWNSVILLE/CAMERON COUNTY	
	Additional Jobs	Growth Percentage
Educational Services	+1,930	+9.6%
Administrative & Support Services	+1,290	+16.9%
Ambulatory Health Care Services	+780	+4.1%
Nursing & Residential Care Facilities	+650	+18.2%
Food Services & Drinking Places	+640	+6.3%
Merchant Wholesalers of Durable Goods	+430	+19.5%
Specialty Trade Contractors	+370	+18.6%

Nearby Cameron County, which includes Brownsville and Harlingen, has a similar economy. The IHS economists are forecasting 5.8% employment growth for Cameron County between 2012 and 2015.

The industries that IHS forecasts to have the most employment growth from 2012 to 2015 for the Cameron County Workforce Board area are shown on the chart above. **7**

Some Texas economists are cautious about overall job growth in this region of the Lone Star State.

“The Valley region in South Texas was one area that was weaker than expected in 2012 employment, likely due to anticipated cuts in Medicare and Medicaid [along with] future impacts of the federal health care plan and crime in Mexico that suppressed retail spending in the Valley,” said Keith Phillips, economist with the Federal Reserve office in San Antonio. Phillips points to those as the primary factors why he expects flat job growth in the Valley in 2013.

Beaumont-Port Arthur-Orange

Expansion and new building of oil refineries and chemical plants along with new natural gas processing plants are some of the key reasons the IHS economists are forecasting growth in construction and manufacturing for the Beaumont-Port Arthur-Orange area of southeast Texas.

The industries that IHS forecasts to have the most employment growth from 2012 to 2015 for the 3-county South East Texas Workforce Board area are on chart **8**.

The skill level of available local workers compared with the needs of the modern plant expansions remains an issue for local leaders and even local economists.

“The Beaumont region fits into a high-wage and low-education category,” said Larry Allen, economist at Lamar University in Beaumont. “Employment should continue to grow below the national average. The prospect of the Keystone pipeline may give a bit of a reprieve, but many of these workers will be brought in from the outside.”

8 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	SOUTH EAST TEXAS WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Administrative & Support Services	+1,500	+25.1%
Specialty Trade Contractors	+1,380	+18.2%
Construction of Buildings	+1,120	+21.0%
Heavy & Civil Engineering Construction	+850	+14.4%
Fabricated Metal Product Manufacturing	+740	+19.4%
Ambulatory Health Care Services	+610	+6.0%
Merchant Wholesale of Durable Goods	+450	+13.8%

Corpus Christi

Total employment in the Corpus Christi area and the nearby counties is expected to grow by 3.9% from 2012 to 2015, according to the IHS economic forecast.

Expansion of refineries around Corpus Christi, as well as expanded production of oil and natural gas in the nearby counties that are within the Eagle Ford Shale play, are the key reasons the IHS economists are expecting job growth in this region.

The industries that IHS forecasts to have the most employment growth from 2012 to 2015 for Corpus Christi and the 12-county Coastal Bend Workforce Board area seen in the chart below. **9**

Texas economists have similar growth expectations for the Corpus Christi area.

“The economy of the Corpus Christi metro area in the Coastal Bend has benefited from the Eagle Ford oil boom more disproportionately than other metro areas

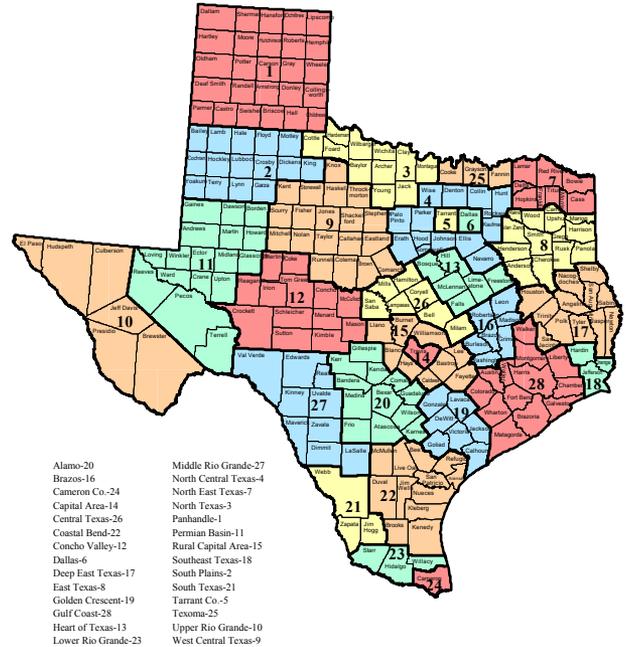
9 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	COASTAL BEND WORKFORCE BOARD	
	Additional Jobs	Growth Percentage
Construction of Buildings	+2,240	+33.4%
Ambulatory Health Care Services	+2,190	+11.1%
Administrative and Support Services	+1,980	+23.1%
Heavy and Civil Engineering Construction	+1,360	+28.5%
Specialty Trade Contractors	+1,330	+21.0%
Support Activities for Mining	+1,210	+9.0%
Truck Transportation	+480	+15.3%
Food Services and Drinking Places	+480	+2.2%

in Texas mainly due to its infrastructure and logistical advantages,” said Jim Lee, economist at Texas A&M University-Corpus Christi. “The Port of Corpus Christi and its refineries are poised to capture much of the regional oil boom’s spillover effects.”

“The Corpus Christi metro area has experienced unprecedented employment growth (during the past 3 years). Given a projected productive lifespan of nearly 20 years for the Eagle Ford Shale, the current growth experience in South Texas, including Corpus Christi, is expected to continue at least through the end of 2014,” Lee said.

Workforce Development Areas



Prepared by the Labor Market Information Department, TWC

Waco

Construction and services are expected to be 2 of the main areas of job expansion in the Waco region, according to the IHS economists.

That prediction can be seen from Interstate 35 as Baylor University is building a new \$250 million on-campus football stadium. The 45,000-seat stadium is scheduled to be completed by fall 2014.

The industries that IHS forecasts to have the most employment growth from 2012 to 2015 for Waco and the 6-county Heart of Texas Workforce Board area are as seen below. **10**

10 IHS Forecasts: Most Employment Growth Industries 2012 to 2015

INDUSTRY	HEART OF TEXAS WORKFORCE	
	Additional Jobs	Growth Percentage
Administrative & Support Services	+1,420	+23.5%
Educational Services	+1,220	+7.2%
Specialty Trade Contractors	+1,170	+24.3%
Heavy and Civil Engineering Construction	+340	+17.6%
Professional, Scientific, and Technical Services	+340	+10.8%
Ambulatory Health Care Services	+340	+5.6%
Nonmetallic Mineral Product Manufacturing	+290	+20.1%

STATEWIDE

From 2012 to 2015, the IHS economists forecast that Texas will see employment rise by 726,960 jobs or an increase of almost 7%.

Amid that growth, the IHS economists expect some particular employment growth and shrinkage within the industry sectors of certain local workforce development areas.

Among those “hot spots” that are expected to experience the most employment growth in Texas from 2012 to 2015 are:

INDUSTRY	Region	Job Gain	Growth Percentage
Administrative & Support Services	Gulf Coast WDA	+47,730	+26.4%
Administrative & Support Services	Dallas County WDA	+38,990	+28.7%
Specialty Trade Contractors	Gulf Coast WDA	+23,930	+27.1%
Ambulatory Health Care Services	Gulf Coast WDA	+20,300	+15.1%
Professional, Scientific & Technical Services	Gulf Coast WDA	+17,150	+8.8%
Food Services & Drinking Places	Gulf Coast WDA	+16,220	+7.7%
Administrative & Support Services	Tarrant County WDA	+15,270	+28.1%
Administrative & Support Services	Alamo WDA	+13,750	+25.6%
Heavy & Civil Engineering Construction	Gulf Coast WDA	+12,770	+29.0%
Professional, Scientific & Technical Services	Capital Area WDA	+11,960	+20.7%
Administrative & Support Services	Capital Area WDA	+11,520	+27.8%
Construction of Buildings	Gulf Coast WDA	+11,180	+24.3%
Hospitals	Gulf Coast WDA	+10,750	+10.6%
Ambulatory Health Care Services	Dallas County WDA	+10,740	+13.1%
Professional, Scientific & Technical Services	Dallas County WDA	+10,470	+8.5%
Administrative & Support Services	North Central Texas WDA	+10,380	+27.6%
Professional, Scientific & Technical Services	North Central Texas WDA	+8,700	+20.1%
Merchant Wholesalers of Durable Goods	Gulf Coast WDA	+7,270	+8.5%
Professional, Scientific & Technical Services	Alamo WDA	+6,870	+16.6%
Ambulatory Health Care Services	Alamo WDA	+6,870	+11.3%
Machinery Manufacturing	Gulf Coast WDA	+6,700	+12.4%
Specialty Trade Contractors	Dallas County WDA	+6,670	+14.1%
Food Services & Drinking Places	North Central Texas WDA	+6,280	+8.9%
Oil & Gas Extraction	Gulf Coast WDA	+6,220	+11.7%
Fabricated Metal Product Manufacturing	Gulf Coast WDA	+6,120	+10.9%
Ambulatory Health Care Services	Tarrant County WDA	+6,000	+16.4%
Ambulatory Health Care Services	North Central Texas WDA	+5,520	+13.7%
Support Activities for Mining, Oil & Gas	Gulf Coast WDA	+5,400	+12.1%

APPENDIX A

**Texas LWDA Regional Employment Forecast 2012-2015
Annualized Growth Rates for All Industries (Percent Change)**

AREA TITLE	Change 2012-2013	Change 2013-2014	Change 2014-2015	Change 2012-2015
North Central Texas	2.7%	3.1%	3.0%	9.1%
Capital Area	2.7%	2.7%	2.8%	8.4%
Rural Capital Area	2.4%	2.8%	2.8%	8.2%
Gulf Coast	2.6%	2.6%	2.7%	8.1%
Tarrant County	2.1%	2.4%	2.4%	7.0%
Alamo	1.9%	2.3%	2.2%	6.6%
Permian Basin	2.4%	1.9%	2.1%	6.6%
Panhandle	2.2%	2.0%	2.0%	6.3%
Dallas County	1.6%	2.1%	2.2%	6.0%
South Texas	0.6%	2.6%	2.5%	5.9%
Cameron County	1.1%	2.3%	2.3%	5.8%
East Texas	1.4%	1.9%	2.1%	5.6%
Coastal Bend	1.7%	1.8%	2.0%	5.5%
Lower Rio Grande Valley	1.4%	1.7%	2.3%	5.5%
Heart of Texas	1.9%	1.8%	1.7%	5.4%
Concho Valley	2.0%	1.2%	1.9%	5.2%
Deep East Texas	1.6%	1.5%	1.9%	5.1%
Central Texas	1.8%	1.5%	1.5%	4.9%
North East Texas	1.9%	1.4%	1.4%	4.8%
West Central Texas	2.2%	1.3%	1.3%	4.7%
Brazos Valley	0.8%	2.0%	1.5%	4.3%
Middle Rio Grande Valley	2.0%	1.1%	0.9%	4.1%
Upper Rio Grande Valley	1.0%	1.5%	1.5%	4.1%
Golden Crescent	0.7%	1.3%	1.8%	3.9%
South Plains	1.0%	1.3%	1.2%	3.5%
Texoma	1.4%	0.7%	1.0%	3.1%
North Texas	0.9%	0.9%	1.0%	2.9%
South East Texas	-0.2%	2.2%	0.6%	2.6%

APPENDIX B

Texas Statewide Short-Term Employment Forecast 2013-2015

INDUSTRY	2013	2014	2015	2013-2015 Change	2013-2015 Change Percent
Texas Total (All Industries)	10,691,140	10,938,740	11,199,820	508,680	4.8%
Administrative and Support Services	677,010	731,160	800,340	123,330	18.2%
Specialty Trade Contractors	334,140	360,010	396,620	62,480	18.7%
Ambulatory Health Care Services	641,130	664,660	689,910	48,780	7.6%
Professional, Scientific & Technical Services	611,590	641,000	658,080	46,490	7.6%
Heavy & Civil Engineering Construction	125,230	135,800	151,660	26,430	21.1%
Construction of Buildings	131,970	141,300	156,030	24,060	18.2%
Food Services & Drinking Places	879,320	892,610	899,620	20,300	2.3%
Hospitals	394,540	402,080	410,230	15,690	4.0%
Merchant Wholesalers of Durable Goods	298,910	305,970	314,200	15,290	5.1%
Fabricated Metal Product Manufacturing	135,570	142,260	148,090	12,520	9.2%
Truck Transportation	127,420	133,080	139,690	12,270	9.6%
Local Government (except education & hospitals)	369,320	374,270	380,990	11,670	3.2%
Wood Product Manufacturing	20,880	26,120	32,240	11,360	54.4%
Nursing & Residential Care Facilities	178,090	183,100	188,510	10,420	5.9%
Support Activities for Mining	150,650	155,560	160,960	10,310	6.8%
Transportation Equipment Manufacturing	94,170	98,450	101,740	7,570	8.0%
Merchant Wholesalers of Nondurable Goods	153,730	157,910	161,250	7,520	4.9%
Real Estate	121,860	125,500	128,260	6,400	5.3%
Oil & Gas Extraction	97,240	100,390	103,480	6,240	6.4%
Support Activities for Transportation	73,040	76,080	79,260	6,220	8.5%
Social Assistance	142,860	145,520	147,940	5,080	3.6%
State Government (except education and hospitals)	148,490	150,420	153,250	4,760	3.2%
Nonmetallic Mineral Product Manufacturing	32,270	34,440	36,800	4,530	14.0%
Waste Management & Remediation Services	29,120	31,030	33,630	4,510	15.5%
Warehousing & Storage	48,710	51,090	53,140	4,430	9.1%
Food & Beverage Stores	213,100	215,260	216,740	3,640	1.7%
Insurance Carriers & Related Activities	149,890	152,830	153,480	3,590	2.4%
Wholesale Electronic Markets, Agents & Brokers	55,130	56,990	58,650	3,520	6.4%
Postal Service	40,600	42,480	43,510	2,910	7.2%
Air Transportation	61,140	62,500	63,780	2,640	4.3%
Clothing & Clothing Accessories Stores	118,870	119,810	121,300	2,430	2.0%

INDUSTRY	2013	2014	2015	2013-2015 Change	2013-2015 Change Percent
Machinery Manufacturing	105,060	105,970	107,420	2,360	2.2%
Accommodation	109,800	111,100	112,050	2,250	2.0%
Health & Personal Care Stores	66,870	68,040	69,000	2,130	3.2%
Credit Intermediation & Related Activities	245,490	247,710	247,560	2,070	0.8%
Transit & Ground Passenger Transportation	18,940	19,980	20,970	2,030	10.7%
Couriers & Messengers	35,450	36,290	37,350	1,900	5.4%
Food Manufacturing	85,000	86,110	86,730	1,730	2.0%
Data Processing, Hosting & Related Services	25,730	26,220	27,410	1,680	6.5%
Pipeline Transportation	16,730	17,550	18,390	1,660	9.9%
Amusement, Gambling & Recreation Industries	82,560	84,100	84,190	1,630	2.0%
Telecommunications	83,020	82,950	84,610	1,590	1.9%
Publishing Industries (except Internet)	39,040	39,270	40,600	1,560	4.0%
Performing Arts, Sports & Related Industries	23,440	24,380	24,870	1,430	6.1%
Motion Picture & Sound Recording Industries	17,210	17,750	18,490	1,280	7.4%
Motor Vehicle & Parts Dealers	152,820	152,610	154,000	1,180	0.8%
Repair & Maintenance	113,460	114,330	114,590	1,130	1.0%
Gasoline Stations	73,470	74,220	74,590	1,120	1.5%
General Merchandise Stores	265,490	266,180	266,590	1,100	0.4%
Furniture & Related Product Manufacturing	22,320	22,750	23,380	1,060	4.7%
Rental & Leasing Services	53,930	54,370	54,850	920	1.7%
Personal & Laundry Services	96,530	97,400	97,440	910	0.9%
Other Information Services	5,730	6,070	6,430	700	12.2%
Chemical Manufacturing	74,000	73,950	74,570	570	0.8%
Miscellaneous Store Retailers	57,470	57,710	58,030	560	1.0%
Electronics & Appliance Stores	40,840	41,050	41,390	550	1.3%
Animal Production	22,810	23,030	23,300	490	2.1%
Building Material, Garden Equipment & Supplies Dealers	91,270	91,480	91,700	430	0.5%
Funds, Trusts & Other Financial Vehicles	8,840	9,190	9,260	420	4.8%
Crop Production	21,240	21,440	21,640	400	1.9%
Museums, Historical Sites & Similar Institutions	8,850	9,080	9,220	370	4.2%
Broadcasting (except Internet)	18,130	18,070	18,410	280	1.5%
Nonstore Retailers	19,080	19,240	19,340	260	1.4%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	2,250	2,400	2,510	260	11.6%

INDUSTRY	2013	2014	2015	2013-2015 Change	2013-2015 Change Percent
Water Transportation	5,030	5,160	5,280	250	5.0%
Primary Metal Manufacturing	21,920	21,780	22,100	180	0.8%
Private Households	35,940	36,200	36,110	170	0.5%
Securities, Commodities & Other Financial Investments & Activities	50,410	50,730	50,490	80	0.2%
Scenic & Sightseeing Transportation	870	900	930	60	6.9%
Rail Transportation	60	60	60	-	0.0%
Fishing, Hunting & Trapping	410	400	390	(20)	-4.9%
Monetary Authorities-Central Bank	1,300	1,300	1,280	(20)	-1.5%
Mining (except Oil & Gas)	9,810	9,830	9,790	(20)	-0.2%
Religious, Grantmaking, Civic, Professional & Similar Organizations	61,010	61,400	60,930	(80)	-0.1%
Textile Product Mills	5,550	5,520	5,460	(90)	-1.6%
Forestry and Logging	1,660	1,610	1,560	(100)	-6.0%
Electrical Equipment, Appliance & Component Manufacturing	18,550	18,400	18,410	(140)	-0.8%
Miscellaneous Manufacturing	28,690	28,620	28,530	(160)	-0.6%
Leather & Allied Product Manufacturing	3,820	3,700	3,640	(180)	-4.7%
Computer & Electronic Product Manufacturing	95,130	94,090	94,940	(190)	-0.2%
Sporting Goods, Hobby, Book & Music Stores	38,780	38,660	38,540	(240)	-0.6%
Beverage & Tobacco Product Manufacturing	11,720	11,610	11,480	(240)	-2.0%
Textile Mills	2,660	2,540	2,390	(270)	-10.2%
Paper Manufacturing	17,020	16,790	16,730	(290)	-1.7%
Apparel Manufacturing	4,690	4,510	4,270	(420)	-9.0%
Plastics & Rubber Products Manufacturing	37,570	37,320	37,090	(480)	-1.3%
Support Activities for Agriculture & Forestry	10,540	10,130	9,860	(680)	-6.5%
Management of Companies & Enterprises	85,470	84,800	84,600	(870)	-1.0%
Petroleum & Coal Products Manufacturing	24,460	24,020	23,570	(890)	-3.6%
Utilities	49,130	48,550	47,880	(1,250)	-2.5%
Furniture & Home Furnishings Stores	35,660	34,670	34,110	(1,550)	-4.3%
Printing & Related Support Activities	25,540	24,540	23,660	(1,880)	-7.4%
Federal Government (except postal services)	156,690	153,430	150,610	(6,080)	-3.9%
Educational Services	1,092,180	1,075,830	1,050,880	(41,300)	-3.8%

Noted Texas economist Ray Perryman once remarked that there are only two kinds of economists; the humble and former. Making employment forecasts brings out the humility in most of those who practice the art of prognostication. The forecasts presented in this document are no different and they are subject to a broad range of external forces that are as complex as the vibrancy of the global economy, the price of oil and natural gas, and emerging hiring practices in the business community. The sluggish jobs recovery post Great Recession in many parts of the nation is a testament to these varied influences. And although Texas has performed better overall than most, our economy is subject to these same forces.

The empirical forecasts presented in this document were developed by IHS Global Insights, an international economic forecasting company. The methodologies used by Global Insights constitute a mix of "top down and bottom up" techniques -- incorporating a sophisticated econometric model benchmarked to regional trend analyses. As with any econometric model, the veracity of the forecasts are only as good as the assumptions incorporated into the model. In this regard, Global Insights is one of the premier forecasting firms in the world. But their economists are certainly not infallible.

To balance the Global Insights forecasts we asked several Texas economists to opine on the job growth prospects for Texas and various regional economies. We appreciate their thoughtful observations which offer us improved context for anticipating likely industry employment change. While only history will tell us how accurate our forecasts are, we encourage our readers to weigh the entirety of the presentation as you engage in policy making endeavors.

Finally, this short term industry forecast document is only 1 contribution toward solving the jigsaw puzzle that is employment projections. We encourage the reader to make the logical leap from forecasted industry job growth to the occupations most likely to be affected. The Labor Market & Career Information department at TWC provides several online tools to help readers better interpret these job growth scenarios. The Interactive Industry Occupation Matrix application at www.TexasIndustryProfiles.com allows a user to select an industry, enter a job growth scenario, and view the most likely occupational impact. In addition, long term industry and occupational employment projections for Texas and Local Workforce Board Areas are available at www.tracer2.com in the section marked The Future. We encourage the reader to explore these and other online labor market applications at www.lmci.state.tx.us.