The Economy of the Permian Basin

Workforce Development Area

2012 Update

A Study Conducted for the

Economic Development Division of the

Permian Basin Regional Planning Commission

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Karr Ingham, Economist

INTRODUCTION

The purpose of this study is to assess the general economic condition of the Permian Basin Workforce Development Area (WDA), and to identify the primary economic influence(s) behind the regional economy. The Permian Basin WDA is comprised of the following seventeen counties served by the Permian Basin Regional Planning Commission:

Andrews	Dawson	Glasscock	Martin	Reeves	Ward
Borden	Ector	Howard	Midland	Terrell	Winkler
Crane	Gaines	Loving	Pecos	Upton	

Methodology

The principal analytical tool employed in this analysis is the Permian Basin WDA Regional Economic Index, which was created for a similar purpose in 2008. The index is based at 100.0 in January 2000 and is presently updated through February 2013. The process behind the establishment of this index involves identifying available, timely and reliable *monthly* economic data by city and/or county in the defined region, and then using that monthly aggregated data to calculate a single monthly number that, considered over time, gives a clear picture as to the general performance of the regional economy over the period of time covered by the analysis.

While the list of data that meet the above criteria is much more restrictive in the non-metro areas than in the metropolitan areas – Midland (Midland County) and Odessa (Ector County), for example – those that are available are excellent and in fact taken together represent the very essence of economic performance at the local and regional level.

In addition to the Permian Basin WDA Regional Economic Index, other anecdotal economic information is considered in this report to support the conclusions reached by the index analysis, and to assist in rounding out the economic picture.

SUMMARY

The 2011 report, the last one given for this purpose, began with the following summary statement:

"The determination as to the primary economic driver(s) in the Permian Basin of Texas – and more specifically in the 17-county region under consideration in this study – is less a matter of identifying the driver(s) and more a matter of simply confirming what is already known to be the case: that the regional oil & gas exploration and production (E&P) industry determines the course, condition and fate of the regional economy as a whole. In fact, the general economy of the region is arguably more directly connected to the oil & gas industry than any other region in Texas (perhaps even the entire US) to its base industry and economy. The general economy of the region is hyper-sensitive to trends and movements within the regional oil & gas economy; when the industry grows and expands, the overall regional economy does the same, and when the industry contracts, the regional economy declines – without fail. And it is difficult to imagine that scenario changing anytime soon."

That statement makes a repeat appearance in this report because it remains every bit as true in early 2013 as it was in late 2008. And in fact, it has been the case in the Permian Basin region for decades now. The regional oil & gas economy makes up such a significant share of the overall economy – probably exceeding 85% in 2012 – that the outcome can be no different.

As was documented in the prior report, however, this strong connection to the oil & gas business has served the region very well in recent years. This trend was very obviously continued in 2012, and remains firmly in place moving into 2013.

In fact, the region has enjoyed extraordinary net growth since 2000, the base year of the index analysis presented in this report. The regional oil & gas economy, and along with it the Permian Basin region as a whole, has endured two contractions over that period of time of widely varying degrees. The first occurred in 2001-2002, was generally short-lived, and of modest severity. The second, occurring in 2009 (actually late 2008 through early 2010) was much deeper and much more severe, characterized by a sharp declines in general spending and employment, and a sharp uptick in the regional unemployment rate. The economy troughed in early 2010 and began

to improve rapidly, however, and that period of recovery and new growth is now three years in the making and counting.

The developments in the US oil & gas picture over the last five years or so are nothing short of stunning, and reflect a renaissance in US energy production that was virtually entirely unpredicted. These developments – the combination of price and technology at work – have reversed the declines in crude oil production in the US, in Texas, and in the Permian Basin. Crude oil production in Texas has increased by an astounding 60% since 2007, and more crude oil was produced in the state in 2012 than in any year since 1992. More than 100 million barrels were added to Texas crude oil output in 2012 alone.

In the Texas Permian Basin (RRC districts 7C, 8, and 8A), more crude oil was produced in 2012 than in any year since 1998. After years of decline, regional crude oil production began to increase in 2006, and production in 2012 was some 25% higher than in 2006. Regional crude oil production increased by over 8% in 2011 compared to 2010, and added another 8% in 2012.

The production increases were accomplished by a significant ramp-up in industry activity as characterized by the regional rig count, the number of drilling permits issued, the number of wells completed, and the number of people working in the industry in the Permian Basin. Incredibly, the total rig count in those three RRC districts in 2012 exceeded the rig count in that same territory at its peak in the 1980s before retreating in the 2nd half of the year.

The net outcome of this dramatic increase in regional oil & gas activity has been enormously positive for the Permian Basin regional economy over the last 13 years. The Permian Basin WDA Regional Economic Index, again based at 100.0 in January 2000 increased to 171.3 at year-end 2012, an increase of over 70% in that period of time.

The number of employed residents within the 17-county Workforce Development Area has grown by over 76,000 according to current estimates since 2000, an expansion of over 47%. Over 60,000 jobs been added to company payrolls across the region, an employment expansion

of over 40%. Real taxable spending has nearly tripled over that period of time, up by over 190% in 2012 compared to 2000.

As of year-end 2012, the regional unemployment rate had not yet reached its pre-recession low point. However, the unemployment rate remained on the decline in 2012 and should continue to do so in 2013, and will likely overtake that milestone sometime this year.

The Permian Basin WDA Regional Economic Index

Most typically, an index is simply a group of numbers that are condensed to one number through some sort of statistical process, with the goal of adding value to the individual numbers used to calculate that index. This is true of the Consumer Price Index, the Dow Jones Industrial Average, the Index of Leading Economic Indicators and many others.

Local and regional economic indexes are designed to indicate growth rates and patterns, and to track economic cycles. The components used to calculate such an index depend on the nature of available data. The Midland-Odessa Regional Economic Index, a monthly index established a number of years ago and still in operation today, is an index that tracks growth rates and business cycles in the combined Midland-Odessa metropolitan area. The components used to calculate that monthly index include inflation-adjusted taxable retail sales, inflation-adjusted spending on new and used automobiles, hotel/motel tax receipts, airline enplanements, building permit data, home sales and prices and employment.

The most important of these are employment and inflation-adjusted retail spending. They are the most reliable in terms of assessing the state of the local and regional economy; in fact, when both are on the increase, it would be difficult to argue that the economy is not growing. So, the concurrent trends in these two sectors of the local economy serve as the best evidence as to how the economy is faring.

Outside of the metro area, much of the above-referenced data becomes sketchier and less reliable, if even possible to get, and some of it simply is not available at all. However, there is

excellent and timely data available at the city and county level with regard to the important employment and spending sectors, and these components were used to calculate the Permian Basin WDA Regional Economic Index. Specifically, the components are:

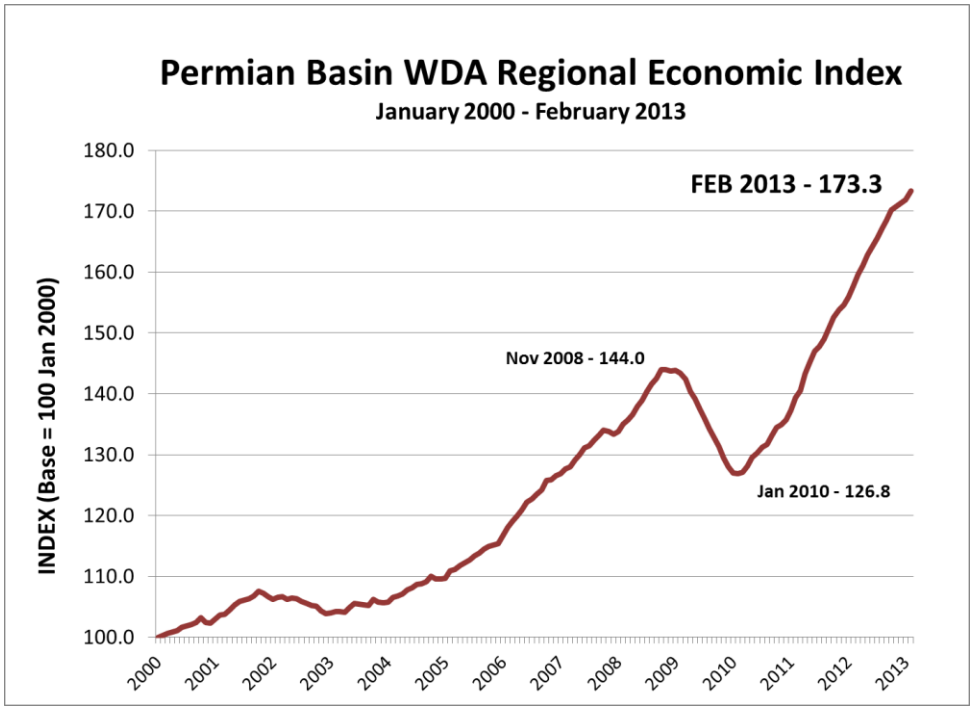
- Inflation-adjusted taxable spending – calculated using the monthly sales tax rebates to the cities within the 17 counties under consideration in this study. Four of those counties do not have a city that collects local taxes (Borden, Glasscock, Loving and Terrell). The monthly sales tax rebate figures for each city are used to calculate the dollar amount of spending that generated that tax collection, and then the individual city numbers are totaled to determine a monthly sales total for the entire region. That number is then adjusted for inflation, seasonality and volatility, and a moving 3-month average and moving 12-month average of that number are employed in the calculation of the monthly index.

- The number of employed persons residing within the Workforce Development Area, per the Local Area Unemployment Statistics (LAUS) data, seasonally adjusted. A moving 3-month average and a moving 12-month average of this number are also used to calculate the monthly index.

- The unemployment rate for the WDA, also based on LAUS data, seasonally adjusted. A moving 12-month average of this number is used to calculate the monthly index.

The base month and year of the index is January 2000; for that month, the above indicators are calibrated to 100.0, and then the aggregate movement in these numbers generates a new index value each month, and the nature of that number over time provides an excellent picture as to how the economy as defined has performed from January 2000 to February 2013. At the time of this analysis, sales tax data is available through March 2013, and employment data is available only through February 2013, so the index analysis presently is updated through February of this year.

Following, then, is the graphical representation of the Permian Basin WDA Regional Economic Index, from its base month and year of January 2000 through February 2013:



Again, the patterns of economic growth and decline are clear including the recession, which we would date from the index peak of 144.0 in November 2008 to the index trough of 126.8 in January 2010.

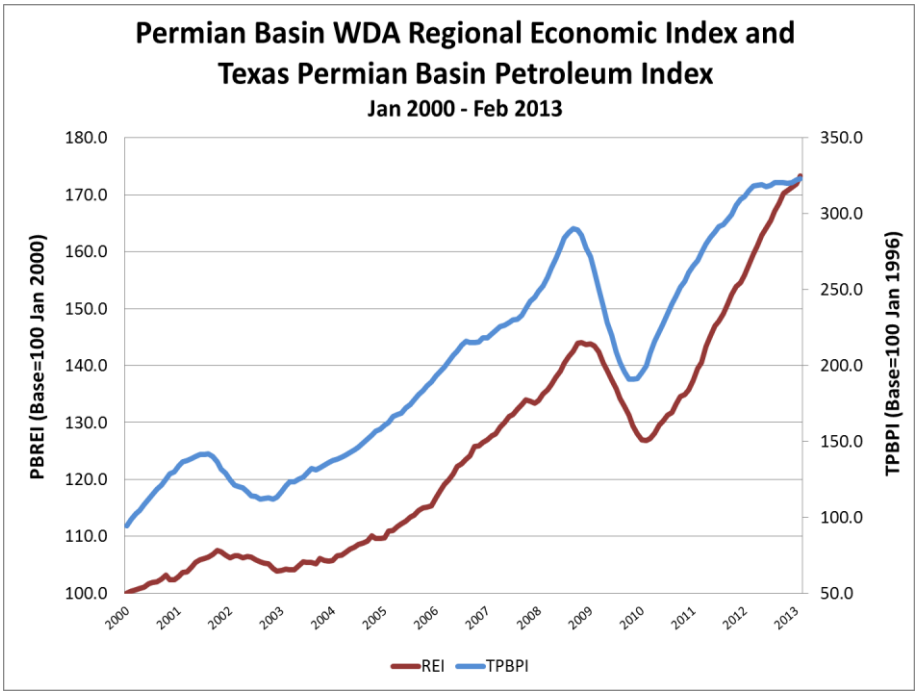
Since that time, the regional economy has been in the midst of a remarkable period of recovery and new growth which has lasted exactly three years as of February 2013 (36 straight months of increase in the index). And it is not nearly over, as the forecast under current economic conditions calls for continued growth and expansion across the region in 2013.

Over that three-year period of time, the Permian Basin WDA Economic Index has expanded by nearly 37%, an average of over 12% per year. Real (inflation-adjusted) taxable spending has increased by a whopping 70%, and the number of employed residents of the region has grown by nearly 43,000 jobs, an increase of some 22%.

In 2012 alone, the index increased by 18% (December 2012 compared to December 2011, which in turn was up by over 19% compared to the December 2012 index). Inflation-adjusted taxable spending was up by nearly 17% in 2012 compared to 2011. Over 14,700

residents were added to the ranks of the employed across the region in 2012, a year-over-year growth rate of 6.8%, and the unemployment rate at year-end 2012 stood at 3.6%, compared to 4.5% at year-end 2011.

The driving force behind the three-year period of growth, including continued strong growth in 2012 is clearly the sharp recovery and rapid growth in the regional oil & gas economy. The following chart adds the Texas Permian Basin Petroleum Index to the graph of the Permian Basin WDA Regional Economic Index. The Texas Permian Basin Petroleum Index is a tracking tool for the regional oil & gas economy, based at 100.0 in January 1996, and its components include crude oil and natural gas prices, the regional rig count, drilling permits, oil and gas well completions, the volume and value of oil & gas production, industry employment, and a regional petroleum stocks index. The chart graphs the index from January 2000 – February 2013.



Again, the depth of the connection between the regional oil & gas economy and the regional economy as a whole is clear and unmistakable. The graph lines move in tandem with one another; typically, the turning points in the oil & gas index will precede the turning points in the general regional economic index by a few months. In effect, the Texas Permian Basin Petroleum

Index serves as the "leading" economic index for the overall regional economy – in other words, it serves to forecast, again virtually without fail, the movements, cycles and growth rates in the general economy of the Permian Basin region.

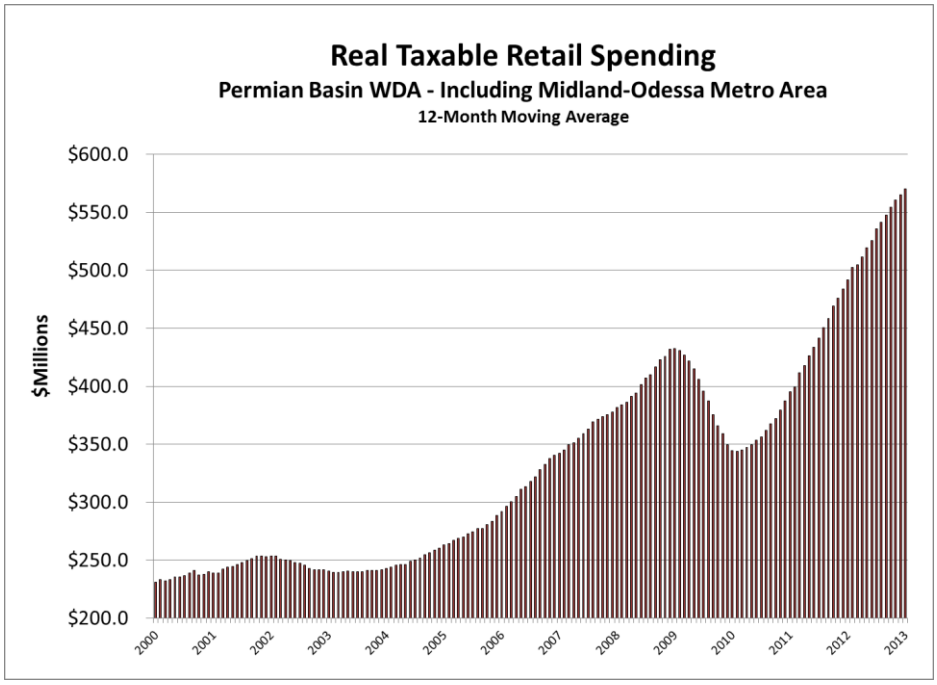
Regional oil & gas activity actually flattened in the latter half of 2012, sparked by an unexpected decline of about $30/barrel in the price of crude oil in the 2nd quarter. The rig count declined by over 60 rigs from June 2012 to January 2013, and the number of drilling permits issued across the Texas Permian Basin region declined by about 10% in the second half of the year. Industry employment was unaffected, and prices had recovered to above $90/barrel by year-end, and the effects on the general economy of the region were largely unnoticeable, though in actuality growth rates appear to have temporarily slowed a bit in response to diminished oil & gas activity.

The rig count reversed course and increased from January to February (and then again in March), and the number of drilling permits issued across the region in January and February 2013 represents the highest total for the first two months of the year dating back to at least the 1980s, and may well be a record total. So it appears that regional oil & gas activity is recovering from a mild slowdown and will continue to provide upside support to the general economy of the region in the coming months.

Regional Taxable Spending

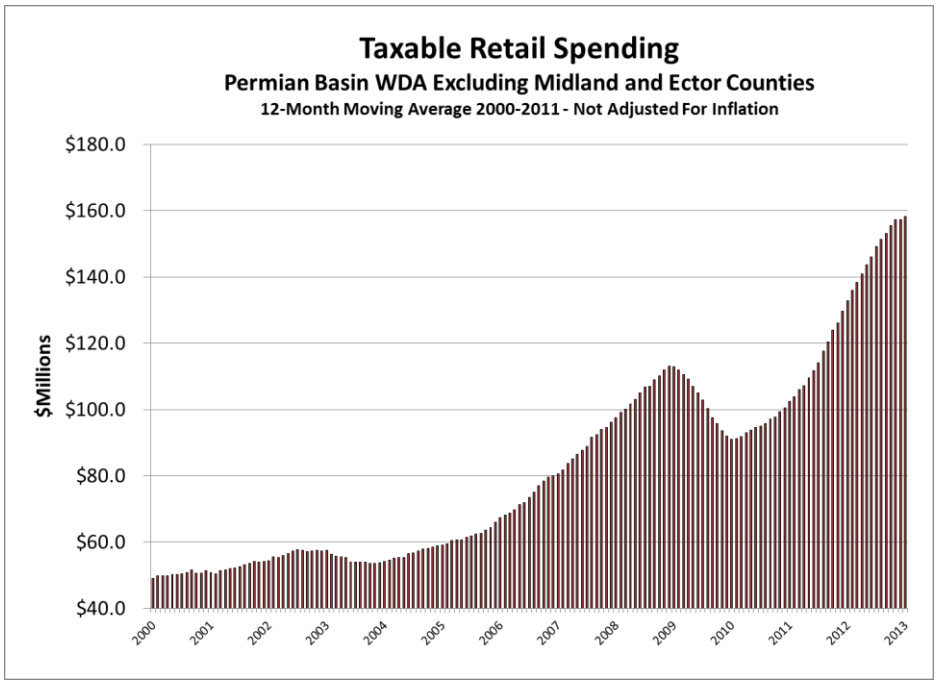
The term "retail sales" may suggest simply spending by households, but that is not the case. Household spending is a large part of the equation, but it is certainly not inclusive. The oil and gas industry, for example, is a massive 'consumer' in the region, and is a huge payer of the sales tax. Either way, growth in total spending virtually always means the economy is growing. While it is not possible to account for every dollar spent (some sales are not taxable for a variety of reasons), it is certainly possible to calculate the amount of spending in the region that generated the tax receipts to the cities involved, and taxable spending is highly useful as an economic indicator.

The following graph represents real (inflation-adjusted) taxable spending in the region; the representation is a moving 12-month average (from 2000 through early 2013), which smooths out the line and offers a more substantive indication of the trends:



The sharp contraction during the recession of 2009 is apparent, as is the impressive growth since then. In mid-2011, real taxable spending surpassed its pre-recession peak and has continued to increase rapidly and in virtually unfettered fashion through early 2013.

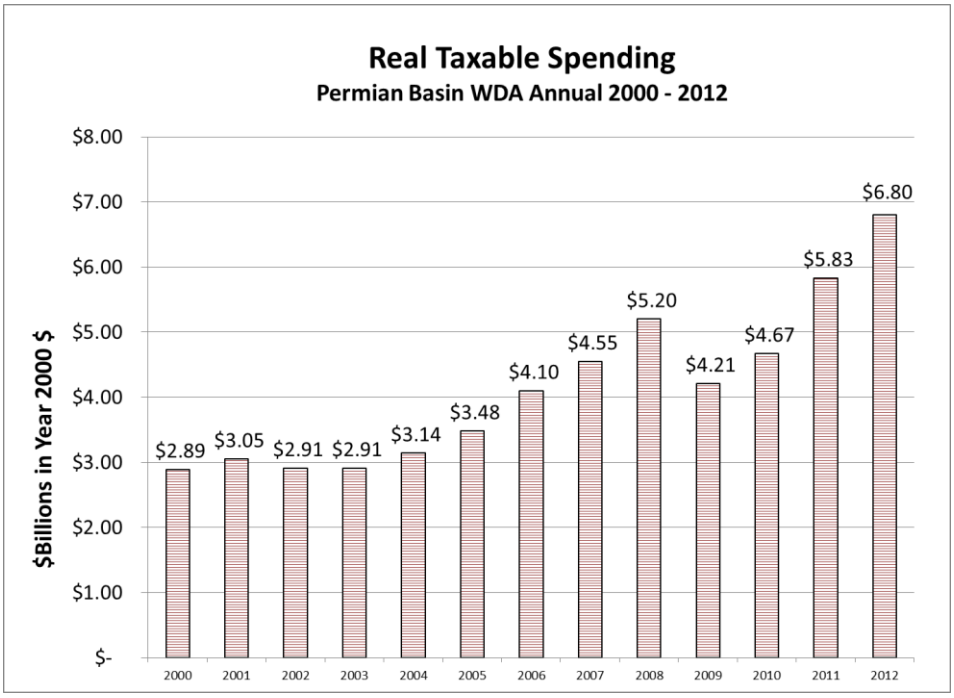
The spending trends represented on the previous graph include totals from Midland and Ector counties, the Midland-Odessa metro area, which makes up nearly 80% of the total. The trend has been every bit as impressive outside the metro area, however, as indicated in the following graph, which charts taxable spending in the region, excluding Midland and Odessa. Again, the following is a 12-month moving average.



The numbers are smaller, but the trends are very much the same. And over that time, the total for the non-metro portion of the region as a percent of the grand total remains quite constant at 21-22%. This means that over the period of time under analysis, taxable spending activity has not decreased relative to the total which includes the Midland-Odessa metro area.

And of course, it is important to remember that a great portion of metro area spending comes from outside the metro area, so the two are surely intertwined; still, it is critically important to the smaller counties and communities to maintain local economic activity, and to themselves have active and vibrant local economies.

Annual spending totals are instructive as well, to help further paint the picture of the trends and recent-year growth in activity across the region. The following graph indicates simply annual totals for spending per the sales tax rebates for the area including the metro area numbers, adjusted for inflation by restating the totals in year 2000 dollars.



Year-to-year growth rates in spending are extraordinary, particularly from 2004-2008, and from 2010-2012. The following table represents the percent change in real spending compared to the prior year:

2001 - 5.4%
2002 - (4.5%)
2003 - 0.0%
2004 - 7.9%
2005 - 10.9%
2006 - 18.0%
2007 - 10.9%
2008 - 14.3%
2009 - (19.2%)
2010 - 11.0%
2011 - 24.9%
2012 - 16.7%

Again, the numbers have been adjusted for inflation over time, so the percent change numbers indicated represent real rates of growth and decline.

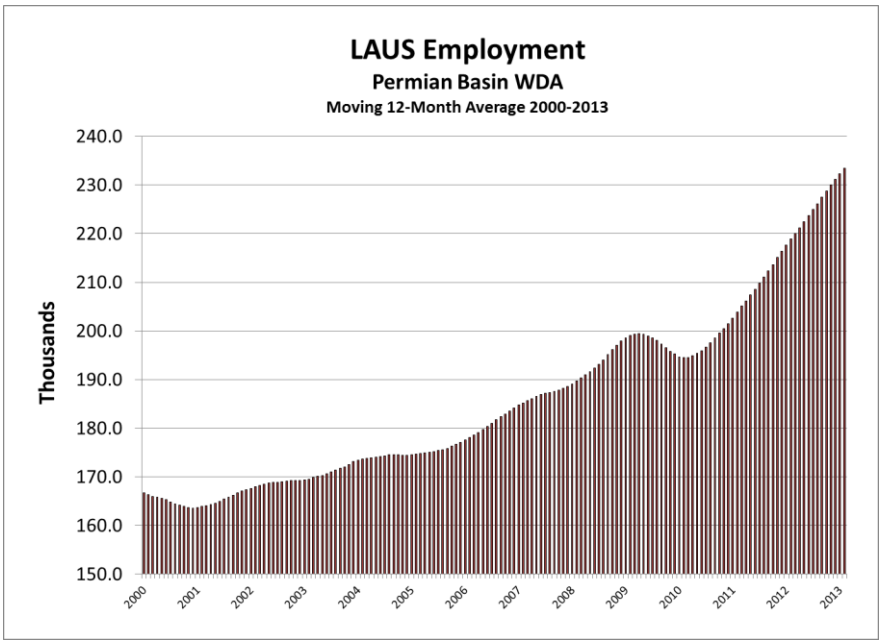
Employment

The monthly employment information that is available for the Workforce Development Area differs from the monthly data that is available for metropolitan areas. For the metro areas (Midland and Odessa, for example), estimates are generated for "wage and salary" employment, meaning estimates are made and released for the number of jobs that exist in that given metro area, no matter who holds those jobs, or where the holders of those jobs reside. The series containing these estimates is referred to as the CES (Current Employment Statistics) series.

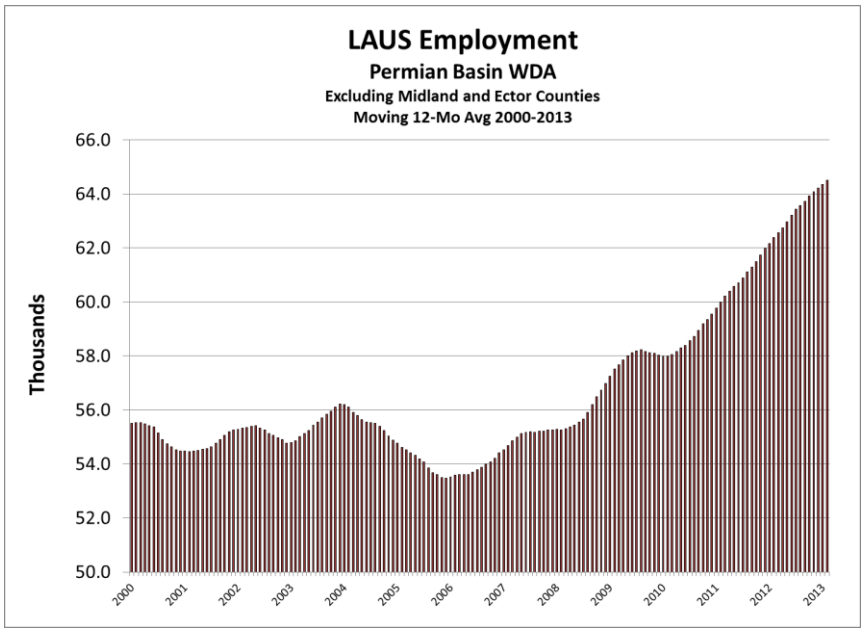
CES data is not available at the county or WDA level. The QCEW (Quarterly Census of Employment and Wages) is available monthly and quarterly, but only on a lag time of 4-6 months or so. QCEW data for Texas counties and WDAs is presently only available through the third quarter of 2012.

To obtain a workable monthly employment number for the Permian Basin WDA Regional Economic Index, the LAUS (Local Area Unemployment Statistics) series is utilized. In simplistic terms, the LAUS series generates estimates for total labor force, number of employed persons, number of unemployed persons, and the unemployment rate (which is the number of unemployed divided by the labor force). The estimates are generated at various geographic levels, including WDA, and the number of employed persons and the unemployment rate are used for the purposes of calculating the Permian Basin WDA Regional Economic Index.

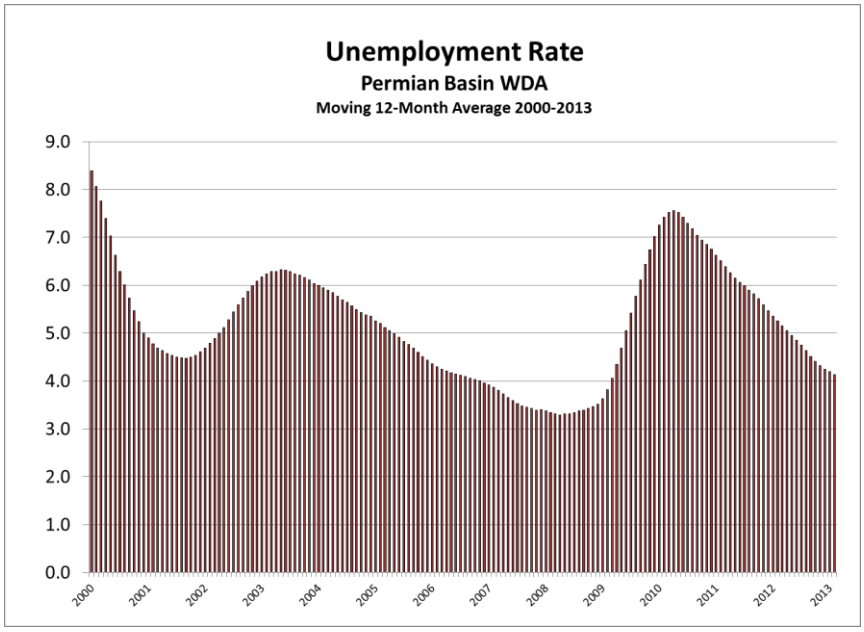
Not surprisingly, the employment data indicates strong net growth as well, but with a considerable loss of employment per this measure in response to the contraction in 2009. The following graph shows a moving 12-month average of WDA employment – again, the estimated number of residents within that 17-county area that are employed.



The Permian Basin is clearly enjoying spectacular growth in employment, with the LAUS employment estimates simply exploding in the last three years. And that growth is not limited to the metro area. The following chart tracks LAUS employment in the Permian Basin with the metro area counties of Midland and Ector excluded.



The unemployment rate for the region as a whole has been quite volatile over the course of the analysis period, and the period of time leading up to that in the latter part of the 1990s. As the chart below suggests, the unemployment rate has been very responsive to periods of economic growth and contraction.

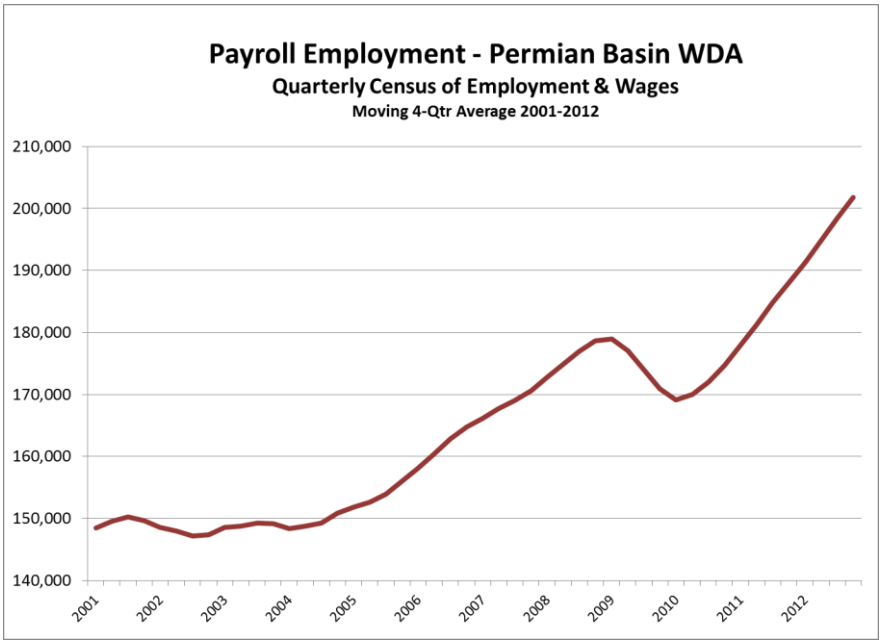


Again, just for smoothing purposes and to remove volatility and seasonality, the graph reflects a moving 12-month average of the unemployment rate from 2000-2013. Interestingly, the unemployment rate was significantly higher in the late 1990s in response to the oil & gas economy crash and resulting downturn in the regional economy. It came down rapidly in the early part of the decade of the 2000s and then rose in 2002-2003 before entering into a long, steady period of decline. In late 2008 and early 2009, the unemployment rate began to rise rapidly before peaking in 2010. The regional unemployment rate continues to come down steadily moving in to 2013 but has yet to return to its pre-recession low point.

The principal payroll employment measure that is available at the county and WDA level is the Quarterly Census of Employment and Wages (QCEW), which tracks employees on the payrolls of companies who participate in the unemployment insurance program. Again, however, it is

only available on a delayed basis, so it is not a candidate for inclusion in a timely regional economic index. It remains an excellent economic indicator, however, and gives a solid indication as to payroll employment growth over time at all geographic levels, including the county and WDA level.

The following chart tracks payroll employment growth per the Quarterly Census of Employment and Wages (QCEW) and reflects a moving four-quarter average, again for the purposes of removing seasonal volatility.

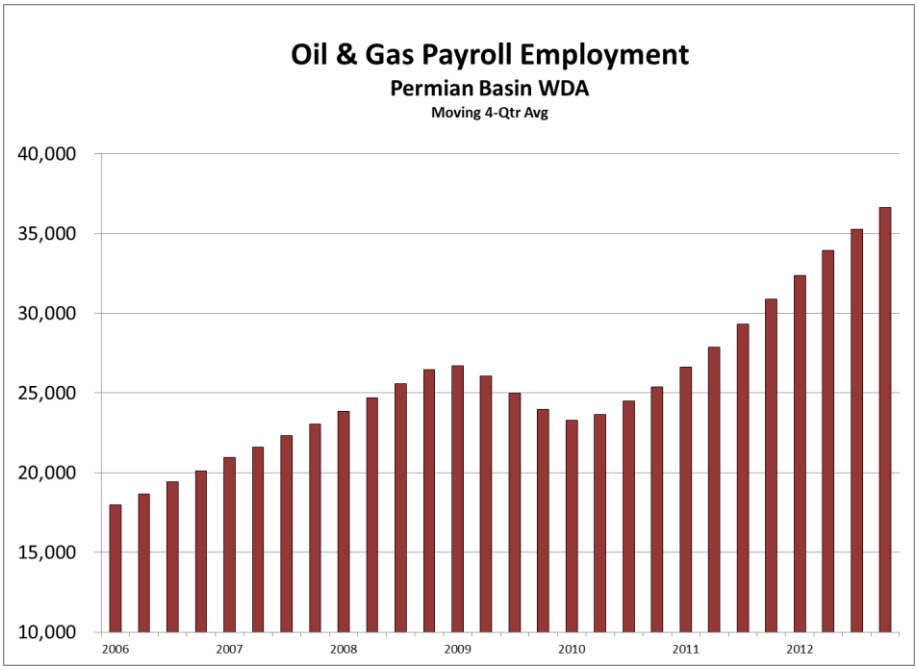


Regional payroll employment growth exhibits what is by now a familiar pattern – a decline in the early part of the period under analysis, followed by dramatic growth from 2004-2008. The number of regional payroll jobs dropped sharply in 2009, but troughed and began to grow again sharply in 2010. At year-end 2012 payroll employment growth in the Permian Basin is nothing short of spectacular, rising above 200,000 for the first time in late 2012.

Oil Gas Employment

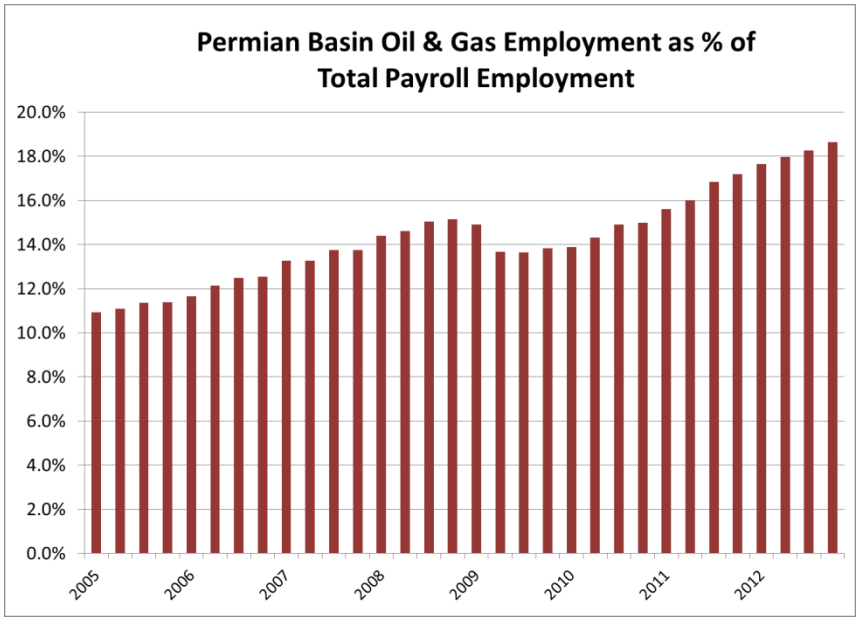
The QCEW payroll employment numbers suggest extraordinary net growth in oil & gas exploration & production jobs across the region, as well as a growing share of oil & gas employment as a percent of the total. Just since 2005, some 20,500 jobs have been added to oil & gas company payrolls in the region. *Over 5,000 oil & gas-related jobs were added to the regional economy in 2012 alone.*

The following chart tracks a moving four-quarter average of oil & gas payroll employment growth in the WDA:



Oil & gas industry employment logged impressive growth leading up to the downturn in 2009, and a significant number of industry jobs were lost during that period of recession for the oil & gas industry and the general economy of the region as a whole. Crude oil prices quickly recovered, and the ensuing activity boom, again as a result of higher prices and rapidly advancing technology began to increase oil & gas jobs, and industry job growth has grown by leaps and bounds since that time.

The industry's share of total employment across the region continues to increase as well. In 2005, oil & gas jobs across the region per QCEW data comprised some 10-11% of all payroll jobs in the Permian Basin WDA. At year-end 2012, oil & gas industry jobs account for an estimated 18.6% of all payroll jobs in the region. In 2000, oil & gas jobs made up about 9-10% of total regional employment, so the industry's share of total payroll employment has doubled just since 2000.



These percentages do not suggest that the oil & gas industry makes up only 18-19% of the total regional economy. At the statewide level in Texas, oil & gas employment makes up only some 2-3% of total employment in the state; however, the upstream (exploration & production) oil & gas economy makes up an estimated 12% of the total statewide economy. If we spin these numbers in the Permian Basin out according to those ratios, the oil & gas industry actually comprises close to 90% of the regional economy as a whole.

That means, of course, that the oil & gas industry directly supports jobs in other employment sectors across the region. And clearly it means that were oil & gas activity to decline as it did in 2009, not only would industry jobs be lost, but employment in other sectors would necessarily decline as well, just as total employment increases when oil & gas activity increases.

Comparative Tables

The Permian Basin WDA Regional Economic Index is calculated using various statistical manipulations of three components: inflation-adjusted taxable spending per sales tax receipts in the region, total regional employment per Local Area Unemployment Statistics (LAUS) data, and the regional unemployment rate. The following table simply compares the year-to-year change in these components from 2011-2012, and includes the data from 2000, the base year of the index analysis. The table also includes regional payroll employment data from Quarterly Census of Employment and Wages (QCEW) data through the third quarter of 2012, the most recent quarter for which these data estimates are available.

Permian Basin Regional Economic Indicators	2000	2011	2012	% Change 2011-2012
Taxable Spending (Annual $Billions) *	$ 2.89	$ 5.83	$ 6.80	16.7%
Employment (LAUS - December)	166,096	223,008	236,877	6.2%
Employment (LAUS - Annual Average)	163,579	216,428	231,160	6.8%
Unemployment Rate (December)	3.9%	4.5%	3.6%	-20.0%
Unemployment Rate (Annual Average)	5.0%	5.5%	4.2%	-22.6%
Total Payroll Employment (3rd Qtr)	147,694	189,596	204,056	7.6%
Mining (O&G) Payroll Employment (3rd Qtr)	13,740	31,950	37,285	16.7%

Real (inflation-adjusted) taxable spending in 2012 was up by 16.7% compared to the 2011 annual total, which in turn was up by nearly 25% compared to total real spending in 2010. By any measure, the regional employment situation continued to post dramatic improvement in 2012 with the estimated number of employed regional residents up by 6.8% on average in 2012, and up by 6.2% at year-end (December) 2012 compared to year-end 2011. Employment growth by this measure was in turn up by 7.5% on average in 2011 compared to 2010. And the regional unemployment rate remained well on the decline in 2012, falling at a faster rate and to a lower level than any other region in the state.

Not surprisingly, the Permian Basin region is outperforming every other region of the state (as defined by Workforce Development Area geography), as the following table suggests. The table simply compares the Permian Basin Workforce Development Area with other WDAs in Texas in terms of payroll employment growth rates, the unemployment rate, and average weekly wage growth. Data is readily available for the WDAs from the Texas Workforce Commission from the 1st quarter of 2005 through the 3rd quarter of 2012, and the payroll employment and weekly wage comparisons are based on that data. The unemployment rate comparison is simply the WDA-level unemployment rate annual average for 2012.

Payroll Employment Growth 2005-2012			**Annual Average Unemployment Rate 2012**			**Average Weekly Wage Growth 2005-2012**	
Permian Basin WDA	**34.4%**		**Permian Basin WDA**	**4.2**		**Permian Basin WDA**	**58.0%**
Rural Capital WDA	29.9%		Panhandle WDA	4.7		Middle Rio Grande WDA	38.9%
North Central WDA	25.2%		Concho Valley WDA	5.0		West Central WDA	36.5%
Gulf Coast WDA	17.2%		Golden Crescent WDA	5.3		Coastal Bend WDA	36.1%
Capital Area WDA	16.9%		West Central WDA	5.5		Concho Valley WDA	35.7%
South Texas WDA	15.5%		South Plains WDA	5.7		South Texas WDA	34.2%
Alamo WDA	14.9%		North Texas WDA	5.7		East Texas WDA	34.0%
Lower Rio Grande WDA	13.9%		Capital Area WDA	5.7		South Plains WDA	33.6%
Middle Rio Grande WDA	12.8%		Rural Capital WDA	5.8		Central Texas WDA	33.1%
Cameron County WDA	12.3%		Brazos Valley WDA	5.8		Brazos Valley WDA	33.0%
Central Texas WDA	11.7%		North Central WDA	6.2		Golden Crescent WDA	32.3%
Tarrant County WDA	11.7%		Coastal Bend WDA	6.2		Panhandle WDA	31.6%
Coastal Bend WDA	11.1%		Alamo WDA	6.4		South East Texas WDA	28.7%
Brazos Valley WDA	10.8%		Tarrant County WDA	6.6		Texoma WDA	27.3%
Panhandle WDA	10.1%		Heart of Texas WDA	6.6		North Texas WDA	27.2%
Upper Rio Grande WDA	8.5%		East Texas WDA	6.7		Lower Rio Grande WDA	26.9%
Concho Valley WDA	7.9%		Texoma WDA	6.7		Cameron County WDA	26.4%
East Texas WDA	7.6%		Gulf Coast WDA	6.8		Heart of Texas WDA	24.5%
Golden Crescent WDA	7.2%		South Texas WDA	7.0		North East WDA	24.5%
Texoma WDA	6.2%		Dallas WDA	7.2		Upper Rio Grande WDA	24.3%
South Plains WDA	6.2%		Central Texas WDA	7.4		Deep East Texas WDA	24.2%
Dallas WDA	5.9%		North East WDA	7.6		North Central WDA	23.8%
West Central WDA	5.8%		Deep East Texas WDA	8.0		Gulf Coast WDA	21.5%
South East Texas WDA	3.7%		Middle Rio Grande WDA	9.1		Alamo WDA	20.8%
Heart of Texas WDA	1.9%		Upper Rio Grande WDA	9.2		Rural Capital WDA	20.3%
North Texas WDA	0.9%		South East Texas WDA	10.1		Tarrant County WDA	17.4%
North East WDA	0.7%		Cameron County WDA	10.5		Capital Area WDA	15.8%
Deep East Texas WDA	0.7%		Lower Rio Grande WDA	11.4		Dallas WDA	13.6%

And just in the last year, the results are the same in terms of employment and wage growth in the Permian Basin compared to other WDA regions across the state. Again, the numbers are updated through the third quarter 2012; the fourth quarter results will be no different in terms of the region's status relative to the rest of the state.

Payroll Employment Growth Q3 2011 - Q3 2012			**Average Weekly Wage Growth Q3 2011 - Q3 2012**	
Permian Basin WDA	**7.6%**		**Permian Basin WDA**	**4.1%**
Capital Area WDA	4.0%		South Texas WDA	2.2%
Gulf Coast WDA	3.8%		Coastal Bend WDA	2.0%
Golden Crescent WDA	3.8%		South Plains WDA	2.0%
North Central WDA	3.7%		West Central WDA	1.2%
Coastal Bend WDA	3.1%		North Central WDA	1.0%
Rural Capital WDA	3.1%		Golden Crescent WDA	0.8%
Brazos Valley WDA	2.8%		Middle Rio Grande WDA	0.6%
Concho Valley WDA	2.7%		Panhandle WDA	0.4%
Tarrant County WDA	2.5%		South East Texas WDA	-0.1%
Alamo WDA	2.4%		Texoma WDA	-0.1%
Cameron County WDA	2.4%		Alamo WDA	-0.3%
South Texas WDA	2.2%		East Texas WDA	-0.3%
Dallas WDA	1.9%		Gulf Coast WDA	-0.5%
South Plains WDA	1.6%		Concho Valley WDA	-0.6%
Middle Rio Grande WDA	1.5%		Capital Area WDA	-0.7%
Heart of Texas WDA	1.4%		Brazos Valley WDA	-1.0%
Lower Rio Grande WDA	1.4%		Tarrant County WDA	-1.0%
West Central WDA	1.3%		Central Texas WDA	-1.2%
North Texas WDA	1.0%		North East WDA	-1.4%
East Texas WDA	0.9%		Rural Capital WDA	-1.5%
Upper Rio Grande WDA	0.7%		Dallas WDA	-1.5%
Central Texas WDA	0.5%		Cameron County WDA	-1.7%
Deep East Texas WDA	0.4%		North Texas WDA	-1.8%
Panhandle WDA	0.4%		Deep East Texas WDA	-1.9%
Texoma WDA	0.1%		Heart of Texas WDA	-2.1%
North East WDA	-0.7%		Upper Rio Grande WDA	-2.4%
South East Texas WDA	-1.2%		Lower Rio Grande WDA	-2.7%

Conclusion

Again, a repeat statement from the prior (2011) report:

"In practical terms, there is but one true driver of the regional economy. The Permian Basin oil & gas industry is not simply strongly connected to the regional economy – it virtually is *the regional economy. The relationship between the regional oil & gas economy and the general economy of the region as measured (and shown on an earlier graph) by the Texas Permian Basin Petroleum Index and the Permian Basin WDA Regional Economic Index confirms that suspicion."*

Employment growth in non-oil & gas categories is largely occurring as the direct result of oil & gas industry expansion across the region and the resulting addition of oil & gas industry jobs. Growth in general spending and any other measure of expanding business and economic activity is directly driven by oil & gas industry spending and employment.

This strong connection to the upstream oil & gas industry has once again served the regional economy very well in 2012. Again, the Permian Basin regional economy is clearly outperforming every other region of the state. And there is strong reason to believe the regional economy is simply the best performing regional economy in the entire nation in terms of employment growth, general real spending, and other measures of economic activity. We know that is true of the Midland-Odessa metro area, for which employment growth in 2012 occurred at faster rates than any other metro area in the nation, regardless of size.

We tend to want to shy away from the term "boom" to describe local economic conditions, on the notion that "booms" are all too often followed by "busts". There is simply no denying it in this case, however. The Permian Basin region and the Midland-Odessa metro areas are clearly enjoying economic boom times at present. Boom times also present challenges, of course, and the principal challenges across the region in the current rapid economic expansion include a chronic shortage of housing, particularly at affordable prices, strained infrastructure, and labor markets that are bursting at the seams, bidding up wages in all employment sectors and creating localized inflation. These challenges are difficult to address, and are not typically solved in the short term, partly because they are inter-connected – for example, labor markets would be eased with an influx of labor supply (an increase in the labor force); however, a shortage of available

housing is clearly restricting a greater influx of labor supply, even though the labor force in the region has expanded dramatically in recent years.

However, there is the overwhelming sense that the benefits accorded to the region and its residents as a result of this extraordinary economic expansion are vastly outweighing the challenges. Either way, the economic boom across the region was plainly evident yet again in 2012, and remains in place in early 2013. Absent a sustained decline in crude oil prices, that will continue to be the case for the balance of the coming year.