

**Dillard College of Business Administration
Bureau of Business and Government Research**

Wichita Falls Regional Economic Outlook Report

Year-End Review, 2014





Dillard
COLLEGE OF BUSINESS ADMINISTRATION
at Midwestern State University

**Dillard College of Business Administration
Bureau of Business and Government Research**

Wichita Falls Regional Economic Outlook Report

Volume 10 Number 4 Year-End Review/Fourth Quarter, 2014

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The Director's Report

The Dillard College of Business Administration (DCOBA) takes seriously its mission of serving the broader regional community. In that regard, the Economic Outlook Report continues to play a very special and pivotal role. This report presents our findings for the Wichita Falls area economy for the Fourth Quarter of 2014. The publication is produced by DCOBA's Bureau of Business and Government Research (BBGR) under the direction of Dr. John E. Martinez.

For any area economy - local, state, or national - there is a wide assortment of economic indicators that are collected to help gauge its general overall economic health. However, individual economic indicators are often ambiguous and sometimes contradictory with one indicator signaling an upswing and another one a downswing. A composite index (or GBI) constructed from individual indicators can help clear up such ambiguity by condensing all the relevant variables into a coherent picture of an area's overall economic well-being.

The BBGR constructs a quarterly General Business Index (WFGBI) for the greater Wichita Falls area. The purpose for constructing economic indices, such as the WFGBI, is to better assess general upswings and downswings in our regional economy through a systematic treatment of all officially collected economic indicators.

In addition to the WFGBI, the BBGR also constructs a number of other important sector indices of the local economy: housing, state sales and use tax collections, oil and gas, employment, and personal income growth trends.

We invite you to read the analysis and commentary for the Fourth Quarter of 2014. The information provided in this latest edition should help us have a more informed opinion about the short-term economic outlook for the local economy.

Sincerely,

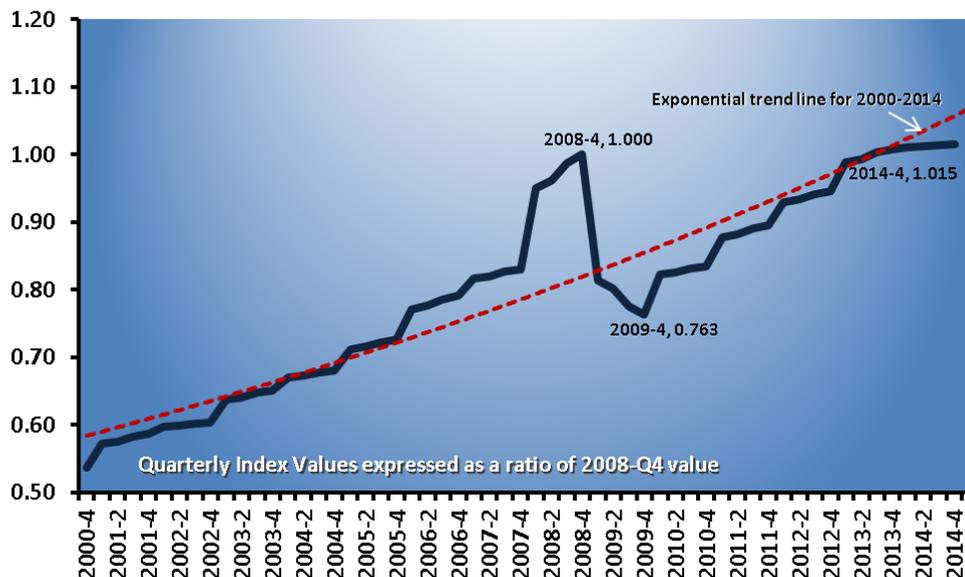
John E. Martinez, Ph.D.
Director, Bureau of Business and Government Research

Analysis Report - Fourth Quarter, 2014

by Dr. John E. Martinez

The purpose of constructing a General Business Index (GBI), such as the one presented in **Chart 1** below, is to provide a systematic treatment of all officially collected and relevant economic indicators. It provides a birds-eye view of the aggregate performance of the Wichita Falls Metropolitan Statistical Area (MSA) economy from the fourth quarter of 2004, through the fourth quarter of 2014. After falling precipitously for much of 2008 and 2009, the local Wichita Falls economy, as measured by the Wichita Falls General Business Index (WFGBI), has been steadily growing for the past five years at a very modest pace. While local area economic performance has slowly but steadily improved over the past year, it is operating below trend. As indicated in Chart 1, the potential level of economic activity is based on a ten-year exponential trend ranging from 2004 through 2014.

**Chart 1 - Wichita Falls Quarterly Economic Index
Actual & Potential GDP**



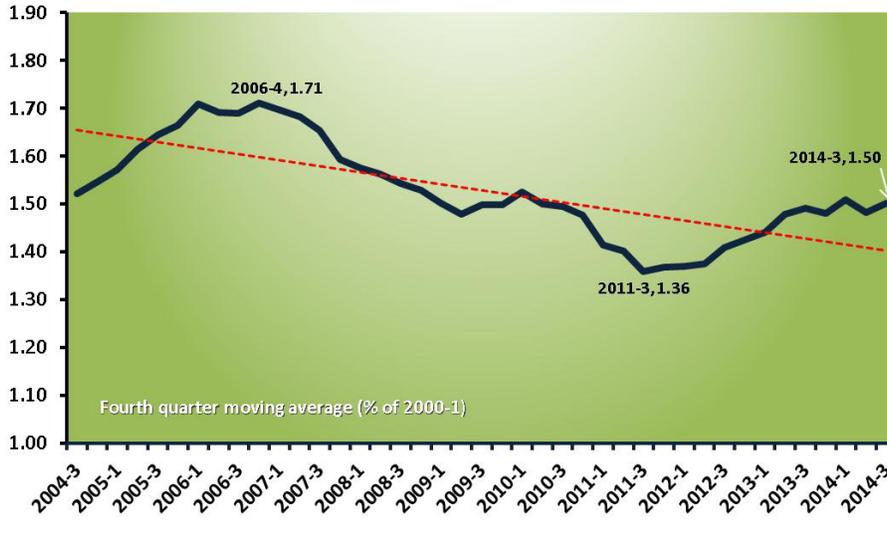
Housing Conditions Index for the Wichita Falls Region for the Fourth Quarter of 2014

The BBGR of DCOBA constructs a quarterly Housing Conditions Index (WFHCI) for the Wichita Falls area. The WFHCI is a composite index constructed for purposes of signaling directional changes in local housing activity. This index covers the period from the fourth quarter of 2004 through the fourth quarter of 2014.

As **Chart 2** reveals, local housing conditions had been on a downward trajectory since midyear 2006 until the fourth quarter of 2011. However, since that time, the WFHCI appears to have turned around with three years of slow but continuous growth.

The WFHCI is a composite index based on a number of key monthly housing statistics: unit sales, dollar sales volume, average and median sales price, total listings, and months of housing inventory on hand. The data is collected on a monthly basis for individual metropolitan areas in Texas by the Real Estate Center at Texas A&M University.

Chart 2 - Wichita Falls Quarterly Housing Conditions Index

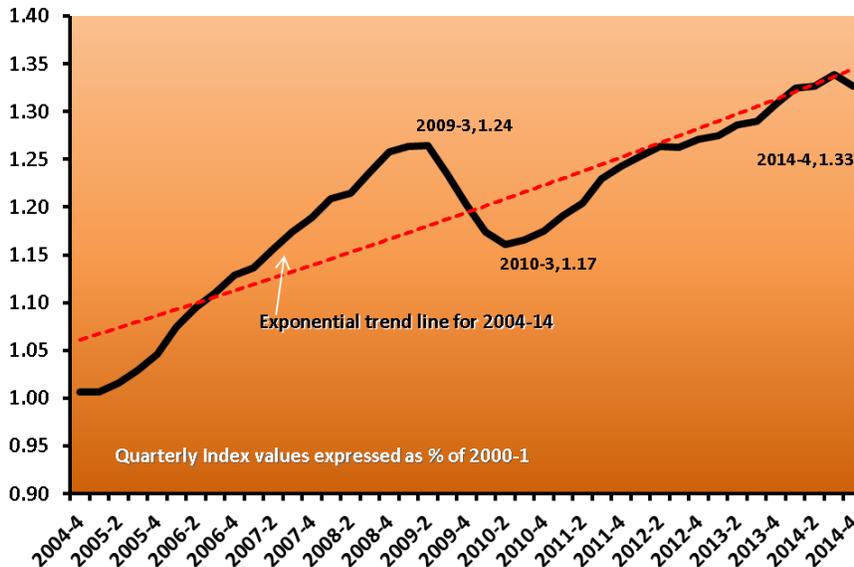


Though the trend may have reversed itself in 2011, local housing growth has been rather anemic, at least when compared to growth in other metro areas in Texas. From the fourth quarter of 2011 through the fourth quarter of 2014, sales volume and unit sales fell slightly in Wichita Falls while significantly increasing in the Abilene and San Angelo MSAs. A similar pattern is also detected for average sales price. The average price of homes sold in 2014 increased by more than 10 percent in Abilene and San Angelo while decreasing slightly in Wichita Falls. Housing problems in Wichita Falls most likely stem from flat population growth. Wichita Falls is the only MSA in Texas that did not experience population growth in the past ten years.

State Sales and Use Tax Collections Index for Wichita Falls for Fourth Quarter of 2014

The BBGR constructs a Quarterly State Sales and Use Tax Collections Index (WFSUT) for the Wichita Falls area. As indicated in **Chart 3**, state sales and use taxes began falling midyear 2009, but have risen steadily since midyear 2010. As the chart shows, it should be noted that current receipts appear to be growing in line with the long term growth trend, which is a growth trajectory based on a ten-year exponential trend.

Chart 3 - Wichita Falls Quarterly State Sales and Use Tax Collections

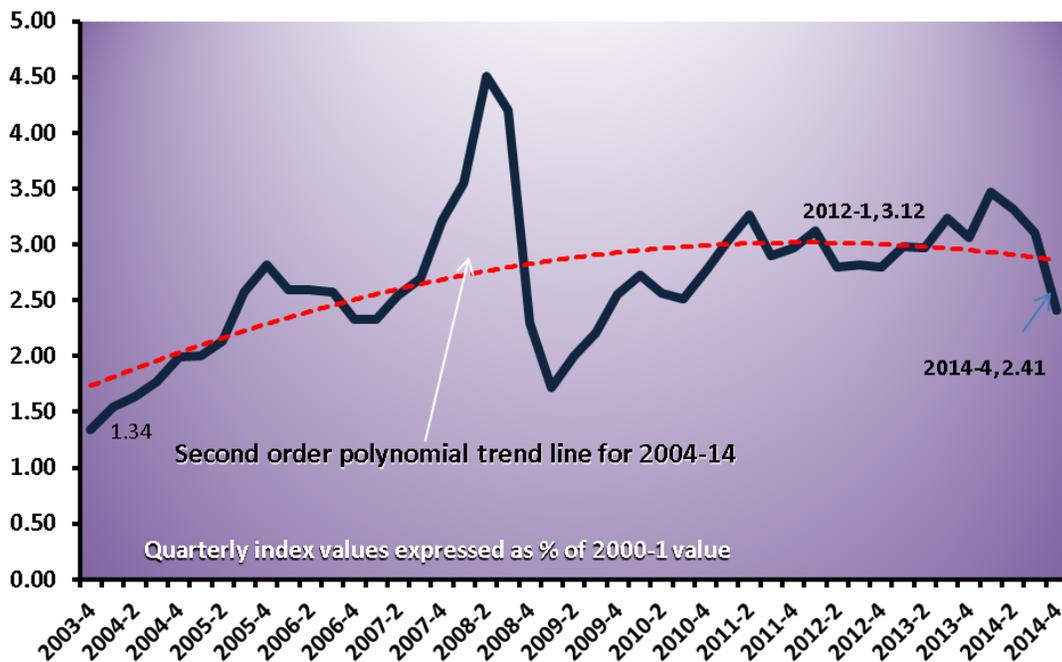


Weighted Average Oil and Gas Price Index for North Texas for the Fourth Quarter of 2014

Since energy comprises one of the largest sectors of the Wichita Falls and North Texas region, the BBGR also constructs a Weighted Average Oil and Gas Price Index (WAGPI). Though the WAGPI dropped significantly in 2008, it began climbing steadily through the first quarter of 2014. As **Chart 4** indicates, the index then began falling rather precipitously in the fourth quarter of 2014.

For the Wichita Falls MSA, the oil and gas industry accounted for more than 25 percent of output in 2013. In 2014, the oil and gas industry produced almost \$1.9 billion of the MSA's \$7 billion output. A single dramatic event, like oil prices dropping by one-third for an entire year, would reduce income for local output by just over \$500 million in a single year.

**Chart 4 -
Weighted Average Oil and Gas Quarterly Price Trend**

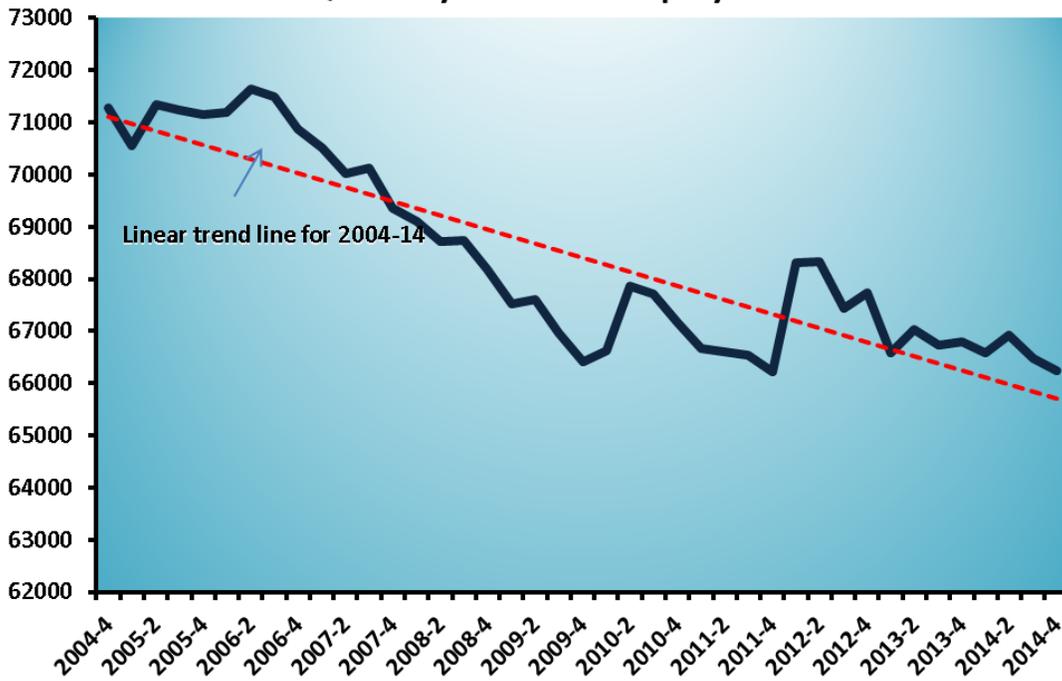


Employment Trends for the Wichita Falls Region for Fourth Quarter of 2014

Mirroring its dormant population growth pattern, total non-farm employment in the Wichita Falls region has steadily declined over the past 10 years. As **Chart 5** reveals, total employment fell quite significantly from 2006 through 2011. However, employment growth in the area has held fairly steady since 2011 and declined only modestly over the past three years.

As demonstrated in **Chart 6**, Wichita Falls was only one of two MSAs in Texas to have experienced declining employment growth. According to **Chart 7**, almost all of the sectors comprising the local economy increased, if only slightly in the second half of 2014. The major sectors experiencing decline were the energy and manufacturing sector. The Government sector which had been decreasing over the past three years finally stabilized in the second half of 2014.

**Chart 5 - Wichita Falls MSA
Quarterly NonFarm Employment**



**Chart 6 - Percent Change (%) in Employment for Texas MSAs
Dec 2013 - Dec 2014**

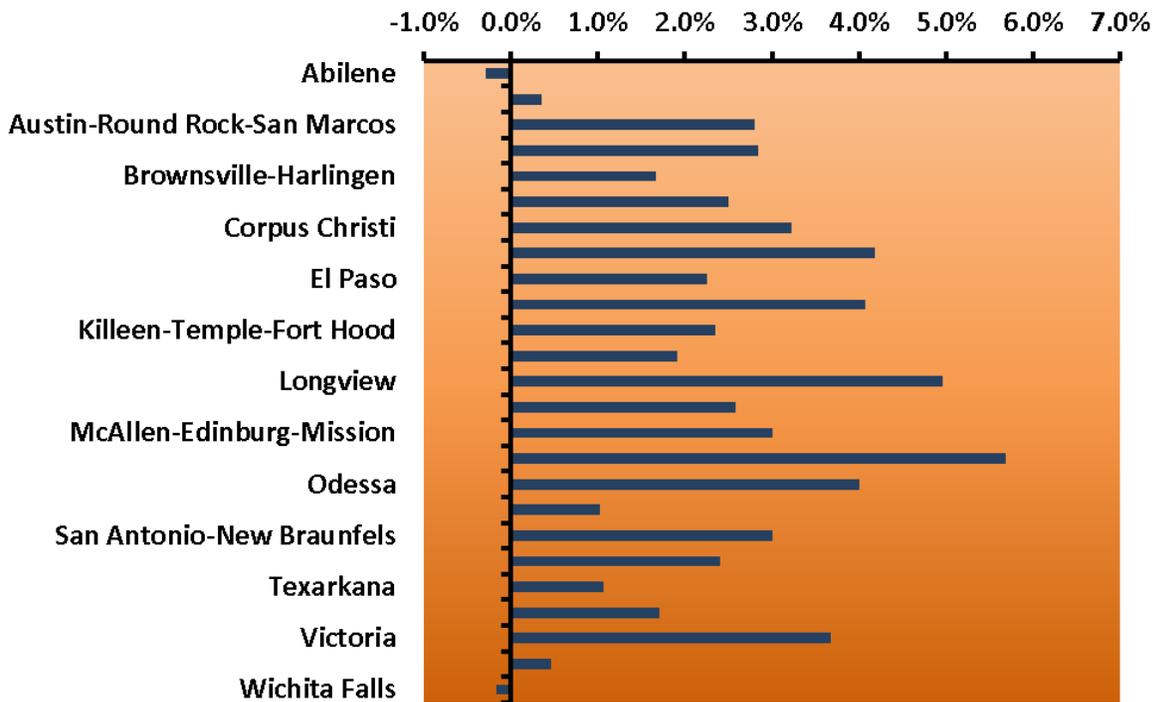


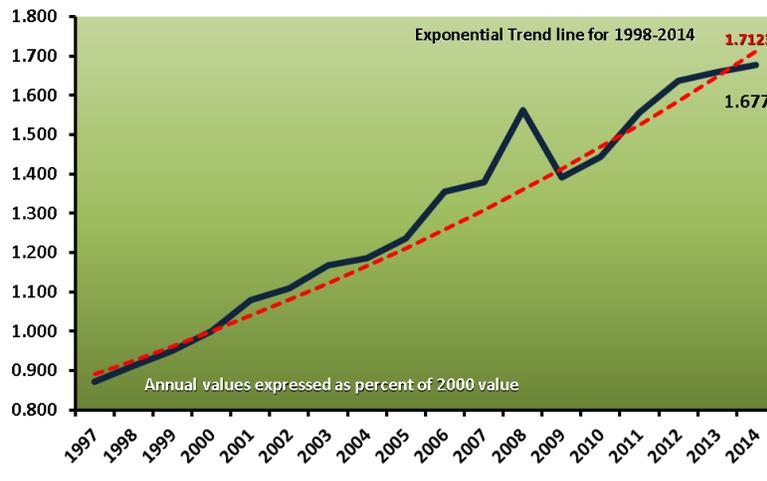
Chart 7 - Employment Statistics for Wichita Falls MSA, TX						
Data Series	July	Aug	Sept	Oct	Nov	Dec
	2014	2014	2014	2014	2014	2014
Labor Force Data						
Civilian Labor Force (1)	71.0	70.0	69.7	69.4	69.2	69.2
Employment (1)	67.0	66.1	66.3	66.1	66	66.5
Unemployment (1)	4.0	3.8	3.4	3.3	3.1	2.7
Unemployment Rate (2)	5.6	5.5	4.9	4.7	4.5	3.9
Nonfarm Wage and Salary Employment						
Total Nonfarm (3)	57.5	57.2	57.3	57.3	57.5	58.1
Mining, Logging, and Construction (3)	3.9	3.9	3.8	3.8	3.8	3.8
Manufacturing (3)	5.0	5.0	4.9	4.9	4.9	4.9
Trade, Transportation, and Utilities (3)	11.7	11.6	11.5	11.6	11.8	12.0
Information (3)	1.1	1.1	1.1	1.1	1.1	1.1
Financial Activities (3)	2.7	2.7	2.8	2.7	2.7	2.8
Professional and Business Services (3)	3.4	3.4	3.5	3.5	3.5	3.5
Education and Health Services (3)	9.0	9.0	9.0	9.0	8.9	9.0
Leisure and Hospitality (3)	6.1	6.1	6.2	6.1	6.1	6.1
Other Services (3)	2.8	2.7	2.7	2.7	2.7	2.8
Government (3)	11.8	11.7	11.8	11.9	12	12.1
Data extracted on: October 31, 2014 Source: U.S. Bureau of Labor Statistics						
Footnotes						
(1) Number in persons, in thousands, not seasonally adjusted.						
(2) In percent, not seasonally adjusted.						
(3) Number of jobs, in thousands, not seasonally adjusted.						
See about the data.						
(P) Preliminary						

Annual Personal Income Growth Index for the Wichita Falls Region for 2014

Chart 8 provides a birds-eye view of the local area economy from 2000 through 2014. As the chart indicates, the local area economy appeared to have stalled in late 2007, taking a severe nosedive throughout much of 2008 and 2009. Since late 2009, the local area economy rebounded, albeit at a much weaker pace than desired. Most recently, that growth seems to have tapered off a bit. While no region has complete immunity from a national recession, the short-term outlook for the Wichita Falls area economy does not look as bleak as might have suggested by losses in energy. As the indirect and induced effects of recent business expansions continue to percolate throughout the general economy, the likelihood of another downturn is diminished.

Total personal income includes (1) net earnings by place of residence; (2) dividends, interest, and rent (or non-earned income); and (3) personal current transfer receipts received by the residents of Wichita Falls. In 2014, Wichita Falls had a total personal income of \$6,576,705* which represented a 46% increase since 2004. In 2004 personal income was \$4,494,327. In 2014, Wichita Falls had a per capita personal income of \$43,496, which also represented a 46% increase since 2004. Among the three components of personal income, net earnings in 2014 accounted for 59% of the total, non-earned income for 21%, and government transfer payments accounted for the remaining 20%. In 2004, those percentages were 64%, 21%, and 15%, respectively. Obviously, the component of personal income growing the fastest in Wichita Falls over the past ten years has been government transfer payments. In 2014, they accounted for \$1.3 billion of total personal income.

**Chart 8 - Growth Trend for Wichita Falls MSA
Actual and Potential Personal Income**



Summary and Conclusions

After falling precipitously for much of 2008 and 2009, the local Wichita Falls economy, as measured by the Wichita Falls General Business Index (WFGBI), has been steadily growing at a modest pace for the past five years. Local area economic growth over the past year was positive and showed steady improvement from the previous year. As measured by local GDP, the local economy generated just over \$100 million in new economic activity.

Local housing conditions were on a downward trajectory since midyear 2006 until the fourth quarter of 2011. However, since that time, the WFHCI appears to have turned around with three years of slow but continuous growth. Though the trend may have reversed itself in 2011, local housing growth has been rather anemic, at least when compared to growth in other metro areas in Texas. From the fourth quarter of 2011 through the fourth quarter of 2014, sales volume and unit sales fell slightly in Wichita Falls while increasing significantly in the Abilene and San Angelo MSAs. A similar pattern is also detected for average sales price. The average price of homes sold increased by more than 10 percent in Abilene and San Angelo while decreasing slightly in Wichita Falls. Moreover, the problem in Wichita Falls is compounded because of flat population growth. Wichita Falls is the only MSA in Texas that has not experienced population growth in the past ten years.

Since energy comprises one of the largest sectors of the Wichita Falls and North Texas region, the BBGR also constructs a Weighted Average Oil and Gas Price Index (WAGPI). Though the WAGPI dropped significantly in 2008, it climbed steadily through the first quarter of 2014 before it began falling. The index fell significantly in the fourth quarter of 2014.

Mirroring its dormant population growth pattern, total non-farm employment in the Wichita Falls region has steadily declined over the past 10 years. Total employment fell quite significantly from 2006 through 2011. However, employment growth in the area has held fairly steady since 2011, falling only modestly over the past three years. Employment growth in Wichita Falls over the past year was only one of two MSAs in Texas to have experienced a decline. Most of the sectors comprising the local economy increased, if only slightly in the second half of 2014. However, the sectors experiencing decline were both energy and manufacturing. They comprise two of the most important drivers of the local economy. The Government sector which had been decreasing over the past three years finally seemed to have stabilized in the second half of 2014.

Based on the most recent information available, the local Wichita Falls MSA economy finished 2014 on a positive note. However those gains may soon fade because of falling oil prices. With continued dependence on the energy sector, the local economy may be headed for a rough patch until that trend reverses itself.

Economic Impact of the Memorial Athletic Complex on the Wichita Falls Area

by Dr. John E. Martinez

Local sporting events are traditionally recognized for the many recreational opportunities they provide. Interestingly, they are not so well recognized for the significant economic benefits they bring to a community. However, tourism and government officials, as well as business leaders across the United States, are starting to recognize that youth or non-professional sporting events can serve as legitimate engines of economic activity.

'Non-professional' or 'youth sports' is a multibillion-dollar industry which caters to a growing number of families who travel across the state and across the country to watch their kids compete in sports tournaments. Local city and county governments have increasingly come to rely on sports complexes as a way to capture the economic benefits that abound from traveling youth sports leagues. A multi-purpose sports complex has the potential to draw thousands of visitors from across a broad region to watch and play in tournaments. Attendance at events hosted by such a facility can increase hotel occupancy, generating millions of dollars of additional spending for the local economy.

Memorial Athletic Complex (MAC) is the sports facility located in the southwest area of Wichita Falls. In 2014, the estimated economic impact on the local Wichita Falls area from the various events hosted by the MAC is in the range of \$30 million. However, 'existing economic impact' does not reflect 'potential economic impact.' An upgraded and enhanced complex could bring substantially more economic benefits to the local area. While it is very difficult to assess 'potential economic impact,' there is no doubt that an updated and modernized MAC has the potential to substantially boost local economic development by even more than \$30 million.

This report seeks to assess the overall economic impact accruing to the Wichita Falls community from the Memorial Athletic Complex (MAC). As a corollary interest, the study also seeks to analyze the economic potential that could be derived from additional investments in the MAC.

Non-professional sporting events have exploded in the last twenty years. Currently, team sports within the United States are at an all-time peak. Using youth tournaments as a regional development mechanism can be a relatively easy means of meeting a variety of economic goals, with dividends that will pay for years and decades to come. According to the Sporting Goods Manufacturers Association (SGMA), nearly 70 percent of children (age 6-17) in the U.S. are playing team sports, and three out of four teenagers are now playing at least one team sport.

Whereas in the past young people might organize themselves into games of informal gatherings, youth sports are increasingly organized. Today, parents, coaches, league organizers, referees and tournament operators organize both practices and competitive games. Across the nation it is estimated that families spent an estimated \$10 billion in 2014 for travel and travel-related expenditures for youth-sports tournaments. Those travel-related expenditures range from gear, uniform fees and private lessons, as well as travel to games played. However, the economic impact of youth sports involves more than travel-related spending. It involves local community investments in building new facilities, improving and upgrading existing facilities as well as operational costs for maintenance and upkeep.

Numerous studies have analyzed the economic impact of youth tournaments on various regional economies and have come to the conclusion that tournaments can generate a considerable amount of direct and indirect economic activity for any region. Memorial Athletic Complex is the sports facility located in the southwest area of Wichita Falls. It was built to be used as the primary stadium for the WFISD football and baseball teams so they would have a place to play home games. The facility started out as a joint venture with the City of Wichita Falls, Midwestern State University and the Wichita Falls ISD. For various reasons the Wichita Falls ISD completed the project independently. Memorial Athletic Complex was completed in 1970 as the largest high school stadium in the state of Texas. It was also the first high school synthetic grass field in the nation,

coming in at a cost of \$2,623,250.00. Funds were provided exclusively through a WFISD school bond election. Memorial Athletic Complex is now considered one of the most used activity “hubs” in the city. It is the main facility for many WFISD Athletic Programs, MSU Football, various semi-pro football teams and serves as host to many nonprofit organizations as well.

The MAC is home to over 40 athletic fields attracting 2,687 events a year. These events enhance social activity and exercise within Wichita Falls, becoming a major part of the culture of Wichita Falls. Arguably, the MAC is one of the most active areas in the city. This activity is seen through the more than 113,000 athletic participants (including band and cheer members) that use the facility throughout the year.

Athletic events at the MAC bring in over 419,000 spectators (participant x 3.7) annually. Altogether, there are 532,000 individuals - participants and visitors alike - that frequent the MAC on an annual basis. Given that some of the events involve cross-town rivals, more than fifty percent of participants are likely residents of Wichita Falls. For purposes of this study, we assume that only one-third of all participants are from out-of-town - or stated alternatively, have non-resident status. **Table 1** below details the total number of attendees on the basis of participation and resident status.

Table 1: 2014 Attendance Estimates for Memorial Athletic Complex			
Attendee	Number	Resident	Non-resident
Participants	113,000	75,000	38,000
Non-participants (Visitors)	419,000	279,000	140,000
Total	532,000	354,000	178,000
Source: Base estimates for 2012 provided by WFISD. Estimates for 2014 are based on a ten percent increase.			

For purposes of this study, we only include non-resident expenditures as part of the economic impact model. Resident spending resulting from MAC events more or less displaces other types of local spending. **Table 2** captures the per-day expenditures of non-residents, both participant and non-participant. We assume that non-resident participants spend on average \$40 for each visit to MAC. Visiting participants who stay the night in hotels obviously spend more. However, most non-resident participants are in and out of the area the same day. Non-resident visitors, mostly adults and parents, obviously spend more than active participant youth.

Table 2: 2014 Local Area Expenditure Estimates of Non-residents			
Attendee Status	Number of Non-resident	Per-attendee Expenditures	Total (\$mi.) Expenditures
Participants	38,000	\$40.00	\$ 1.5
Non-participants (Visitors)	140,000	\$77.00	\$10.5
Total	178,000	\$67.00	\$12.0
Source: Estimates provided by BBGR			

The estimated total non-resident spending comes to \$12.0 million. Assuming a modest multiplier of 1.80, the \$12.0 million in direct spending will have an indirect and induced effect of just over \$ 9.6 million. Thus, the estimated economic impact from non-resident spending on the local area amounts to just under \$22 million (\$21.6). Annual operating expenditures at Memorial Athletic Complex (excluding non-WFISD events) are estimated at \$1.96 million. With a conservative multiplier of 1.80, the total regional economic impact from operations the Memorial Athletic Complex is \$3.5 million annually. The multiplier effect from the direct and indirect impact from most service industry expenditures are in the range of 1.4 to 1.6. Adding a conservative 'induced' effect, which stems from the effect of increased income on local spending, the estimated multiplier comes to 1.8.

Some organized sporting events involve a variety of fees of one type or another. However, most local sporting and recreational events, as is the case for many events hosted by the MAC, don't involve any kind of direct payment from participants. When residents attend youth soccer matches, ride biking trails, or play in a variety of parks and playgrounds, there is very little by way of direct monetary exchange that takes place. And, because no explicit payments are typically collected, the economic benefits derived from such events are never fully appreciated. However, the sporting activities associated with multi-purpose sporting complexes such as the MAC provide many economic benefits, even if they are not typically expressed through explicit market transactions.

It is nevertheless possible to quantify some of the implicit economic benefits through indirect means. Leisure is often considered to be discretionary and is often viewed as something that takes place during free time, away from work and other responsibilities, and thus without monetary value. Given that individuals freely give up paid work to engage in these activities, leisure time obviously entails economic costs, even if no explicit market valuation is involved.

As an example, an individual is likely to prefer an eight-hour workday to a ten-hour day, even if it means giving up \$10,000 annually. On an annual basis, that would mean giving up \$10,000 for an additional 500 hours of leisure (10 hours a week for 50 weeks). At the margin, that translates into a \$20 value for each additional hour of leisure.

Using a conservative estimate of \$10.00 per hour (slightly less than the current minimum wage), the estimated value of all this leisure time devoted to sporting and recreational events by non-participant residents at the MAC is approximately \$5.6 million per year (558,000 hours per year times \$10.00 per hour) for the local area. The hourly estimate is based on the assumption that the 279,000 non-participant residents [see Table 1 above] spend on average two hours attending one MAC event for a total of 558,000 hours. While most of this activity takes place outside regular market channels, it is nonetheless, a reasonable and conservative estimate of the monetary benefits provided by these activities.

Altogether, the economic benefits accruing to the local economy from all activities performed at the MAC are estimated to be just over \$30 million annually. That estimate is derived as the sum of almost \$21.6 million in visitor spending, just over \$3.5 million in operations, and \$5.6 million in the estimated value of all leisure time devoted to sporting and recreational events at the MAC. However, given the imprecise nature of any estimate of this type, it is more appropriate to express the estimated value as a range, perhaps as much as 20% above or below the \$30 million figure. Consequently, the annual economic impact of the MAC on the local economy ranges between \$24 and \$36 million.