Comparing San Angelo

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The U.S. Bureau of Economic Analysis reported in September that San Angelo ranks 319th out of 387 metropolitan areas across the nation with a \$4.7 billion Gross Domestic Product (GDP) for 2017. The report marked a third straight year of modest declines in GDP for San Angelo.

San Angelo's \$4.9 billion GDP in 2014 was a record for the local area. It had climbed dramatically by 16.9% during the peak of the oil boom between 2012 and 2014. All-in-all, the \$4.7 billion local GDP for 2017 remains 13.3% higher than the metro area's 2012 GDP of \$4.1 billion.

Tracing this bit of San Angelo's economic history sparked a curiousity to learn more. Given the recent pattern, we especially wondered how resilient the local economy is compared to similar cities. We turned to the warehouse of knowledge accumulated by the economic and community development research specialists at the nation's 12 regional Federal Reserve Banks to dig in.

The role of the Reserve Banks is to perform key functions of the U.S. Federal Reserve System. The Fed, as it is called, ensures availablility of funds to the familiar depository banks in every community and provides core financial services such as distributing the currency, clearing checks, and operating automated financial systems. The Fed also examines financial institutions to ensure consumer protection and fair lending, and to promote local community development.

As part of the responsibility to promote community development, the Chicago Fed developed a unique online tool that we used as a starting point for learning more about underlying qualities of San Angelo's economy. The tool helps find local area peer cities across the nation.

We used the tool to identify 20 peer cities to San Angelo. The metropolitan areas of San Angelo's peers range in population from 99,900 to 375,600. They include the West Texas metro areas of Abilene, Amarillo, Lubbock, Midland, Odessa and Wichita Falls. Two other Texas peers are Tyler and Victoria.

We also identified 12 peer cities from other states. These include Bellingham, Washington; Fort Smith, Arkansas; Green Bay, Wisconsin; Hanford, California; Las Cruces, New Mexico; Medford, Oregon; Oshkosh, Wisconsin; Owensboro, Kentucky; Peoria, Illinois; Pueblo, Colorado; Topeka, Kansas; and Vineland, New Jersey.

The Chicago Fed tool uses Census Bureau records on 960 metro areas to identify peers with similarities in four key dimensions. Equity, the first dimension, focuses on wage differentials, degrees of racial/ethnic segregation, and changes in poverty and education levels. Resilience, the second factor, measures labor force participation, manufacturing employment, and unemployment trends over time to identify cities with similar patterns of the economic diversification. The third dimension explores local economic outlook based on population change, immigration, family composition, and age structure. The final factor centers on housing

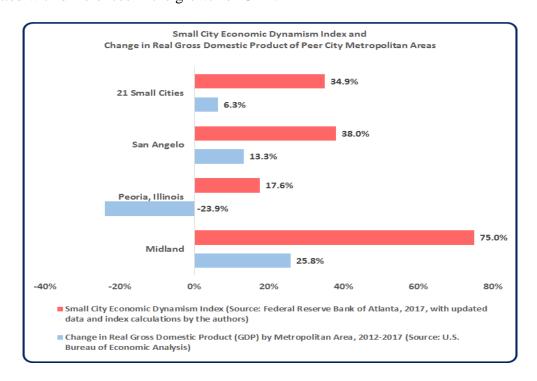
infrastructure, including affordability, home ownership and vacancy rates, and the age and quality of dwelling units.

Equipped with our list of peer cities, we turned attention to another tool from the Fed knowledge warehouse on local economic and community development research. The Atlanta Fed has a Small City Economic Dynamism (SCED) Index to analyze local economic trajectories using indicators known to correlate with local growth and development. The SCED Index scores levels of economic dynamism in 400 small cities and metro areas.

We made two adaptations to the Atlanta Fed methodology to create an analysis of economic dynamism and growth in San Angelo compared to its 20 peer cities. We updated SCED indicators to include available 2016 and 2017 data. Overall, the updated data includes 12 indicators covering the 2005-2017 time periond. The indicators measure local employment, wage inequality, median household income, family poverty, population size, educational attainment among adults over age 24, new business startups, non-profit revenues, building permits, population density, and the net number of in-bound daily commuters.

We also adapted the scoring method used in the original SCED Index. We used the Fed formula for scoring, but we applied the calculations only to San Angelo and its 20 peer cities. We did not include all 400 small cities represented in the original Atlanta Fed project.

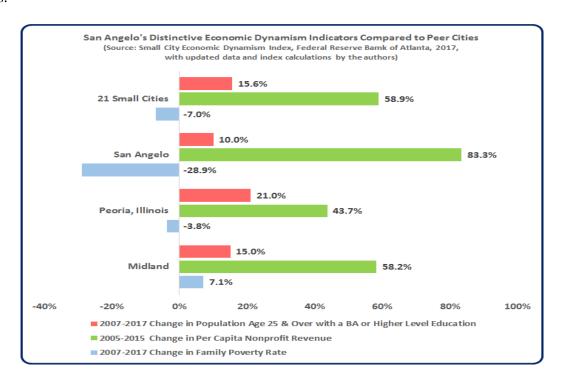
The result is that our application of the SCED Index assesses the nature of San Angelo's metro area economy over the years since 2005 by comparing it to 20 peer cities. Each city is scored on the 12 SCED indicators using a scale ranging from 0 to 100 percent. Cities with higher percentage scores have more dynamic local economies. The veracity of our results is confirmed by a statistically significant correlation showing that peer city SCED scores are strongly associated with differences in the growth of GDP.



The graph provides a descriptive picture of relationships between SCED scores and economic growth. The average SCED score for all 21 peer cities, including San Angelo, was 34.9%. Their combined GDP growth rate from 2012 to 2017 was 6.3%. San Angelo was above average with a SCED score of 38.0% and its previously noted 13.3% increase in GDP.

Midland's 75.0% SCED score indicates the most dynamic economy among the peer cities. Midland enjoyed a corresponding 25.8% GDP growth rate. The most sluggish peer city economy was in Peoria, Illinois with SCED score of just 17.6%. Peoria experienced a 23.9% drop in GDP between 2012 to 2017.

Recalling the Atlanta Fed method of selecting indicators based on economic research, we wanted to gain deeper insight into economic trends that make our local area unique. We did this by focusing on factors that had the strongest impact on San Angelo's SCED score. They provide a revealing look at the unique strengths and weaknesses of the local economy compared to peer cities.



Two strengths that distinguish San Angelo from its peers added to the dynamic nature of the local economy. A substantial reduction in family poverty is the first unique trend. The San Angelo metro economy helped reduce family poverty from 12.1% in 2007 to 8.6% in 2017.

That amounts to a 28.9% decline. In comparison, the 21 peer cities managed a 7.0% decline in family poverty, and despite its dynamic economy, Midland was one of seven peer cities where family poverty increased.

The second distinctive strength of San Angelo's economy helps account for its unique achievement on poverty reduction. Revenue going to local nonprofit organizations, many working to help lift families out of poverty, increased by 83.3% between 2005 and 2015. Area

nonprofits received \$3,500 per person in the population in 2005 compared to \$6,415 per person in 2015. On average, the 21 peer cities experienced a 58.9% increase in per capita nonprofit revenues during this time period. Even Peoria, with the most sluggish economy among the peer cities, saw a 43.7% increase. However, San Angelo was a leader of the pack.

It is inspiring to see evidence of our better angels lighting the way. The increased flow of revenue into nonprofits with the corresponding reduction in family poverty reflects more than acts of charity. In fact, it added to the arc of the community's economic development and growth in a way that distinguishes San Angelo from its peer cities.

There are additional lessons to be learned by focusing on San Angelo's lagging trends in comparison to its peers. Income inequality, for instance, increased in the majority of peer cities over the past decade, but it increased more rapidly than average in San Angelo according to SCED measurements. Similarly, while jobs increased steadily in the local metro area, increases were tepid compared to the average for peer cities.

The challenges of job creation and earnings are well known in the local community, and they rightly attract attention. Yet, neither of these was the weakest link according to the SCED Index. San Angelo's most formidable weakness compared to its peer cities is education.

Between 2007 and 2017, the peer cities had a 15.6% increase in the proportion of adults age 25 and over who attained at least a four-year college degree. This increase was matched by dynamic, fast growing Midland, while Peoria, with its sagging economy, outpaced the average with a 21.0% surge. San Angelo lagged its peer cities with a 10.0% increase in the proportion of college educated adults.

Overall, the comparison of San Angelo with its nationwide group of peer cities tells us to celebrate the economic contributions of the area's nonprofit sector. It also tells us the community has work to do toward educating and then retaining a highly educated population of adults through their productive years.