

San Antonio-New Braunfels:

Home of the Alamo and Cradle of Texas Liberty

HISTORY: A Military Service and Health Research Center Emerges

Spanish expeditions explored the area of present-day San Antonio in 1691 and 1709. A town grew out of the San Antonio de Béxar Presidio and San Fernando de Béxar. The presidio was built to defend the San Antonio mission, and San Fernando was the first chartered civil settlement in Texas. In 1773, San Antonio de Béxar became the capital of Tejas, Spanish Texas. It was the site of several battles during the Texas Revolution from October 1835 to April 1836, most notably the 13-day siege of the Alamo. Bexar County was established by the Republic of Texas following the departure of Mexican troops, and San Antonio became its seat in 1837.

In 1860, San Antonio surpassed Galveston to become the largest city in Texas and, following the Civil War, it thrived as a center for the cattle industry. The 1877 arrival of San Antonio's first railroad—the Galveston,

Harrisburg and San Antonio Railway—fueled the city's economic growth and spurred additional railroad connections to other parts of the country by 1900. However, San Antonio's population fell behind that of Houston and Dallas by 1930, and San Antonio has since remained the third-largest urban area in Texas.

The First United States Volunteer Cavalry—later known as the Rough Riders—was organized in San Antonio during the Spanish–American War. In World Wars I and II, San Antonio served as an important military center for the Army and Air Force. Today, three large military installations—Fort Sam Houston and Lackland and Randolph Air Force bases—provide employment for many of the area's residents.

A 418-bed military hospital began operations in 1938 and expanded during World War II. In 1946, with Fort Sam Houston chosen as site of the U.S. Army Medical Field Service School, the hospital was renamed

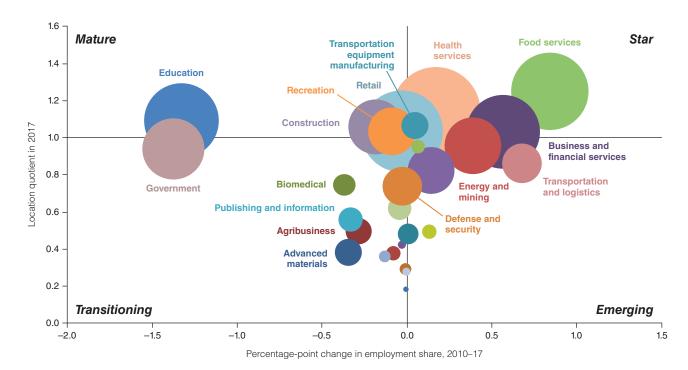


Chart 9.1: San Antonio's Industrial Composition Is Diverse

NOTE: Bubble size represents cluster share of metropolitan statistical area employment. SOURCES: Texas Workforce Commission; Bureau of Labor Statistics.

Brooke Army Medical Center. It marked the beginning of the area's ties to medical research.

INDUSTRY CLUSTERS: Tourism and Health Dominate

Location quotients (LQs), which compare the relative concentration of various industry clusters locally and nationally, can be used to assess key drivers in an area's economy. An LQ exceeding 1 indicates that a specific industry cluster is more dominant locally than nationally. Industry cluster growth is measured by the percentage-point change in its share of local employment between 2010 and 2017 (*Chart* 9.1).²

Clusters in the top half of the chart have a larger share of employment relative to the nation and, thus, an LQ exceeding 1. These clusters are generally vital to the area's economy and can be expanding relatively rapidly ("star") or slowly ("mature"). Those in the bottom half are less dominant locally than nationally and, hence, have LQs below 1. "Emerging" clusters are fast growing; those growing slowly or declining are "transitioning."

The higher LQs of food services, recreation, education, health services (the largest cluster) and retail reflect their outsized role in the San Antonio area. The metro's largest private employer is the supermarket chain HEB, with 20,000 employees. The second- and third-largest industry clusters, retail and food services, are tied to the region's strong tourism industry. San Antonio is a top U.S. convention city. Local attractions draw millions of visitors annually, and tourism and the travel industry together generate billions of dollars in economic impact each year.³

Employment expanded 32 percent in food services and 18 percent in recreation during the 2010–17 period—the two clusters make up nearly 14 percent of all metro jobs (*Chart 9.2*). San Antonio is home to two of the region's premier theme parks—SeaWorld, the largest of three such theme parks in the U.S., and Fiesta Texas, a 200-acre amusement park. Other notable attractions include the River Walk and the Alamo.

The government cluster reflects the presence of three military installations, which together employ more than 80,000 people.⁴ The military bases support

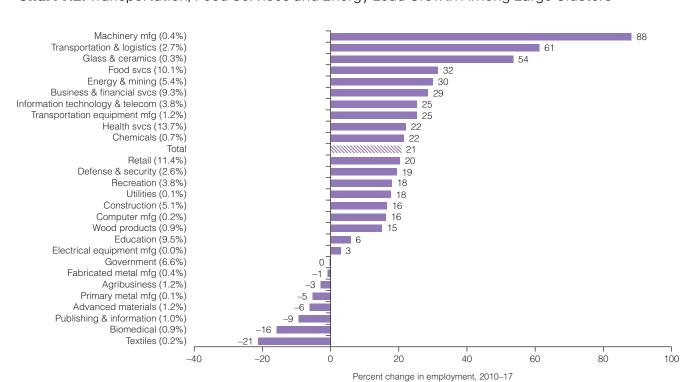


Chart 9.2: Transportation, Food Services and Energy Lead Growth Among Large Clusters

NOTES: Percent change in employment is shown in whole numbers. Each cluster's share of total jobs is shown in parentheses (rounded to one decimal place). SOURCES: Texas Workforce Commission; authors' calculations.

Table 9.1: Pay in San Antonio's Dominant Clusters Lags U.S.

Cluster	San Antonio					U.S.
	2010	2012	2014	2016	2017	2017
Food services	17,780	17,627	17,770	18,496	18,606	18,963
Health services	49,084	48,431	48,407	51,534	51,479	56,001
Education	45,739	43,601	44,070	44,933	45,491	49,322
Transportation equipment manufacturing	58,582	58,576	62,677	69,627	75,418	73,569
Construction	49,188	50,803	52,645	56,073	56,524	60,742
Recreation	33,154	32,242	33,189	33,625	34,189	41,467
Retail	30,289	30,880	31,129	31,982	31,803	31,216
Business and financial services	73,828	76,897	76,366	78,046	78,614	100,785
Clusters with location quotient > 1	43,766	43,232	43,549	45,334	45,662	-
Clusters with location quotient < 1	59,739	61,313	62,135	63,466	63,354	_
Average earnings (total)	45,740	45,856	46,417	47,905	48,185	55,375

NOTES: Clusters are listed in order of location quotient (LQ); clusters shown are those with LQs greater than 1. Earnings are in 2017 dollars. SOURCES: Texas Workforce Commission; Bureau of Labor Statistics; authors' calculations.

employment in the defense and security and health clusters. San Antonio has ranked in the top 10 among U.S. metro areas in terms of the largest concentrations of federal government and military workers.⁵

The health services and biomedical sectors also have a strong foothold in the area, with a combination of private and government operations. Employment in health-related institutions (private and government) accounts for almost 14 percent of San Antonio's workforce, a larger proportion than in other major Texas metros (including Houston). Large private health care service providers are Methodist Healthcare System and Baptist Health System. Medical research facilities in San Antonio include the Brooke Army Medical Center's San Antonio Military Medical Center (the nation's largest military hospital), Wilford Hall Ambulatory Surgical Center at Lackland Air Force Base, the University of Texas Health Science Center at San Antonio and the Texas Biomedical Research Institute.

Education is also a significant regional contributor, with more than 30 higher-education facilities and many ties to health care and biosciences through the South Texas Medical Center. Along with public and private K-12 education jobs, education accounts for almost 10 percent of employment in San Antonio.

Machinery manufacturing—which includes mining machinery used in the oil and gas industry—was the fastest-growing cluster from 2010 to 2017 as employment increased 88 percent. Glass and ceramics expand-

ed 54 percent, while transportation equipment manufacturing grew 25 percent during the period, thanks in part to continued growth in area suppliers for a Toyota USA plant that began operations in 2006. The plant produces the Toyota Tundra, a full-size pickup, and added the Tacoma truck in 2010. Toyota employs 2,800 workers at its facility.

Business and financial services, the metro's fifth-largest cluster, accounts for 9.3 percent of the local workforce—roughly equivalent to its national presence. San Antonio is the headquarters of USAA (United Services Automobile Association), a Fortune 500 financial services group, and Cullen/Frost Bankers Inc. Employment in the business and financial services cluster expanded 29 percent from 2010 to 2017.

On average in 2017, clusters with a greater employment concentration in San Antonio than in the U.S. paid workers about \$45,700, less than those industries with a relatively smaller presence, which paid \$63,400 (*Table 9.1*). The average wage is lower because San Antonio's dominant clusters are in industries that typically command less pay. These include food services at \$18,600 annually and retail at \$31,800. Still, some locally concentrated clusters are among the highest paying—business and financial services, at \$78,600 annually, and transportation equipment manufacturing, at \$75,400. A relatively low cost of living in San Antonio boosts the purchasing power of local wages, a difference not accounted for in the table.

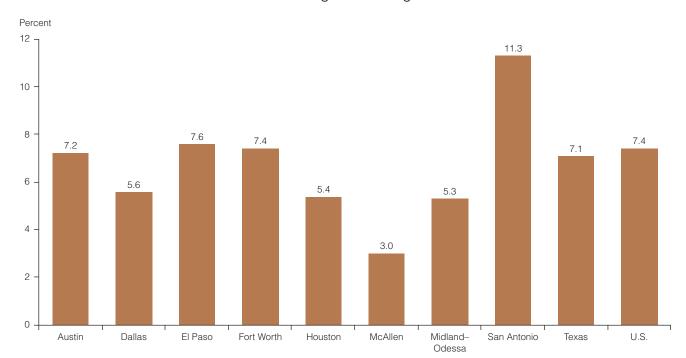


Chart 9.3: San Antonio's Share of Veterans Highest Among Texas Metros

NOTE: The share of veterans in Amarillo, Beaumont–Port Arthur, Lubbock and Tyler–Longview were 7.9, 7.3, 6.7 and 7.2 percent, respectively. SOURCE: Census Bureau, 2016 American Community Survey 1-year estimates.

A low-pay environment in the health industry is unusual; doctors, nurses and other health care workers are mostly well-educated and command high wages. However, in San Antonio's health cluster, nearly 25,000 people work in home health-care services. Many are unlicensed, nonmedical caregivers, and the average salary for these jobs—\$21,100 in 2017—is significantly lower than the average pay in the health care sector (\$51,500).

DEMOGRAPHICS: Mostly Hispanic; Strong Military Background

The population is predominantly Hispanic, 55.1 percent—the highest share among the five major Texas metros and well above the Texas share of 39.1 percent.⁷ Despite the higher proportion of Hispanics, the metro area has the lowest foreign-born population among the major Texas metros in this report at 12.2 percent. This compares with the foreign-born share of 17.0 percent in Texas overall and 13.5 percent in the U.S.

Twenty-eight percent of the population age 25 and over holds a bachelor's degree or higher, similar to the Texas average of 28.9 percent but markedly lower than neighbor Austin at 42.8 percent.

San Antonio's median age is 34.6 years, in line with the Texas median of 34.5 years. Nevertheless, the area has a relatively large older population compared with other major Texas metros; the share of seniors is 12.7 percent. The area's age distribution reflects the significant military presence and a tendency for many armed forces personnel to retire in the area after completing their service. As a result, more than 1-in-10 San Antonio adults are current or former military personnel, the highest share of all the metros in this report (*Chart* 9.3). This compares with 7.1 percent in Texas and 7.4 percent in the U.S.

EMPLOYMENT: Steady as She Goes

San Antonio's diversified industrial base and considerable government presence likely helped the metro weather the Great Recession better than other major Texas metros.

Despite its proximity to the Eagle Ford Shale formation—a prolific source of energy deposits—San Antonio did not experience much of a boost in job growth from the shale boom. Employment at year-end 2014 was 12.2 percent above its 2008 high, just a tad higher than Texas' overall increase of 10.4 percent from the 2008 peak.

Thanks in part to San Antonio's relatively limited dependence on the cyclical energy and mining sector—the cluster accounts for 5.4 percent of its workforce—metro jobs grew at an annualized 2.9 percent rate in the oil bust years, 2015–16, compared with the state rate of 1.2 percent.⁸

Growth in 2017 was 2.0 percent, and it slowed to 1.0 percent during the first 10 months of 2018. Labor markets have continued to tighten, and the San Antonio unemployment rate fell to an 18-year low of 3.1 percent in October 2017. It has risen slightly since, to 3.3 percent in September 2018.

OUTLOOK: Industry Diversity Lifts Economy

San Antonio's industry profile is as unique as its history, with a concentration in health care, retail, food services, education, business and financial services, and recreation. In the near term, those industries' performance will set the course for the area's economy.

San Antonio's dependence on government and military jobs—government accounted for more than 15 percent of the area's 2017 nominal output—provides some

stability, although government employment levels have been relatively flat outside of growth in public health.⁹ Federal budget constraints may also limit growth.

Firming oil prices have spurred little additional activity in the nearby Eagle Ford, in contrast to the Permian Basin region of Texas. The total rig count in the Eagle Ford peaked at 98 in May 2017 and was at 90 in September 2018. The Permian Basin rig count rose from 356 in May 2017 to 485 in September 2018. While San Antonio has very few oil and gas jobs, related industries such as transportation and machinery manufacturing benefit from energy upturns.

The metro's proximity to several state-of-the art military medical facilities, as well as large private research and health institutes, should continue to propel health sector growth and enable San Antonio to meet the needs of South Texas, including the Rio Grande Valley. Additionally, the Texas Research and Technology Foundation plans to develop a 110,000-square-foot innovation center in the downtown area, with the goal of incubating and developing bioscience, cybersecurity and emerging-technologies companies in San Antonio.¹⁰

—Laila Assanie and Christopher Slijk

San Antonio—New Braunfels Growth Outlook

Drivers

- The government, education and health clusters continue to provide stability as the region's population expands.
- Biomedical and health services should continue to support job growth in the area.
- The rebound in the state's energy sector should provide some boost to ancillary transportation firms and oil refiners in San Antonio.

Challenges

- San Antonio's high school dropout rate is above the state average, weakening the pipeline of high-skilled talent in the local labor force.
- A continued shortage of skilled workers may constrain growth in high-paying sectors and limit the area's ability to attract firms and investment.
- The three large military installations and the defense and security cluster are vulnerable should federal budget cuts occur.

Notes

- ¹ The history of San Antonio is adapted from the Texas State Historical Association's *Handbook of Texas*, tshaonline.org/handbook/online/articles/hds02, and from the Brooke Army Medical Center website, www.bamc. amedd.army.mil/history.asp.
- ² The percentage shares of individual clusters do not add to 100 because some industries are counted in multiple clusters, and some industries are not counted at all based on cluster definitions. (See the appendix for more information.)
- ³ See "The Economic Impact of San Antonio's Hospitality Industry," by Richard V. Butler and Mary E. Stefl, Trinity University, for the San Antonio Area Tourism Council and San Antonio Hotel and Lodging Association, www. sanantoniotourism.com/research-and-useful-links.
- ⁴ Data on the largest employers in San Antonio were obtained from the San Antonio Economic Development Foundation, www.sanantonioedf.com/why-san-antonio/data.

- ⁵ See "Relying on a Federal Paycheck During the Shutdown," *Washington Post*, March 7, 2013 (updated Oct. 1, 2013), www.washingtonpost.com/wp-srv/special/business/diversify-economy.
- ⁶ The definition of home health care workers is from the North American Industry Classification System, NAICS 6216.
- ⁷ Texas' major metros are Austin, Dallas, Fort Worth, Houston and San Antonio
- ⁸ Employment data are from the Texas Workforce Commission and are seasonally adjusted by the Federal Reserve Bank of Dallas.
- ⁹ Output data are from the Bureau of Economic Analysis.
- 10 "Texas Research and Technology Foundation Plans Innovation Center," by Iris Gonzalez, *Rivard Report*, Sept. 14, 2017, http://therivardreport.com/texas-research-and-technology-foundation-plans-innovation-center.