



Texas Workforce Report

2019 to 2020



**Texas Workforce Commission's
Labor Market & Career Information**

I. Introduction

The 2019 Texas Annual Economic Report provides a detailed analysis of the state's demographics, labor market, job market, and occupational employment trends.

The Labor Market and Career Information Department of the Texas Workforce Commission (TWC) has produced this report to fulfill its commitment to providing the past year's statistical information to the Employment and Training Administration (ETA).

II. Executive Summary – State of the Workforce

Texas was not alone as it faced the worldwide pandemic known as Coronavirus. The unprecedented scope of the virus and measures taken to curb its spread caused precipitous declines in economic output and employment. Still, the Texas economy was in good shape going into the nationwide efforts to slow the spread of COVID-19. Texas had positive monthly growth for 31 consecutive periods, adding 42,900 jobs in February 2020. Annually, employment improved year-over-year for 119 consecutive months, while the unemployment rate reached and remained at historic lows for much of 2019 and early 2020.

Considered an advanced indicator to unemployment, initial claims rose to historic levels however for week ending April 4, 2020 to just over 315,000 as shutdown orders across the state were enacted to help control the spread of Coronavirus. Over time initial claims gradually fell to just under 97,000 for week ending June 27, 2020. Despite this, challenges remain as continued claims remain high while the agency develops innovative ways to assist job seekers and employers get the help they need.

All industries were initially affected by job losses in either March or April 2020, with all but Mining and Logging bouncing back on a monthly basis almost immediately afterwards in May as state and local leaders, public health officials, as well as business owners collaborated to safely reopen the Texas economy.

In June 2020, hopes of a rebound continued as the unemployment rate fell to 8.0 percent, four months after a series high 13.5 percent in April. Total Nonfarm employment grew by a combined 482,600 jobs over May and June after a joint loss of 1.4 million was recorded in March and April.

The long-term outlook for Texas economy remains bright however, as employment is expected to grow by 1.7 million jobs by 2028. This positive outlook assumes the continued training and availability of a workforce highly skilled in the ever-evolving technologies growing more present in the global marketplace. Of the 1.7 million new jobs added by 2028, just over 40 percent will require some form of postsecondary education and training.

III. Demographics

General population trends

Between 2018 and 2019, the Texas population grew at a faster rate than the national population, increasing by 1.3 percent as compared to 0.5 percent, respectively. Texas ranked fifth in percentage growth over the year and increased its population more than any other state, adding 367,215 people as noted in the table below.

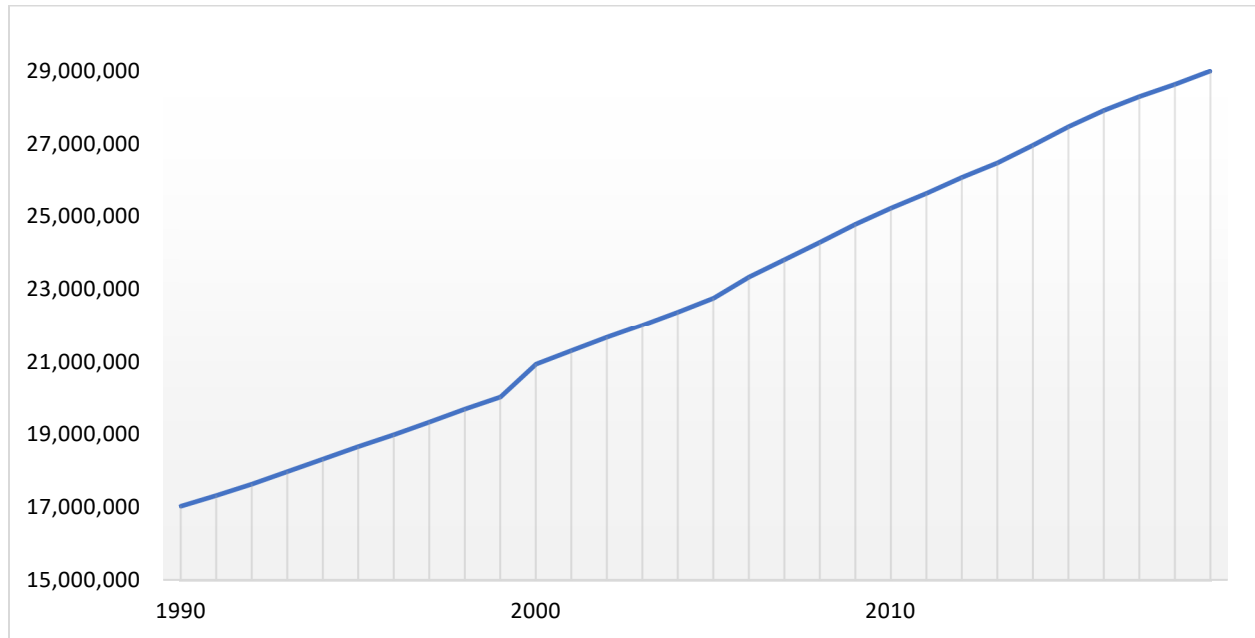
Table 1: Population Growth in Top Five States and the U.S., 2018 to 2019

Area	2018	2019	OTY Change	OTY % Change
United States	326,687,501	328,239,523	1,552,022	0.5%
Texas	28,628,666	28,995,881	367,215	1.3%
Florida	21,244,317	21,477,737	233,420	1.1%
Arizona	7,158,024	7,278,717	120,693	1.7%
North Carolina	10,381,615	10,488,084	106,469	1.0%
Georgia	10,511,131	10,617,423	106,292	1.0%

Data Source: U.S. Census Bureau, Annual Estimates of Resident Population, July 1, 2018 to July 1, 2019

Figure 1 shows the historical population trends in Texas since 1990. The U.S. Census Bureau estimates Texas population at 28,995,881 persons in 2019. That represents an increase of 4.2 million persons or 16.9 percent over the last decade.

Figure 1: Texas Historical Population Trend, 1990 to 2019



Data Source: U.S. Census Bureau, Annual Estimates of Resident Population, July 1, 1990 to July 1, 2019

Population growth among metropolitan areas in Texas continues to increase. According to the Census Bureau, Texas metro areas held the first, third, and fifth rankings in actual growth among Metropolitan Statistical Areas in the United States and Puerto Rico from July 1, 2018 to July 1, 2019. The Dallas-Fort Worth-Arlington MSA added the most people of any MSA nationally from 2018 to 2019. The Houston-The Woodlands-Sugar Land and Austin Round-Rock MSAs ranked third and fifth, respectively for number of people added from 2018 to 2019, with Austin ranking sixth nationally in percentage growth from 2018 to 2019. All six of Texas' largest metropolitan areas experienced growth over the year as shown in Figure 2.

The figure below also contains percentages of population with a high school diploma or higher and a bachelor's degree or higher for the largest MSAs. Educational attainment is closely watched since it is highly correlated with high-wage jobs.

Figure 2: Annual Growth Rates and Educational Attainment in Texas' Largest Metropolitan Statistical Areas, 2018-2019

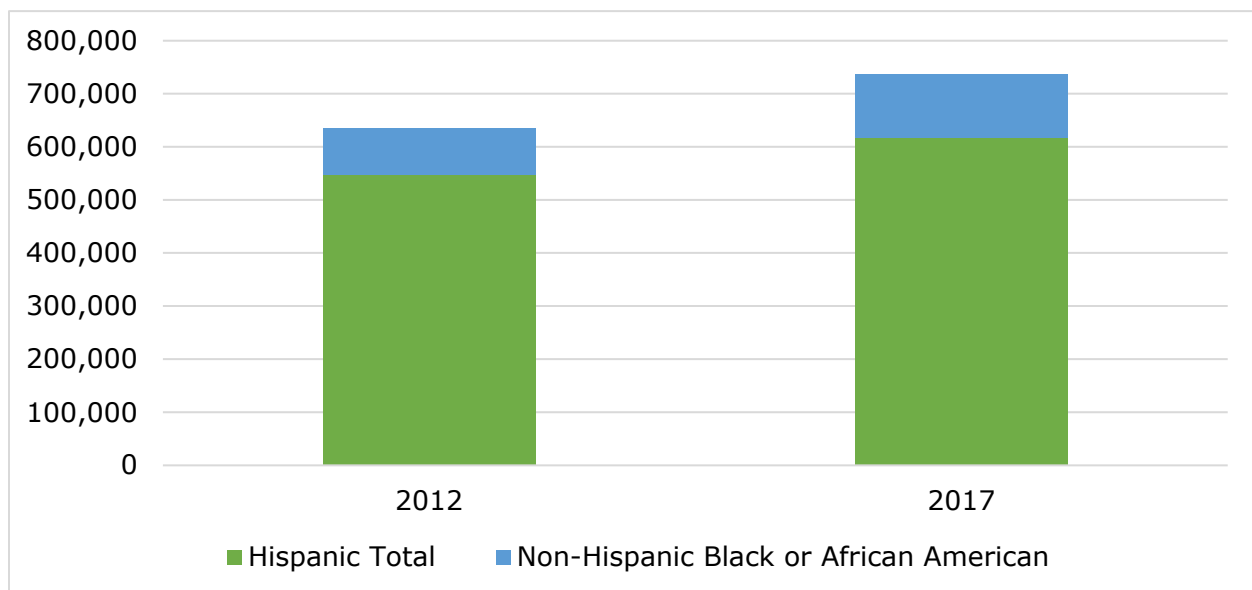
Texas Metropolitan Statistical Area	Population Estimate July 1, 2018	Population Estimate July 1, 2019	Number Change, 2018- 2019	Percent Change, 2018- 2019	Percent of Population	
					HS Diploma and Above	Bachelor's Degree and Above
Dallas-Fort Worth-Arlington	7,455,756	7,573,136	117,380	1.6%	86.1%	35.5%
Houston-The Woodlands- Sugar Land	6,976,147	7,066,141	89,994	1.3%	83.7%	33.1%
San Antonio- New Braunfels	2,512,379	2,550,960	38,581	1.5%	85.1%	27.5%
Austin-Round Rock	2,165,497	2,227,083	61,586	2.8%	90.1%	46.6%
McAllen- Edinburg- Mission	862,298	868,707	6,409	0.7%	66.3%	18.7%
El Paso	841,613	844,124	2,511	0.3%	77.9%	23.5%

Data Sources: U.S. Census Bureau, Annual Estimates of Resident Population, July 1, 2018 to July 1, 2019; U.S. Census Bureau, American Community Survey, 1-Year Estimates, 2019

Minority Business Ownership

As Texas becomes more diverse, so do our businesses. According to the US Census Bureau's 2017 American Business Survey, 51,915 Texas firms are Hispanic-owned, with a payroll of \$18.7 billion and 617,271 employees. In 2017, 9,343 Texas firms are owned by non-Hispanic African-Americans, with a payroll of \$3.2 billion and 120,154 employees. According to the 2012 Census Bureau Survey of Business Owners, 48,596 Texas firms were Hispanic-owned, with a payroll of \$15.3 billion and 546,523 employees. In 2012, 9,042 Texas firms were owned by non-Hispanic African-Americans with a payroll of \$2.1 billion and 88,175 employees.

Figure 3: Number of Paid Employees by both Hispanic Total and Non-Hispanic Black or African American Business Owners in Texas 2012 and 2017

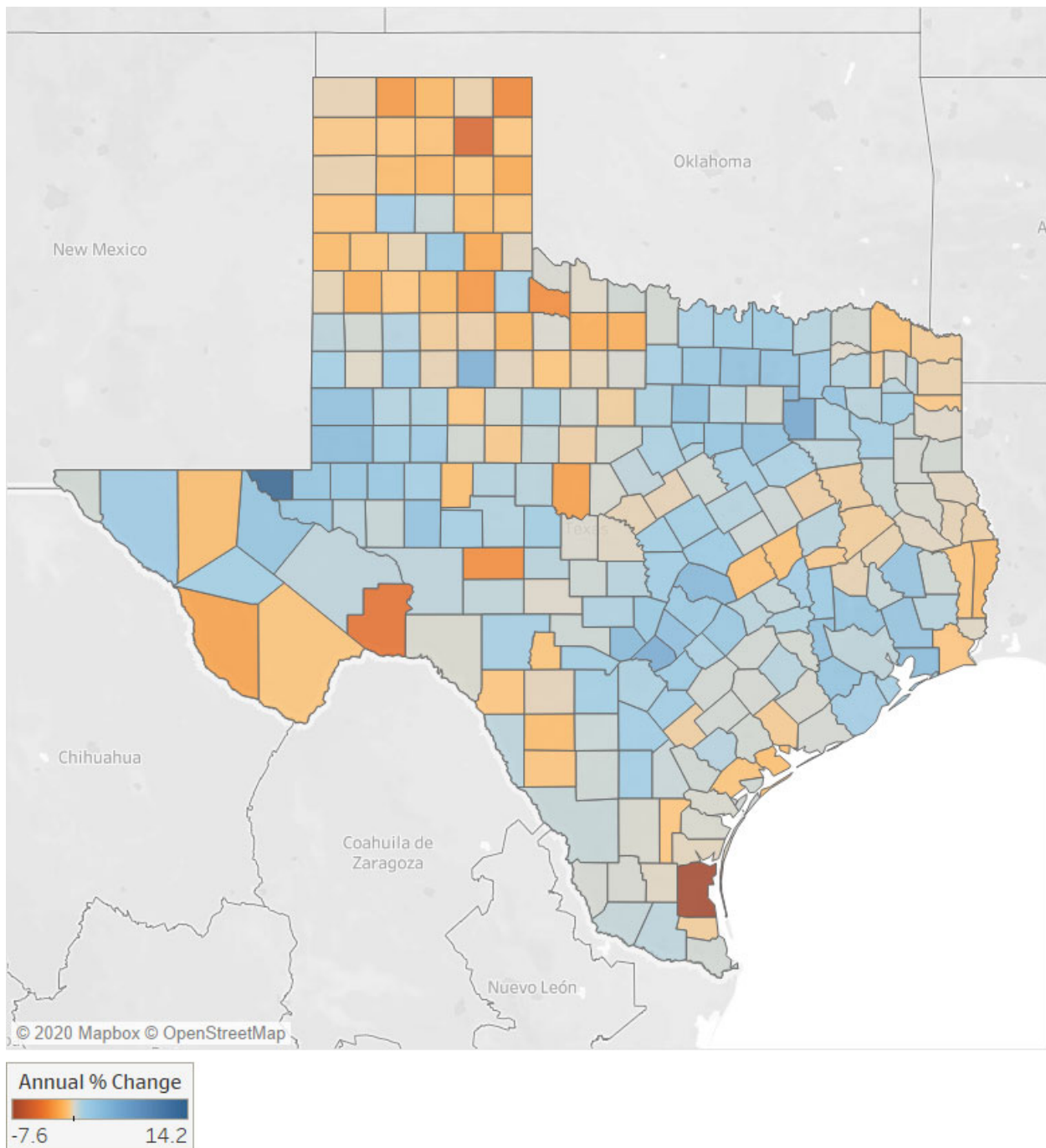


Data Sources: U.S. Census Bureau, Survey of Business Owners, 2012; U.S. Census Bureau, American Business Survey, 2017

County Population Growth

Population growth rates varied considerably across counties from 2018 to 2019, ranging from a low of -7.6 percent in Kenedy to a high of 14.2 percent in Loving County as shown in Figure 4 below. Twenty-two counties had a population growth rate of 3.0 percent or higher. From 2018 to 2019, 160 counties experienced positive population growth rates over the month, while 89 counties experienced a negative growth rate and 5 experienced no change. The top ten counties that experienced the most population growth were also located within Metropolitan Statistical Areas. This suggests that in Texas, metropolitan areas continue to be a target for population growth.

Figure 4: Annual Population Growth Rates for Counties in Texas, 2018-2019



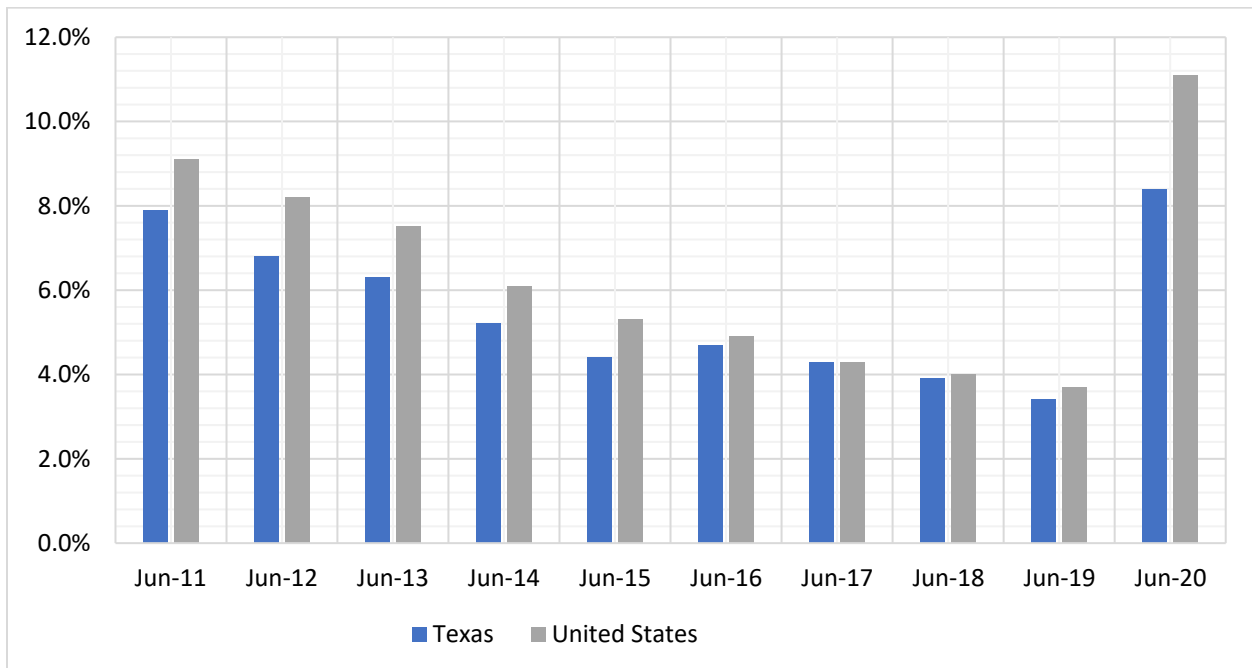
Data Sources: U.S. Census Bureau, Annual Estimates of Resident Population for Counties in Texas, July 1, 2018 to July 1, 2019

IV. Local Area Unemployment Statistics

Unemployment & Labor Force Participation Rates

Due to the impact of the novel coronavirus (COVID-19), labor forces across the United States and the world have been heavily impacted by government mandated closures of many industries, causing both labor force participation rates to drop and unemployment rates to rise to unprecedented levels. Since peaking during April 2020 (at 13.5 percent), the unemployment rate for Texas has dropped considerably. Texas, for a variety of economic and demographic reasons, has weathered COVID-19 better thus far than many other states. More recently, the unemployment rate in June 2020 dropped to 8.4 percent, considerably lower than that of the United States as is shown in Figure 5.

Figure 5: Unemployment Rates, Seasonally Adjusted

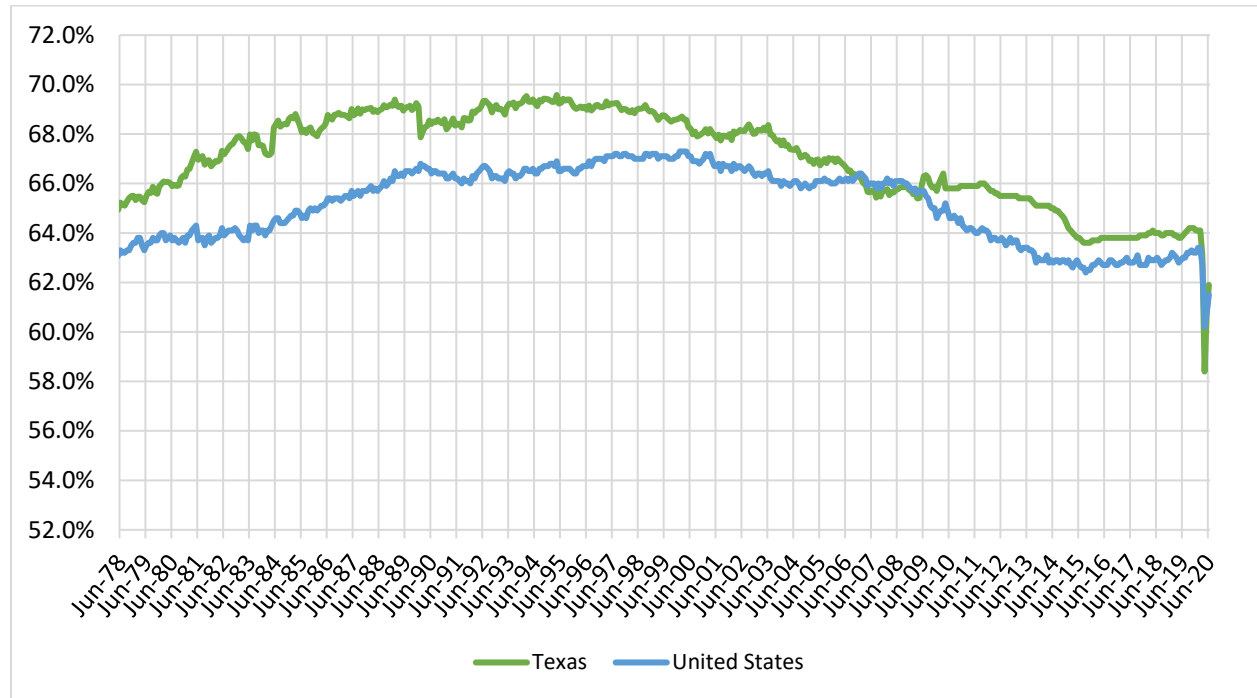


Data Source: Local Area Unemployment Statistics

The unemployment rate is a relatively simple measure of labor surplus, representing the fraction of the total labor force that is not employed, but looking for work. Because of this, many experts consider the labor force participation rate (LFPR) a better gauge of labor market conditions. The LFPR is the percentage of the total civilian population that is either employed or unemployed (that is, either working or actively seeking work).

Figure 6 shows LFPR for both Texas and the United States since 1978. In June 2020, 61.9 percent of Texas' civilian non-institutional population participated in the labor force. The United States had a 61.5 percent participation rate during the same period. As can be seen in figure 6, participation rates have been declining over time for both Texas and the United States. This decline can be attributed to a variety of factors including: an aging population, an increase in disability, and an increase in young people delaying work to pursue higher education.

Figure 6: Labor Force Participation Rates

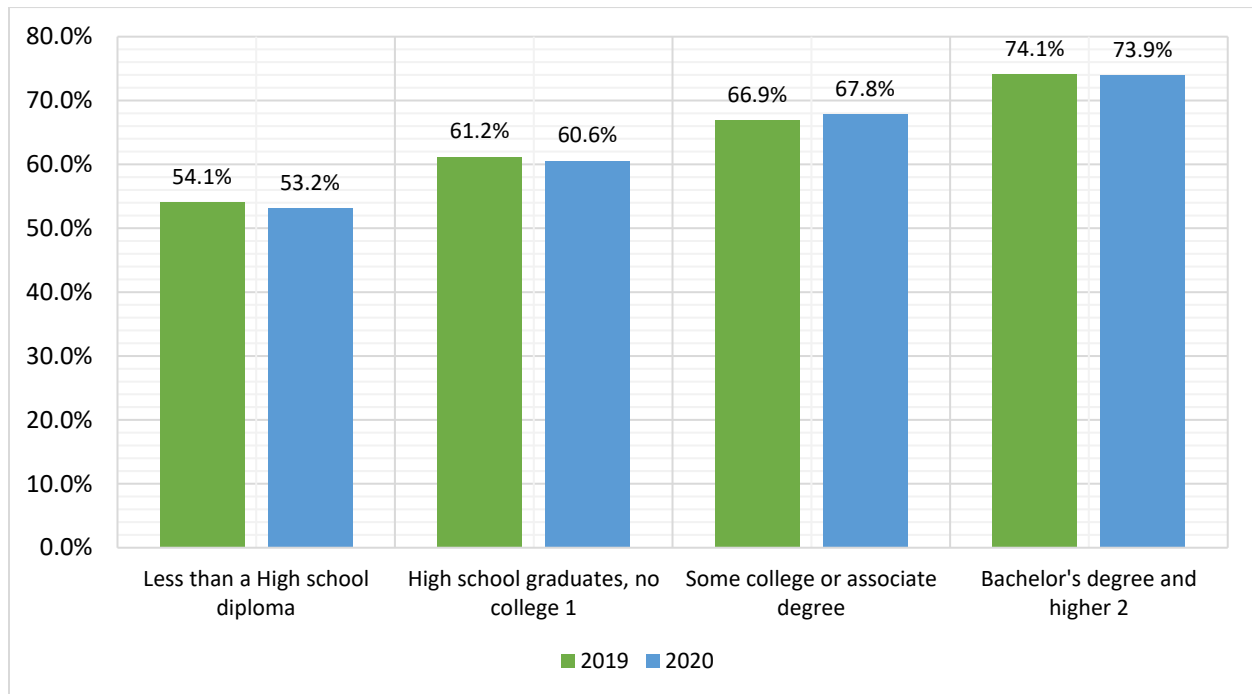


Data Source: Local Area Unemployment Statistics

Educational Attainment

Figure 7 displays the average LFPR by educational attainment as of June 2019 and 2020. A clear trend is displayed, showing that those with more education have a higher likelihood of participating in the labor force. The fact that the estimates do not change severely from year to year indicates they accurately depict the behavior of the state's population.

Figure 7: Texas' Labor Force Participation Rate by Educational Attainment



Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

Table 2 lists the June 2020 LFPR, Employment to Population Ratio (EP), and Unemployment Rate (U Rate), including a comparison to what the estimate was a year ago. The table shows those with more education have a higher tendency both of participating in the labor force and being employed. Those with some college or an associate degree have an unemployment rate of less than six percent, while the unemployment rate of those with less than a high school diploma is higher.

Table 2: Educational Attainment by Labor Force Statistics

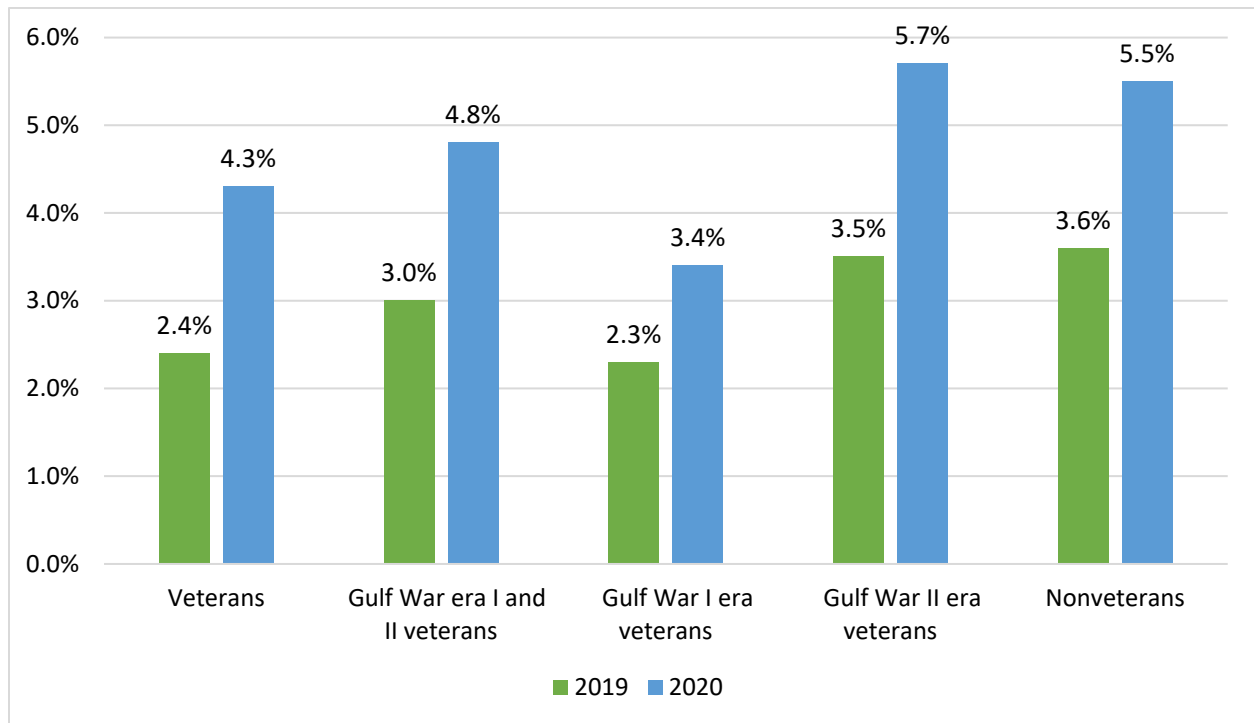
Education Level	LFPR	Annual Change	EP Ratio	Annual Change	U Rate	Annual Change
Less than a high school diploma	53.2%	-0.9%	49.3%	-3.0%	7.3%	4.0%
High school graduates, no college	60.6%	-0.6%	56.8%	-2.5%	6.1%	3.1%
Some college or associate degree	67.8%	0.9%	64.6%	-0.4%	4.8%	1.9%
Bachelor's degree and higher	73.9%	-0.2%	71.9%	-0.3%	2.8%	0.3%

Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

Veterans

Figure 8 compares unemployment rates for veterans and nonveterans, including the rates for veterans of Gulf War I and II. The comparison shows that over the last two years veterans in Texas have largely had a lower unemployment rate than that of nonveterans. There is also a notable contrast between the unemployment rate for Gulf War I veterans when compared to the more recent war in the gulf. A likely cause is the longer time frame that Gulf War I veterans have had to work and gain experience, when compared to that of their Gulf War II counterparts.

Figure 8: Unemployment Rates for Veterans in Texas

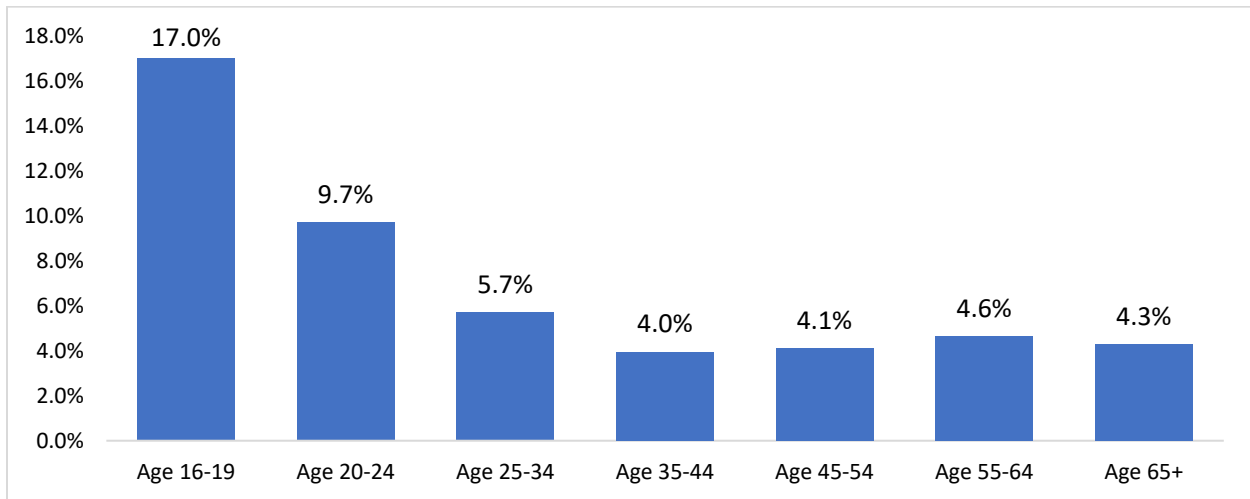


Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

Age Groups

Unemployment rates in Texas vary noticeably by age group. Figure 9 below shows higher unemployment rates among younger age groups. A significant decrease is experienced by those age 25 or above, with all these age groups having a rate of 5.7 percent or below.

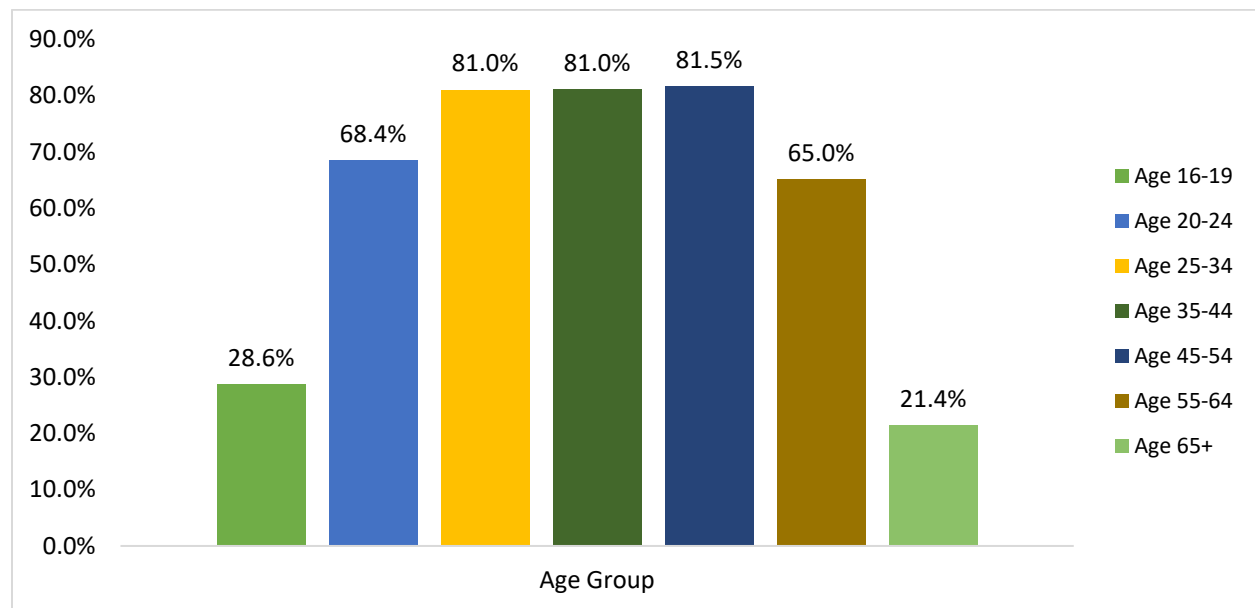
Figure 9: Unemployment Rates by Age Group in Texas



Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

Figure 10 lists the LFPR for all available age groups 16 and above. LFPRs are on the lower ends for both the younger and older age ranges. This is to be expected, as those on the lower end of the age spectrum often forgo working to pursue education, and those on the upper end have a higher likelihood of being retired. The age ranges from 25 to 54 have the highest LFPRs, all of which are at or above 81 percent.

Figure 10: Labor Force Participation Rate by Age Group

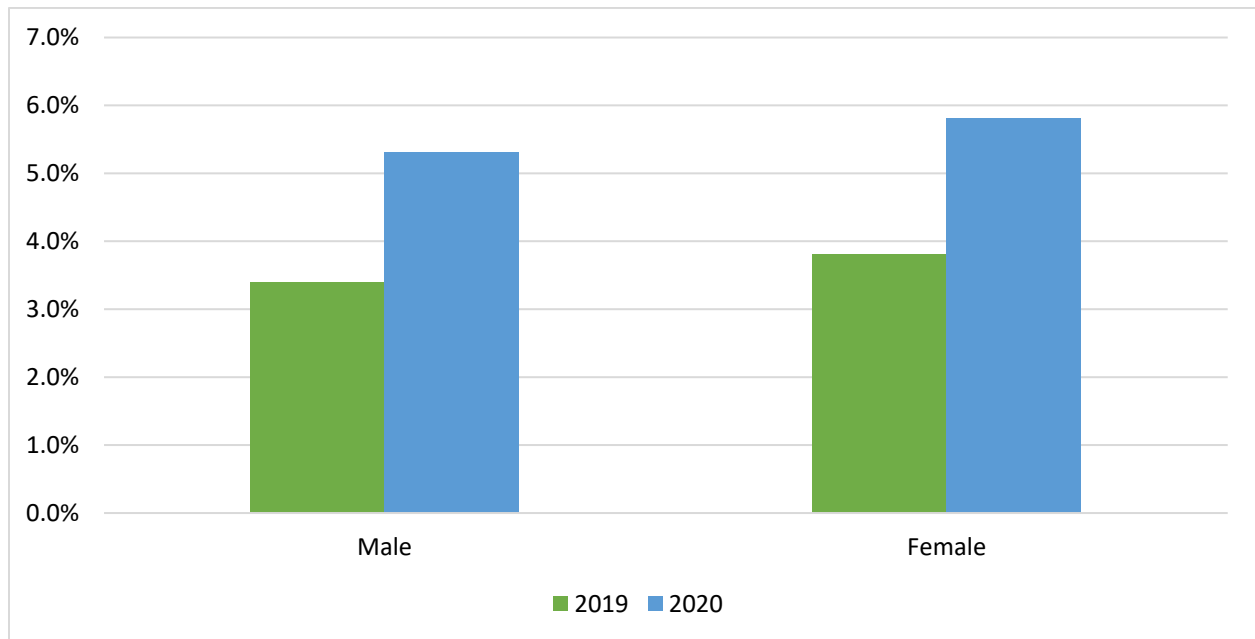


Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

Gender

Figure 11 illustrates the unemployment rates for Males and Females age 16 and up for 2019 and 2020 in Texas. Over this two-year period, males tended to have a lower unemployment rate than females.

Figure 11: Unemployment Rate by Gender



Data Source: Local Area Unemployment Statistics & Current Population Survey, 12-month rolling average July 2019 to June 2020 (Based on CPS)

V. Current Employment Statistics

Statewide Payroll Employment

Texas Total Nonagricultural Employment grew 1.9 percent from June 2015 to June 2020. This growth rate exceeded that of the whole United States, which contracted by 2.7 percent over five years. However, employment in both areas declined considerably beginning in March 2020 when the economy reflected changes due to COVID-19 and efforts to slow its spread. Financial Activities led all major industries in Texas with 11.6 percent growth over the five-year period. Texas' five-year Mining and Logging employment declined by 29.8 percent, which was highly responsive to price shocks in West Texas Intermediate crude over this time frame. The latest of which occurred in 2020 as a result of price wars outside the United States and the worldwide outbreak of COVID-19. The industry has experienced negative annual growth since August 2019. Four other major industries in Texas contracted over five years, all of which had enjoyed relatively long periods of annual growth prior to when COVID-19 impacts were being felt by economies across the state and nation. Private Sector employment expanded at 2.3 percent over five years.

Table 3: Industry Employment, 2015 to 2020

Industry	June 2015	June 2020	Change	% Change
Total Nonagricultural	11,859,100	12,087,300	228,200	1.9%
Total Private	9,975,400	10,199,900	224,500	2.3%
Goods-Producing	1,836,100	1,808,300	-27,800	-1.5%
Service-Providing	10,023,000	10,279,000	256,000	2.6%
Mining & Logging	272,500	191,300	-81,200	-29.8%
Construction	683,000	743,600	60,600	8.9%
Manufacturing	880,600	873,400	-7,200	-0.8%
Trade, Transportation, & Utilities	2,382,300	2,418,300	36,000	1.5%
Information	200,100	194,800	-5,300	-2.6%
Financial Activities	718,900	802,100	83,200	11.6%
Professional & Business Services	1,601,900	1,730,200	128,300	8.0%
Education & Health Services	1,575,000	1,667,200	92,200	5.9%
Leisure & Hospitality	1,240,700	1,168,800	-71,900	-5.8%
Other Services	420,400	410,200	-10,200	-2.4%
Government	1,883,700	1,887,400	3,700	0.2%

Data Source: Current Employment Statistics, Seasonally Adjusted

The Mining and Logging and Construction industries each comprise a larger share of Texas employment than they do at the national level. Combined, the two industries account for 7.7 percent of Texas employment, while accounting for 5.7 percent of all jobs at the national level. Texas has a lower share of Education and Health Services jobs compared to the United States (13.8 percent to 16.5 percent). From June 2015 to June 2020, the Financial Activities industry in Texas grew 11.6 percent, the highest five-year growth rate among major industries. Mining and Logging declined over a five-year period at both the state (-29.8 percent) and national (-23.0 percent) levels.

Table 4: Comparing Texas to U.S. Industry Percent Share and Growth Rates, 2015 to 2020

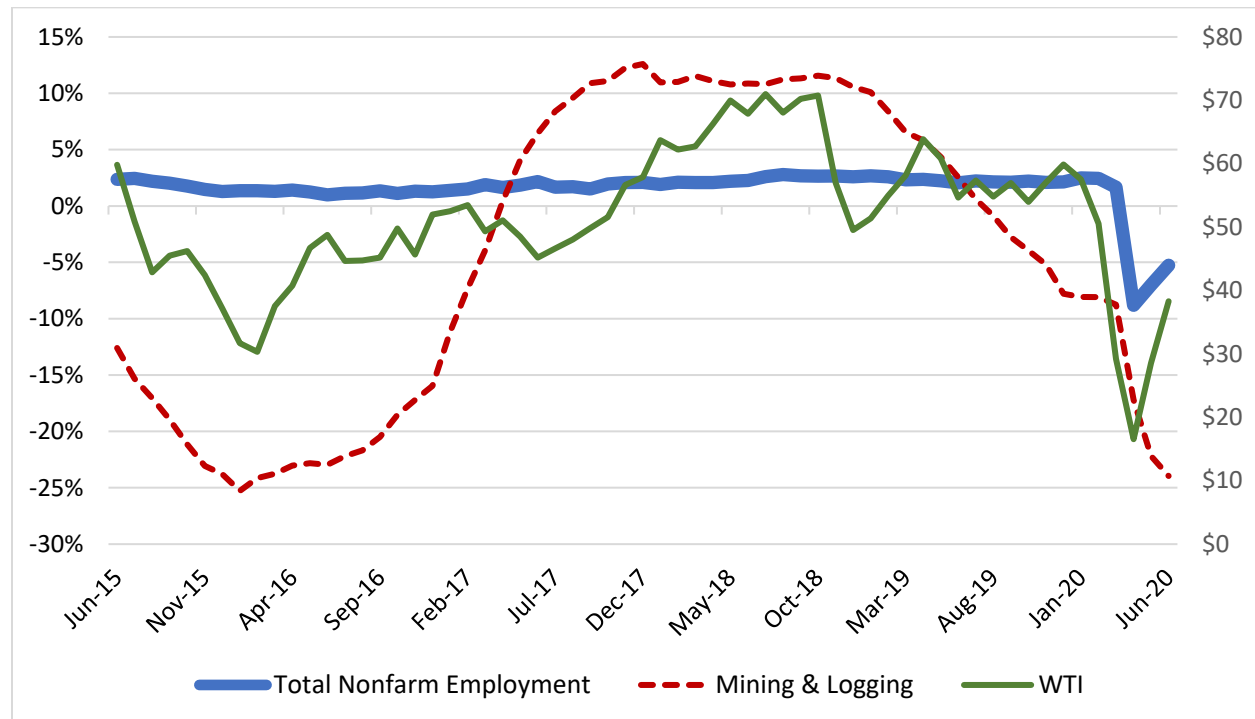
Industry	Texas % Share	U.S. % Share	Texas Growth Rate	U.S. Growth Rate
Total Nonagricultural	100.0%	100.0%	1.9%	-2.7%
Total Private	84.4%	84.5%	2.3%	-2.7%
Goods-Producing	15.0%	14.4%	-1.5%	1.5%
Service-Providing	85.0%	85.6%	2.6%	-3.4%
Mining & Logging	1.6%	0.5%	-29.8%	-23.0%
Construction	6.2%	5.2%	8.9%	11.4%
Manufacturing	7.2%	8.8%	-0.8%	-2.0%
Trade, Transportation, & Utilities	20.0%	18.7%	1.5%	-3.7%
Information	1.6%	1.9%	-2.6%	-6.2%
Financial Activities	6.6%	6.2%	11.6%	6.0%
Professional & Business Services	14.3%	14.3%	8.0%	0.2%
Education & Health Services	13.8%	16.5%	5.9%	3.5%
Leisure & Hospitality	9.7%	8.7%	-5.8%	-21.0%
Other Services	3.4%	3.7%	-2.4%	-8.0%
Government	15.6%	15.5%	0.2%	-3.2%

Data Source: Current Employment Statistics, Seasonally Adjusted

Statewide Payroll Employment Growth, the Price of Oil, and COVID-19

Two major adversities confronted the Mining and Logging industry in Texas beginning early in 2020. Figure 12 below shows the last five years of growth and decline for West Texas Intermediate (WTI) crude oil prices compared to Mining and Logging and Total Nonfarm annual employment growth rates. WTI fluctuated sporadically, while Mining and Logging employment followed going into 2020. Then March 2020 saw the beginning of the oil price war between Russia and Saudi Arabia, precipitating a sharp drop in WTI. Shortly thereafter the world became gripped by COVID-19, drastically decreasing the demand for travel, and thereby fuel. This naturally led to sharp declines in production in the Texas' Mining and Logging industry which affected employment in the industry and contributed to an overall decline in the state. As of June 2020, Total Nonfarm employment and WTI have shown some improvement. WTI was approaching \$40 a barrel after bottoming out in April at an average of \$16.55 per barrel. Texas' annual growth rate improved in June to -5.3 percent after dipping to -8.8 percent in April. But Mining and Logging has continued to decline with no monthly improvement.

Figure 12: Annual Employment Growth (Actual) vs. West Texas Intermediate Crude Spot Price



Data Source: Current Employment Statistics, Not Seasonally Adjusted

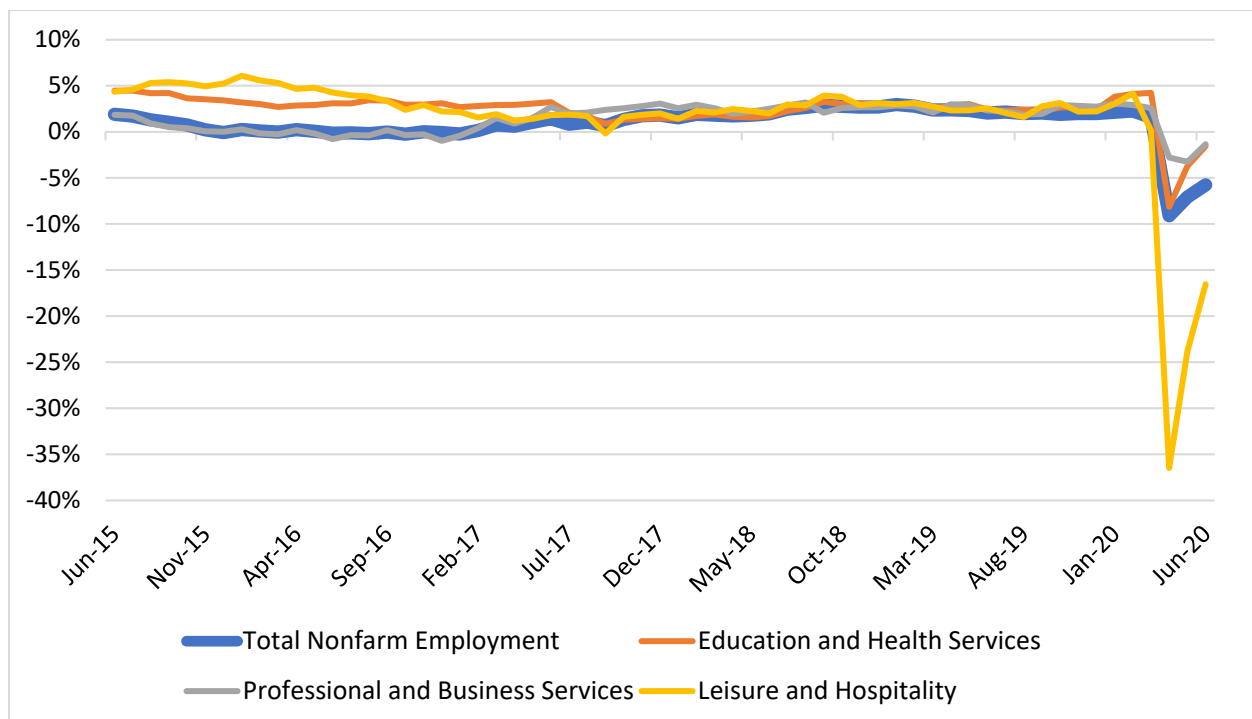
Payroll Employment Growth in Largest Metro Areas

Houston-The Woodlands-Sugarland MSA

For the first time since the series began in 1990, the Houston-The Woodlands-Sugar Land MSA, reported in 2020 that its employment declined over a five-year period. As of June, the MSA remains in negative territory at -0.8 percent employment change over five years. From June 2015 to June 2020 the Mining and Logging industry contracted more than any other industry, with an employment change of -38.4 percent. Six of the 11 major industries in the Houston MSA contracted over that period. Some of the industries that managed to maintain positive growth over five-years were Education and Health Services (32,900 jobs added) and Professional and Business Services (25,600 added).

Leisure and Hospitality contracted by 7.3 percent from June 2015 to June 2020. Prior to COVID-19, the industry reported positive growth year-over-year for 115 consecutive months.

Figure 13: Houston-The Woodlands-Sugarland MSA Annual Employment Growth Rate



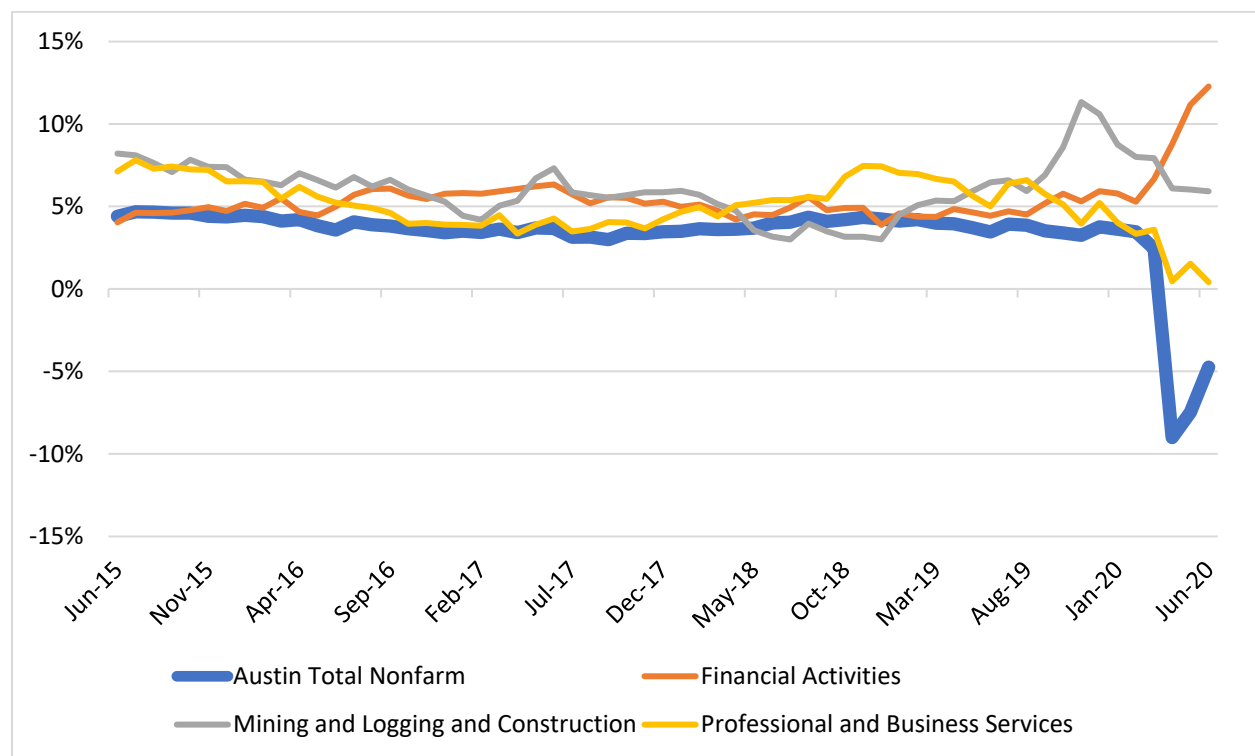
Data Source: Current Employment Statistics, Not Seasonally Adjusted

Austin-Round Rock MSA

The Austin-Round Rock MSA had the highest five-year growth rate among Texas' four largest MSAs, though at 10.0 percent it declined by more than half since June 2019. Eight of the MSA's 10 major industries maintained positive five-year growth. Big contributors included employers in Professional and Business Services (35,600 added), Financial Activities (19,900 jobs added), Trade, Transportation, and Utilities (18,500 added), and Mining, Logging and Construction (18,000 added).

Leisure and Hospitality contracted by 11.1 percent over five years. Prior to COVID-19, the industry posted positive annual growth for 123 consecutive months ending February 2020.

Figure 14: Austin-Round Rock MSA Annual Employment Growth Rate

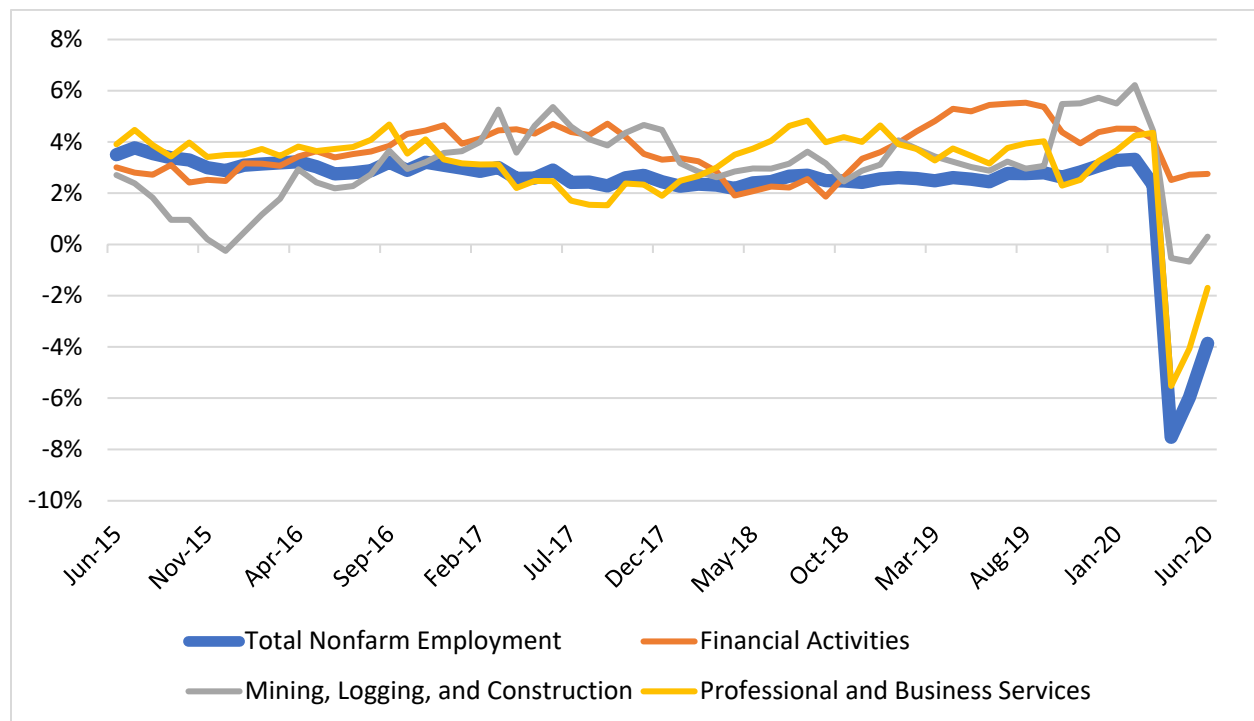


Data Source: Current Employment Statistics, Not Seasonally Adjusted

Dallas-Fort Worth-Arlington MSA

The Dallas-Fort Worth-Arlington MSA added 228,200 jobs from June 2015 through June 2020 with seven of 10 major industries growing during this time span. In percentage terms, the Financial Activities industry led with an employment gain of 19.9 percent or 54,600 jobs. Mining, Logging, and Construction employment expanded by 14.4 percent adding 28,900 positions, while Professional and Business Services grew at 12.1 percent with 67,800 positions added.

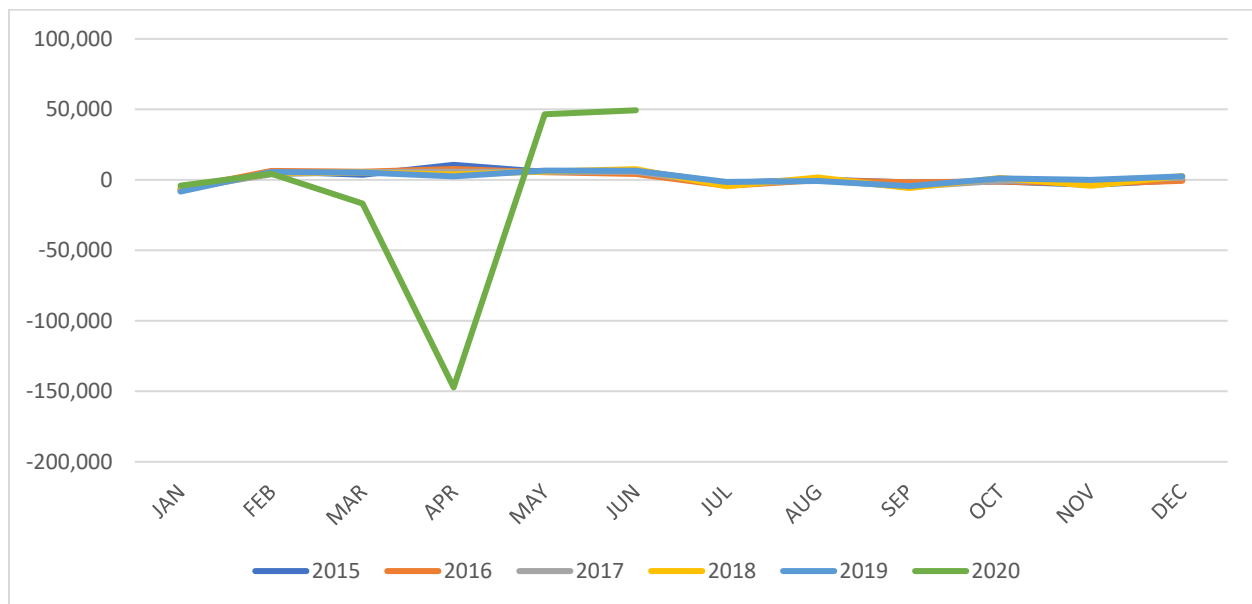
Figure 15: Dallas-Fort Worth-Arlington MSA Annual Employment Growth Rate



Data Source: Current Employment Statistics, Not Seasonally Adjusted

Leisure and Hospitality contracted by 7.2 percent from June 2015 to June 2020. Prior to COVID-19, the five-year average annual change for June was an increase of 12,200 jobs compared to a loss of 71,100 jobs in 2020. Figure 16 measures over-the-month employment changes for Leisure and Hospitality in the MSA going back to 2015.

Figure 16: Dallas-Fort Worth-Arlington MSA Leisure & Hospitality Over-the-Month Employment Change



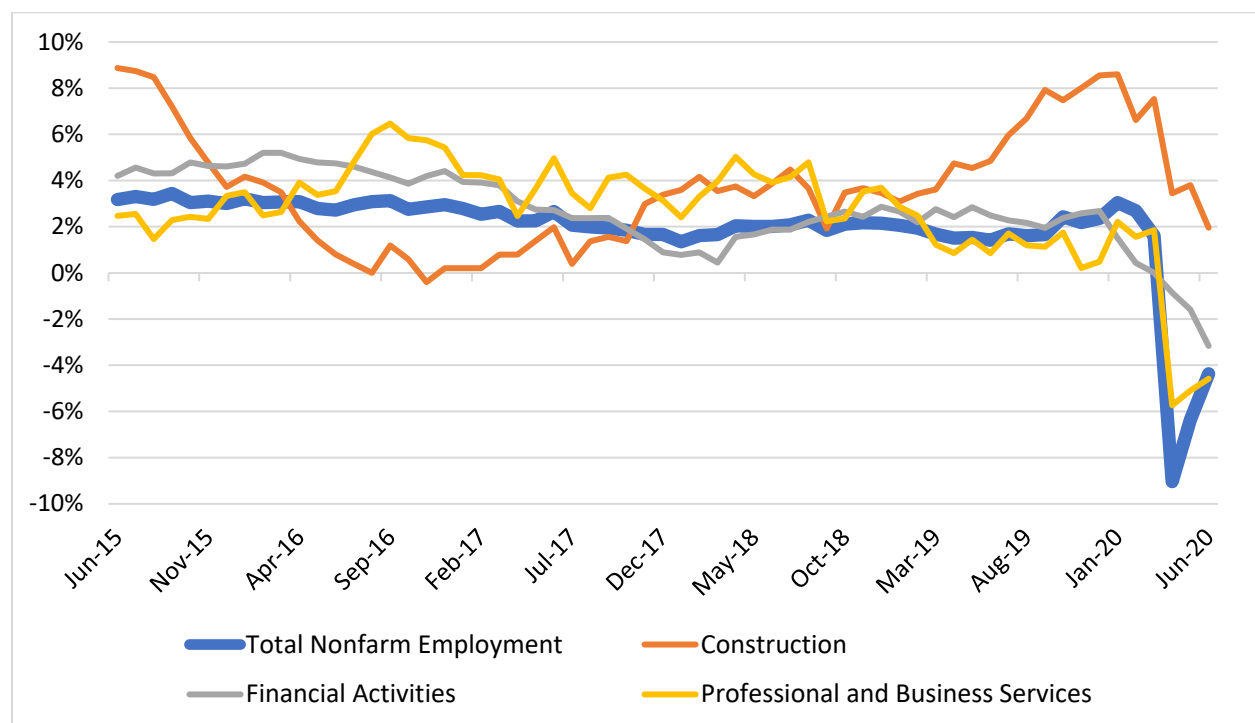
Data Source: Current Employment Statistics, Not Seasonally Adjusted

San Antonio-New Braunfels MSA

The San Antonio-New Braunfels MSA dipped into negative five-year employment change in April 2020, but immediately returned to positive five-year growth the following month. From June 2015 to June 2020 the MSA added 42,700 jobs.

Construction, Financial Activities, and Professional and Business Services expanded at the fastest percentage rates. Construction added 7,100 jobs over five years, Financial Activities 7,400, and Professional and Business Services added 10,800. Trade, Transportation, and Utilities also added over 10,000 jobs from June 2015 to June 2020.

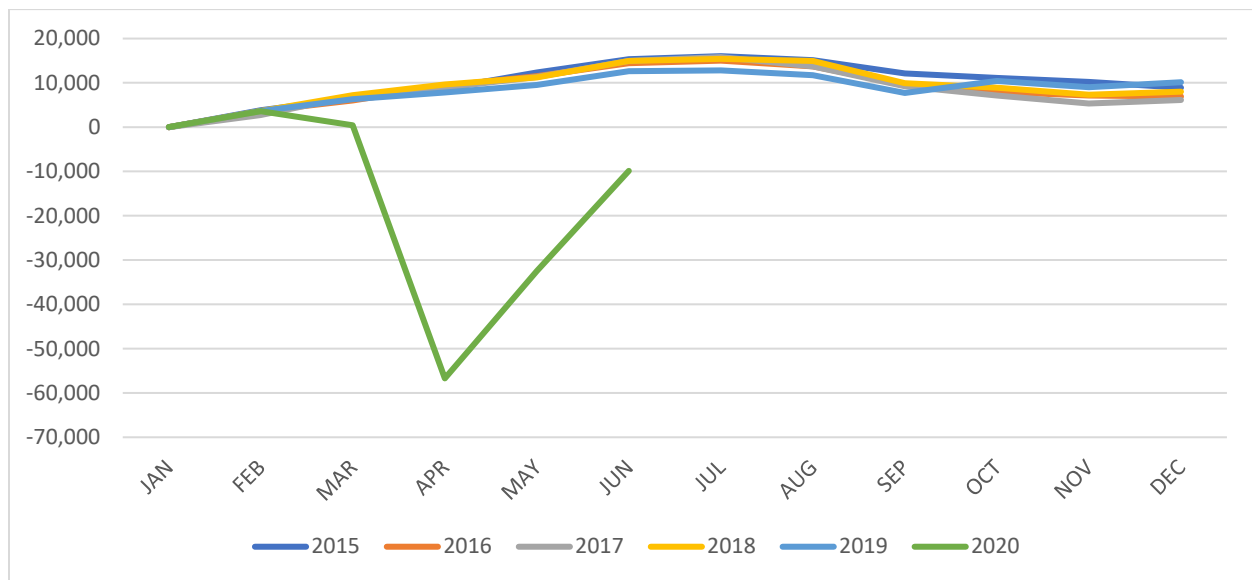
Figure 17: San Antonio-New Braunfels MSA Annual Employment Growth Rate



Data Source: Current Employment Statistics, Not Seasonally Adjusted

Leisure and Hospitality contracted by 600 jobs over five years. The average year-to-date employment gain in this industry from 2015 to 2019 was 14,400 jobs. In 2020, the industry lost 9,900 jobs since January. Figure 18 measures year-to-date employment changes for Leisure and Hospitality in the MSA going back to 2015.

Figure 18: San Antonio-New Braunfels MSA Leisure & Hospitality Year-to-Date Employment Growth



Data Source: Current Employment Statistics, Not Seasonally Adjusted

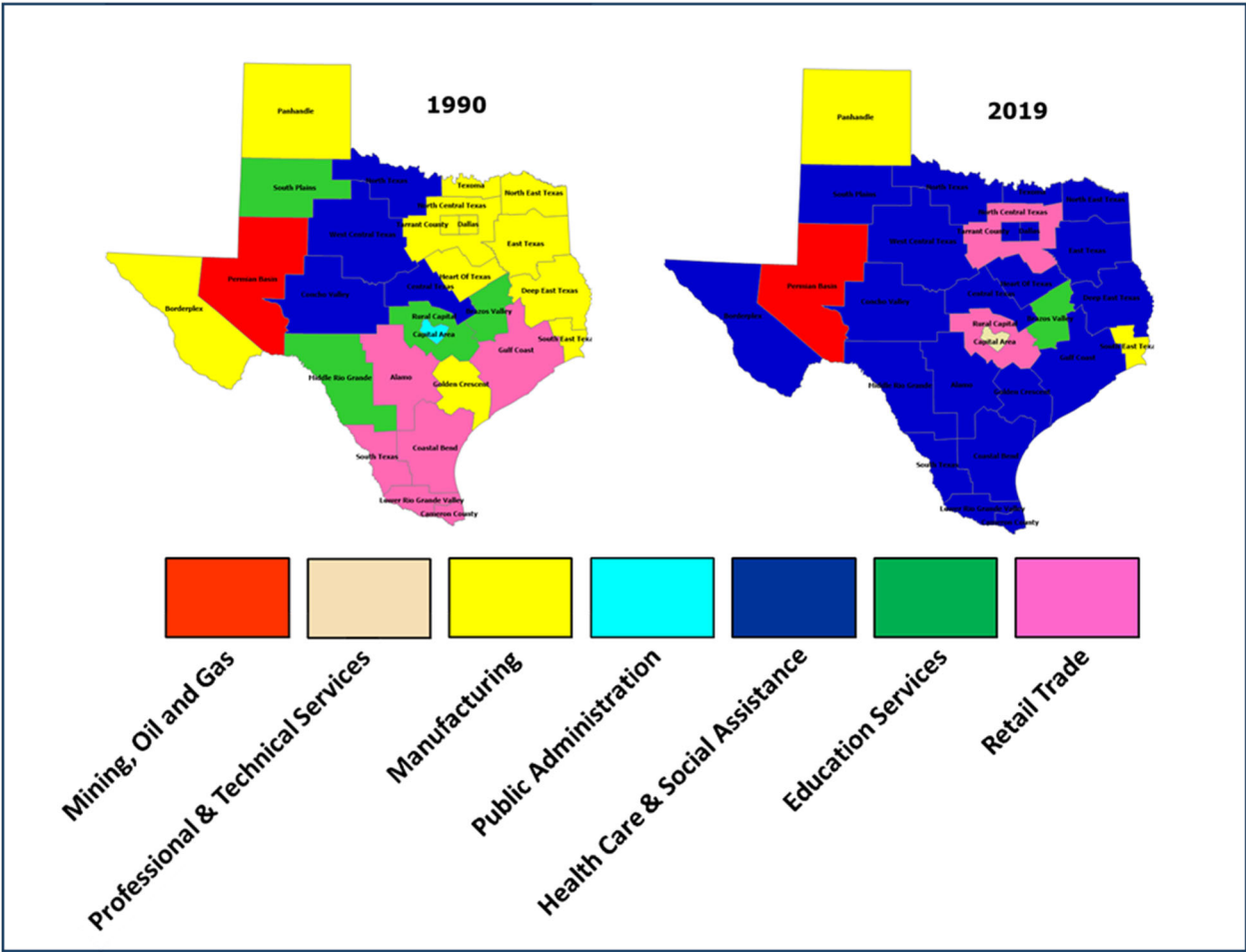
VI. Quarterly Census of Employment and Wages

Industry Composition

The predominant industry across Texas is Health Care and Social Assistance. It is the largest industry in 21 of 28 Workforce Development Areas in the state, as shown in Figure 19. The industry increased by slightly over 40,000 jobs from the first quarter of 2019 to the first quarter of 2020. Generally, this industry has shown to be resilient in Texas during slower economic times, because the population includes aging residents, including retirees. However, claims filed indicate that this industry was heavily affected by layoffs related to elective procedures as the state battled COVID-19. At the time of this writing, second quarter data was not available to determine the scope of job loss. With that being stated, the population of Texas continues to increase, with Health Care displaying long-term employment growth through early 2020.

Manufacturing continues to dominate the Panhandle and South East Texas WDAs. Often very closely connected with the Oil and Gas industry, Manufacturing still picked up an additional 6,000 jobs over the year from first quarter 2019 to first quarter 2020. The Retail Trade industry dominates North Central Texas and Rural Capital workforce development areas, each of which surround large metro urban counties. The industry has changed considerably over the last two years as Retail shifts from brick and mortar stores to online retail, but the industry was down overall losing 1,000 jobs from first quarter 2019 to first quarter 2020. Because of Texas A&M University, Educational Services continues to dominate the Brazos Valley Workforce Development Area. Finally, Professional and Technical Services continues to dominate the Capital Area driven by Computer Systems Design and Related Services, attracting more and more tech companies over the last few years. With substantial job numbers in metropolitan areas in Texas, Professional, Scientific, and Technical Services showed a job gain of slightly over 38,000 jobs from first quarter 2019 quarter to first quarter 2020.

Figure 19: Top Industry by Employment, 1990 to 2019



Data Source: Quarterly Census of Employment and Wages

Total Wages

The Quarterly Census of Employment and Wages (QCEW) provides insight into wages paid by industry as well as ownership type that identifies public and private employers. From second quarter 2019 to first quarter 2020, 13.7 percent of all wages in Texas were paid to government employees while 86.3 percent of wages were paid to private sector employees. The nation, on the other hand, paid a slightly larger share of wages to government employees: 14.7 percent vs. 85.3 percent to private.

In the private sector, the highest percentage of Texas wages in the year ending with first quarter 2020 were paid to Professional and Business Services (18.4 percent), followed by Trade, Transportation, and Utilities (18.0 percent), Education and Health Services (11.1 percent), Manufacturing (9.5 percent) and Financial Activities (9.0 percent). Furthermore, the two private industries of Trade, Transportation and Utilities and Natural Resources and Mining paid a significantly higher percent of wages in Texas than nationwide (18.0 percent and 4.6 percent for the respective industries in Texas vs. 15.4 percent and 1.3 percent in the United States).

Table 5: Total Wages by Major Industry, Second Quarter 2019 to First Quarter 2020

Industry	Texas Total Wages	Texas Total Wages % Share	U.S. Total Wages % Share
Total, All Industries	\$720,784,144,187	100%	100%
Government	\$99,616,357,198	13.7%	14.7%
Federal	\$16,040,984,707	2.2%	2.7%
State	\$21,666,143,628	3.0%	3.3%
Local	\$61,909,228,863	8.5%	8.6%
Total Private	\$621,167,786,989	86.3%	85.3%
Natural Resources and Mining	\$34,354,081,622	4.6%	1.3%
Construction	\$49,324,869,392	6.9%	5.5%
Manufacturing	\$69,197,061,600	9.5%	10.1%
Trade, Transportation and Utilities	\$130,843,393,689	18.0%	15.4%
Information	\$18,024,524,475	2.5%	3.9%
Financial Activities	\$63,965,031,086	9.0%	9.4%
Professional and Business Services	\$131,554,377,263	18.4%	19.0%
Education and Health Services	\$79,824,839,194	11.1%	13.7%
Leisure and Hospitality	\$30,049,492,967	4.2%	4.7%
Other Services	\$13,369,266,884	1.9%	2.1%
Unclassified	\$660,837,480	0.1%	0.1%

Data Source: Quarterly Census of Employment and Wages

Average Weekly Wages

Table 6 compares the average weekly wages by major industry in Texas and the United States. Texas' private sector weekly earnings in several industries are above the national average, while others are below over the year ending in First Quarter 2020. For example, in the Information and Financial Services industries, Texas workers receive 22.5 percent and 10.5 percent less than employees of the same industries nationwide on average. It is important to note here though that Texas has no state income tax and the wages from the QCEW are pre-tax.

In all private sector industries, the wages in Texas were \$50 or 4.4 percent higher than those nationwide. The wage gap was particularly significant in Natural Resources and Mining, where Texas' employees earned 90.5 percent more than their national counterparts (\$2,265 versus \$1,189).

Table 6: Average Weekly Wages by Major Industry, Second Quarter 2019 to First Quarter 2020

Industry	Texas	U.S.	Difference	% Difference
Total, All Industries	\$1,157	\$1,148	\$9	0.8%
Government	\$1,055	\$1,147	-\$92	-8.0%
Federal	\$1,545	\$1,622	-\$78	-4.8%
State	\$1,193	\$1,218	-\$24	-2.0%
Local	\$941	\$1,029	-\$89	-8.6%
Total Private	\$1,199	\$1,149	\$50	4.4%
Natural Resources and Mining	\$2,265	\$1,189	\$1,076	90.5%
Construction	\$1,331	\$1,264	\$68	5.3%
Manufacturing	\$1,566	\$1,349	\$217	16.1%
Trade, Transportation and Utilities	\$1,071	\$954	\$116	12.2%
Information	\$1,813	\$2,339	-\$526	-22.5%
Financial Activities	\$1,722	\$1,924	-\$202	-10.5%
Professional and Business Services	\$1,523	\$1,522	\$1	0.1%
Education and Health Services	\$974	\$1,006	-\$32	-3.2%
Leisure and Hospitality	\$449	\$486	-\$37	-7.6%
Other Services	\$817	\$775	\$42	5.5%

Data Source: Quarterly Census of Employment and Wages

VII. Industry and Occupational Projections

Positive growth continues to drive demand for workers in Texas and across the nation. In some key occupations, local supply has at times struggled to keep up with demand. Texas remains driven by a continued economic shift towards high-skilled jobs in the Professional and Business Services sector, while the state's rapid population growth and aging baby-boomer population increases demand for service sector jobs, primarily in Education and Health Services. These two industries in addition to Trade, Transportation, and Utilities account for over 56 percent of the jobs in Texas.

The Projections program examines more than 800 occupations, segmenting them for specific industries. Employment in Texas is projected to grow by 12.7 percent from 2018 to 2028, which represents approximately 1.7 million jobs. On an annual basis, Texas is projected to have about 1.8 million job openings due to exits from the labor force, transfers from occupations, and growth. In this section, we will examine more closely projected growth in key industries and in-demand occupations in Texas over the 10-year period.

Health Care and Social Assistance

The Health Care and Social Assistance industry grew to 1,721,630 positions in First Quarter 2020. Even with COVID-19, the industry has shown strong economic performance in Texas. According to not seasonally adjusted Current Employment Statistics data, industry employment in June 2020 is 80,800 jobs above where it was in June 2015. In the current year, industry employment is 50,500 below where it was in June 2019, but as the economy reopens and more elective medical procedures occur, employment in the industry is expected to rebound. According to long-term industry projections, Health Care and Social Assistance employment is expected to grow to approximately 1,898,313 jobs by 2028, with 20.8 percent projected from growth 2018 to 2028.

Ambulatory Health Care Services, which consists of doctors' and dentists' offices, outpatient care centers and medical and diagnostic laboratories, comprises about 45 percent of employment in the Health Care and Social Assistance industry. Employment in this subset of health care and social assistance has increased by 64,200 jobs from June 2015 to June 2020. During the past year, employment decreased by 9,700 from June 2019 to June 2020.

Employment in Health Care and Social Assistance increased by 5.8 percent from June 2015 to June 2020, while Ambulatory Health Care employment increased by 9.4 percent during the same five-year period.

Data from The Conference Board's Help Wanted OnLine database continues to show strong demand for nursing. Registered Nurses ranks sixth among occupations in the HWOL database for June 2020 with 4,756 postings although in June 2019 this occupation ranked first with 6,417 job postings.

Table 7: Health Care and Social Assistance Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Registered Nurses	185,291	217,668	32,377	17.5	\$74,338
Dental Assistants	28,563	39,302	10,739	37.6	\$38,682
Licensed Practical and Licensed Vocational Nurses	62,952	69,583	6,631	10.5	\$47,434
Medical and Health Services Managers	25,466	31,047	5,581	21.9	\$104,303
Dental Hygienists	12,670	17,459	4,789	37.8	\$76,791*
Physicians and Surgeons, All Other	19,197	22,935	3,738	19.5	\$216,701*
Nurse Practitioners	10,567	14,290	3,723	35.2	\$116,842
Speech-Language Pathologists	8,884	12,299	3,415	38.4	\$78,518
Respiratory Therapists	10,951	14,164	3,213	29.3	\$60,456
Dentists, General	7,817	10,739	2,922	37.4	\$186,246

Data Source: Texas Statewide Projections 2018 to 2028

Ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013

*** -- 2019 hybrid wage**

Educational Services

Demand for Educational Services will continue to grow in Texas due to an ever-expanding population. From 2010 to 2019, Texas added 3,753,910 people—more than any other state in the nation. According to the U.S. Census Bureau’s American Community Survey, school enrollment for the Texas population three years of age and over increased by 537,800 from 2010 to 2018, a 7.5 percent increase.

QCEW data shows Educational Services employment added 99,303 jobs over five years beginning first quarter 2015, an 8.6 percent gain that puts industry employment at 1,259,679 jobs for First Quarter 2020. The industry is expected to expand by another 10.2 percent from 2018 to 2028 according to TWC’s long-term industry projections. The Conference Board’s Help Wanted OnLine job posting data shows 15.2 percent growth in job postings from 2019 to 2020, demonstrating continuing demand for labor in this industry.

TWC’s Occupational projections data estimate that Self-Enrichment Education Teachers, Coaches and Scouts, and Health Specialties Teachers, Postsecondary will all increase by more than 20 percent from 2018 to 2028. Educational Services occupations projected to add the most jobs in the long term that pay a wage above the state median are listed below.

Table 8: Educational Services Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Secondary School Teachers, Except Special and Career/Technical Education	107,782	119,583	11,801	10.9	\$58,017
Self-Enrichment Education Teachers	9,179	13,545	4,366	47.6	\$46,809
Coaches and Scouts	10,912	14,669	3,757	34.4	\$50,930
Health Specialties Teachers, Postsecondary	13,185	16,465	3,280	24.9	\$145,421
Education Administrators, Elementary and Secondary School	27,574	30,739	3,165	11.5	\$86,356
Educational, Guidance, School, and Vocational Counselors	22,523	25,371	2,848	12.6	\$60,895
Instructional Coordinators	12,785	14,332	1,547	12.1	\$66,241
Preschool Teachers, Except Special Education	9,132	10,492	1,360	14.9	\$52,804
Business Operations Specialists, All Other	12,041	13,130	1,089	9.0	\$69,035
Vocational Education Teachers, Postsecondary	9,458	10,543	1,085	11.5	\$57,759

Data Source: Texas Statewide Projections 2018 to 2028

Ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013

Retail Trade

Retail Trade is a large and changing industry. Texas' expanding economy and population have increased demand for retail goods.

Not seasonally adjusted Current Employment Statistics data for June 2020 indicates the industry represents 10.4 percent of Total Nonfarm employment in Texas at 1,264,500 jobs. According to industry projections, Retail Trade will add nearly 122,777 jobs by 2028, growing to 1,450,882 jobs total. COVID-19 sent the industry into negative five-year change starting in April 2020 after a long period of expansion. From June 2015 to June 2020, the industry saw a change rate of -2.4 percent. Technological advances like personalized shopper experiences and online ordering capabilities were already changing the industry when COVID-19 hit.

Retail Trade occupations projected to add the most jobs in the long term that pay a wage above the state median are listed below. For this Texas industry, the median wage is \$26,288 while the state median wage for all industries is \$38,013.

Table 9: Retail Trade Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
First-Line Supervisors of Retail Sales Workers	87,571	97,048	9,477	10.8	\$45,420
General and Operations Managers	22,356	25,248	2,892	12.9	\$90,432
Automotive Service Technicians and Mechanics	25,217	27,750	2,533	10.0	\$47,528
Counter and Rental Clerks	8,385	9,537	1,152	13.7	\$38,313
Sales Representatives, Services, All Other	19,066	20,125	1,059	5.6	\$41,769*
First-Line Supervisors of Mechanics, Installers, and Repairers	5,456	6,261	805	14.8	\$61,246
First-Line Supervisors of Office and Administrative Support Workers	14,572	15,307	735	5.0	\$44,255
Pharmacists	11,678	12,406	728	6.2	\$128,310
Sales Managers	3,865	4,405	540	14.0	\$128,025
Heavy and Tractor- Trailer Truck Drivers	3,651	4,142	491	13.4	\$41,933

Data source: Texas Statewide Projections 2018 to 2028

**Ranked by employment change for occupations with mean wages higher than
Texas median wage of \$38,013**

*** -- 2019 hybrid wage**

Construction

The construction industry is projected to grow by 16.1 percent from 2018 to 2028, creating the need for 118,909 more workers over 10 years. Occupational projections also indicate that some of the highest demand will be for construction laborers, supervisors of construction and extraction workers, followed by specialty trade workers to fill positions such as plumbers, electricians, and carpenters.

According to first quarter 2020 Quarterly Census of Employment and Wages report, employment with the Construction industry reached 802,876 workers and has grown 2.0 percent over the last year. Demand for construction workers continues to rise. The average price of a home in Texas was \$289,801 in 2019, an annual increase of \$8,510 over the 2018 average price according to Texas A&M's Real Estate Center. For the month of July 2020, the housing inventory is the lowest (2.8 months) in the series that dates back to 1990 published by Texas A&M Real Estate Center. This indicates a high demand for and a shortage of residential housing in Texas. The year-over-year average home price has increased consistently since 2012 as reported by the Real Estate Center at Texas A&M University. These trends indicate strong demand for residential building projects.

Construction occupations projected to add the most jobs long-term and pay above the Texas median wage of \$38,013 are listed below in Table 10.

Table 10: Construction Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Supervisors of Construction and Extraction Workers	55,140	64,955	9,815	17.80%	\$66,145
Electricians	48,347	55,780	7,433	15.37%	\$51,007
Plumbers, Pipefitters, and Steamfitters	36,241	42,787	6,546	18.06%	\$50,117
Operating Engineers and Other Construction Equipment Operators	28,494	34,076	5,582	19.59%	\$44,872
Carpenters	30,974	35,601	4,627	14.93%	\$42,037
Construction Managers	25,201	29,533	4,332	17.19%	\$96,538
General and Operations Managers	22,205	26,045	3,840	17.29%	\$119,469
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	17,298	20,515	3,217	18.60%	\$45,514
Welders, Cutters, Solderers, and Brazers	11,328	13,381	2,053	18.12%	\$54,647
Office Clerks, General	27,442	28,996	1,554	5.66%	\$40,891

Data source: Texas Statewide Projections 2018 to 2028

**Ranked by employment change for occupations with mean wages higher than
Texas median wage of \$38,013**

Professional, Scientific, and Technical Services

From 2018 to 2028, the Professional, Scientific, and Technical Services industry is projected to grow by 23.6 percent, resulting in 184,615 jobs added. Establishments in this industry employ workers in many different occupations. Software Developers, Applications are projected to be the most in-demand through 2028 with an estimated employment of 42,808 jobs. Projections indicate other highly skilled jobs will be for Accountants and Auditors and General and Operations Managers.

According to First Quarter 2020 QCEW report, employment in the Professional, Scientific, and Technical Services reached an average 853,440 workers and has grown 20.2 percent over the last five years. The average weekly wage from QCEW for First Quarter 2020 was \$1,884. In not seasonally adjusted CES, Professional, Scientific, and Technical Services employment grew 18.4 percent over the past five years, representing the addition of 130,700 jobs. This growth outpaced Texas' Total Nonfarm employment increase of 2.0 percent over the past five years. Computer Systems Design and Related Services had the largest growth over the past five years of 30.0 percent for the industry. Management, Scientific, and Technical Consulting Services grew at a 25.1 percent over the same period, representing the addition of 31,900 jobs.

Professional, Scientific, and Technical Services occupations projected to add the most jobs in the long term that pay a wage above the state median are listed below.

**Table 11: Professional, Scientific, & Technical Services Industry
Long-Term Occupational Projections**

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Software Developers, Applications	30,459	42,808	12,349	40.5	\$105,358*
Accountants and Auditors	42,448	54,243	11,795	27.8	\$80,804
General and Operations Managers	22,539	29,725	7,186	31.9	\$149,562
Sales Representatives, Services, All Other	18,938	24,922	5,984	31.6	\$70,588*
Lawyers	28,739	34,607	5,868	20.4	\$148,253
Computer Systems Analysts	20,014	25,802	5,788	28.9	\$105,891*
Management Analysts	12,724	18,381	5,657	44.5	\$97,938
Paralegals and Legal Assistants	19,429	24,806	5,377	27.7	\$53,069
Computer User Support Specialists	18,138	23,410	5,272	29.1	\$54,502*
Office Clerks, General	33,591	37,999	4,408	13.1	\$39,041

Data Source: Texas Statewide Projections 2018 to 2028

Ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013

*** -- 2019 hybrid wage**

Transportation and Warehousing

According to long term industry projections, Transportation and Warehousing employment is expected to grow to approximately 615,744 positions by 2028. From 2018 to 2028 the Transportation and Warehousing industry is projected to grow by 11.9 percent resulting in 65,277 jobs added. Heavy and Tractor-Trailer Truck Drivers are expected to be the most in-demand through 2028 with an estimated employment of 120,894 jobs. Light Truck or Delivery Services Drivers is projected to hit an estimated employment of 27,169 jobs by 2028.

According to CES not seasonally adjusted data, Transportation and Warehousing employment grew 13.8 percent over the past five years.

Transportation and Warehousing occupations projected to add the most jobs in the long term pay a wage above the state median are listed in Table 12.

Table 12: Transportation and Warehousing Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Heavy and Tractor-Trailer Truck Drivers	102,488	120,894	18,406	17.9	\$47,145
Light Truck or Delivery Services Drivers	23,336	27,169	3,833	16.4	\$50,717
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	13,614	15,638	2,024	14.8	\$60,329*
Flight Attendants	15,468	17,230	1,762	11.4	N/A**
Bus and Truck Mechanics and Diesel Engine Specialists	7,982	9,258	1,276	15.9	\$49,740
General and Operations Managers	6,536	7,676	1,140	17.4	\$117,295
Aircraft Mechanics and Service Technicians	10,654	11,612	958	8.9	\$73,038
Sales Representatives, Services, All Other	5,523	6,416	893	16.2	\$63,958*
Dispatchers, Except Police, Fire, and Ambulance	8,788	9,677	889	10.1	\$43,675
Reservation and Transportation Ticket Agents and Travel Clerks	12,605	13,452	847	6.7	\$51,943

Data Source: Texas Statewide Projections 2018 to 2028

Ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013

**** OES 2019 wage estimate not available for Texas**

*** -- 2019 hybrid wage**

Manufacturing

According to the Federal Reserve Bank of Dallas, in 2019 Texas produced 10.4 percent of the total manufactured goods in the United States as cited in the August edition of Your Texas Economy. According to the Federal Reserve Bank of Dallas monthly Manufacturing survey, "Texas factory activity expanded in August for the third consecutive month following a record contraction in the spring after the onset of the COVID-19 pandemic, according to business executives responding to the Texas Manufacturing Outlook Survey. The production index, a key measure of state manufacturing conditions, came in at 13.1, down slightly from July but still indicative of moderate growth." In 2018, Texas Manufacturing produced 12.98 percent of the gross state product, \$230.45 billion in manufacturing output according to the National Association of Manufacturing (NAM).

Since a low year-over-year loss of 40,900 jobs in December 2015, Manufacturing employment rebounded with peak over-the-year gains of 35,600 jobs in November 2018 and January 2019. The Texas Manufacturing industry showed positive job gains through March 2020, and despite strong historical correlation with oil and gas industry employment trends, Mining and Logging (dominated by the Oil and Gas industry) started showing negative annual job growth in August of 2019.

With increased automation and robotics, the Manufacturing industry has changed in recent years with increased computerization, driving up manufacturing wages. This continues a demand increase for higher-skilled employees. Manufacturing industry employment is expected to increase by 5,678 jobs or 0.6 percent from 2018 to 2028. This increase includes a broad range of occupations including Welders, Cutters, Solderers and Brazers, Machinists, and Industrial Engineers, as well as some occupations with high employment levels such as Electromechanical and Equipment Assemblers, and Chemical Equipment Operators and Tenderers, among others as shown in Table 13 below.

Table 13: Manufacturing Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Supervisors of Production and Operating Workers	32,965	34,138	1,173	3.6	\$69,002
Welders, Cutters, Solderers, and Brazers	26,530	29,471	2,941	11.1	\$43,198
Inspectors, Testers, Sorters, Samplers, and Weighers	22,264	18,824	-3,440	-15.5	\$42,167
Machinists	18,778	20,557	1,779	9.5	\$46,133
Sales Rep., Wholesale & Manufacturing	17,904	18,866	962	5.4	\$71,783
General and Operations Managers	16,831	17,491	660	3.9	\$135,110
Electromechanical Equipment Assemblers	16,642	17,336	694	4.2	\$39,012
Heavy and Tractor-Trailer Truck Drivers	16,614	16,203	-411	-2.5	\$43,156
Office Clerks, General	14,742	13,924	-818	-5.5	\$40,593
Chemical Equipment Operators and Tenders	13,218	10,768	-2,450	-18.5	\$60,291

Data Source: Texas Statewide Projections 2018 to 2026

Ranked by 2018 base year employment for occupations with wages above the Texas 2019 median wage of \$38,013.

NAM Link. <https://www.nam.org/state-manufacturing-data/2019-texas-manufacturing-facts/>

Agriculture and Forestry

The Agriculture and Forestry industry in Texas is one of the most robust in the country. Approximately 248,400 farms, 97 percent family owned, cover over 127 million acres across the state. According to the 2017 Census of Agriculture Texas ranks third in the nation for market value of agricultural products sold. Texas tops the lists for cotton and cattle.

The industry followed a trend of positive growth over the last five years. From First Quarter 2015 to First Quarter 2020 the Agriculture and Forestry industry grew by 2.1 percent, adding 1,188 jobs. Despite this recent growth, the industry is projected to lose 2,776 jobs by 2028, shrinking to 57,078 jobs total.

Agriculture and Forestry industry jobs projected to be the most in-demand over the long term that pay a wage above the state median are listed below. Note: Many agriculture workers are considered self-employed and are therefore not included in the table below.

Table 14: Agriculture and Forestry Industry Long-Term Occupational Projections

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Animal Breeders	436	474	38	8.716	\$38,870
Animal Trainers	261	288	27	10.345	\$57,832
Human Resources Specialists	53	52	-1	-1.887	\$73,274
First-Line Supervisors of Production and Operating Workers	70	60	-10	-14.3%	\$53,361
Bus and Truck Mechanics and Diesel Engine Specialists	115	101	-14	-12.2%	\$54,267
First-Line Supervisors of Office and Administrative Support Workers	209	178	-31	-14.8%	\$59,838
Fallers	186	147	-39	-21.0%	\$54,451
Logging Equipment Operators	655	580	-75	-11.5%	\$43,309

Data Source: Texas Statewide Projections 2018 to 2028

Ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013

Mining, Quarrying, and Oil and Gas Extraction

The Mining, Quarrying, and Oil and Gas Extraction industry is projected to grow by 12.9 percent from 2018 to 2028, resulting in 31,483 jobs added. By 2028 the industry is projected to have 275,893 jobs. Service Unit Operators, Roustabouts and Heavy and Tractor-Trailer Truck Drivers are the top projected occupations for the industry.

According to not seasonally adjusted Current Employment Statistics data, employment in Mining, Quarrying, and Oil and Gas Extraction contracted by 29.1 percent from June 2015 to June 2020. After 28 months of positive annual growth the industry slipped into annual decline beginning in August 2019. In June 2020 the industry annual change rate was -24.0 percent.

Mining, Quarrying, and Oil and Gas Extraction occupations projected to add the most jobs in the long term that pay a wage above the state median are listed below.

**Table 15: Mining, Quarrying, and Oil and Gas Extraction Industry
Long-Term Occupational Projections**

Occupational Title	Employment 2018	Employment 2028	Change	% Growth	Mean Annual Wage 2019
Service Unit Operators, Oil, Gas, and Mining	21,924	26,273	4,349	19.8	\$48,136
Roustabouts, Oil and Gas	22,478	26,801	4,323	19.2	\$39,909
Heavy and Tractor-Trailer Truck Drivers	13,593	16,055	2,462	18.1	\$45,498
Rotary Drill Operators, Oil and Gas	6,839	8,224	1,385	20.3	\$56,916
Derrick Operators, Oil and Gas	5,847	7,052	1,205	20.6	\$45,510
Petroleum Engineers	8,855	9,520	665	7.5	\$163,749
Geological and Petroleum Technicians	3,803	4,220	417	11.0	\$61,990*
Wellhead Pumpers	6,608	6,900	292	4.4	\$54,803
Extraction Workers, All Other	1,205	1,472	267	22.2	\$51,851*
Bus and Truck Mechanics and Diesel Engine Specialists	1,166	1,421	255	21.9	\$48,477

Data Sources: Texas Statewide Projections 2018 to 2028 and Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Employment Statistics*

Occupations are ranked by employment change for occupations with mean wages higher than Texas median annual wage of \$38,013.

*** -- 2019 hybrid wage**

VIII. Glossary

Local Area Unemployment Statistics (LAUS)

This Federal/State cooperative program produces employment and unemployment estimates by place of residence.

Civilian Labor Force (CLF) - All persons classified as employed or unemployed.

Employed - All persons 16 years and over who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees, worked on their own business, profession, or on their own farm, or worked 15 hours or more as unpaid family workers, or (b) were not working but who had jobs from which they were temporarily absent. Each employed person is counted only once, even if the person holds more than one job.

Employment Population Ratio - The proportion of the civilian non-institutional population who are employed over the age of 16. Used in conjunction with the unemployment rate to evaluate the status of the labor force, it provides a measure of change in employment.

Labor Force Participation Rate (LFPR) - Represents the proportion of the non-institutional population that is in the labor force. In the Current Population Survey (CPS), the participation rates are usually published for sex-age groups, often cross classified by other demographic characteristics.

Unemployed - All persons aged 16 years and over who had no employment, were available for work, and had made specific efforts to find employment. Includes persons who were waiting to be recalled to jobs from which they had been laid off.

Unemployment Rate - The unemployed number divided by the civilian labor force number.

Current Employment Statistics (CES)

This Federal/State cooperative program produces estimates drawn from a monthly survey of nonfarm business establishments used to collect wage and salary employment, worker hours and payroll by industry and area. It counts the number of jobs, not of people.

Nonagricultural Jobs - The total number of persons on establishment payrolls employed full or part time. Persons on the payroll of more than one establishment are counted in each establishment. Data exclude proprietors, self-employed, unpaid family or volunteer workers, farm workers, and domestic workers. Government employment only covers civilian employees.

Actual or Not Seasonally Adjusted - Describes the data series not subject to the seasonal adjustment process. In other words, the effects of regular, or seasonal, patterns have not been removed from these series.

Seasonally Adjusted - The effects of regular, or seasonal, patterns of hiring or layoffs (holidays, weather, etc.) have been removed from these series. These adjustments make it easier to observe the cyclical and other non-seasonal movements in a data series.

Quarterly Census of Employment and Wages (QCEW)

A Federal/State cooperative program which collects and compiles employment and wage data for workers covered by State unemployment insurance laws, and Federal civilian workers covered by unemployment compensation for federal employees. State employment security agencies collect and compile quarterly Unemployment Insurance (UI) contribution reports which are submitted by all employees. These data are maintained in the State in macro and microdata forms, and sent to the Bureau of Labor Statistics (BLS).

Average Weekly Wages (AWW) - Average weekly wage values are calculated by dividing quarterly total wages by the average of the three-monthly employment levels (all employees) and dividing the result by 13, for the 13 weeks in the quarter.

Occupational Employment Statistics (OES)

The Federal/State cooperative program which produces current estimates of industry staffing patterns through periodic surveys of the nonfarm wage and salary sector of the economy. Occupational wages are also made through the survey.

Hybrid Wage- OES estimates are calculated using data collected from six survey panels over three years. Because data will be collected under two different Standard Occupational Classification (SOC) systems, estimates for May 2019 will be based on a hybrid of the two classification systems. During the transition to the 2018 SOC system, OES estimates will be based on a "hybrid" structure that is a combination of the 2010 SOC and 2018 SOC.

Industry Staffing Patterns - The occupational make-up of an industry collected by the Occupational Employment Statistics (OES) survey

Standard Occupational Classification (SOC) - The SOC is a system for classifying all occupations in the economy. The 2010 SOC classifies workers at four levels of aggregation: major group, minor group, broad occupation, and detailed occupation. All occupations are clustered into one of the 23 major groups.

Projections

The Texas Workforce Commission's Labor Market and Career Information Department produces industry and occupation employment projections. The program is funded by the Employment and Training Administration, U. S. Department of Labor. Projections are generated every two years for a 10-year period. The process of making employment projections depends on two main ingredients: industry employment and occupation employment within each industry (staffing patterns).

Employment Projections - Estimates of projected 10-year industrial and occupational employment for Texas and the 28 Workforce Development Areas.

Long-Term Projection System (LTPS) - Long-Term Industry Projection System (LTPS) was developed through the Asset Logistics Management Information System (ALMIS) Long-Term Industry Consortium. It is a PC-based system used to produce industry employment projections for Texas and the 28 Workforce Development Areas (WDAs) for a 10-year period. Texas and the WDA historical employment trends and U.S. relationships are used in conjunction with the forecast of Texas unemployment rates, gross state product, population, personal income, and labor force. The projections were developed through various types of regression and shift-share analyses.

Miscellaneous

Help Wanted OnLine - The Conference Board's data series provides monthly measures of labor demand (advertised vacancies) at the national, regional, state, and metropolitan area levels.

Current Population Survey (CPS) - National monthly household survey of sample households approximately 60,000 of the non-institutional population 16 years of age and older, employment and unemployment, demographic data and related subjects which are analyzed and published by Bureau of Labor Statistics (BLS). Each month, labor force information from this survey is published by Department of Labor in Employment and Earnings, and in the Employment Situation Summary press release. Annual demographic data are published in the Geographic Profile of Employment and Unemployment. Although the CPS is best known as the source for the monthly national unemployment rate, annual average CPS data for states are used in the Local Area Unemployment Statistics (LAUS) program as benchmarks and monthly data are used either in the extrapolation procedures or directly where the estimates meet BLS reliability standards.

Texas Geography

Metropolitan Division (MD) - A Metropolitan Statistical Area with a population of 2.5 million which is subdivided into smaller groupings is referred to as Metropolitan Divisions (MDs). An MD in Texas is made up of one or more counties.

Metropolitan Statistical Area (MSA) - A geographic area that contains at least one urbanized center of 50,000 or more population plus adjacent territory that has a high degree of social and economic integration with the core urban location. An MSA in Texas is made up of one or more counties.

Metro Area - Can refer either to a Metropolitan Statistical Area or a Metropolitan Division. Texas has 25 MSAs, including the Dallas-Fort Worth-Arlington MSA which is subdivided into two MDs.

Workforce Development Area (WDA) - The State of Texas is divided into twenty-eight (28) local workforce development areas. A WDA in Texas is made up of one or more counties and every county resides in a WDA.