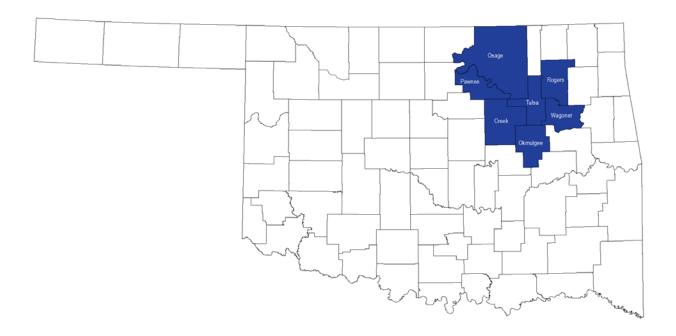
TULSA METROPOLITAN STATISTICAL AREA



2023 LOCAL BRIEFING

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Table of Contents

Introduction	5
Population	5
Population by County	7
Population by Age	7
Population by Race and Ethnicity	9
Education	10
Educational Attainment	10
Educational Attainment by Race and Ethnicity	11
Education Mismatch	12
Educational Assets	12
Labor Force	13
Labor Force Participation by County	13
Median Earnings	14
Commuter Data	15
Top Industries by Total Jobs	15
Key Sectors	16
Key Sector Staffing Patterns	17
Summary	18
Appendix	18
Educational Assets	18
Key Industries	20
Key Occupations	21
Industry and Occupational Employment Projections	23

Tables

Table 1: Population by County	6
Table 2: Projected Population by County	6
Table 3: Population by Age	7
Table 4: Population by Race and Ethnicity	9
Table 5: Educational Attainment	11
Table 6: Labor Force Participation Rate by County	14
Table 7: Top Industries by Total Jobs	16
Table 8: Educational Assets	18
Table 9: Industry Location Quotients (LQ)	20
Table 10: Occupation Location Quotients (LQ)	21
Table 11: 2020-2030 Industry Employment Projections	23
Table 12: 2020-2030 Occupational Employment Projections	24

Figures

Figure 1: Population by County	5
Figure 2: Population by Age	7
Figure 3: Population by Race and Ethnicity	8
Figure 4: Educational Attainment	10
Figure 5: Educational Attainment by Race and Ethnicity	11
Figure 6: Educational Attainment Mismatch	12
Figure 7: Labor Force Participation Rate by County	13
Figure 8: Median Earnings by County	14
Figure 9: Local Area Commuter Patterns	15

Introduction

The Tulsa Metropolitan Statistical Area (MSA) is comprised of seven Oklahoma counties: Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner. According to the U.S. Census Bureau, this combined centralized region of Oklahoma covers 6,269 square miles and is home to more than 1 million residents. Osage County, the largest county by land area in Oklahoma constitutes 36 percent of the Tulsa MSA. Wagoner County, with 8 percent of the area, is the smallest county of the Tulsa MSA. The following reviews the population, education, labor force, top industries by total jobs, and staffing patterns of state key industry sectors.

Population

Between 2017 and 2022, the Tulsa MSA grew by approximately 4.1 percent, from 977,869 to 1,017,724, or around 39,855 additional people. Between 2020 and 2030, the area is expected to grow by an additional 2.1 percent to 1,020,558 people. The following shows population figures and analyses by county, age, race, and ethnicity in the Tulsa MSA.

Population by County

Figure 1 shows the Tulsa MSA population breakdown by county. Tulsa County had the largest population, representing 66 percent of the population in the Tulsa MSA. Pawnee County had the second largest population at 9 percent. Okmulgee County had the smallest population, representing 4 percent of the population in the Tulsa MSA.

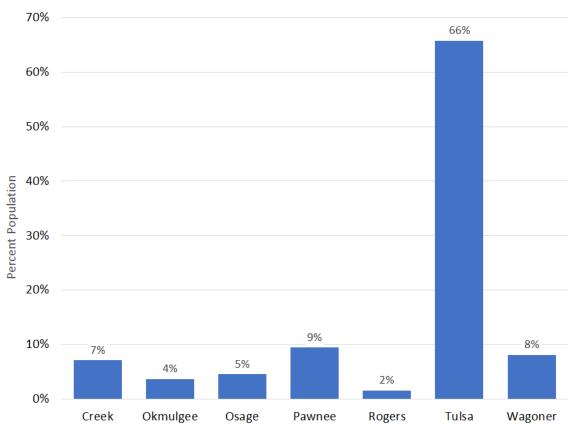


Figure 1: Population by County

SOURCE: U.S. Census Bureau. 2022 American Community Survey, ACS 5-Year Estimates.

Table 1 provides the change in Tulsa MSA population by county from 2017 to 2022. During this period, all counties grew in population, with the exception of Okmulgee, Osage and Pawnee Counties. Tulsa County added the most people during this period with an additional 31,800 (5.0 percent) people in 2022. Rogers County added the second largest number of people at 5,772 (6.4 percent). Creek County added the least number of people at 1,177 (1.7 percent). Okmulgee County (-5.7 percent, Pawnee County (-4.7 percent), and Osage County (-2.8 percent) were the only counties showing a decline in population during this period.

Table 1: Population by County

	2017	2022	Total	Percent
County	Population	Population	Change	Change
Creek	70,899	72,076	1,177	1.7%
Okmulgee	39,121	36,900	-2,221	-5.7%
Osage	47,350	46,004	-1,346	-2.8%
Pawnee	16,448	15,682	-766	-4.7%
Rogers	90,098	95,870	5,772	6.4%
Tulsa	637,123	668,923	31,800	5.0%
Wagoner	76,830	82,269	5,439	7.1%
Total	977,869	1,017,724	39,855	4.1%

SOURCE: U.S. Census Bureau. American Community Survey, ACS 5-Year Estimates.

Table 2 shows the projected population change from 2020 to 2030 by county. During this period, all counties in the Tulsa MSA are projected to grow in population. Tulsa County is projected to have the largest increase in population at 16,024 (2.4 percent) additional people by 2030. Wagoner County is projected to add the second largest number of people at 3,566 (4.4 percent). The population in Osage County is projected to grow the least, adding 113 persons (0.2 percent).

Table 2: Projected Population by County

County	2020 Population	2030 Population	Total Change	Percent Change
Creek	72,112	72,112	358	0.5%
Okmulgee	36,995	36,995	289	0.8%
Osage	45,931	45,931	113	0.2%
Pawnee	15,937	15,937	384	2.5%
Rogers	95,670	95,670	430	0.5%
Tulsa	685,303	685,303	16,024	2.4%
Wagoner	84,547	84,547	3,566	4.4%
Total	1,036,495	1,036,495	21,164	2.1%

SOURCE: Oklahoma Department of Commerce. Oklahoma Population Projections 2020-2070, March 2023.

Population by Age

Figure 2 below shows the population by age in the Tulsa MSA. In 2022, the 5- to 14- and 25- to 34-year old age groups represented the largest age groups in the Tulsa MSA at 13.8 percent and 13.6 percent respectively. The next largest age group was the 15- to 24-year old group at 13.2 percent. Those aged 85 and over represent the smallest age group in Tulsa MSA at 1.7 percent.

16.0% 13.8% 14.0% 13.6% 13.2% 12.9% 12.4% 11.9% 12.0% 10.0% 9.4% 8.0% 6.4% 6.0% 4.7% 4.0% 1.7% 2.0% 0.0% Under 5 25 to 34 35 to 44 75 to 84 5 to 14 15 to 24 45 to 54 55 to 64 65 to 74 85 years years years years years years and over

Figure 2: Population by Age

SOURCE: U.S. Census Bureau. 2022 American Community Survey, ACS 5-Year Estimates.

Table 3, on the next page, provides the population change by age group from 2017 to 2022. During this period, most age groups grew in population. In particular, age groups under 5 years old and over 85 years old declined. The 65- to 74-year old age group added the most people at 12,701 while 35- to 44-year olds were next at 11,441. The 5- to 14-year-old age group grew the least at just 2,729 more people in the last 5 years. Alternatively, under 5-year-olds experienced the largest decline at 3,355 fewer people.

Table 3: Population by Age

	2017	2022	Total	Percent
Age	Population	Population	Change	Change
Under 5 years	67,101	64,701	-2,400	-3.6%
5 to 14 years	137,022	140,058	3,036	2.2%
15 to 24 years	127,665	134,279	6,614	5.2%
25 to 34 years	134,343	138,210	3,867	2.9%
35 to 44 years	122,890	131,778	8,888	7.2%
45 to 54 years	125,557	121,440	-4,117	-3.3%
55 to 64 years	122,740	126,116	3,376	2.8%
65 to 74 years	81,969	95,782	13,813	16.9%
75 to 84 years	42,286	47,737	5,451	12.9%
85 years and over	16,296	17,623	1,327	8.1%
Total	977,869	1,017,724	39,855	4.1%

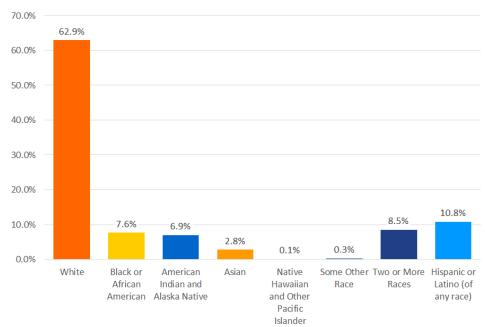
SOURCE: U.S. Census Bureau. American Community Survey, ACS 5-Year Estimates.

Population by Race and Ethnicity

The following analyses uses the racial and ethnicity categories designated by the U.S. Census Bureau which categorizes "Hispanic Origin" as an ethnicity rather than a race. People who identify as Hispanic, Latino, or Spanish may be any race. As such, Hispanic is always reported in conjunction with another racial designator, i.e., "Black or African American, Hispanic." Unless otherwise noted, individual races included in this briefing section were reported as non-Hispanic.

Figure 3 summarizes the Tulsa MSA population by race and ethnicity in 2022. White made up the largest percentage of the population at 62.9 percent. Hispanic or Latino (of any race) were the second largest percentage of the population at 10.8 percent. Native Hawaiians or Pacific Islanders were the smallest percentage of the population at 0.1 percent.

Figure 3: Population by Race and Ethnicity



SOURCE: U.S. Census Bureau. American Community Survey, ACS 5-Year Estimates.

Table 4 provides the population change by demographic group for Tulsa MSA from 2017 to 2022. During this period, most demographic groups grew in population. Hispanic Ethnicity with Any Race added the most population during this period at 18,240 (19.8 percent), followed by Two or More Races at 11,939 (16.0 percent). Alternatively, Native Hawaiian or Pacific Islanders added the least in total population during this period at 224 (30.5 percent) additional people. The White segment of the population was the only group estimated declining during this period.

Table 4: Population by Race and Ethnicity

Demographic	2017 Population	2021 Population	Total Change	Percent Change
White	644,092	640,291	-3,801	-0.6%
Black or African American	76,744	77,834	1,090	1.4%
American Indian and Alaska Native	66,577	70,570	3,993	6.0%
Asian	21,844	28,349	6,505	29.8%
Native Hawaiian and Other Pacific Islander	735	959	224	30.5%
Some Other Race	1,366	3,031	1,665	121.9%
Two or More Races	74,464	86,403	11,939	16.0%
Hispanic Ethnicity with Any Race	92,047	110,287	18,240	19.8%
Total	977,869	1,017,724	39,855	4.1%

SOURCE: U.S. Census Bureau. American Community Survey, ACS 5-Year Estimates.

Education

Colleges, universities, career technology centers, and K-12 schools are instrumental in developing the workforce. Educational institutions help supply local businesses and organizations with a workforce with the necessary education and skills to be competitive in today's economy. The following section reviews Tulsa MSA's educational attainment and provides an educational attainment mismatch analysis, and details the State's educational assets.

Educational Attainment

Figure 4 compares Tulsa MSA's educational attainment levels with the United States educational attainment levels in 2022. In the Tulsa MSA, High School Graduates made up the largest share of the population at 28.5 percent. This was 2.4 percentage points higher than the U.S. average of 26.1 percent. The second largest share of the population was Some College at 21.6 percent. Those with less than 9th grade educational attainment represented the smallest group at 3.5 percent, 1.2 percentage point below the national average.

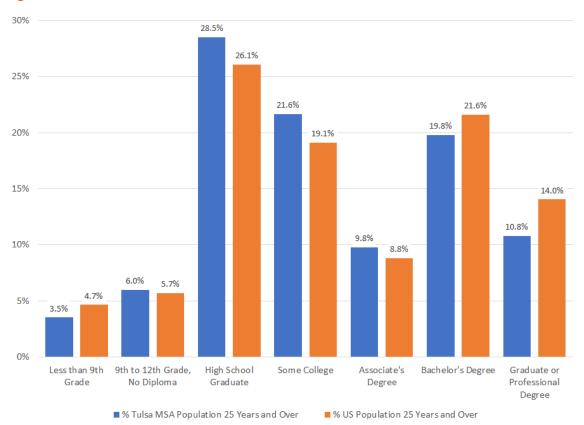


Figure 4: Educational Attainment

SOURCE: U.S. Census Bureau. 2022 American Community Survey, ACS 1-Year Estimates.

Table 5 provides the change in educational attainment levels in Tulsa MSA from 2017 to 2022. By 2022, more people achieved higher levels of education than in 2017, while fewer people had below high school graduate. In particular, those with Bachelor's and Graduate Degrees grew the most during this period adding 14,483 and 14,976 more people respectively. High School Graduates were next with an additional 10,311 people by 2022. Alternatively, only a combined 3,571 fewer people had an education below the High School Graduate level by 2022.

Table 5: Educational Attainment

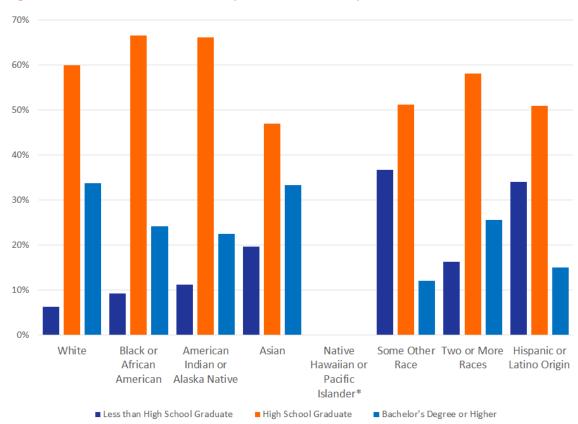
Educational	2017	2022	Total	Percent
Attainment	Population	Population	Change	Change
Less than 9th Grade	24,817	24,429	-388	-1.6%
9th to 12th Grade, No Diploma	44,749	41,566	-3,183	-7.1%
High School Graduate	187,115	197,426	10,311	5.5%
Some College	160,122	149,795	-10,327	-6.4%
Associate's Degree	59,676	67,684	8,008	13.4%
Bachelor's Degree	122,432	136,915	14,483	11.8%
Graduate or Professional Degree	59,630	74,606	14,976	25.1%
Total	658,541	692,421	33,880	5.1%

SOURCE: U.S. Census Bureau. American Community Survey, ACS 1-Year Estimates.

Educational Attainment by Race and Ethnicity

Figure 5 shows Tulsa MSA's education attainment levels by race and ethnicity in 2022. Across all racial and ethnic groups, High School Graduate represented the largest percentage of the respective population groups. White and Black or African American had the largest population percentage at the High School Graduate level at over 90 percent. Asian Americans had the largest population percentage at the Bachelor's Degree or Higher level at 33.3 percent.

Figure 5: Educational Attainment by Race and Ethnicity



^{*}The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

SOURCE: U.S. Census Bureau. 2022 American Community Survey, ACS 1-Year Estimates.

Educational Attainment Mismatch

Figure 6 below shows an educational attainment mismatch analysis for the Tulsa MSA.¹ This compares the typical education required for jobs to the educational attainment of the population in 2022. In 2022, approximately 22.3 percent of jobs in the Tulsa MSA required no formal education while just 9.5 percent of the population have an education at this level. This suggests that many of these jobs may be filled by those with an education level beyond what is required. At the High School Diploma level, 43.0 percent of jobs in Tulsa MSA require this level of education while 28.5 percent of the population have this level of education. The percent of population with Some College, Non-Degree Award was 31.4 percent, while just 12.5 percent of jobs required these levels of education, suggesting underemployment. At the Bachelor's Degree level, 19.8 percent of the population hold the degree while 18.9 percent of jobs require it. For those with a Graduate Degree or Higher, 10.8 percent of the population is prepared for 3.3 percent of the jobs in the market.

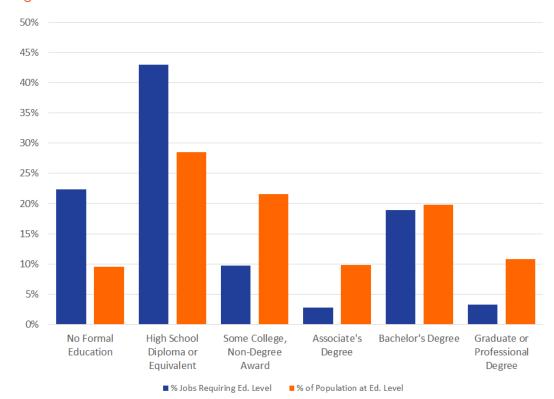


Figure 6: Educational Attainment Mismatch

Educational Assets

Tulsa MSA has 24 distinct post-secondary educational institutions, ranging from universities, technical colleges, community colleges, and specialty training schools. These institutions are important educational and professional assets as they help connect students of all backgrounds and circumstances with resources, degrees, certifications, and higher knowledge. Table 8 in the Appendix details accredited institutions and their programs of study.

¹ The educational attainment mismatch analysis, formerly known as skills gaps analysis, is attained by comparing the working age (25 years and older) population's educational attainment and typical entry level education for the total number of jobs. The analysis does not account for individuals' actual educational attainment and their current employment. The analysis compares American Community Survey data from the Census Bureau with occupation data from OESC's Economic Research and Analysis Division and Bureau of Labor Statistics.

Labor Force

The labor force may be considered one of the foremost assets of a particular region, providing key goods and services, collaborating across industries, and participating in economic and skills development. The following section reviews Tulsa MSA's labor force participation rates broken down by county, median earnings, as well as commuter data detailing inflow, outflow, and circulation.

Labor Force Participation by County

Figure 7 shows the Tulsa MSA labor force participation rate by county. In 2021, three of seven counties in the Tulsa MSA met or exceeded the Oklahoma state average labor force participation rate of 60.8 percent. The highest labor force participation rate was in Tulsa County at 66.0 percent. The second highest was in Wagoner County at 63.2 percent. The third highest was in Rogers County at 62.9 percent. The lowest percentage is in Seminole County at 49.6 percent.

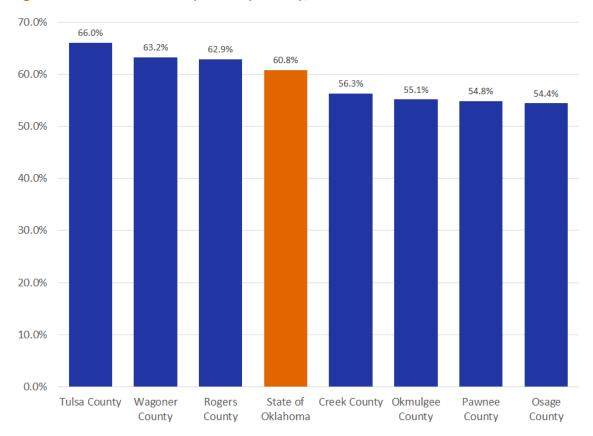


Figure 7: Labor Force Participation by County, 2021

Source: American Community Survey (ACS) 2021 5-Year Estimates

Table 6 below shows the labor force participation rate by county for Tulsa MSA from 2020 to 2021. During this period, four of Tulsa MSA's county labor force participation rates decreased. This follows the general decline of the state's rate at -0.3 since 2020. Creek County's labor force participation rate grew during this period at an additional 1.2 percentage points. Osage and Rogers County's rate decreased by the most at -0.5 percentage point.

Table 6: Labor Force Participation by County

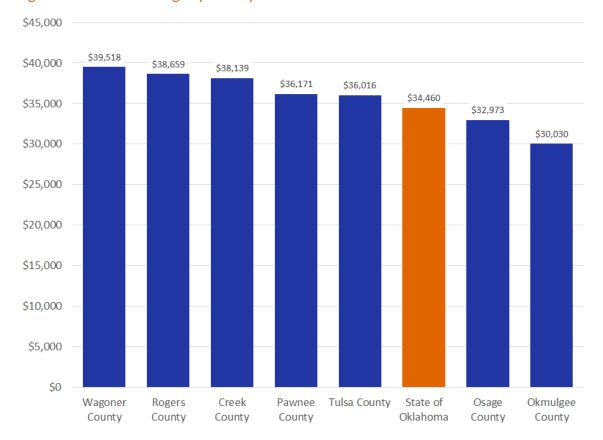
	LFPR	LFPR	Total
Area	2020	2021	Change
State of Oklahoma	60.5%	60.8%	0.3%
Creek County	55.1%	56.3%	1.2%
Okmulgee County	54.6%	55.1%	0.5%
Osage County	54.9%	54.4%	-0.5%
Lincoln County	54.4%	54.7%	0.3%
Rogers County	63.3%	62.9%	-0.5%
Tulsa County	66.2%	66.0%	-0.2%
Wagoner County	63.4%	63.2%	-0.2%

Source: American Community Survey (ACS) 2021 5-Year Estimates

Median Earnings

Figure 8 provides the median earnings of those that are over the age of 16 in each of Tulsa MSA's counties and the State of Oklahoma in 2021. The highest earnings were found in Wagoner County at \$39,518. The second highest median earnings were Rogers County at \$38,659. The third highest were in Creek County at \$38,139. The lowest median earnings were in Okmulgee County at \$30,030. Overall, five of Tulsa MSA's counties boasted median earnings above those found at the state level, while two counties fell below this level.

Figure 8: Median Earnings by County



Commuter Data

The U.S. Census Bureau Longitudinal Employer-Household Dynamics (LEHD) program uses data from a variety of sources including the unemployment insurance program, Quarterly Census of Employment and Wages (QCEW), and administrative data from censuses and surveys to create models estimating worker commutes for primary employment. In 2021, 70,173 (19.4 percent) worked in the Tulsa MSA and did not live there, 290,827 lived and worked in the Tulsa MSA, and 56,721 (16.3 percent) lived in Tulsa MSA and worked outside the area. See Figure 9 below.

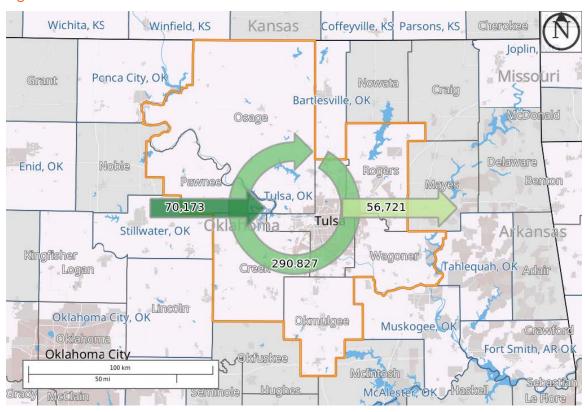


Figure 9: Commuter Patterns

Source: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program (LEHD), 2021, https://onthemap.ces.census.gov.

Top Industries by Total Jobs

The North American Industry Classification System (NAICS) is the standard utilized by federal agencies to classify businesses to collect, analyze, and publish statistical data related to the United States business economy. Several of the analyses that follow are based upon data using NAICS employment sector codes. The following information is provided to enhance understanding of the framework of these analyses.

NAICS uses a 6-digit coding system which is structured hierarchically, beginning with 20 broad economic sectors. Over 1,000 industries are then sub-categorized within these 20 sectors. Each industry within a sector shares distinguishing economic activities. The most recent version of the classification system was implemented in 2017. Additional information is available at: www.census.gov/eos/www/naics.

Table 9 below shows the top ten industries in the Tulsa MSA by the total number of jobs in 2022. There was an estimated 431,979 number of total jobs in the Tulsa MSA in 2022. The largest sector was Health Care and Social Assistance with 59,049 jobs. The second largest sector was Government with 51,034 jobs. The tenth largest sector was Wholesale Trade with 16,703 jobs. Together, these industries made up 84.1 percent of the total jobs in the area.

Table 7: Top Industries by Total Job	Table 7	': Top	Industries by	v Total Jobs
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NAICS Code	Industry Description	2022 Jobs	Percentage of Total Employment
62	Health Care and Social Assistance*	59,049	13.7%
90	Government	51,034	11.8%
44-45	Retail Trade	48,944	11.3%
31-33	Manufacturing	47,762	11.1%
72	Accommodation and Food Services*	39,311	9.1%
56	Administrative and Support and Waste Management*	32,710	7.6%
23	Construction	24,899	5.8%
54	Professional, Scientific, and Technical Services*	22,917	5.3%
48-49	Transportation and Warehousing*	20,157	4.7%
42	Wholesale Trade	16,703	3.9%

^{*} Data for at least one county in the region does not meet BLS disclosure requirements and is not included in the statistics listed above.

SOURCE: Quarterly Census of Employment and Wages (QCEW), Bureau of Labor Statistics.

Key Sectors

This section will provide both data and analysis of key industries and occupations in Oklahoma using official labor market statistics from the Oklahoma Employment Security Commission (OESC), the U.S. Bureau of Labor Statistics (BLS), and the Census Bureau.

It is well understood that some industries are more heavily concentrated in some geographic areas than in others as individual firms have realized advantages in being close to competitors, customers, supply chain sources, etc. Knowing this policy makers can profit by understanding the long-standing (and perhaps even the emerging) economic geography of their state and substate regions. Using location quotients, we can identify those industries and occupation that already exist and are thriving within our state.

Utilizing 4-digit NAICS codes we have identified industries with at least 500 employees within the private and federal government sectors that have an employment concentration that is at least twice that of the nation. Table 9 in the Appendix outlines the top 4-digit NAICS industries in Oklahoma based on location quotients.

Key Occupations

Table 10 in the Appendix shows similar employment concentration data but from an occupational perspective. Here we are illustrating occupations that have LQs of at least 3.0 and at least 100 employees.

Long Term Industry and Occupational Employment Projections

Next, we transition to looking at the industry and occupational projections produced by the OESC's Economic Research & Analysis division in partnership with the U.S. Department of Labor (see Tables 11 and 12 in the Appendix). These data products are produced every-other year in accordance with national standards. They provide labor market participants with an informed guide of how current trends may play out over the next decade.

Summary

This local briefing reviewed Tulsa MSA's population, educational attainment and assets, labor force information, top industry data, and target and complementary sectors. The Tulsa MSA is one of five Metropolitan Statistical Areas (MSAs) in Oklahoma. The Oklahoma Employment Security Commission prepares briefings for each of the five Metropolitan Statistical Areas (MSAs) and four Nonmetropolitan Areas, including a state-level briefing.

Table 8: Educational Assets

Institution Name	Institution	City	County	Area	Degree
	Туре				Types
Langston University	Public	Tulsa	Tulsa	Tulsa MSA	Associate, Bachelor, Master, Doctorate
Northeastern State University	Public	Broken Arrow	Tulsa	Tulsa MSA	Certificate, Bachelor, Master
Oklahoma State University	Public	Tulsa	Tulsa	Tulsa MSA	Bachelor, Master, Doctorate
Oklahoma State University Center for Health Sciences	Public	Tulsa	Tulsa	Tulsa MSA	M.D., Master, Doctorate, Graduate Certificate
Oklahoma State University Institute of Technology	Public	Okmulgee	Okmulgee	Tulsa MSA	Associate, Bachelor
Rogers State University	Public	Claremore	Rogers	Tulsa MSA	Certificate, Associate, Bachelor, Master
Tulsa Community College	Public	Tulsa	Tulsa	Tulsa MSA	Associate, Certificate
University of Oklahoma	Public	Tulsa	Tulsa	Tulsa MSA	Bachelor, Master, Doctorate, Graduate Certificate
Oklahoma Technical College	Non- traditional nonprofit	Tulsa	Tulsa	Tulsa MSA	Certificate
Oral Roberts University	Private Non- Profit	Tulsa	Tulsa	Tulsa MSA	Bachelor, Master, Doctorate, Graduate Certificate
Phillips Theological Seminary	Private Non- Profit	Tulsa	Tulsa	Tulsa MSA	Master, Ph.D.
Spartan College of Aeronautics and Technology	Private For- Profit	Tulsa	Tulsa	Tulsa MSA	Associate, Bachelor

Table 8: Educational Assets (continued)

Institution Name	Institution	City	County	Area	Degree
	Туре				Types
The University of Tulsa	Private Non-	Tulsa	Tulsa	Tulsa MSA	Bachelor,
	Profit				Master,
					Doctorate,
					Graduate
					Certificate
Tulsa Welding School	Private For-	Tulsa	Tulsa	Tulsa MSA	Associate,
	Profit				Certificate
University of Phoenix	Private For	Tulsa	Tulsa	Tulsa MSA	Bachelor,
	Profit				Master
Central Technology Center	Technical	Drumright	Creek/Payn	Tulsa MSA/	Certificate
	School		e	Northwest	
Central Technology Center	Technical	Sapulpa	Creek	Tulsa MSA	Certificate
	School				
Green Country Technology	Technical	Okmulgee	Okmulgee	Tulsa MSA	Certificate
Center	School				
Tulsa Technology Center	Technical	Broken	Tulsa/Wago	Tulsa MSA	Certificate
	School	Arrow	ner		
Tulsa Technology Center	Technical	Owasso	Tulsa/Roger	Tulsa MSA	Certificate
	School		s		
Tulsa Technology Center	Technical	Sand	Osage/Tulsa	Tulsa MSA	Certificate
	School	Springs			
Tulsa Technology Center	Technical	Memorial	Tulsa	Tulsa MSA	Certificate
	School	Tulsa			
Tulsa Technology Center	Technical	Riverside	Tulsa	Tulsa MSA	Certificate
	School	Tulsa			
Tulsa Technology Center	Technical	Peoria Tulsa	Tulsa	Tulsa MSA	Certificate
	School				

 $SOURCE: Oklahoma\ State\ Regents\ of\ Higher\ Education,\ \underline{CareerTech.org}.$

Key Industries

Table 9: Industry Location Quotients (LQ)

			2022	
NAICS Code	Industry Title	2022 Average Employment	Average Annual Earnings	Employment LQ
Aerosp	ace and Defense Industries			
3329	Other Fabricated Metal Product Manufacturing - Federal Government	1,634	\$67,581	39.24
9281	National Security and International Affairs	21,590	\$79,377	3.38
3364	Aerospace Product and Parts Manufacturing	11,690	\$96,525	2.16
6211	Offices of Physicians - Federal Government	693	\$91,330	2.56
Energy	Industries			
4869	Other Pipeline Transportation	1,275	\$156,838	14.47
2111	Oil and Gas Extraction	11,965	\$159,860	9.8
4862	Pipeline Transportation of Natural Gas	2,248	\$118,726	6.58
2131	Support Activities for Mining	16,315	\$84,665	5.75
Agribus	siness and Biosciences Industries			
1122	Hog and Pig Farming	1,636	\$49,110	5.21
4245	Farm Product Raw Material Merchant Wholesalers	1,960	\$39,219	2.59
3111	Animal Food Manufacturing	1,851	\$64,187	2.39
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	870	\$114,517	2.14
3116	Animal Slaughtering and Processing	11,834	\$49,125	2.06
Manufa	acturing Industries			
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	6,429	\$58,148	4.18
3324	Boiler, Tank, and Shipping Container Manufacturing	4,094	\$76,039	4.11
3274	Lime and Gypsum Product Manufacturing	607	\$68,555	3.62
3262	Rubber Product Manufacturing	4,931	\$70,199	3.39
3331	Agriculture, Construction, and Mining Machinery Manufacturing	7,493	\$72,907	3.27
3312	Steel Product Manufacturing from Purchased Steel	1,567	\$73,056	2.58
3221	Pulp, Paper, and Paperboard Mills	2,385	\$80,124	2.49
3352	Household Appliance Manufacturing	1,785	\$47,029	2.37
3271	Clay Product and Refractory Manufacturing	926	\$53,039	2.35

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW).

Key Occupations

Table 10: Employment Location Quotients (LQ)

SOC Code	Occupational Title	Employment	Annual Average Wage	Employment LQ
33-9031	Gambling Surveillance Officers and Gambling Investigators	1,700	\$31,310	14.94
47-5012	Rotary Drill Operators, Oil and Gas	1,770	\$56,380	13.37
43-3041	Gambling Cage Workers	1,310	\$25,740	10.27
41-2012	Gambling Change Persons and Booth Cashiers	1,870	\$26,400	9.16
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters	420	\$50,890	8.18
47-5071	Roustabouts, Oil and Gas	3,370	\$44,660	7.94
47-5013	Service Unit Operators, Oil and Gas	2,730	\$56,330	6.92
17-2171	Petroleum Engineers	1,470	\$144,160	6.62
17-2021	Agricultural Engineers	110	\$62,890	6.56
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	2,050	\$83,850	6.01
47-5081	HelpersExtraction Workers	420	\$50,350	5.6
11-9071	Gambling Managers	270	\$66,670	5.15
49-9043	Maintenance Workers, Machinery	3,500	\$57,840	5.14
49-9081	Wind Turbine Service Technicians	540	\$53,870	5.03
49-3011	Aircraft Mechanics and Service Technicians	6090	\$75,590	4.18
19-4043	Geological Technicians, Except Hydrologic Technicians	400	\$73,300	4.05

Key Occupations

Table 10: Employment Location Quotients (LQ)

SOC Code	Occupational Title	Employment	Annual Average Wage	Employment LQ
47-5011	Derrick Operators, Oil and Gas	470	\$54,200	3.94
53-7073	Wellhead Pumpers	580	\$59,810	3.68
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	1400	\$31,190	3.62
45-2011	Agricultural Inspectors	540	\$42,820	3.56
29-9021	Health Information Technologists and Medical Registrars	1340	\$49,340	3.49
39-1013	First-Line Supervisors of Gambling Services Workers	830	\$44,000	3.49
47-5051	Rock Splitters, Quarry	140	\$30,640	3.3
43-4141	New Accounts Clerks	1,610	\$37,320	3.28
51-8092	Gas Plant Operators	480	\$70,670	3.09

Source: Bureau of Labor Statistics, Occupational Employment and Wage Statistics (OEWS).

Industry and Occupational Employment Projections

Table 11: 2020-2030 Tulsa MSA Industry Employment Projections

NAICS Code	Industry	2020 Employment	2030 Employment	Numeric Change	Percent Change
000000	Total All Industries	440,130	480,640	40,500	9.2%
000670	Self Employed and Unpaid Family Workers, All Jobs	23,720	23,580	-140	-0.6%
110000	Agriculture, Forestry, Fishing and Hunting	*	*	*	*
210000	Mining	*	*	*	*
220000	Utilities	*	*	*	*
230000	Construction	24,530	26,220	1,690	0.7%
310000	Manufacturing	50,600	52,390	1,780	0.4%
420000	Wholesale Trade	*	*	*	*
440000	Retail Trade	47,680	49,870	2,190	0.5%
480000	Transportation and Warehousing	16,930	16,350	-580	-0.4%
510000	Information	*	*	*	*
520000	Finance and Insurance	*	*	*	*
530000	Real Estate and Rental and Leasing	*	*	*	*
540000	Professional, Scientific, and Technical Services	*	*	*	*
550000	Management of Companies and Enterprises	*	*	*	*
560000	Administrative and Support and Waste Management and Remediation Services	29,730	33,590	3,850	1.2%
610000	Educational Services	28850	31,190	2,350	0.8%
620000	Health Care and Social Assistance	59,590	69,990	10,400	1.6%
710000	Arts, Entertainment, and Recreation	7480	9,670	2,190	2.6%
720000	Accommodation and Food Services	35,870	43,650	7,780	2.0%
810000	Other Services (except Government)	10070	11,420	1,360	1.3%
910000	Total Federal Government Employment	5,040	4,580	-470	-1.0%
999200	State Government, Excluding Education and Hospitals	3030	2,250	-780	-2.9%
999300	Local Government, Excluding Education and Hospitals	15,310	15,860	540	0.4%

Source: Employment Projections (EP) program, Oklahoma Employment Security Commission, Economic Research & Analysis Division, <u>Industry and Occupational Employment Projections (oklahoma.gov)</u>.

Industry and Occupational Employment Projections

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections

SOC Code	Occupation	2020 Employment	2030 Employment		Percent Change	Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
00-0000	Total, All Occupations	440,130	480,640	40,500	9.2	540,510	\$38,210			
11-1011	Chief Executives	930	900	-30	-3.23	590	\$169,120	Bachelor's degree	5 years or m	None
11-1021	General and Operations Managers	6,870	7,710	850	12.31	6,820	\$81,100	Bachelor's degree	5 years or m	None
11-1031	Legislators	50	50	0	0	40	\$59,880	Bachelor's degree	Less than 5 years	None
11-2021	Marketing Managers	390	440	50	12.18	400	\$121,020	Bachelor's degree	5 years or more	None
11-2022	Sales Managers	790	870	80	10.13	770	\$103,340	Bachelor's degree	Less than 5 years	None
11-2030	Public Relations and Fundraising Managers	110	130	20	14.41	120	99870	Bachelor's degree	5 years or more	None
11-3010	Administrative Services and Facilities Managers	1,680	1,870	190	11.2	1,580	\$95,620	Bachelor's degree	Less than 5 years	None
11-3021	Computer and Information Systems Managers	980	1,120	150	14.87	910	\$120,440	Bachelor's degree	5 years or more	None
11-3031	Financial Managers	1,610	1,950	340	21.17	1,600	\$129,180	Bachelor's degree	5 years or more	None
11-3051	Industrial Production Managers	640	700	60	9.43	500	\$107,030	Bachelor's degree	5 years or more	None
11-3061	Purchasing Managers	160	180	20	9.2	140	103540	Bachelor's degree	5 years or more	None
11-3071	Transportation, Storage, and Distribution Managers	350	370	20	5.78	280	\$84,440	High school diploma or equivalent	5 years or more	None
11-3111	Compensation and Benefits Managers	90	90	10	5.68	70	\$113,710	Bachelor's degree	5 years or more	None
11-3121	Human Resources Managers	450	510	50	11.73	430	\$106,520	Bachelor's degree	5 years or more	None
11-3131	Training and Development Managers	80	90	10	14.29	80	\$89,450	Bachelor's degree	5 years or more	None
11-9021	Construction Managers	1,390	1,590	200	14.47	1,260	\$77,370	Bachelor's degree	None	Moderate- term on- the-job training
11-9031	Education and Childcare Administrators, Preschool and Daycare	200	230	30	14.29	180	\$54,790	Bachelor's degree	Less than 5 years	None
11-9032	Education Administrators, Kindergarten through Secondary	680	740	60	8.48	570	\$79,560	Master's degree	5 years or more	None
11-9033	Education Administrators, Postsecondary	260	280	20	8.14	210	\$79,020	Master's degree	Less than 5 years	None
11-9039	Education Administrators, All Other	70	90	10	18.92	70	\$57,730	Bachelor's degree	Less than 5 years	None
11-9041	Architectural and Engineering Managers	840	910	70	8.45	670	143200	Bachelor's degree	5 years or more	None
11-9039	Education Administrators, All Other	120	130	10	6.84	90	\$96,100	Bachelor's degree	Less than 5 years	None
11-9041	Architectural and Engineering Managers	980	1,060	80	7.98	780	\$136,630	Bachelor's degree	5 years or more	None

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment		Percent Change	Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
11-9051	Food Service Managers	1,140	1,310	170	15.16	1,530	\$56,400	High school diploma or equivalent	Less than 5 years	None
11-9081	Lodging Managers	70	70	10	10.45	80	\$52,200	High school diploma or equivalent	Less than 5 years	None
11-9111	Medical and Health Services Managers	1,390	1,870	480	34.65	1,720	\$87,800	Bachelor's degree	Less than 5 years	None
11-9141	Property, Real Estate, and Community Association Managers	1,540	1,610	70	4.27	1,260	\$69,470	High school diploma or equivalent	Less than 5 years	None
11-9151	Social and Community Service Managers	240	280	40	16.67	260	\$64,400	Bachelor's degree	Less than 5 years	None
11-9198	Personal Service Managers; Entertainment & Recreation Managers, Except Gambling; and Managers, All Other	720	790	70	9.85	620	\$94,080	Bachelor's degree	Less than 5 years	None
13-1020	Buyers and Purchasing Agents	1,610	1,570	-40	-2.61	1,520	58620	Bachelor's degree	None	Moderate- term on- the-job training
13-1031	Claims Adjusters, Examiners, and Investigators	630	620	-10	-1.74	460	\$72,490	High school diploma or equivalent	None	Long-term on-the-job training
13-1041	Compliance Officers	1,070	1,150	80	7.57	940	\$55,360	Bachelor's degree	None	Moderate- term on- the-job training
13-1051	Cost Estimators	770	790	20	2.58	710	\$63,410	Bachelor's degree	None	Moderate- term on- the-job training
13-1071	Human Resources Specialists	2,010	2,270	260	13.11	2,260	\$53,890	Bachelor's degree	None	None
13-1075	Labor Relations Specialists	220	210	-10	-4.13	190	18140	Bachelor's degree	Less than 5 years	None
13-1081	Logisticians	610	800	190	31.69	800	\$60,120	Bachelor's degree	None	None
13-1111	Management Analysts	1,880	2,190	300	16.03	2,130	\$86,390	Bachelor's degree	Less than 5 years	None
13-1121	Meeting, Convention, and Event Planners	340	400	60	17.2	440	\$53,430	Bachelor's degree	None	None
13-1131	Fundraisers	200	230	30	15.82	230	\$57,320	Bachelor's degree	None	None
13-1141	Compensation, Benefits, and Job Analysis Specialists	320	360	40	11.56	340	\$61,260	Bachelor's degree	Less than 5 years	None
13-1151	Training and Development Specialists	1,270	1,410	130	10.52	1,360	\$42,380	Bachelor's degree	Less than 5 years	None
13-1161	Market Research Analysts and Marketing Specialists	1,630	2,040	410	25.32	2,190	\$54,640	Bachelor's degree	None	None
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2,430	2,580	150	6	1,960	\$76,220	Bachelor's degree	None	None
13-2011	Accountants and Auditors	4,840	5,320	480	10	4,910	\$70,410	Bachelor's degree	None	None
13-2020	Property Appraisers and Assessors	190	200	10	4.19	150	40940	Bachelor's degree	None	Long-term on-the-job training
13-2031	Budget Analysts	100	110	10	6.93	90	\$66,020	Bachelor's degree	None	None
13-2041	Credit Analysts	440	430	-10	-2.07	350	\$56,470	Bachelor's degree	None	None
13-2052	Personal Financial Advisors	580	620	40	7.06	470	\$105,630	Bachelor's degree	None	Long-term on-the-job
13-2053	Insurance Underwriters	140	140	0	0	100	\$63,050	Bachelor's degree	None	Moderate- term on- the-job training
		190	210	30	15.68	180	\$74,140	Bachelor's	None	Long-term

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

soc	Occupation	2020	2030	Numeric	Percent	Total Annual	Median	Typical Entry Level	Work	Typical On-The-
Code	Occupation	Employment	Employment	Change	Change	Openings		Education	Required	Job
13-2071	Credit Counselors	110	120	10	9.43	90	\$37,140	Bachelor's degree	None	Training Moderate- term on- the-job training
13-2072	Loan Officers	960	1,000	50	4.92	790	\$72,680	Bachelor's degree	Less than 5	Moderate- term on- the-job training
13-2081	Tax Examiners and Collectors, and Revenue Agents	70	60	-10	-11.43	50	\$61,330	Bachelor's degree	None	Moderate- term on- the-job training
13-2082	Tax Preparers	330	350	20	4.5	390	\$40,680	High school diploma or equivalent	None	Moderate- term on- the-job training
13-2098	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	1,070	1,180	110	10.16	950	\$74,580	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	1,000	1,110	110	11.4	840	\$89,120	Bachelor's degree	None	None
15-1212	Information Security Analysts	310	430	120	37.26	380	83690	Bachelor's degree	Less than 5 years	None
15-1231	Computer Network Support Specialists	750	830	80	10.39	640	\$60,920	Associate's degree	None	None
15-1232	Computer User Support Specialists	2,040	2,270	230	11.07	1,770	\$48,930	Some college, no degree	None	None
15-1241	Computer Network Architects	540	580	40	7.24	370	\$91,480	Bachelor's degree	5 years or more	None
15-1244	Network and Computer Systems Administrators	690	750	60	8.83	520	\$72,010	Bachelor's degree	None	None
15-1245	Database Administrators and Architects	940	1,020	80	8.75	790	77360	Bachelor's degree	None	None
15-1251	Computer Programmers	410	370	-50	-11.41	210	\$78,520	Bachelor's degree	None	None
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	2,660	3,360	700	26.28	2,870	\$90,570	Bachelor's degree	None	None
15-1257	Web Developers and Digital Interface Designers	290	340	50	16.49	280	\$52,230	Bachelor's degree	None	None
15-1299	Computer Occupations, All Other	480	540	50	11.16	420	\$71,500	Bachelor's degree	None	None
15-2031	Operations Research Analysts	120	160	40	29.27	130	\$72,060	Bachelor's degree	None	None
15-2098	Data Scientists and Mathematical Science Occupations, All Other	160	210	50	29.81	180	\$80,020	Bachelor's degree	None	None
17-1011	Architects, Except Landscape and Naval	390	410	20	5.91	300	\$74,260	Bachelor's degree	None	Internship /residency
17-1022	Surveyors	100	110	10	6.73	100	\$71,990	Bachelor's degree	None	Internship /residency
17-2011	Aerospace Engineers	610	660	50	7.72	400	\$96,590	Bachelor's degree	None	None
17-2041	Chemical Engineers	80	90	10	14.1	60	115570	Bachelor's degree	None	None
17-2051	Civil Engineers	1,040	1,170	130	12.3	900	\$97,320	Bachelor's degree	None	None
17-2061	Computer Hardware Engineers	50	60	0	5.56	40	\$120,630	Bachelor's degree	None	None
17-2071	Electrical Engineers	810	950	140	17.16	700	\$102,710	Bachelor's degree	None	None
17-2072	Electronics Engineers, Except Computer	320	380	60	18.18	280	\$87,280	Bachelor's degree	None	None
17-2081	Environmental Engineers	240	260	20	7.47	200	\$85,690	Bachelor's degree	None	None
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	250	270	20	9.8	180	\$81,160	Bachelor's degree	None	None
17-2112	Industrial Engineers	1,040	1,210	170	15.92	860	\$85,480	Bachelor's degree	None	None
17-2131	Materials Engineers	110	120	10	10.81	80	\$86,640	Bachelor's degree	None	None
17-2141	Mechanical Engineers	730	810	80	10.84	530	\$92,750	Bachelor's degree	None	None
17-2171	Petroleum Engineers	520	590	70	13.19	430	*	Bachelor's degree	None	None

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
17-3011	Architectural and Civil Drafters	490	500	10	1.01	470	\$59,490	Associate's degree	None	None
17-3012	Electrical and Electronics Drafters	170	200	30	14.71	200	\$62,980	Associate's degree	None	None
17-3013	Mechanical Drafters	410	400	-10	-1.95	380	\$63,880	Associate's degree	None	None
17-3021	Aerospace Engineering and Operations Technologists and Technicians	130	140	10	6.3	130	*	Associate's degree	None	None
17-3022	Civil Engineering Technologists and Technicians	210	230	10	5.63	210	\$55,840	Associate's degree	None	None
17-3025	Environmental Engineering Technologists and Technicians	150	160	10	5.88	150	\$48,480	Associate's degree	None	None
17-3026	Industrial Engineering Technologists and Technicians	120	130	10	7.76	120	66060	Associate's degree	None	None
17-3027	Mechanical Engineering Technologists and Technicians	110	120	10	7.14	110	\$57,890	Associate's degree	None	None
17-3031	Surveying and Mapping Technicians	230	250	20	8.81	310	\$58,460	High school diploma or equivalent	None	Moderate- term on- the-job training
17-3098	Calibration and Engineering Technologists and Technicians, Except Drafters, All Other	450	490	40	8.15	470	\$58,300	Associate's degree	None	None
19-1029	Biological Scientists, All Other	70	60	0	-6.15	50	\$76,720	Bachelor's degree	None	None
19-2031	Chemists	70	80	10	13.64	70	67800	Bachelor's degree	None	None
19-2041	Environmental Scientists and Specialists, Including Health	150	160	10	9.46	160	\$64,010	Bachelor's degree	None	None
19-2042	Geoscientists, Except Hydrologists and Geographers	250	290	40	15.6	300	\$139,820	Bachelor's degree	None	None
19-3031	Clinical, Counseling, and School Psychologists	180	200	20	11.73	140	\$91,820	Doctoral or profession al degree	None	Internship /residency
19-3039	Psychologists, All Other	80	80	0	-1.27	50	*	Master's degree	None	Internship /residency
19-3051	Urban and Regional Planners	60	60	10	8.93	50	\$63,710	Master's degree	None	None
19-4031	Chemical Technicians	80	90	10	7.5	100	\$48,650	Associate's degree	None	Moderate- term on- the-job training
19-4042	Environmental Science and Protection Technicians, Including Health	100	110	10	10.2	140	\$45,980	Associate's degree	None	None
19-4045	Geological and Hydrologic Technicians	260	310	40	16.67	390	\$76,880	Associate's degree	None	Moderate- term on- the-job training
19-4099	Life, Physical, and Social Science Technicians, All Other	170	180	20	9.52	230	\$46,680	Associate's degree	None	None
19-5011	Occupational Health and Safety Specialists	310	340	30	11.11	260	72320	Bachelor's degree	None	None
21-1012	Educational, Guidance, and Career Counselors and Advisors	730	820	90	12.47	800	\$47,530	Master's degree	None	None
21-1013	Marriage and Family Therapists	140	170	30	21.13	170	\$39,980	Master's degree	None	Internship /residency
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	1,010	1,280	270	26.31	1,320	\$45,000	Bachelor's degree	None	None
21-1021	Child, Family, and School Social Workers	970	990	20	1.54	910	39660	Bachelor's degree	None	None
21-1022	Healthcare Social Workers	500	590	90	17	580	\$50,250	Master's degree	None	Internship /residency
21-1023	Mental Health and Substance Abuse Social Workers	390	460	70	17.14	450	\$40,770	Master's degree	None	Internship /residency
21-1029	Social Workers, All Other	60	60	0	-1.67	50	\$51,760	Bachelor's degree	None	None
21-1091	Health Education Specialists	230	260	30	13.6	280	\$53,200	Bachelor's degree	None	None
21-1091	Health Education Specialists	230	260	30	13.6	280	\$53,200	Bachelor's degree	None	None
21-1092	Probation Officers and Correctional Treatment Specialists	110	90	-20	-15.89	60	*	Bachelor's degree	None	Short-term on-the-job
21-1093	Social and Human Service Assistants	180	210	30	14.67	260	\$36,230	High school diploma or	None	Short-term on-the-job

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

		ı								
SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
21-1094	Community Health Workers	80	90	10	14.29	100	\$45,320	High school	None	Short-term on-the-job
21-2011	Clergy	130	140	20	11.72	150	\$47,640	diploma or Bachelor's degree	None	Moderate- term on- the-job training
23-1011	Lawyers	1,590	1,750	160	10.09	930	\$120,210	Doctoral or profession al degree	None	None
23-1023	Judges, Magistrate Judges, and Magistrates	90	80	-20	-17.39	20	\$86,840	Doctoral or profession al degree	5 years or more	Short-term on-the-job training
23-2011	Paralegals and Legal Assistants	560	640	80	14.39	710	\$49,370	Associate's degree	None	None
23-2093	Title Examiners, Abstractors, and Searchers	260	280	20	8.46	280	\$57,620	High school diploma or equivalent	None	Moderate- term on- the-job training
25-1011	Business Teachers, Postsecondary	120	130	10	7.69	120	\$69,450	Doctoral or profession al degree	None	None
25-1022	Mathematical Science Teachers, Postsecondary	140	150	10	5.76	140	\$63,390	Doctoral or profession al degree	None	None
25-1032	Engineering Teachers, Postsecondary	70	80	10	13.24	80	*	Doctoral or profession al degree	None	None
25-1071	Health Specialties Teachers, Postsecondary	230	290	60	25	290	\$57,470	Doctoral or profession al degree	Less than 5 years	None
25-1072	Nursing Instructors and Teachers, Postsecondary	140	180	30	23.08	180	\$65,970	Doctoral or profession al degree	Less than 5 years	None
25-1121	Art, Drama, and Music Teachers, Postsecondary	120	130	10	11.3	120	70650	Master's degree	None	None
25-1122	Communications Teachers, Postsecondary	80	90	10	7.23	80	\$59,600	Doctoral or profession al degree	None	None
25-1123	English Language and Literature Teachers, Postsecondary	60	60	0	6.78	60	\$61,600	Doctoral or profession al degree	None	None
25-1194	Career/Technical Education Teachers, Postsecondary	540	570	30	5.96	540	\$48,690	Bachelor's degree	Less than 5 years	None
25-2011	Preschool Teachers, Except Special Education	1,540	1,890	360	23.24	2,060	\$32,660	Associate's degree	None	None
25-2012	Kindergarten Teachers, Except Special Education	320	350	30	8.72	360	\$52,840	Bachelor's degree	None	None
25-2021	Elementary School Teachers, Except Special Education	4,100	4,430	320	7.9	3,340	\$51,580	Bachelor's degree	None	None
25-2022	Middle School Teachers, Except Special and Career/Technical Education	1,730	1,870	140	7.92	1,410	\$49,150	Bachelor's degree	None	None
25-2023	Career/Technical Education Teachers, Middle School	90	100	10	8.6	80	\$39,950	Bachelor's degree	Less than 5 years	None
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	2,350	2,550	200	8.39	1,840	\$52,820	Bachelor's degree	None	None
25-2032	Career/Technical Education Teachers, Secondary School	100	110	10	8.25	80	\$50,750	Bachelor's degree	Less than 5 years	None
25-2052	Special Education Teachers, Kindergarten and Elementary School	490	540	40	8.3	410	\$54,400	Bachelor's degree	None	None
25-2057	Special Education Teachers, Middle School	230	250	20	7.93	190	\$55,380	Bachelor's degree	None	None
25-2058	Special Education Teachers, Secondary School	350	380	30	8.24	290	\$53,710	Bachelor's degree	None	None
25-3021	Self-Enrichment Teachers	460	580	120	26.14	710	\$35,500	High school diploma or equivalent	Less than 5 years	None
25-3031	Substitute Teachers, Short-Term	1,150	1,300	160	13.6	1,540	*	Bachelor's degree	None	None
25-3097	Teachers and Instructors, All Other, Except Substitute Teachers	450	530	80	17.04	630	\$31,930	Bachelor's degree	None	None

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code Occupation 2020 Employment Employment 2030 Employment Employment Numeric Employment Change Percent Annual Annual Openings Total Annual Annual Openings Median Annual Openings 25-4012 Curators 50 60 10 22 70 \$48,280 25-4013 Museum Technicians and Conservators 60 70 10 21.43 80 \$27,990 25-4022 Librarians and Media Collections Specialists 350 380 30 8.07 360 \$56,210 25-4031 Library Technicians 140 140 -10 -3.47 200 \$32,040 25-9031 Instructional Coordinators 340 370 40 10.65 370 \$57,870 25-9045 Teaching Assistants, Except Postsecondary 3,000 3,290 290 9.59 3,170 \$22,480	Typical Entry Level Education Master's degree Bachelor's degree Master's degree Postsecond ary non- degree award Master's degree	Work Experience Required None None None	Typical On-The- Job Training None None
25-4013 Museum Technicians and Conservators 60 70 10 21.43 80 \$27,990 25-4022 Librarians and Media Collections Specialists 350 380 30 8.07 360 \$56,210 25-4031 Library Technicians 140 140 -10 -3.47 200 \$32,040 25-9031 Instructional Coordinators 340 370 40 10.65 370 \$57,870	degree Bachelor's degree Master's degree Postsecond ary non- degree award Master's	None None	None
25-4022 Librarians and Media Collections Specialists 350 380 30 8.07 360 \$56,210 25-4031 Library Technicians 140 140 -10 -3.47 200 \$32,040 25-9031 Instructional Coordinators 340 370 40 10.65 370 \$57,870	Bachelor's degree Master's degree Postsecond ary non- degree award Master's	None	
25-4031 Library Technicians 140 140 -10 -3.47 200 \$32,040 25-9031 Instructional Coordinators 340 370 40 10.65 370 \$57,870	Master's degree Postsecond ary non- degree award Master's		None
25-9031 Instructional Coordinators 340 370 40 10.65 370 \$57,870	Postsecond ary non- degree award Master's		
		, tone	None
25 0045 Teaching Assistants Except Postsoconday, 2 000 2 300 050 3 470 533 490		5 years or more	None
25-9045 Teaching Assistants, Except Postsecondary 3,000 3,290 290 9.59 3,170 \$22,480	Some college, no degree	None	None
25-9099 Educational Instruction and Library Workers, All Other 310 330 30 8.52 320 *	Bachelor's degree	None	None
27-1011 Art Directors 100 110 20 16.84 120 \$77,100	Bachelor's degree	5 years or more	None
27-1023 Floral Designers 120 100 -20 -15.25 80 \$29,210	High school diploma or equivalent	None	Moderate- term on- the-job training
27-1024 Graphic Designers 500 530 30 5.39 490 \$40,570	Bachelor's degree	None	None
27-1025 Interior Designers 340 350 10 3.83 320 \$43,390	Bachelor's degree	None	None
27-1026 Merchandise Displayers and Window Trimmers 660 700 40 5.6 650 \$29,540	High school diploma or equivalent	None	Short-term on-the-job training
27-2012 Producers and Directors 360 480 120 33.8 480 \$53,700	Bachelor's degree	Less than 5 years	None
27-2022 Coaches and Scouts 730 920 190 25.48 1,320 \$30,840	Bachelor's degree	None	None
27-3023 News Analysts, Reporters, and Journalists 180 210 30 16.95 240 *	Bachelor's degree	None	None
27-3031 Public Relations Specialists 310 350 40 14.38 340 \$54,360	Bachelor's degree	None	None
27-3041 Editors 230 250 30 12 260 \$50,110	Bachelor's degree	Less than 5 years	None
27-3042 Technical Writers 210 240 30 14.08 230 \$52,130	Bachelor's degree	Less than 5 years	Short-term on-the-job training
27-3043 Writers and Authors 170 190 30 14.97 200 \$45,090	Bachelor's degree	None	Long-term on-the-job training
27-3091 Interpreters and Translators 190 220 30 16.04 220 \$44,150	Bachelor's degree	None	None
27-4011 Audio and Video Technicians 240 280 50 19.41 300 \$44,770	Postsecond ary non- degree award	None	Short-term on-the-job training
27-4021 Photographers 300 340 40 13.42 330 \$36,430	High school diploma or equivalent	None	Moderate- term on- the-job training
27-4031 Camera Operators, Television, Video, and Film 220 310 90 41.2 330 \$39,610	Bachelor's degree	None	None
27-4032 Film and Video Editors 80 110 30 43.42 120 \$45,480	Bachelor's degree	None	None
25-2058 Special Education Teachers, Secondary School 350 380 30 8.24 290 \$53,710	Bachelor's degree	None	None
25-3021 Self-Enrichment Teachers 460 580 120 26.14 710 \$35,500	High school diploma or equivalent	Less than 5 years	None
25-3031 Substitute Teachers, Short-Term 1,150 1,300 160 13.6 1,540 *	Bachelor's degree	None	None
25-3097 Teachers and Instructors, All Other, Except Substitute Teachers 450 530 80 17.04 630 \$31,930	Bachelor's degree	None	None

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
29-1011	Chiropractors	110	120	20	14.29	40	*	Doctoral or professional degree	None	None
29-1021	Dentists, General	220	250	20	10.81	90	*	Doctoral or professional degree	None	None
29-1031	Dietitians and Nutritionists	190	210	20	12.7	160	\$63,240	Bachelor's degree	None	Internship /residency
29-1041	Optometrists	270	300	30	12.36	120	\$124,780	Doctoral or professional degree	None	None
29-1051	Pharmacists	730	750	20	2.6	300	\$124,450	Doctoral or professional degree	None	None
29-1071	Physician Assistants	290	390	100	35.05	290	\$115,750	Master's degree	None	None
29-1122	Occupational Therapists	340	410	70	22.09	280	\$90,240	Master's degree	None	None
29-1123	Physical Therapists	600	740	140	23.53	410	\$85,730	Doctoral or professional degree	None	None
29-1124	Radiation Therapists	90	100	10	11.76	60	\$77,820	Associate's degree	None	None
29-1126	Respiratory Therapists	530	650	120	22.12	390	\$33,100	Associate's degree	None	None
29-1127	Speech-Language Pathologists	530	710	180	33.15	550	\$54,420	Master's degree	None	Internship /residency
29-1131	Veterinarians	340	400	70	20.24	190	\$67,040	Doctoral or professional degree	None	None
29-1141	Registered Nurses	8,850	9,910	1,060	11.95	5,920	\$66,250	Bachelor's degree	None	None
29-1151	Nurse Anesthetists	240	280	40	15.42	170	\$175,660	Master's degree	None	None
29-1171	Nurse Practitioners	410	610	210	50.12	470	\$115,040	Master's degree	None	None
29-1211	Anesthesiologists	350	360	10	2.29	110	*	Doctoral or professional degree	None	Internship /residency
29-1215	Family Medicine Physicians	510	550	50	8.88	190	*	Doctoral or professional degree	None	Internship /residency
29-1216	General Internal Medicine Physicians	130	130	0	3.15	40	*	Doctoral or professional degree	None	Internship /residency
29-1223	Psychiatrists	80	90	10	14.81	40	\$170,610	Doctoral or professional degree	None	Internship /residency
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	1,290	1,380	90	7.21	460	*	Doctoral or professional degree	None	Internship /residency
29-1248	Surgeons, Except Ophthalmologists	140	140	0	-0.74	40	*	Doctoral or professional degree	None	Internship /residency
29-1292	Dental Hygienists	610	690	90	14.36	480	\$87,450	Associate's degree	None	None
29-2010	Clinical Laboratory Technologists and Technicians	1,120	1,280	150	13.71	910	\$46,320	Bachelor's degree	None	None
29-2031	Cardiovascular Technologists and Technicians	230	250	20	10.67	190	\$47,190	Associate's degree	None	None
29-2032	Diagnostic Medical Sonographers	250	300	60	22.36	250	\$72,260	Associate's degree	None	None
29-2033	Nuclear Medicine Technologists	50	60	10	11.54	50	\$75,210	Associate's degree	None	None
29-2034	Radiologic Technologists and Technicians	730	810	80	11.26	620	\$57,360	Associate's degree	None	None
29-2035	Magnetic Resonance Imaging Technologists	130	150	10	10.45	110	\$65,030	Associate's degree Postsecondary	Less than 5 years	None
29-2040	Emergency Medical Technicians and Paramedics	590	670	80	14.24	490	\$39,930	non-degree award Associate's	None	None
29-2051	Dietetic Technicians	90	100	10	6.52	70	\$24,100	degree	None	None
29-2052	Pharmacy Technicians	1,220	1,350	130	10.85	1,030	\$30,910	High school diploma or equivalent	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
29-2053	Psychiatric Technicians	240	280	40	16.05	220	\$29,120	Postsecondary non-degree award	Less than 5 years	Short-term on-the-job training
29-2055	Surgical Technologists	560	630	70	11.61	480	\$38,840	Postsecondary non-degree award	None	None
29-2056	Veterinary Technologists and Technicians	300	350	50	18.12	280	\$34,040	Associate's degree	None	None
29-2061	Licensed Practical and Licensed Vocational Nurses	2,420	2,710	290	12.06	2,230	\$44,770	Postsecondary non-degree award	None	None
29-2081	Opticians, Dispensing	150	170	20	11.69	140	\$30,080	High school diploma or equivalent	None	Long-term on-the-job training
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	820	910	90	10.88	700	\$40,330	Postsecondary non-degree award	None	None
29-9098	Health Information Technologists, Medical Registrars, Surgical Assistants, & Healthcare Practitioners, AO	620	710	90	14.01	550	\$39,600	Postsecondary non-degree award	None	None
31-1120	Home Health and Personal Care Aides	5,650	7,710	2,060	36.49	10,110	\$20,920	High school diploma or equivalent	None	Short-term on-the-job training
31-1131	Nursing Assistants	5,400	6,000	600	11.08	7,480	\$26,970	Postsecondary non-degree award	None	None
31-1132	Orderlies	230	250	20	10.18	310	\$25,520	High school diploma or equivalent	None	Short-term on-the-job training
31-1133	Psychiatric Aides	120	130	10	12.07	160	\$24,970	High school diploma or equivalent	None	Short-term on-the-job training
31-2011	Occupational Therapy Assistants	250	350	100	40.65	460	\$71,230	Associate's degree	None	None
31-2021	Physical Therapist Assistants	320	430	120	37.03	560	\$53,650	Associate's degree	None	None
31-9011	Massage Therapists	160	210	50	32.3	260	\$35,940	Postsecondary non-degree award	None	None
31-9091	Dental Assistants	1,040	1,180	140	13.52	1,430	\$38,010	Postsecondary non-degree award	None	None
31-9092	Medical Assistants	2,420	2,940	520	21.4	3,620	\$31,450	Postsecondary non-degree award	None	None
31-9093	Medical Equipment Preparers	160	180	20	11.46	220	\$33,190	High school diploma or equivalent	None	Moderate- term on- the-job training
31-9094	Medical Transcriptionists	230	250	20	9.09	360	\$41,230	Postsecondary non-degree award	None	None
31-9095	Pharmacy Aides	190	170	-20	-9.47	220	\$24,490	High school diploma or equivalent	None	Short-term on-the-job training
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	370	440	80	20.71	720	\$29,360	High school diploma or equivalent	None	Short-term on-the-job training
31-9097	Phlebotomists	580	730	140	24.74	900	\$30,380	Postsecondary non-degree award	None	None
31-9099	Healthcare Support Workers, All Other	80	80	10	10.67	100	\$40,740	High school diploma or equivalent	None	None

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
33-1012	First-Line Supervisors of Police and Detectives	310	330	20	5.5	220	\$74,210	High school diploma or equivalent	Less than 5 years	Moderate- term on- the-job training
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	80	80	10	6.67	50	\$71,260	Postsecondary non-degree award	Less than 5 years	Moderate- term on- the-job training
33-1090	Miscellaneous First-Line Supervisors, Protective Service Workers	310	350	50	14.61	360	\$44,190	High school diploma or equivalent	Less than 5	None
33-2011	Firefighters	1,020	1,090	70	7.07	850	\$46,020	Postsecondary non-degree award	None	Long-term on-the-job training
33-3012	Correctional Officers and Jailers	730	660	-70	-10.08	570	\$32,500	High school diploma or equivalent	None	Moderate- term on- the-job training
33-3021	Detectives and Criminal Investigators	160	150	-10	-6.96	100	\$63,940	High school diploma or equivalent	Less than 5 years	Moderate- term on- the-job training
33-3051	Police and Sheriff's Patrol Officers	1,680	1,780	100	5.71	1,410	\$53,410	High school diploma or equivalent	None	Moderate- term on- the-job training
33-9031	Gambling Surveillance Officers and Gambling Investigators	80	100	10	15.85	130	\$28,860	High school diploma or equivalent	Less than 5 years	Moderate- term on- the-job training
33-9032	Security Guards	2,820	3,310	490	17.22	4,480	\$28,980	High school diploma or equivalent	None	Short-term on-the-job training
33-9091	Crossing Guards and Flaggers	90	90	10	8.05	190	\$20,680	No formal educational credential	None	Short-term on-the-job training
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	80	100	20	28	230	\$19,640	No formal educational credential	None	Short-term on-the-job training
33-9093	Transportation Security Screeners	120	110	-10	-5.17	90	\$40,370	High school diploma or equivalent	None	Short-term on-the-job training
33-9098	School Bus Monitors and Protective Service Workers, All Other	230	250	20	8.19	620	\$30,470	High school diploma or equivalent	None	Short-term on-the-job training
35-1011	Chefs and Head Cooks	160	200	40	25.64	270	\$49,350	High school diploma or equivalent	5 years or more	None
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	3,990	4,870	890	22.2	7,370	\$28,710	High school diploma or equivalent	Less than 5 years	None
35-2011	Cooks, Fast Food	3,880	3,820	-60	-1.6	5,490	\$18,940	No formal educational credential	None	Short-term on-the-job training
35-2012	Cooks, Institution and Cafeteria	2,380	2,600	220	9.32	3,820	\$24,010	No formal educational credential	None	Short-term on-the-job training
35-2014	Cooks, Restaurant	4,560	6,780	2,220	48.59	10,400	\$26,360	No formal educational credential	Less than 5 years	Moderate- term on- the-job training
35-2021	Food Preparation Workers	1,580	1,760	180	11.21	3,020	\$25,020	No formal educational credential	None	Short-term on-the-job training
35-3011	Bartenders	2,180	2,860	680	30.93	4,870	\$18,590	No formal educational credential	None	Short-term on-the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
35-3023	Fast Food and Counter Workers	8,820	10,360	1,550	17.52	20,980	\$19,040	No formal educational credential	None	Short-term on-the-job training
35-3031	Waiters and Waitresses	6,920	8,300	1,380	19.88	16,050	\$18,430	No formal educational credential	None	Short-term on-the-job training
35-3041	Food Servers, Nonrestaurant	160	180	20	13.21	290	\$23,640	No formal educational credential	None	Short-term on-the-job training
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	1,080	1,380	300	27.59	2,420	\$19,880	No formal educational credential	None	Short-term on-the-job training
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,130	1,420	290	25.82	3,230	\$19,360	No formal educational credential	None	Short-term on-the-job training
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	660	700	50	7.32	810	\$32,340	High school diploma or equivalent	Less than 5 years	None
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	590	630	30	5.75	660	\$49,910	High school diploma or equivalent	Less than 5 years	None
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4,120	4,470	350	8.49	6,050	\$23,930	No formal educational credential	None	Short-term on-the-job training
37-2012	Maids and Housekeeping Cleaners	2,640	2,980	340	12.79	4,060	\$22,220	No formal educational credential	None	Short-term on-the-job training
37-3011	Landscaping and Groundskeeping Workers	2,520	2,720	210	8.15	3,580	\$30,260	No formal educational credential	None	Short-term on-the-job training
39-1013	First-Line Supervisors of Gambling Services Workers	150	170	30	16.78	200	\$42,050	High school diploma or equivalent	Less than 5 years	None
39-1098	First-Line Supervisors of Personal Service & Entertainment and Recreation Workers, Exc Gambling Services	540	710	170	30.76	830	\$31,250	High school diploma or equivalent	Less than 5 years	None
39-2021	Animal Caretakers	1,110	1,520	400	36.33	2,340	\$23,490	High school diploma or equivalent	None	Short-term on-the-job training
39-3031	Ushers, Lobby Attendants, and Ticket Takers	520	690	160	31.17	1,540	\$18,150	No formal educational credential	None	Short-term on-the-job training
39-3091	Amusement and Recreation Attendants	530	650	120	23	1,350	\$19,610	No formal educational credential	None	Short-term on-the-job training
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	60	70	10	23.33	150	\$24,390	High school diploma or equivalent	None	Short-term on-the-job training
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,590	1,880	290	18.42	2,170	\$23,650	Postsecondary non-degree award	None	None
39-6011	Baggage Porters and Bellhops	200	240	50	23.59	330	\$23,060	High school diploma or equivalent	None	Short-term on-the-job training
39-6012	Concierges	100	110	20	16.67	150	\$25,750	High school diploma or equivalent	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
39-7010	Tour and Travel Guides	80	100	20	18.75	150	\$30,470	High school diploma or equivalent	None	Moderate- term on- the-job training
39-9011	Childcare Workers	2,160	2,420	250	11.74	3,400	\$20,000	High school diploma or equivalent	None	Short-term on-the-job training
39-9031	Exercise Trainers and Group Fitness Instructors	1,040	1,390	340	32.89	2,210	\$47,930	High school diploma or equivalent	None	Short-term on-the-job training
39-9032	Recreation Workers	290	340	50	18.25	530	\$29,340	High school diploma or equivalent	None	Short-term on-the-job training
39-9041	Residential Advisors	170	190	20	11.24	270	\$27,280	High school diploma or equivalent	None	Short-term on-the-job training
41-1011	First-Line Supervisors of Retail Sales Workers	5,020	5,070	50	0.94	5,320	\$35,870	High school diploma or equivalent	Less than 5 years	None
41-1012	First-Line Supervisors of Non-Retail Sales Workers	1,810	1,790	-30	-1.38	1,560	\$67,820	High school diploma or equivalent	Less than 5 years	None
41-2011	Cashiers	9,010	8,730	-280	-3.12	15,760	\$22,330	No formal educational credential	None	Short-term on-the-job training
41-2012	Gambling Change Persons and Booth Cashiers	140	160	20	15.56	280	\$22,820	No formal educational credential	None	Short-term on-the-job training
41-2021	Counter and Rental Clerks	590	640	50	9.06	750	\$26,720	No formal educational credential	None	Short-term on-the-job training
41-2022	Parts Salespersons	650	720	80	11.57	890	\$37,920	No formal educational credential	None	Moderate- term on- the-job training
41-2031	Retail Salespersons	14,610	15,580	970	6.63	21,870	\$24,850	No formal educational credential	None	Short-term on-the-job training
41-3011	Advertising Sales Agents	180	200	30	13.97	260	\$52,040	High school diploma or equivalent	None	Moderate- term on- the-job training
41-3021	Insurance Sales Agents	1,420	1,550	130	9.1	1,450	\$42,690	High school diploma or equivalent	None	Moderate- term on- the-job training
41-3031	Securities, Commodities, and Financial Services Sales Agents	890	950	60	6.71	850	\$64,770	Bachelor's degree	None	Moderate- term on- the-job training
41-3041	Travel Agents	120	120	10	7.83	150	\$37,380	High school diploma or equivalent	None	Moderate- term on- the-job training
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,900	3,280	380	13.03	3,870	\$51,650	High school diploma or equivalent	None	Moderate- term on- the-job training
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1,870	2,000	130	6.73	2,010	\$75,150	Bachelor's degree	None	Moderate- term on- the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,130	3,350	220	6.99	3,370	\$51,310	High school diploma or equivalent	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
41-9022	Real Estate Sales Agents	2,500	2,540	40	1.6	2,200	\$62,070	High school diploma or equivalent	None	Moderate- term on- the-job training
41-9031	Sales Engineers	180	200	20	11.17	210	\$93,610	Bachelor's degree	None	Moderate- term on- the-job training
41-9041	Telemarketers	510	410	-90	-18.34	590	\$24,060	No formal educational credential	None	Short-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	5,300	5,320	20	0.38	5,240	\$55,130	High school diploma or equivalent	Less than 5 years	None
43-3011	Bill and Account Collectors	1,150	1,070	-80	-7.04	1,110	\$38,740	High school diploma or equivalent	None	Moderate- term on- the-job training
43-3021	Billing and Posting Clerks	1,890	1,950	60	3.28	2,030	\$36,920	High school diploma or equivalent	None	Moderate- term on- the-job training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	6,650	6,620	-20	-0.33	7,250	\$42,250	Some college, no degree	None	Moderate- term on- the-job training
43-3041	Gambling Cage Workers	120	140	20	16.95	150	\$22,470	High school diploma or equivalent	None	Short-term on-the-job training
43-3051	Payroll and Timekeeping Clerks	610	540	-70	-10.89	520	\$47,100	High school diploma or equivalent	None	Moderate- term on- the-job training
43-3061	Procurement Clerks	190	180	-10	-2.7	160	\$36,960	High school diploma or equivalent	None	Moderate- term on- the-job training
43-3071	Tellers	1,600	1,370	-240	-14.73	1,300	\$28,870	High school diploma or equivalent	None	Short-term on-the-job training
43-4011	Brokerage Clerks	80	80	-10	-10.71	80	\$56,130	High school diploma or equivalent	None	Moderate- term on- the-job training
43-4031	Court, Municipal, and License Clerks	460	520	70	14.29	550	\$32,520	High school diploma or equivalent	None	Long-term on-the-job training
43-4041	Credit Authorizers, Checkers, and Clerks	130	130	-10	-3.79	120	\$38,210	High school diploma or equivalent	None	Moderate- term on- the-job training
43-4051	Customer Service Representatives	9,900	10,350	440	4.47	13,170	\$31,270	High school diploma or equivalent	None	Short-term on-the-job training
43-4061	Eligibility Interviewers, Government Programs	60	60	0	5.17	60	\$47,280	High school diploma or equivalent	None	Moderate- term on- the-job training
43-4071	File Clerks	390	350	-40	-11.2	390	\$31,940	High school diploma or equivalent	None	Short-term on-the-job training
43-4081	Hotel, Motel, and Resort Desk Clerks	440	520	80	17.73	860	\$20,550	High school diploma or equivalent	None	Short-term on-the-job training
43-4111	Interviewers, Except Eligibility and Loan	520	510	-10	-0.96	630	\$34,390	High school diploma or equivalent	None	Short-term on-the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
43-4121	Library Assistants, Clerical	210	200	-10	-3.79	310	\$27,780	High school diploma or equivalent	None	Short-term on-the-job training
43-4131	Loan Interviewers and Clerks	1,300	1,310	20	1.31	1,160	\$36,550	High school diploma or equivalent	None	Short-term on-the-job training
43-4141	New Accounts Clerks	180	150	-20	-13.14	130	\$38,280	High school diploma or equivalent	None	Moderate- term on- the-job training
43-4151	Order Clerks	600	500	-110	-17.58	470	\$28,990	Some college, no degree	None	Short-term on-the-job training
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	190	200	0	0.52	190	\$39,050	Associate's degree	None	None
43-4171	Receptionists and Information Clerks	2,760	2,850	100	3.44	3,600	\$29,830	High school diploma or equivalent	None	Short-term on-the-job training
43-4199	Information and Record Clerks, All Other	430	460	40	9.18	510	\$36,920	High school diploma or equivalent	None	Short-term on-the-job training
43-5021	Couriers and Messengers	610	540	-70	-11.68	480	\$30,810	High school diploma or equivalent	None	Short-term on-the-job training
43-5031	Public Safety Telecommunicators	240	260	20	8.37	250	\$31,980	High school diploma or equivalent	None	Moderate- term on- the-job training
43-5032	Dispatchers, Except Police, Fire, and Ambulance	550	570	20	4.2	530	\$37,340	High school diploma or equivalent	None	Moderate- term on- the-job training
43-5051	Postal Service Clerks	210	190	-30	-11.9	140	\$52,140	High school diploma or equivalent	None	Short-term on-the-job training
43-5052	Postal Service Mail Carriers	1,190	1,040	-150	-12.21	640	\$51,800	High school diploma or equivalent	None	Short-term on-the-job training
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	350	300	-60	-16.43	220	\$58,230	High school diploma or equivalent	None	Short-term on-the-job training
43-5061	Production, Planning, and Expediting Clerks	1,930	2,120	200	10.34	2,240	\$47,330	High school diploma or equivalent	None	Moderate- term on- the-job training
43-5071	Shipping, Receiving, and Inventory Clerks	2,200	2,110	-100	-4.31	1,960	\$36,360	High school diploma or equivalent	None	Short-term on-the-job training
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	150	170	20	14.67	170	\$48,850	High school diploma or equivalent	None	Short-term on-the-job training
43-6011	Executive Secretaries and Executive Administrative Assistants	1,740	1,420	-310	-18.04	1,370	\$46,630	High school diploma or equivalent	Less than 5 years	None
43-6012	Legal Secretaries and Administrative Assistants	410	330	-80	-19.13	320	\$36,230	High school diploma or equivalent	None	Moderate- term on- the-job training
43-6013	Medical Secretaries and Administrative Assistants	2,790	3,170	390	13.82	3,560	\$35,830	High school diploma or equivalent	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,570	4,280	-290	-6.29	4,430	\$34,470	High school diploma or equivalent	None	Short-term on-the-job training
43-9021	Data Entry Keyers	430	340	-90	-20.28	330	\$30,280	High school diploma or equivalent	None	Short-term on-the-job training
43-9031	Desktop Publishers	60	50	-10	-10.34	60	\$37,180	Associate's degree	None	Short-term on-the-job training
43-9041	Insurance Claims and Policy Processing Clerks	350	360	10	3.19	340	\$43,520	High school diploma or equivalent	None	Moderate- term on- the-job training
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	350	350	0	0.29	400	\$28,380	High school diploma or equivalent	None	Short-term on-the-job training
43-9061	Office Clerks, General	5,360	5,320	-40	-0.8	6,040	\$32,120	High school diploma or equivalent	None	Short-term on-the-job training
43-9071	Office Machine Operators, Except Computer	80	70	-10	-11.25	80	\$34,300	High school diploma or equivalent	None	Short-term on-the-job training
43-9199	Office and Administrative Support Workers, All Other	240	280	40	15.83	320	\$35,350	High school diploma or equivalent	None	Short-term on-the-job training
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	120	120	0	2.56	190	\$28,040	No formal educational credential	None	Short-term on-the-job training
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	150	160	10	3.33	240	\$19,080	No formal educational credential	None	Short-term on-the-job training
45-4022	Logging Equipment Operators	90	100	10	5.43	150	\$61,600	High school diploma or equivalent	None	Moderate- term on- the-job training
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	3,600	3,950	350	9.61	3,860	\$56,320	High school diploma or equivalent	5 years or more	None
47-2021	Brickmasons and Blockmasons	230	220	-10	-3.54	200	\$46,390	High school diploma or equivalent	None	Apprentice ship
47-2031	Carpenters	2,050	2,140	100	4.69	2,010	\$47,510	High school diploma or equivalent	None	Apprentice ship
47-2051	Cement Masons and Concrete Finishers	900	920	20	1.77	830	\$38,870	No formal educational credential	None	Moderate- term on- the-job training
47-2061	Construction Laborers	3,160	3,500	340	10.77	3,570	\$33,490	No formal educational credential	None	Short-term on-the-job training
47-2071	Paving, Surfacing, and Tamping Equipment Operators	430	460	30	7.28	490	\$38,420	High school diploma or equivalent	None	Moderate- term on- the-job training
47-2073	Operating Engineers and Other Construction Equipment Operators	1,670	1,770	110	6.31	1,900	\$38,860	High school diploma or equivalent	None	Moderate- term on- the-job training
47-2081	Drywall and Ceiling Tile Installers	120	130	10	7.5	110	\$41,130	No formal educational credential	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
47-2111	Electricians	2,580	2,920	340	13.24	3,150	\$47,470	High school diploma or equivalent	None	Apprentice ship
47-2121	Glaziers	120	130	10	9.02	140	\$42,840	High school diploma or equivalent	None	Apprentice ship
47-2131	Insulation Workers, Floor, Ceiling, and Wall	210	230	20	9.13	220	\$34,920	No formal educational credential	None	Short-term on-the-job training
47-2141	Painters, Construction and Maintenance	790	840	50	6.88	750	\$36,980	No formal educational credential	None	Moderate- term on- the-job training
47-2151	Pipelayers	370	370	-10	-1.6	370	\$37,550	No formal educational credential	None	Short-term on-the-job training
47-2152	Plumbers, Pipefitters, and Steamfitters	1,810	1,960	150	8.37	2,050	\$54,370	High school diploma or equivalent	None	Apprentice ship
47-2181	Roofers	320	350	30	7.72	340	\$37,140	No formal educational credential	None	Moderate- term on- the-job training
47-2211	Sheet Metal Workers	590	630	40	6.73	610	\$39,010	High school diploma or equivalent	None	Apprentice ship
47-2221	Structural Iron and Steel Workers	300	330	30	9.54	360	\$55,400	High school diploma or equivalent	None	Apprentice ship
47-3012	HelpersCarpenters	100	100	0	3.12	120	\$33,570	No formal educational credential	None	Short-term on-the-job training
47-3013	HelpersElectricians	350	370	20	5.46	440	\$36,110	High school diploma or equivalent	None	Short-term on-the-job training
47-3015	HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters	220	240	20	8.22	280	\$35,670	High school diploma or equivalent	None	Short-term on-the-job training
47-4011	Construction and Building Inspectors	770	790	20	2.73	920	*	High school diploma or equivalent	5 years or more	Moderate- term on- the-job training
47-4051	Highway Maintenance Workers	360	390	30	6.94	410	\$32,660	High school diploma or equivalent	None	Moderate- term on- the-job training
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	90	100	10	14.12	120	\$31,720	High school diploma or equivalent	None	Moderate- term on- the-job training
47-5011	Derrick Operators, Oil and Gas	110	150	40	36.7	190	\$50,000	No formal educational credential	None	Short-term on-the-job training
47-5012	Rotary Drill Operators, Oil and Gas	270	360	90	34.7	460	\$56,040	No formal educational credential	None	Moderate- term on- the-job training
47-5013	Service Unit Operators, Oil and Gas	160	200	40	26.28	250	\$44,530	No formal educational credential	None	Moderate- term on- the-job training
47-5071	Roustabouts, Oil and Gas	450	640	190	42.86	830	\$47,010	No formal educational credential	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1,940	2,120	180	9.43	1,980	\$68,200	High school diploma or equivalent	Less than 5 years	None
49-2011	Computer, Automated Teller, and Office Machine Repairers	540	530	-20	-2.77	550	\$36,920	Some college, no degree	None	Short-term on-the-job training
19-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	710	760	50	7.36	870	\$62,040	Postsecondary non-degree award	None	Moderate- term on- the-job training
49-2091	Avionics Technicians	210	230	20	7.55	170	\$49,270	Associate's degree	None	None
19-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	220	240	10	6.28	190	\$61,610	Postsecondary non-degree award	None	Long-term on-the-job training
19-2098	Security and Fire Alarm Systems Installers	730	840	110	14.93	900	\$48,680	High school diploma or equivalent	None	Moderate- term on- the-job training
49-3011	Aircraft Mechanics and Service Technicians	1,510	1,570	50	3.43	1,300	\$65,420	Postsecondary non-degree award	None	None
19-3021	Automotive Body and Related Repairers	650	680	30	4.62	640	\$46,890	High school diploma or equivalent	None	Long-term on-the-job training
19-3023	Automotive Service Technicians and Mechanics	2,730	2,870	140	5.09	2,870	\$36,260	Postsecondary non-degree award	None	Short-term on-the-job training
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	950	1,000	50	5.48	940	\$47,040	High school diploma or equivalent	None	Long-term on-the-job training
19-3042	Mobile Heavy Equipment Mechanics, Except Engines	680	810	130	19.26	860	\$54,950	High school diploma or equivalent	None	Long-term on-the-job training
19-3053	Outdoor Power Equipment and Other Small Engine Mechanics	140	150	10	8.63	170	\$36,480	High school diploma or equivalent	None	Moderate- term on- the-job training
19-3092	Recreational Vehicle Service Technicians	90	110	20	21.59	130	\$42,390	High school diploma or equivalent	None	Long-term on-the-job training
19-3093	Tire Repairers and Changers	450	490	40	9.62	580	\$30,100	High school diploma or equivalent	None	Short-term on-the-job training
19-9011	Mechanical Door Repairers	80	100	20	20.73	90	\$33,030	High school diploma or equivalent	None	Moderate- term on- the-job training
19-9012	Control and Valve Installers and Repairers, Except Mechanical Door	420	470	50	11.88	400	\$65,050	High school diploma or equivalent	None	Moderate- term on- the-job training
19-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,300	1,400	100	7.94	1,370	\$45,950	Postsecondary non-degree award	None	Long-term on-the-job training
19-9031	Home Appliance Repairers	130	140	10	5.47	130	\$40,380	High school diploma or equivalent	None	Moderate- term on- the-job training
19-9041	Industrial Machinery Mechanics	1,090	1,330	240	22	1,270	\$54,500	High school diploma or equivalent	None	Long-term on-the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
49-9043	Maintenance Workers, Machinery	1,130	1,270	150	12.87	1,200	\$48,090	High school diploma or equivalent	None	Long-term on-the-job training
49-9051	Electrical Power-Line Installers and Repairers	410	480	70	16.5	450	\$65,390	High school diploma or equivalent	None	Long-term on-the-job training
49-9062	Medical Equipment Repairers	130	140	10	7.81	150	\$56,820	Associate's degree	None	Moderate- term on- the-job training
49-9071	Maintenance and Repair Workers, General	4,120	4,460	340	8.18	4,350	\$41,170	High school diploma or equivalent	None	Moderate- term on- the-job training
49-9091	Coin, Vending, and Amusement Machine Servicers and Repairers	320	360	40	11.15	430	\$43,830	High school diploma or equivalent	None	Short-term on-the-job training
49-9098	HelpersInstallation, Maintenance, and Repair Workers	500	560	60	10.96	730	\$35,710	High school diploma or equivalent	None	Short-term on-the-job training
49-9099	Installation, Maintenance, and Repair Workers, All Other	300	330	30	8.7	340	\$41,740	High school diploma or equivalent	None	Moderate- term on- the-job training
51-1011	First-Line Supervisors of Production and Operating Workers	3,030	3,250	210	7.06	3,270	\$59,810	High school diploma or equivalent	Less than 5 years	None
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	450	390	-60	-13.56	400	\$42,770	High school diploma or equivalent	None	Moderate- term on- the-job training
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	1,380	1,530	150	10.67	1,660	\$31,260	High school diploma or equivalent	None	Moderate term on- the-job training
51-2041	Structural Metal Fabricators and Fitters	700	630	-80	-10.83	600	\$39,620	High school diploma or equivalent	None	Moderate term on- the-job training
51-2090	Miscellaneous Assemblers and Fabricators	5,090	4,820	-270	-5.36	5,150	\$44,070	High school diploma or equivalent	None	Moderate term on- the-job training
51-3011	Bakers	660	760	100	14.37	1,020	\$25,040	No formal educational credential	None	Long-term on-the-job training
51-3021	Butchers and Meat Cutters	420	430	10	1.66	500	\$22,670	No formal educational credential	None	Long-term on-the-job training
51-3023	Slaughterers and Meat Packers	70	70	0	6.15	80	\$35,100	No formal educational credential	None	Short-term on-the-job training
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	140	150	10	6.38	180	\$35,100	No formal educational credential	None	Moderate term on- the-job training
51-3092	Food Batchmakers	170	180	10	7.19	220	\$31,200	High school diploma or equivalent	None	Moderate term on- the-job training
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	150	140	-10	-5.92	130	\$39,450	High school diploma or equivalent	None	Moderate term on- the-job training
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	60	60	0	-4.69	60	\$41,730	High school diploma or equivalent	None	Moderate term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	840	850	10	0.71	850	\$33,970	High school diploma or equivalent	None	Training Moderate- term on- the-job training
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	90	80	-10	-14.61	70	\$45,090	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	760	760	0	-0.39	860	\$31,180	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4041	Machinists	2,120	2,330	210	10.11	2,470	\$42,390	High school diploma or equivalent	None	Long-term on-the-job training
51-4071	Foundry Mold and Coremakers	110	110	0	-0.88	110	\$22,700	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	380	360	-20	-4.71	360	\$30,750	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	730	810	80	10.87	850	\$37,240	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4111	Tool and Die Makers	140	140	10	4.41	150	\$54,320	Postsecondary non-degree award	None	Long-term on-the-job training
51-4121	Welders, Cutters, Solderers, and Brazers	4,450	4,930	480	10.83	5,410	\$44,510	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	70	70	0	2.78	80	\$32,040	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	200	200	0	-2.01	190	\$37,660	High school diploma or equivalent	None	Moderate- term on- the-job training
51-4193	Plating Machine Setters, Operators, and Tenders, Metal and Plastic	220	220	0	0	220	\$36,750	High school diploma or equivalent	None	Moderate- term on- the-job training
51-5112	Printing Press Operators	530	510	-20	-3.23	540	\$31,330	High school diploma or equivalent	None	Moderate- term on- the-job training
51-5113	Print Binding and Finishing Workers	60	70	0	6.56	70	\$30,930	High school diploma or equivalent	None	Moderate- term on- the-job training
51-6011	Laundry and Dry-Cleaning Workers	570	630	60	10.41	850	\$22,830	No formal educational credential	None	Short-term on-the-job training
51-6031	Sewing Machine Operators	110	110	-10	-5.41	120	\$21,990	No formal educational credential	None	Short-term on-the-job training
51-7011	Cabinetmakers and Bench Carpenters	620	690	70	10.63	670	\$26,470	High school diploma or equivalent	None	Moderate- term on- the-job training
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	60	60	0	7.27	60	\$33,600	High school diploma or equivalent	None	Moderate- term on- the-job training
51-8013	Power Plant Operators	60	70	10	23.33	80	\$89,780	High school diploma or equivalent	None	Long-term on-the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-8021	Stationary Engineers and Boiler Operators	100	130	30	30.21	160	\$68,090	High school diploma or equivalent	None	Long-term on-the-job training
51-8031	Water and Wastewater Treatment Plant and System Operators	350	360	10	2.59	330	\$37,160	High school diploma or equivalent	None	Long-term on-the-job training
51-8092	Gas Plant Operators	120	150	40	31.62	170	\$71,330	High school diploma or equivalent	None	Long-term on-the-job training
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	560	590	20	4.26	600	\$86,940	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9011	Chemical Equipment Operators and Tenders	270	280	10	4.03	290	\$48,970	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	120	130	0	3.28	140	\$35,310	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9022	Grinding and Polishing Workers, Hand	150	130	-20	-11.84	140	\$32,550	No formal educational credential	None	Moderate- term on- the-job training
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	140	150	10	6.99	170	\$42,840	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	160	160	0	-0.64	190	\$36,370	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	190	200	10	3.65	210	\$30,150	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	100	110	10	5.94	110	\$36,310	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	2,730	2,450	-280	-10.25	2,770	\$41,290	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9081	Dental Laboratory Technicians	170	190	20	14.29	250	\$47,410	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9083	Ophthalmic Laboratory Technicians	80	90	10	9.76	120	\$28,550	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9111	Packaging and Filling Machine Operators and Tenders	530	570	40	7.2	630	\$30,910	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	870	950	80	9.17	990	\$37,660	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9161	Computer Numerically Controlled Tool Operators	1,810	1,810	0	0	1,960	\$39,410	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9162	Computer Numerically Controlled Tool Programmers	120	160	40	30.25	180	\$58,580	Postsecondary non-degree award	None	Moderate- term on- the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change		Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
51-9191	Adhesive Bonding Machine Operators and Tenders	140	140	0	2.21	170	\$54,120	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	150	160	10	8.97	180	\$27,300	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	150	170	30	19.31	190	\$39,780	High school diploma or equivalent	None	Long-term on-the-job training
51-9196	Paper Goods Machine Setters, Operators, and Tenders	420	390	-30	-6.71	420	\$47,120	High school diploma or equivalent	None	Moderate- term on- the-job training
51-9198	HelpersProduction Workers	920	900	-20	-2.38	1,270	\$29,480	High school diploma or equivalent	None	Short-term on-the-job training
51-9199	Production Workers, All Other	420	460	40	9.11	510	\$32,990	High school diploma or equivalent	None	Moderate- term on- the-job training
53-1047	First Line Supervisors of Transportation & Material Moving Workers, Exc Aircraft Cargo Handling Supervisor	1,660	1,730	70	3.91	1,860	\$47,770	High school diploma or equivalent	Less than 5 years	None
53-2012	Commercial Pilots	90	90	0	3.3	100	\$82,140	High school diploma or equivalent	None	Moderate- term on- the-job training
53-3031	Driver/Sales Workers	1,470	1,690	230	15.36	1,940	\$30,980	High school diploma or equivalent	None	Short-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	6,460	6,440	-10	-0.17	7,000	\$52,820	Postsecondary non-degree award	None	Short-term on-the-job training
53-3033	Light Truck Drivers	2,440	2,600	160	6.44	2,890	\$34,340	High school diploma or equivalent	None	Short-term on-the-job training
53-3052	Bus Drivers, Transit and Intercity	180	200	20	9.34	240	\$33,910	High school diploma or equivalent	None	Moderate- term on- the-job training
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,330	1,510	190	14.01	1,830	\$28,960	No formal educational credential	None	Short-term on-the-job training
53-6021	Parking Attendants	160	200	40	23.6	310	\$23,170	No formal educational credential	None	Short-term on-the-job training
53-6031	Automotive and Watercraft Service Attendants	300	320	20	6.98	440	\$24,980	No formal educational credential	None	Short-term on-the-job training
53-7021	Crane and Tower Operators	270	290	20	6.34	300	\$50,880	High school diploma or equivalent	Less than 5 years	Moderate- term on- the-job training
53-7051	Industrial Truck and Tractor Operators	1,550	1,640	100	6.14	1,800	\$32,840	No formal educational credential	None	Short-term on-the-job training
53-7061	Cleaners of Vehicles and Equipment	1,180	1,290	110	9.57	1,820	\$27,080	No formal educational credential	None	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	6,420	6,960	550	8.51	9,290	\$29,260	No formal educational credential	None	Short-term on-the-job training

Table 12: 2020-2030 Tulsa MSA Occupational Employment Projections (continued)

SOC Code	Occupation	2020 Employment	2030 Employment	Numeric Change	Change	Total Annual Openings	Median Annual Wage	Typical Entry Level Education	Work Experience Required	Typical On-The- Job Training
53-7063	Machine Feeders and Offbearers	150	160	10	5.26	210	\$33,440	No formal educational credential	None	Short-term on-the-job training
53-7064	Packers and Packagers, Hand	760	730	-30	-4.07	1,000	\$28,840	No formal educational credential	None	Short-term on-the-job training
53-7065	Stockers and Order Fillers	7,480	7,840	360	4.82	12,190	\$27,650	High school diploma or equivalent	None	Short-term on-the-job training
53-7073	Wellhead Pumpers	160	180	30	16.56	210	\$60,720	High school diploma or equivalent	Less than 5 years	Moderate- term on- the-job training
53-7081	Refuse and Recyclable Material Collectors	530	610	80	15.34	840	\$28,960	No formal educational credential	None	Short-term on-the-job training

Source: Employment Projections (EP) program, Oklahoma Employment Security Commission, Economic Research & Analysis Division, <u>Industry and Occupational Employment Projections (oklahoma.gov)</u>.