

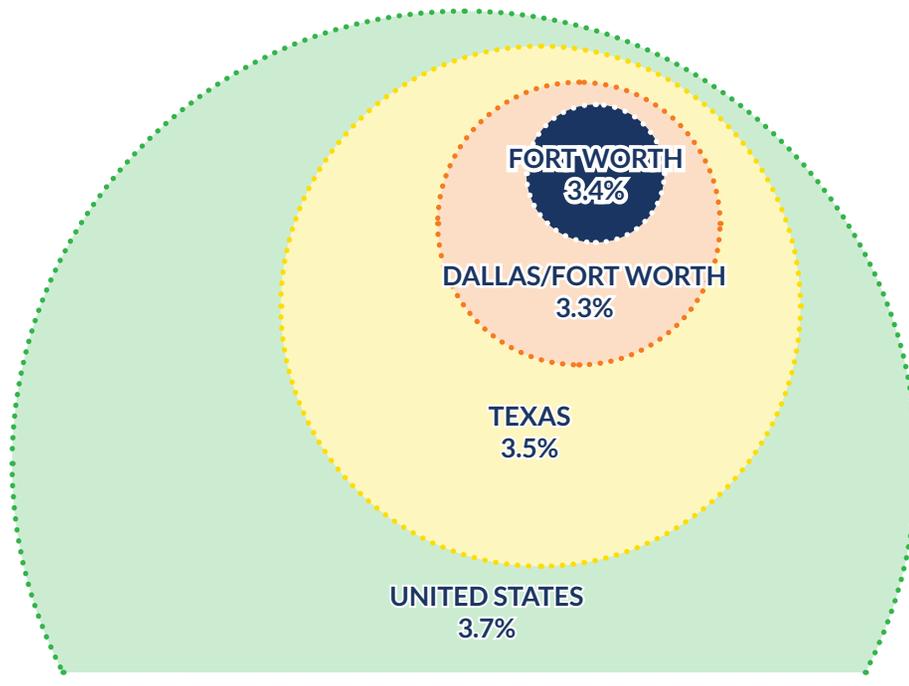


CHAPTER 2

ECONOMIC TRENDS

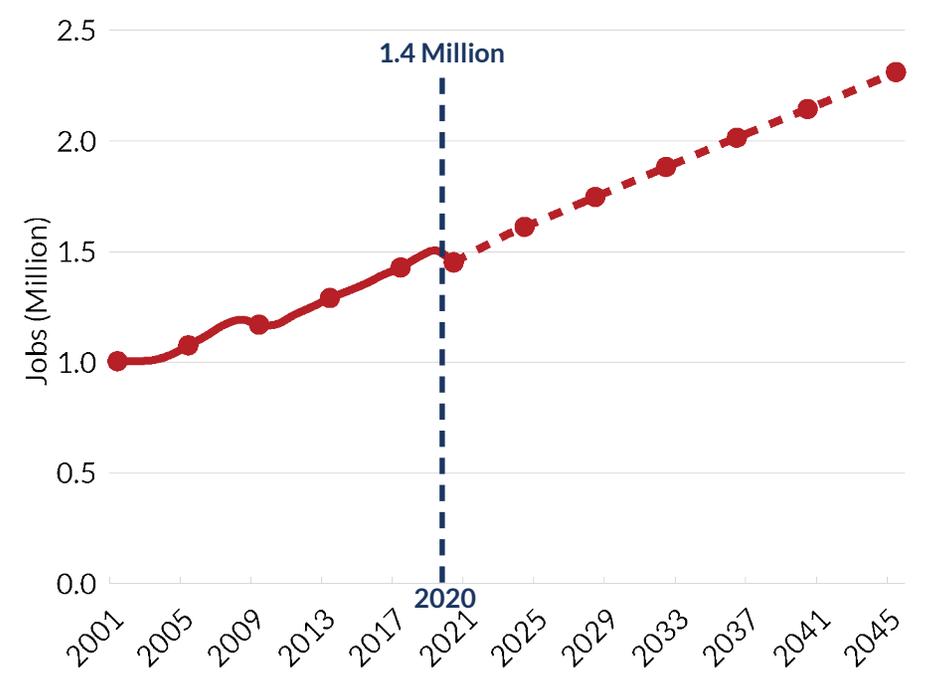
The prosperity of Fort Worth is linked to domestic and international changes. During the 1970s and 1980s, the local economy was driven primarily by a large and successful aerospace and defense industry. Substantial cutbacks in defense contracts prompted the City to begin working towards diversifying its economy in the 1990s, largely through small business development. The result is an economy that is diversified in many industry sectors such as services, trade, manufacturing, transportation, communication, and construction. This diverse employment base helped Fort Worth weather the 2008 Great Recession and will contribute to Fort Worth's ability to rebound from economic declines due to the 2020 Coronavirus (COVID-19) pandemic. Fort Worth's robust economic growth is expected to continue.

UNEMPLOYMENT RATE, 2019



Source: Texas Workforce Commission, 2020.

TOTAL EMPLOYMENT, 2001 - 2045



Source: The Perryman Group, Fort Worth-Arlington-Grapevine, MD, 2020.

3.4%

UNEMPLOYMENT RATE,
2019

2,301,398

PROJECTED TOTAL
EMPLOYMENT BY 2045

\$81,500

MEDIAN FAMILY INCOME,
2020

TOP 3 EMPLOYMENT SECTORS, 2019

SERVICE	22.4%
MANUFACTURING	17.5%
TRADE	15.6%

Sources: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020; HUD, Income Limits, 2020.

KEY INDICATORS, 2001 – 2025

ECONOMIC INDICATOR	2020 LEVEL	2025 LEVEL	FIVE YEAR INCREASE	ANNUAL GROWTH
REAL GROSS PRODUCT	\$129.2 B	\$160.3 B	\$31.1 B	4.41% ↑
REAL PERSONAL INCOME	\$123.1 B	\$149.5 B	\$26.4 B	3.96% ↑
REAL RETAIL SALES	\$34.9 B	\$42.8 B	7.9 B	4.15% ↑
EMPLOYMENT	1.0 M	1.2 M	128.0 TH	2.34% ↑

Growth and development in the Fort Worth-Arlington-Grapevine area is expected to occur at a pace significantly faster than the nationwide rate.

Employment is projected to grow by roughly 128,000 net new positions, led by the services sector.

Real gross product is forecast to expand at a 4.41% annual pace, resulting in a gain of about \$31.1 billion by 2025. Key growth sectors are likely to be mining, services, and manufacturing.

The economic indicators in the table are real variables, which are adjusted for the effects of inflation.

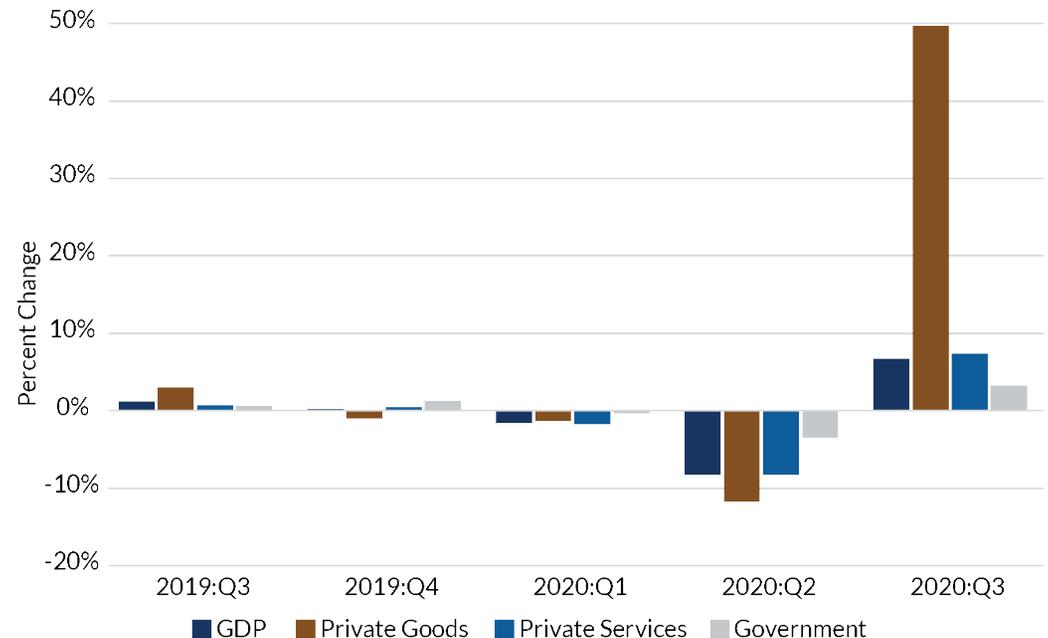
Source: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020.

REAL GROSS DOMESTIC PRODUCT BY INDUSTRY - TEXAS

Texas's Real Gross Domestic Product (GDP) third quarter 2020 activity indicates a rebound from the COVID-19 pandemic impacted economic declines seen in the second quarter of 2020. Economic activity is expected to continue as the impact of the COVID-19 pandemic dissipates.

TOP SECOND QUARTER 2020 DECLINES BY INDUSTRY

Private Goods	
Agriculture, forestry, fishing, and hunting	37.3%
Mining, quarrying, and oil and gas extraction	13.2%
Durable goods (e.e. cars, appliances, etc.)	9.1%
Private Services	
Arts, entertainment, and recreation	31.1%
Accommodation and food services	31.0%
Transportation and warehousing	14.7%
Government	
State and local	3.6%



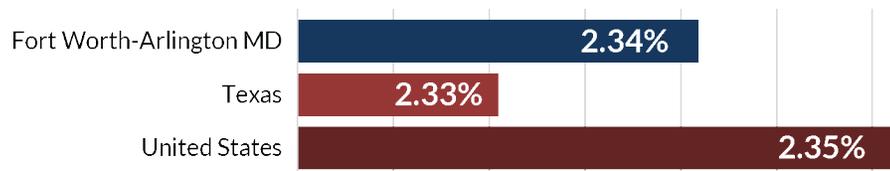
Source: U.S. Bureau of Economic Analysis, 2020.

PROJECTED INDUSTRY GROWTH THROUGH 2025

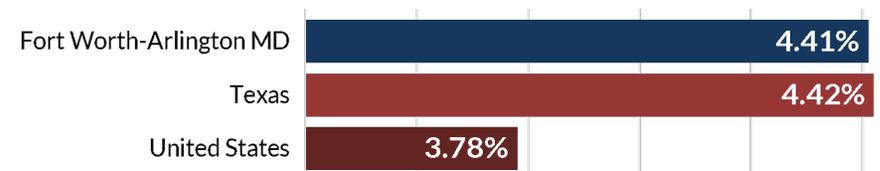
INDUSTRY SECTOR	EMPLOYMENT			REAL GROSS PRODUCT		
	ABSOLUTE CHANGE	ANNUAL GROWTH		ABSOLUTE CHANGE	ANNUAL GROWTH	
AGRICULTURE	145	1.41%	↑	\$0.003 B	2.12%	↑
MINING	3,357	5.72%	↑	\$8.852 B	8.92%	↑
UTILITIES	134	1.08%	↑	\$0.129 B	2.47%	↑
CONSTRUCTION	5,531	1.78%	↑	\$0.847 B	2.64%	↑
MANUFACTURING	7,802	1.54%	↑	\$4.472 B	3.88%	↑
WHOLESALE & RETAIL TRADE	15,268	1.75%	↑	\$3.732 B	3.76%	↑
TRANSPORTATION & WAREHOUSING	8,646	1.88%	↑	\$1.904 B	3.46%	↑
INFORMATION	522	1.00%	↑	\$0.777 B	4.30%	↑
FINANCE, INSURANCE, & REAL ESTATE	4,865	1.41%	↑	\$2.600 B	3.27%	↑
SERVICES	76,446	3.56%	↑	\$6.717 B	4.70%	↑
GOVERNMENT	5,289	0.75%	↑	\$1.112 B	1.92%	↑

Source: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020.

ANNUAL EMPLOYMENT GROWTH, 2020 – 2025

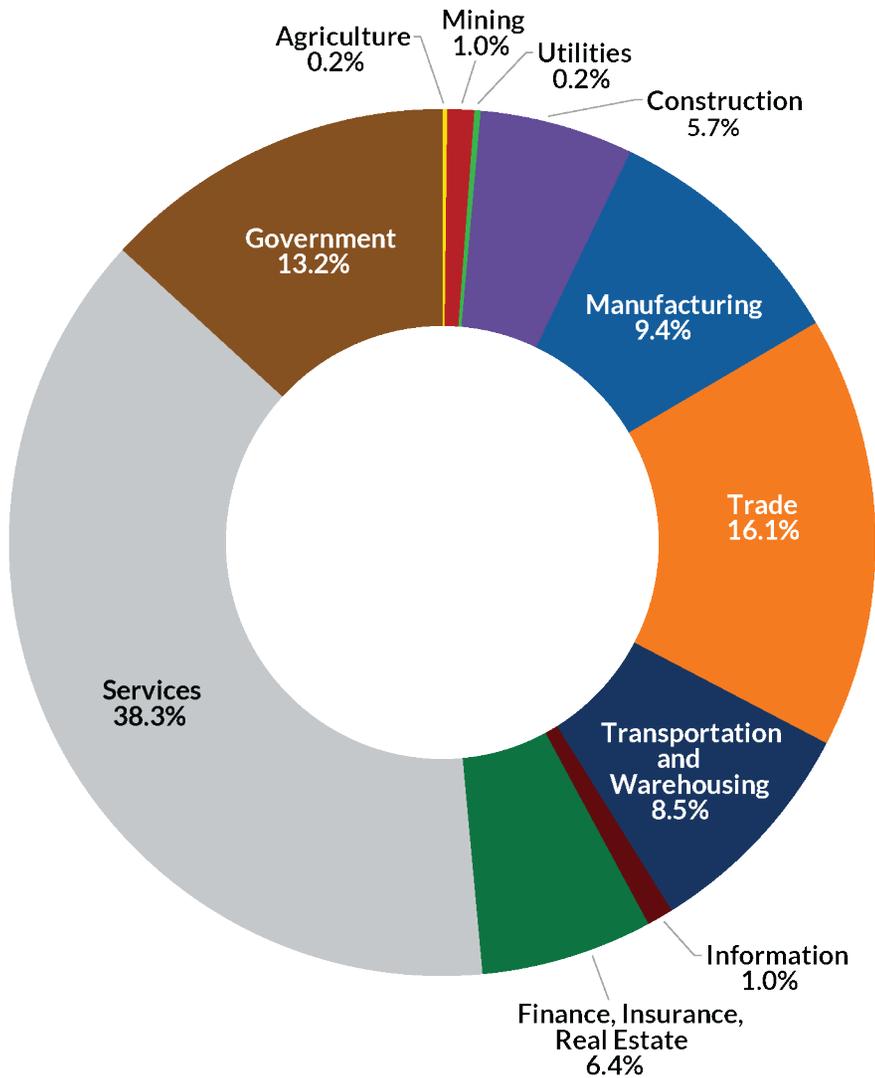


ANNUAL REAL GROSS PRODUCT INCREASE, 2020 – 2025

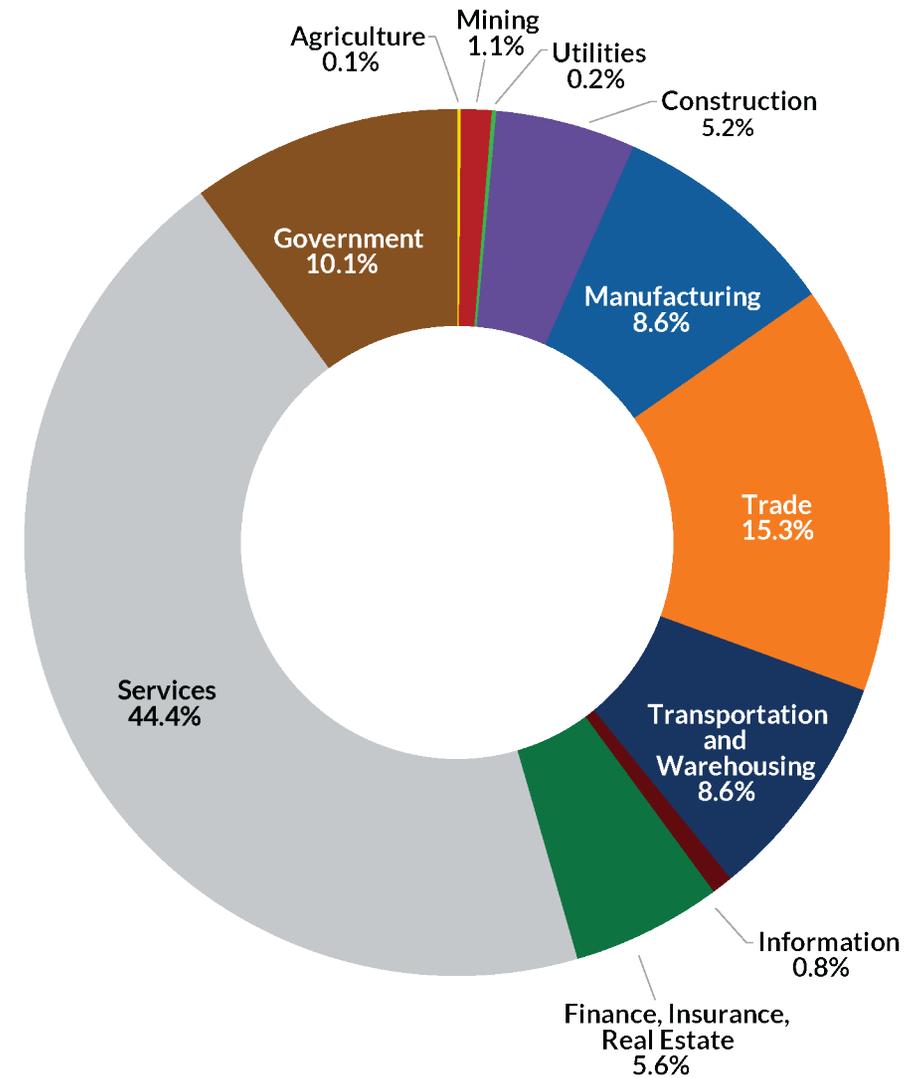


Source: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020.

EMPLOYMENT BY SECTOR, 2020



PROJECTED EMPLOYMENT BY SECTOR, 2045



The Fort Worth-Arlington-Grapevine area continues to experience economic growth. The region's manufacturing and transportation & logistics businesses form a solid basis for expansion over an extended time horizon. With a long-standing pattern of growth and a number of desirable attributes, the Fort Worth-Arlington-Grapevine area will remain an attractive destination for new business locations and expanded operations.

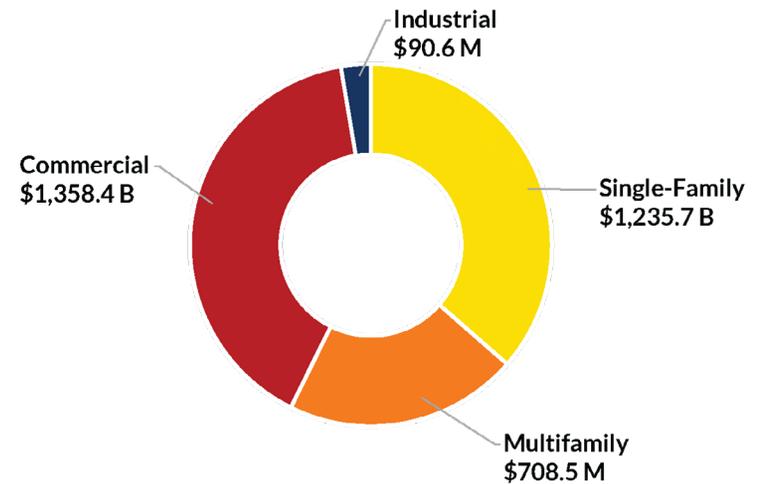
Source: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020.

GROWTH AND DEVELOPMENT

Fort Worth's building permit data indicate historic and current growth trends. Single-family residential development comprises the majority of the City's building permit activity, which correlates to Fort Worth's population growth. Commercial building permits have been relatively stable, with modest increases since 2016. Multifamily building permits have fluctuated over the past ten years, with 2016 showing the highest level activity over the last decade.

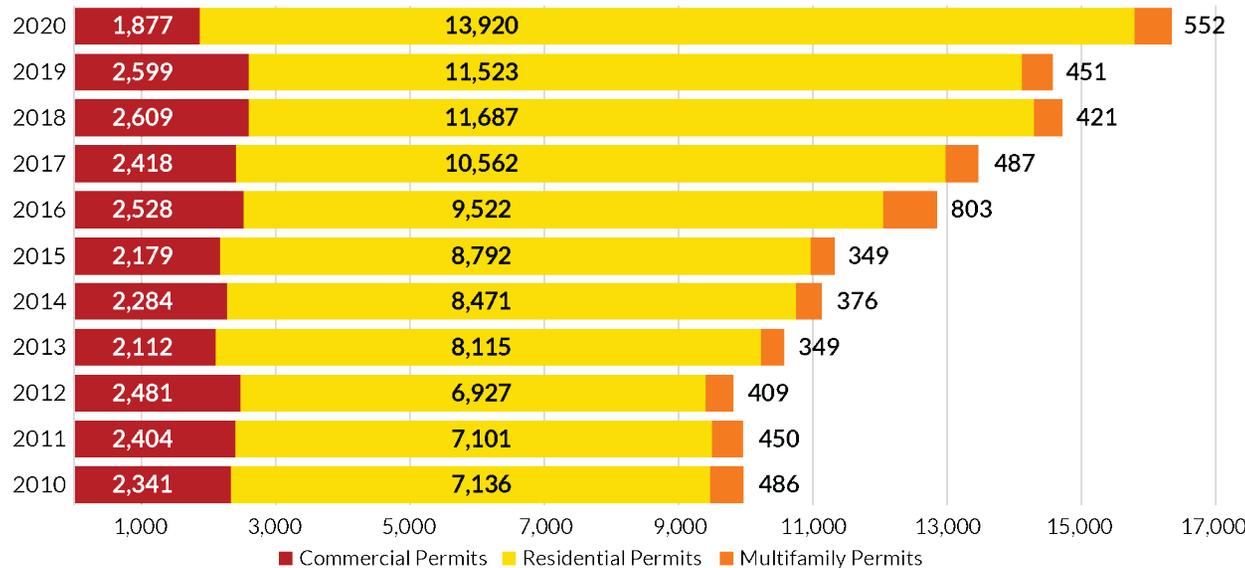
The value of all permits in 2020 totaled more than \$4.3 billion, an increase of 3.6 percent from the 2019 value of \$4.2 billion.

FORT WORTH BUILDING PERMITS VALUE, 2020



Source: City of Fort Worth, Development Services Department, 2020.

FORT WORTH BUILDING PERMITS, 2010 – 2020



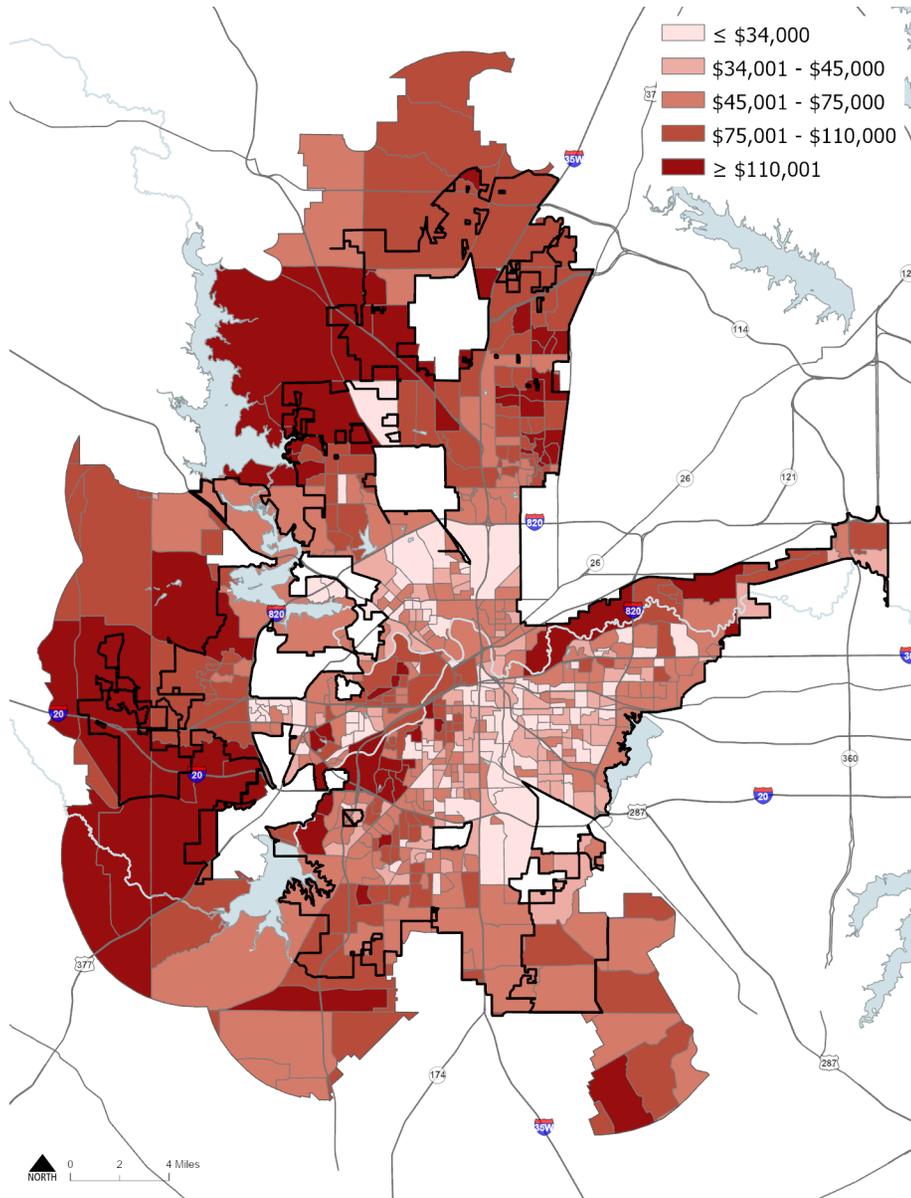
Source: City of Fort Worth, Development Services Department, 2020.



Single-family residential development continues to increase in response to Fort Worth's rising population growth.

Single-family infill housing in Central City. (Source: City of Fort Worth.)

MEDIAN HOUSEHOLD INCOME



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019.

Median household incomes remain highest in the Downtown, Arlington Heights, TCU/Westcliff, Far North, Far Northwest, Far West, Far South, Far Southwest, and parts of the Eastside sectors.

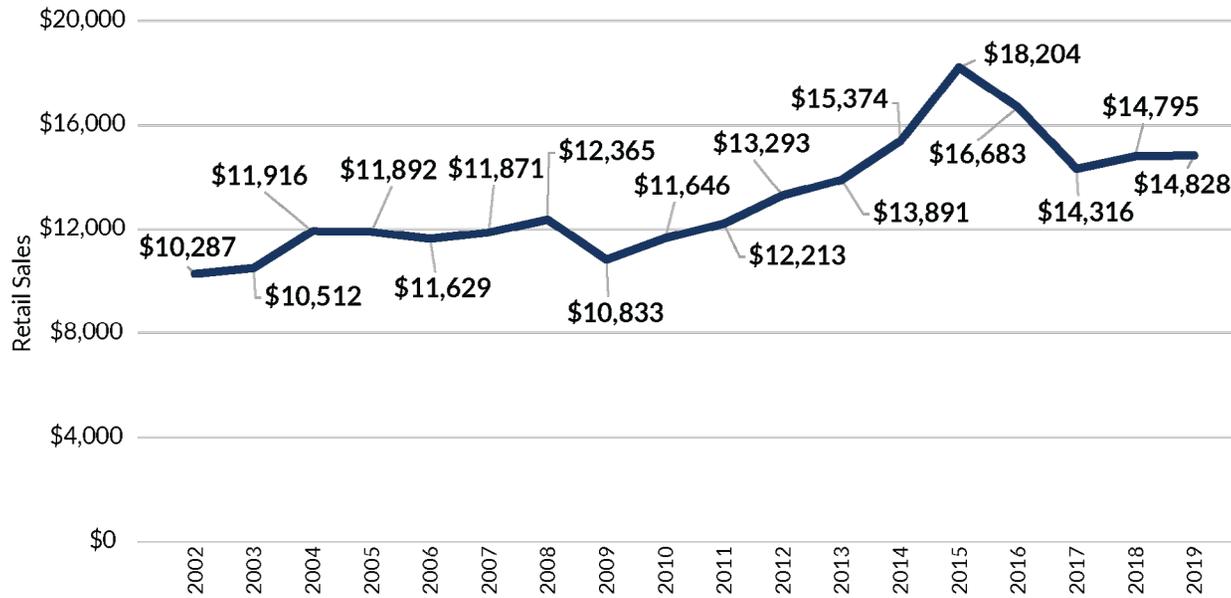
Median family income for the Fort Worth-Arlington HUD Metro Fair Market Rent (FMR) Area increased from \$57,400 to \$81,500 between 2000 and 2020, an average annual increase of about 1.8% over the 20-year period.

MEDIAN FAMILY INCOME, 2000 - 2020



Source: HUD, Income Limits, Fort Worth-Arlington Metropolitan Fair Market Rent Area, 2020.

RETAIL SALES PER PERSON, 2002 - 2019



Source: Texas Comptroller of Public Accounts and U.S. Census Bureau, 2019.

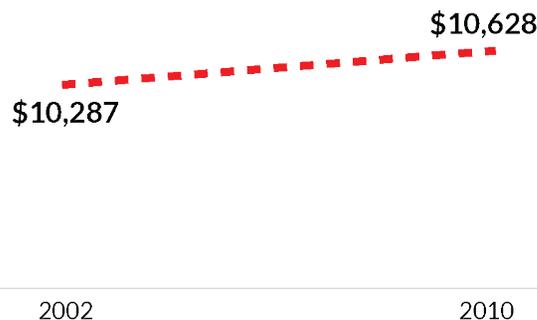
In 2019, per capita retail sales in Fort Worth totaled \$14,828 per person, a 0.22 percent increase from 2018, lower than the Fort Worth-Arlington-Grapevine MD retail sales of \$16,625 and the Dallas-Plano-Irving MD, which had a per capita retail sales figure of \$17,549.

Source: The Perryman Group, Fort Worth-Arlington-Grapevine MD, 2020.

INFLATION

Between 2002 and 2019, the average growth rate of per capita retail sales in Fort Worth remained flat at less than one percent, an indication of stagnant wages.

Per Capita Retail Sales
Inflation Adjusted
Average Growth Rate: 0.6%



The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. The CPI measures inflation, the escalation of prices of consumer goods.

Source: U.S. Bureau of Labor Statistics, 2020, Texas Comptroller of Public Accounts, and U.S. Census Bureau, 2019.

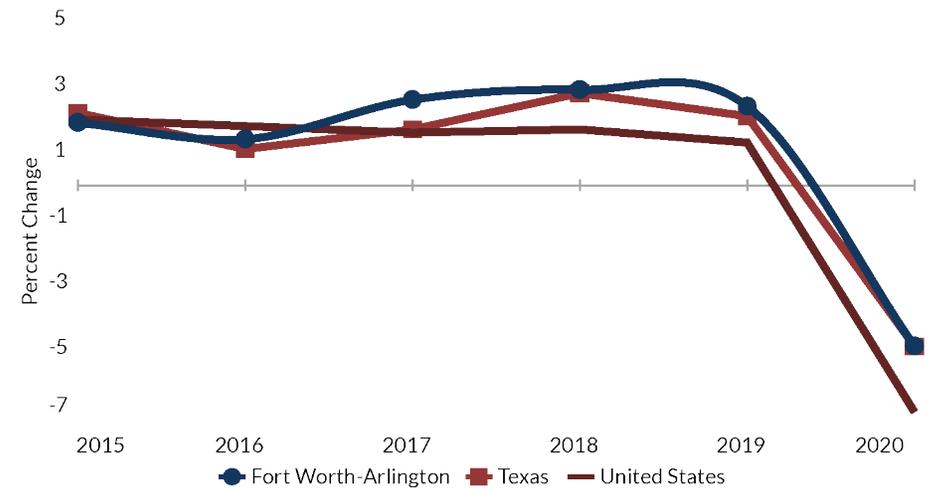
EMPLOYMENT CHANGE

Since 2015, the employment figures for the Fort Worth-Arlington area generally trended above Texas and the United States. During this same time period, the year over year percent change ranged between 1.4 percent to 2.9 percent until 2020. Beginning in the first quarter of 2020, employment figures at all levels began trending downward, primarily due to the impact of the Coronavirus (COVID-19) pandemic. The employment decline was -4.9 percent for the Fort Worth-Arlington area and Texas. At the national level, the employment decline was -6.9 percent.

According to the U.S. Bureau of Labor Statistics (BLS), the total nonfarm employment in the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (MSA) stood at 3,657,500 in August 2020, down 140,300 from one year earlier, representing a 3.7 percent decline compared to the national decline of 7.0 percent. This was the fifth consecutive month of decline according to the BLS data. Additionally, the Dallas-Fort Worth-Arlington MSA had the second-slowest rate of job loss among the 12 largest metropolitan areas in the country, as 10 of the 12 areas had greater percentage losses according to the BLS.

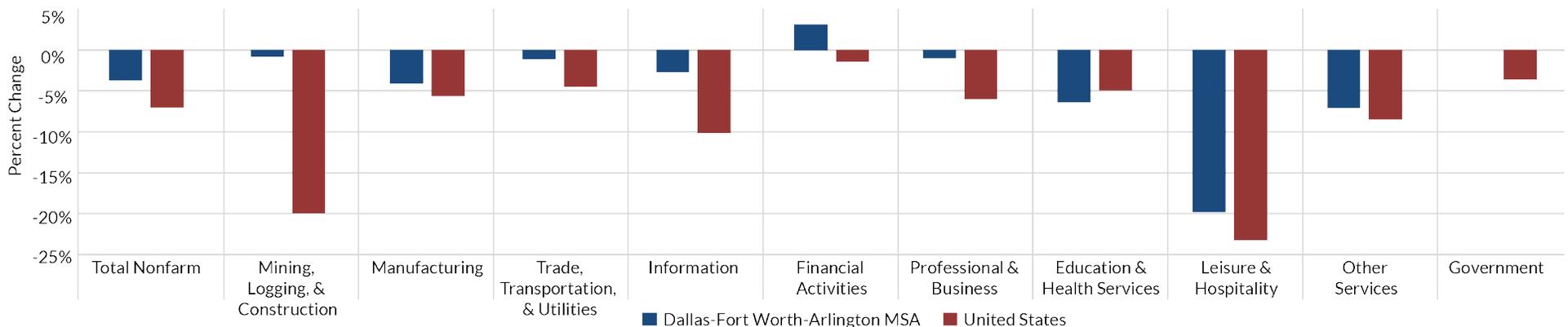
The Dallas-Fort Worth-Arlington MSA consists of two metropolitan divisions — separately identifiable employment centers within the larger metropolitan area. The employment declines since 2019 for the area’s metropolitan divisions (MD) are listed below.

EMPLOYMENT CHANGE, 2015 – 2020



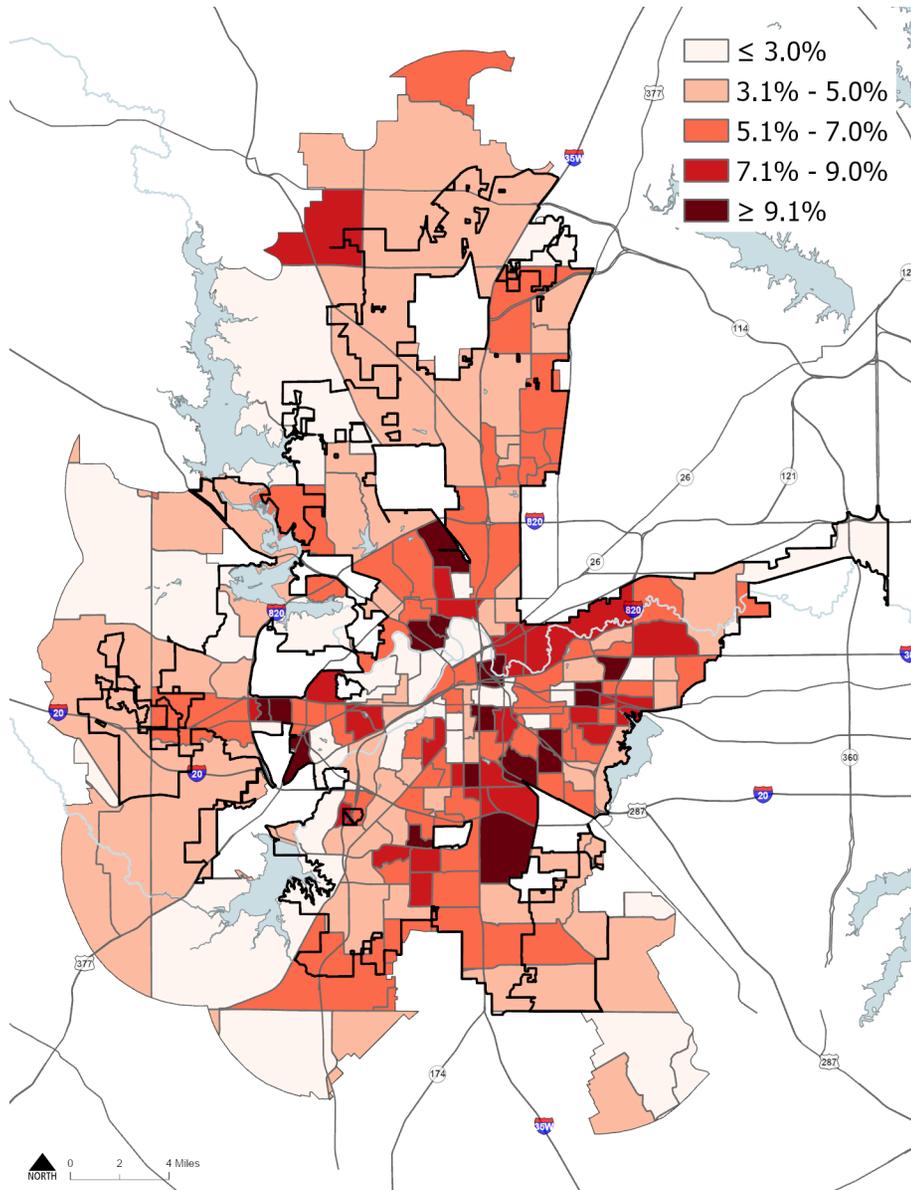
EMPLOYMENT DECLINE			
	% Area's Workforce	#	%
Dallas-Plano-Irving MD	72%	84,100	3.1%
Fort Worth-Arlington MD	28%	56,200	5.1%

EMPLOYMENT CHANGE BY INDUSTRY, YEAR OVER YEAR 2019



Source: U.S. Bureau of Labor Statistics, 2020.

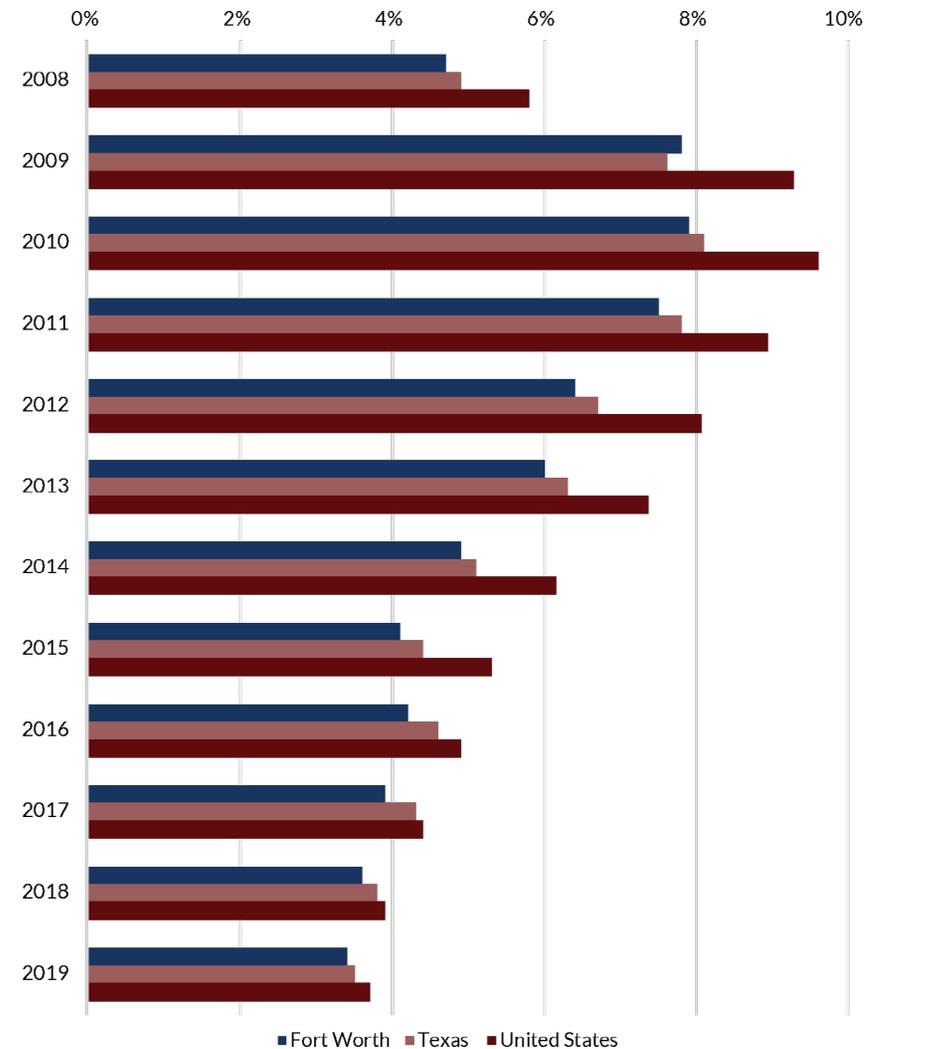
UNEMPLOYMENT RATE



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2015-2019.

Fort Worth's unemployment rate experienced a spike from 2009 to 2010 due to the national recession, but rates began falling in 2011. The State of Texas and the City of Fort Worth experienced lower unemployment rates than the nation as a whole during the recession and subsequent economic recovery.

ANNUAL UNEMPLOYMENT RATE, 2008 - 2019



Source: Texas Workforce Commission, 2020.

