

# Industry Spotlight

# Manufacturing

Brazos County, Texas

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## **Spotlight Summary**

Manufacturing Brazos County, Texas - 2021Q3

#### **EMPLOYMENT**



5,119

Regional employment / 12,531,285 in the nation

0.9%

Avg Ann % Change Last 10 Years / +0.5% in the U.S.

Region Nation

% of Total Employment / 8.2% in the U.S.

Region Nation

#### WAGES



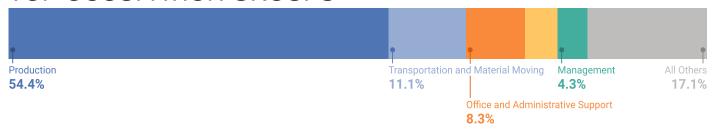
\$50,246

Avg Wages per Worker / \$74,735 in the nation

Avg Ann % Change Last 10 Years / +2.4% in the U.S.

Nation

#### TOP OCCUPATION GROUPS



## TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

Region Nation

Poultry Processing

3.7 % Region Nation

Metal Window and Door Manufacturing

2.2 % Region Nation

Wood Kitchen Cabinet and Countertop Manufacturing

# **Industry Snapshot**

## **EMPLOYMENT**



## **WAGES**



6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Poultry Processing	1,326	\$27,557	7.77		176	1.3%
Metal Window and Door Manufacturing	665	\$38,248	13.55	$\sim$	80	1.5%
Wood Kitchen Cabinet and Countertop Manufacturing	560	\$49,416	5.90		67	1.5%
Commercial Screen Printing	268	\$35,281	4.89		26	-1.0%
All Other Plastics Product Manufacturing	122	\$53,378	0.54		14	0.5%
Clay Building Material and Refractories Manufacturing	104	\$70,900	6.54		12	0.7%
Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	94	\$44,008	2.26		11	1.3%
Soft Drink Manufacturing	92	\$57,402	1.56		13	2.0%
Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	91	\$48,924	5.22	•	10	0.7%
Fabricated Structural Metal Manufacturing	84	\$53,387	1.25		10	1.5%
Remaining Component Industries	1,693	\$35,713	0.53		195	1.0%
Manufacturing	5,119	\$50,246	0.55		595	1.2%

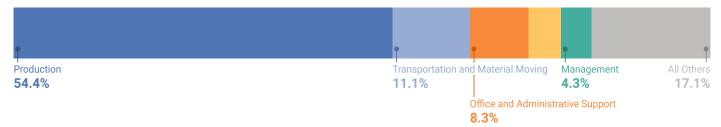


Employment is one of the broadest and most timely measures of a region's economy. Fluctuations in the number of jobs shed light on the health of an industry. A growing employment base creates more opportunities for regional residents and helps a region grow its population.



Since wages and salaries generally compose the majority of a household's income, the annual average wages of a region affect its average household income, housing market, quality of life, and other socioeconomic indicators.

# Staffing Pattern



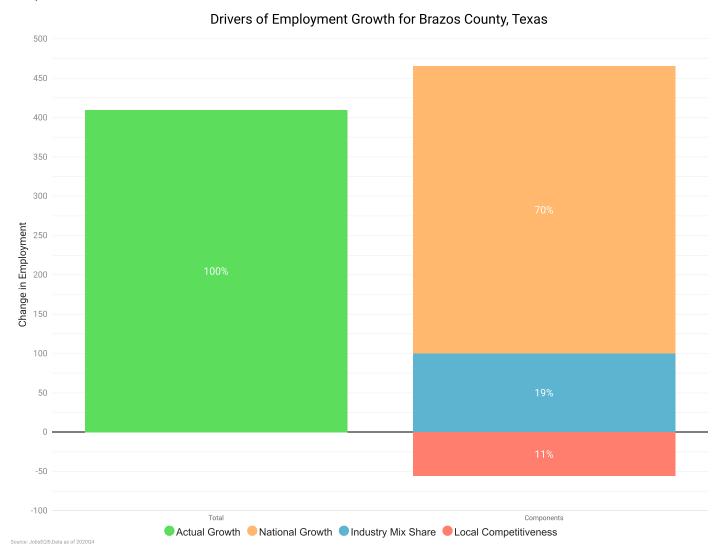
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Team Assemblers	243	\$30,000	28
Slaughterers and Meat Packers	232	\$31,300	34
Laborers and Freight, Stock, and Material Movers, Hand	202	\$28,400	33
First-Line Supervisors of Production and Operating Workers	192	\$66,800	23
Welders, Cutters, Solderers, and Brazers	182	\$47,400	25
Meat, Poultry, and Fish Cutters and Trimmers	175	\$29,800	25
Cabinetmakers and Bench Carpenters	158	\$30,500	21
HelpersProduction Workers	133	\$34,100	20
Inspectors, Testers, Sorters, Samplers, and Weighers	130	\$45,200	17
Packaging and Filling Machine Operators and Tenders	118	\$32,400	16
Remaining Component Occupations	3,328	\$49,900	417
Total	5,092		



The mix of occupations points to the ability of a region to support an industry and its flexibility to adapt to future demand. Industry wages are a component of the cost of labor for regional employers.

## **Drivers of Employment Growth**

Over the ten years ending 2020, employment in Manufacturing for Brazos County, Texas added 410 jobs. After adjusting for national growth during this period and industry mix share, the part of this employment change due to local competitiveness was a loss of 56 jobs—meaning this industry was less competitive than its national counterpart during this period.





Shift-share analysis sheds light on the factors that drive regional employment growth in an industry. A positive change in local competitiveness indicates advantages that may be due to factors such as superior technology, management, and labor pool, etc.



National growth is due to the overall growth or contraction in the national economy. Industry mix share is the growth attributable to the specific industries examined (based on national industry growth patterns and the industry mix of the region).

## **Employment Distribution by Type**

The table below shows the employment mix by ownership type for Manufacturing for Brazos County, Texas. Four of these ownership types — federal, state, and local government and the private sector — together constitute "Covered Employment" (employment covered by the Unemployment Insurance programs of the United States and reported via the Quarterly Census of Employment and Wages).

"Self-Employment" refers to unincorporated self-employment and represents workers whose primary job is selfemployment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).

9	7	٠	8	9	6

	Empl	%
Private	5,005	97.8%
Self-Employment	114	2.2%
Other Non-Covered	0	0.0%

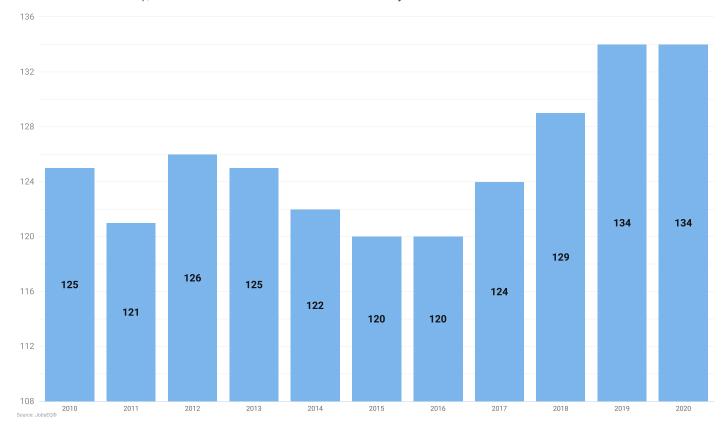
Source: JobsEQ®



Strong entrepreneurial activity is indicative of growing industries. Using self-employment as a proxy for entrepreneurs, a higher share of self-employed individuals within a regional industry points to future growth.

## **Establishments**

In 2020, there were 134 Manufacturing establishments in Brazos County, Texas (per covered employment establishment counts), an increase from 125 establishments ten years earlier in 2010.





New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business activity takes place, and with at least one employee.

## **GDP & Productivity**

In 2020, Manufacturing produced \$0.6 billion in GDP for Brazos County, Texas.

GDP: Indexed 2010 = 100





Gross domestic product (GDP) is the most comprehensive measure of regional economic activity, and an industry's contribution to GDP is an important indicator of regional industry strength. It is a measure of total value-added to a regional economy in the form of labor income, proprietor's income, and business profits, among others. GDP values shown on this page are nominal GDP data.



Growth in productivity (output per worker) leads to increases in wealth and higher average standards of living in a region.

# Supply Chain: Top Suppliers

As of 2021Q3, Manufacturing in Brazos County, Texas are estimated to make \$1.1 billion in annual purchases from suppliers in the United States with about 21% or \$0.2 billion of these purchases being made from businesses located in Brazos County, Texas.

6-digit Supplier Industries	Purchases from In- Region (\$000s)	Purchases from Out-of-Region (\$000s)
Poultry Processing	\$61,432.0	\$322.0
Corporate, Subsidiary, and Regional Managing Offices	\$5,016.0	\$39,339.0
Animal Production (Proprietors)	\$29,627.0	\$9,276.0
Petroleum Refineries	<\$0.1	\$30,096.0
Other Animal Food Manufacturing	\$83.0	\$28,587.0
Remaining Supplier Industries	\$134,025.0	\$770,916.0
Total	\$230,183.0	\$878,536.0



Supplier-buyer networks can indicate local linkages between industries, regional capacity to support growth in an industry, and potential leakage of sales out of the region.

# Sector Strategy Pathways





The graphics on this page illustrate relationships and potential movement (from left to right) between occupations that share similar skill sets. Developing career pathways as a strategy promotes industry employment growth and workforce engagement.

## Postsecondary Programs Linked to Manufacturing

Program	Awards
Texas A & M University-College Station	
Business Administration and Management, General	560
Chemical Engineering	273
Computer Graphics	113
Electrical and Electronics Engineering	372
Engineering/Industrial Management	44
Industrial Engineering	364
Logistics, Materials, and Supply Chain Management	178
Manufacturing Engineering Technology/Technician	115
Mechanical Engineering	575
Sales, Distribution, and Marketing Operations, General	362

Source: JobsEQ®



The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.



Among postsecondary programs at schools located in Brazos County, Texas, the sampling above identifies those most linked to occupations relevant to Manufacturing. For a complete list see JobsEQ®, <a href="http://www.chmuraecon.com/jobseq">http://www.chmuraecon.com/jobseq</a>

# Brazos County, Texas Regional Map



## **Data Notes**

- Industry employment and wages (including total regional employment and wages) are as of 2021Q3 and are based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts.
- Occupation employment is as of 2021Q3 and is based on industry employment and local staffing patterns
  calculated by Chmura and utilizing BLS OES data. Occupation wages are per the BLS OES data and are as of
  2020.
- GDP is derived from BEA data and imputations by Chmura. Productivity (output per worker) is calculated by Chmura using industry employment and wages as well as GDP and BLS output data. Supply chain modeling including purchases by industry are developed by Chmura.
- Postsecondary awards are per the NCES and are for the 2019-2020 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

## FAQ

#### What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

#### What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

#### What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.