

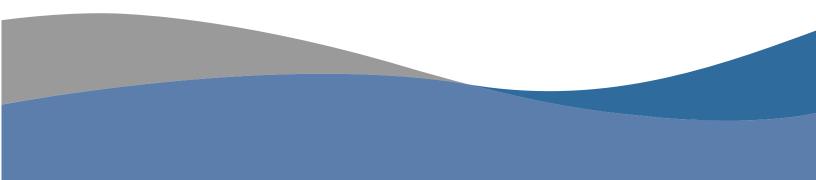
Industry Spotlight

Manufacturing

Fort Bend County, Texas



Greater Houston's Finest Address



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Spotlight Summary

Manufacturing Fort Bend County, Texas - 2020Q3

EMPLOYMENT



14,573

Regional employment / 12,556,691 in the nation

1.3%



Avg Ann % Change Last 10 Years / +0.6% in the U.S.

Region		
Nation		

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

Region		
Nation		

TOP OCCUPATION GROUPS



75,942

Avg Wages per Worker / \$70,435 in the nation



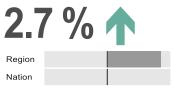
Avg Ann % Change Last 10 Years / +2.3% in the U.S.

Region	
Nation	

Production Office and Administrative Support Management All Others 49.3% 9.0% 6.4% 21.1% Transportation and Material Moving 7.4%

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years



Machinery Manufacturing



Nation

Fabricated Metal Product Manufacturing





Industry Snapshot

EMPLOYMENT





						Forecast
3-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Ann Growth
		-	•	Syrmotory		
Machinery Manufacturing	2,237	\$122,077	1.44		269	2.1%
Fabricated Metal Product Manufacturing	2,231	\$70,843	1.08		276	2.0%
Food Manufacturing	2,084	\$47,762	0.88		306	2.6%
Chemical Manufacturing	1,832	\$98,980	1.50		227	2.5%
Computer and Electronic Product Manufacturing	1,715	\$76,414	1.11	-	193	2.2%
Plastics and Rubber Products Manufacturing	1,067	\$43,236	1.06		131	1.5%
Electrical Equipment, Appliance, and Component Manufacturing	600	\$92,269	1.08		72	1.8%
Furniture and Related Product Manufacturing	544	\$45,276	1.01	$\overline{}$	66	1.6%
Printing and Related Support Activities	526	\$55,425	0.89		59	0.4%
Miscellaneous Manufacturing	526	\$51,758	0.57		65	2.0%
Remaining Component Industries	1,212	\$53,396	0.28		150	1.7%
Manufacturing	14,573	\$75,942	0.81		1,825	2.0%

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



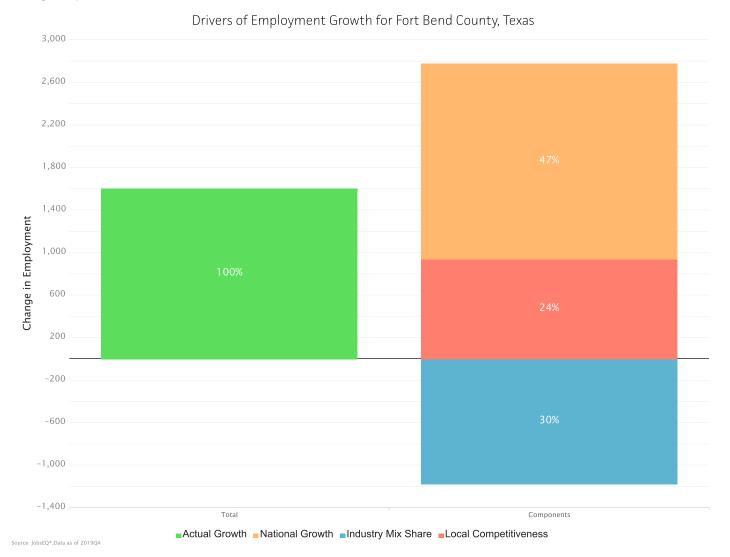
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Team Assemblers	863	\$32,000	105
First-Line Supervisors of Production and Operating Workers	529	\$71,900	71
Welders, Cutters, Solderers, and Brazers	478	\$47,100	70
Inspectors, Testers, Sorters, Samplers, and Weighers	423	\$42,400	56
Packaging and Filling Machine Operators and Tenders	410	\$30,600	63
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	380	\$38,300	56
Machinists	355	\$46,100	49
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	298	\$75,600	41
Laborers and Freight, Stock, and Material Movers, Hand	294	\$31,200	52
Shipping, Receiving, and Inventory Clerks	280	\$35,900	33
Remaining Component Occupations	10,243	\$58,500	1,402
Total	14,573		

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 2019, employment in Manufacturing for Fort Bend County, Texas added 1,606 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 gain of 936 jobs—meaning this industry was more 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 Fort Bend 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).

	95.5%		
		Empl	%
Private		13,912	95.5%
Self-Employment		662	4.5%

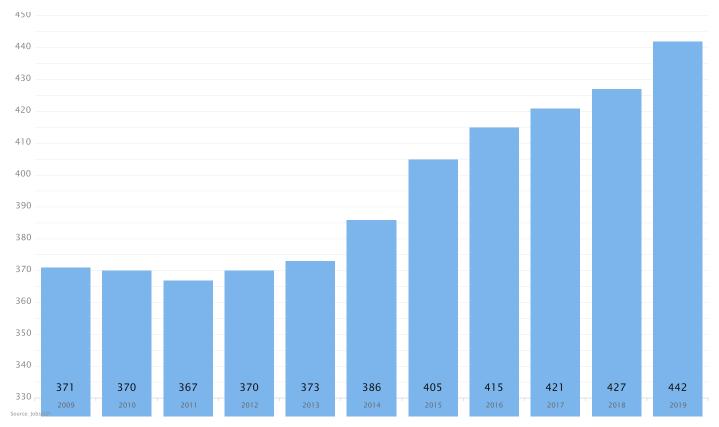
Source: JobsEQ®

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 2019, there were 442 Manufacturing establishments in Fort Bend County, Texas (per covered employment establishment counts), an increase from 371 establishments ten years earlier in 2009.



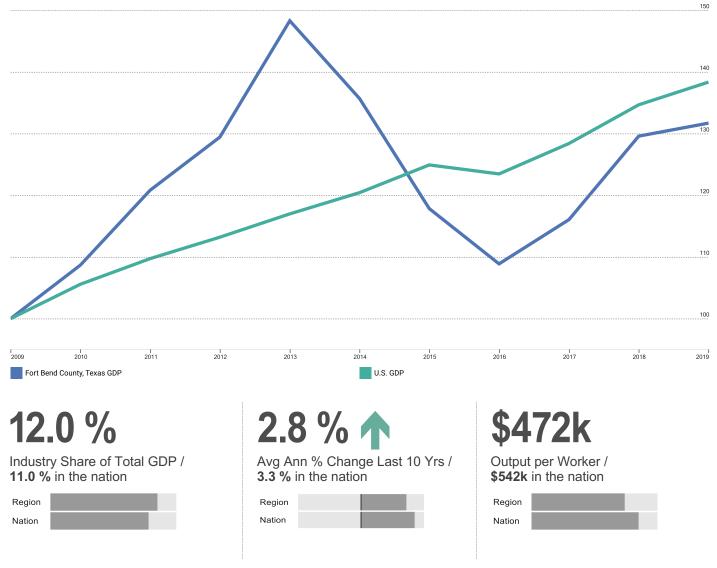
New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business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



GDP & Productivity

In 2019, Manufacturing produced \$3.1 billion in GDP for Fort Bend County, Texas.

GDP: Indexed 2009 = 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 valueadded to a regional economy in the form of labor income, proprietor's income, and business profits, among others.

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 2020Q3, Manufacturing in Fort Bend County, Texas are estimated to make \$3.4 billion in annual purchases from suppliers in the United States with about 21% or \$0.7 billion of these purchases being made from businesses located in Fort Bend County, Texas.

3-digit Supplier Industries	Purchases from In- Region (\$M)	Purchases from Out-of-Region (\$M)
Chemical Manufacturing	\$49.5	\$294.8
Professional, Scientific, and Technical Services	\$63.1	\$160.2
Primary Metal Manufacturing	\$5.6	\$211.3
Fabricated Metal Product Manufacturing	\$68.4	\$141.9
Merchant Wholesalers, Durable Goods	\$62.1	\$143.0
Remaining Supplier Industries	\$488.1	\$1,757.1
Total	\$736.8	\$2,708.2

) 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

First-Line Supervisors of Mechanics, Installers, and Repairers

First-Line Supervisors of Housekeeping and Janitorial Workers

First-Line Supervisors of Production and Operating Workers

Team Assemblers

Welders, Cutters, Solderers, and Brazers

First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers

Chefs and Head Cooks

First-Line Supervisors of Farming, Fishing, and Forestry Workers

Assemblers and Fabricators, All Other

Mail Clerks and Mail Machine Operators, Except Postal Service

Team Assemblers

Inspectors, Testers, Sorters, Samplers, and Weighers

Industrial Truck and Tractor Operators

Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers

Helpers--Production Workers

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

Awards
50
41

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 Fort Bend County, Texas, the sampling above identifies those most linked to occupations relevant to Manufacturing. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq



Fort Bend County, Texas Regional Map





Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2020Q3 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 2020Q3 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 2019.
- 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 2018-2019 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.

