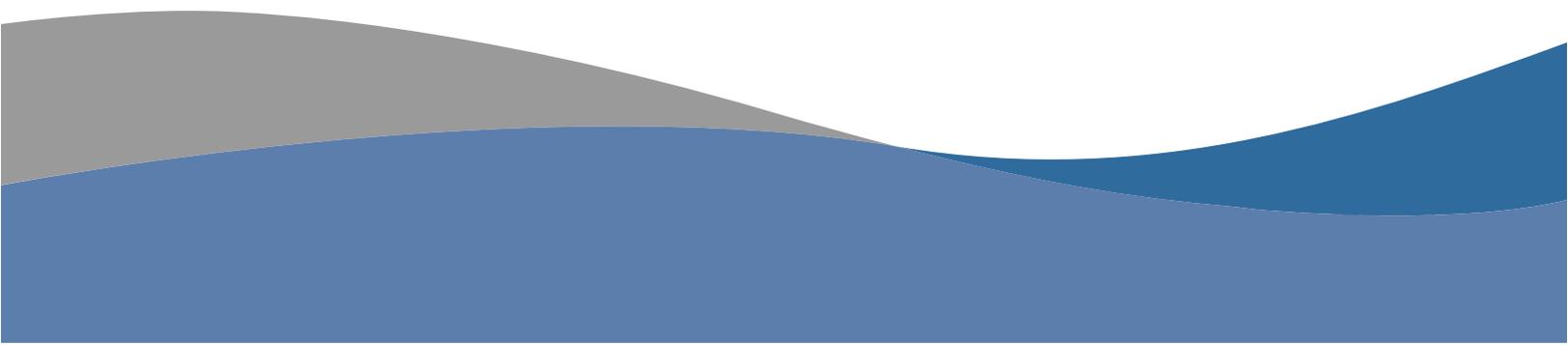




Industry Spotlight

Energy (1)

Fort Bend County, Texas



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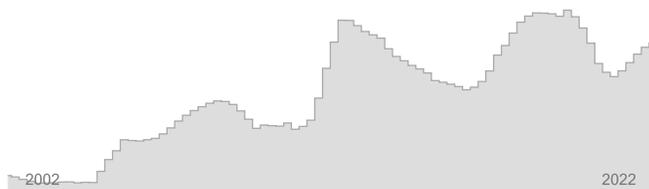
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Spotlight Summary

Energy (1)
Fort Bend County, Texas – 2022Q4

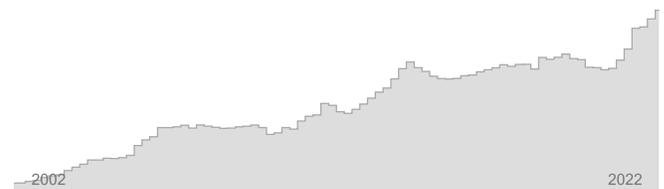
EMPLOYMENT



3,216

Regional employment / 1,117,556 in the nation

WAGES



\$153,887

Avg Wages per Worker / \$104,224 in the nation

-0.8% ↓

Avg Ann % Change Last 10 Years / +0.0% in the U.S.



1.2%

% of Total Employment / 0.7% in the U.S.

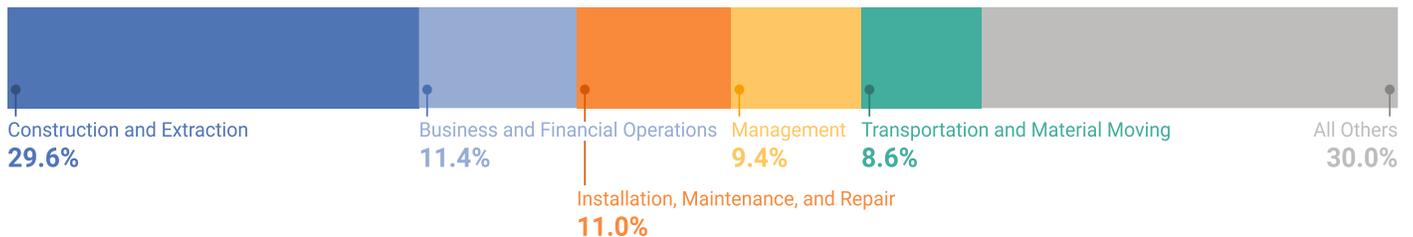


4.3% ↑

Avg Ann % Change Last 10 Years / +2.8% in the U.S.



TOP OCCUPATION GROUPS



TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

-2.5% ↓



Support Activities for Oil and Gas Operations

3.7% ↑



Other Scientific and Technical Consulting Services

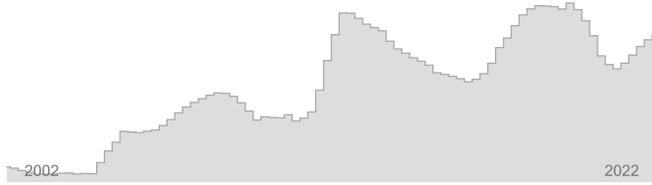
-2.3% ↓



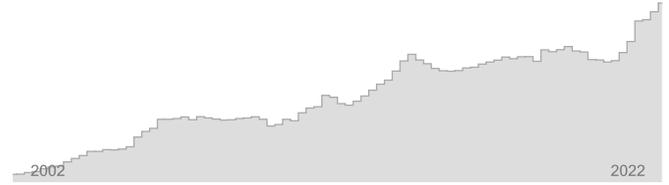
Fossil Fuel Electric Power Generation

Industry Snapshot

EMPLOYMENT



WAGES

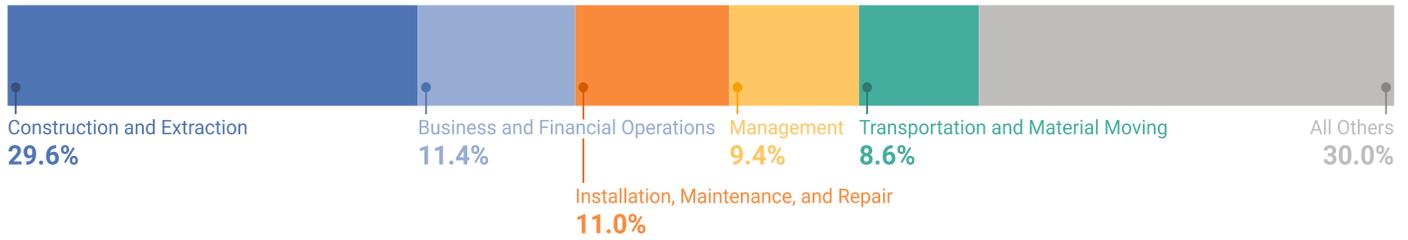


6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Support Activities for Oil and Gas Operations	1,900	\$179,574	5.74		298	4.9%
Other Scientific and Technical Consulting Services	445	\$97,236	1.09		58	3.6%
Fossil Fuel Electric Power Generation	351	\$132,509	2.36		32	-0.3%
Solar Electric Power Generation	204	\$125,696	14.15		31	5.7%
Power and Communication Line and Related Structures Construction	185	\$147,160	0.49		24	3.5%
Administration of General Economic Programs	45	\$68,261	0.31		5	2.5%
Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	36	\$86,516	0.57		4	2.8%
Heating Equipment (except Warm Air Furnaces) Manufacturing	31	\$104,529	1.16		4	1.8%
Other Electric Power Generation	8	\$130,073	1.36		1	3.2%
Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	8	\$53,992	0.37		1	2.8%
Remaining Component Industries	2	\$47,007	0.02		0	2.3%
Energy (1)	3,216	\$153,887	1.77		463	4.2%

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
Roustabouts, Oil and Gas	226	\$44,100	43
Service Unit Operators, Oil and Gas	191	\$47,400	35
General and Operations Managers	146	\$139,300	22
First-Line Supervisors of Construction Trades and Extraction Workers	136	\$76,300	22
Heavy and Tractor-Trailer Truck Drivers	126	\$45,500	24
Management Analysts	117	\$96,300	17
Electrical Power-Line Installers and Repairers	76	\$67,800	8
Office Clerks, General	66	\$40,000	12
Industrial Machinery Mechanics	64	\$68,700	9
Rotary Drill Operators, Oil and Gas	63	\$67,400	11
Remaining Component Occupations	1,965	\$73,100	300
Total	3,177		

 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.

Employment Distribution by Type

The table below shows the employment mix by ownership type for Energy (1) 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 self-employment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).



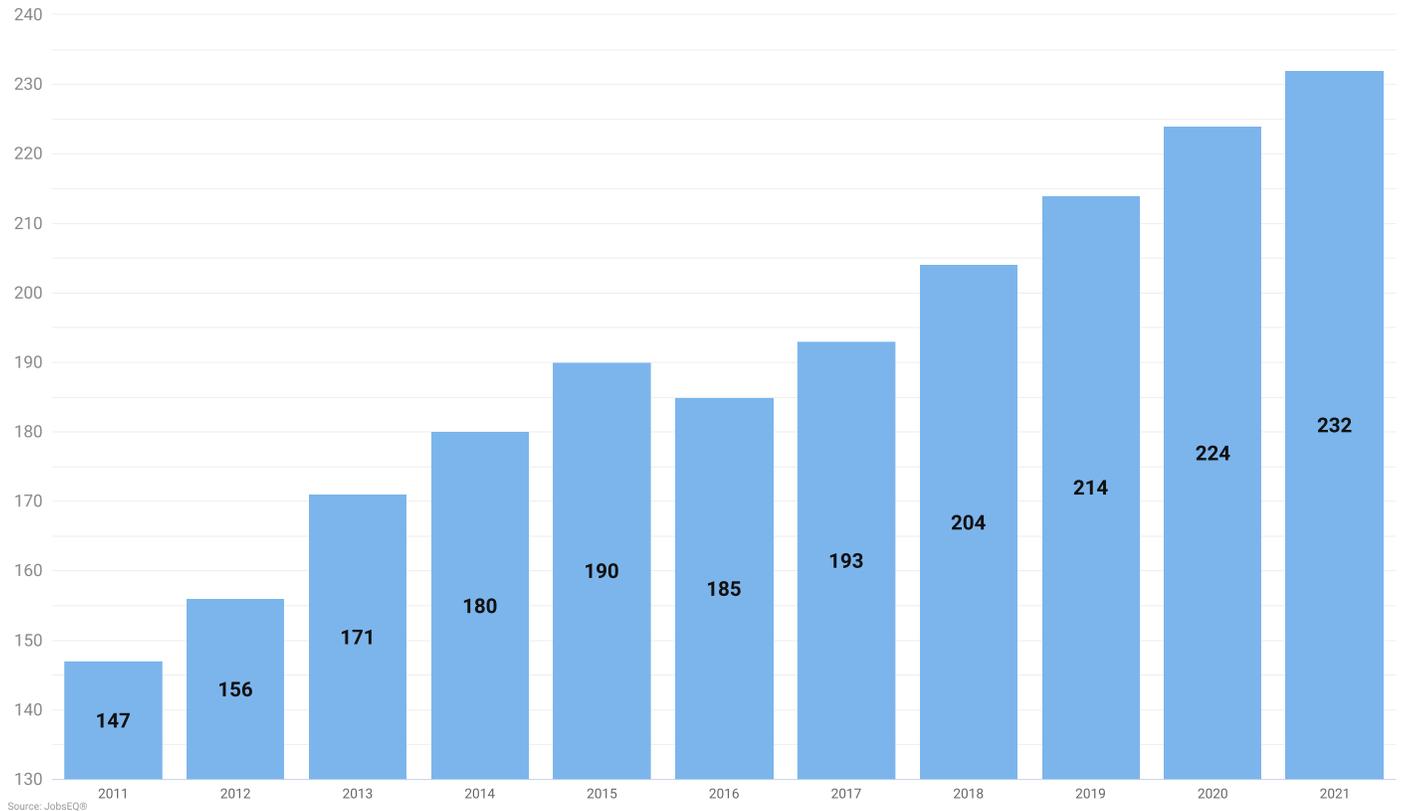
	Empl	%
 Private	2,965	92.2%
 Self-Employment	205	6.4%
 Federal Government	45	1.4%

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 2021, there were 232 Energy (1) establishments in Fort Bend County, Texas (per covered employment establishment counts), an increase from 147 establishments ten years earlier in 2011.

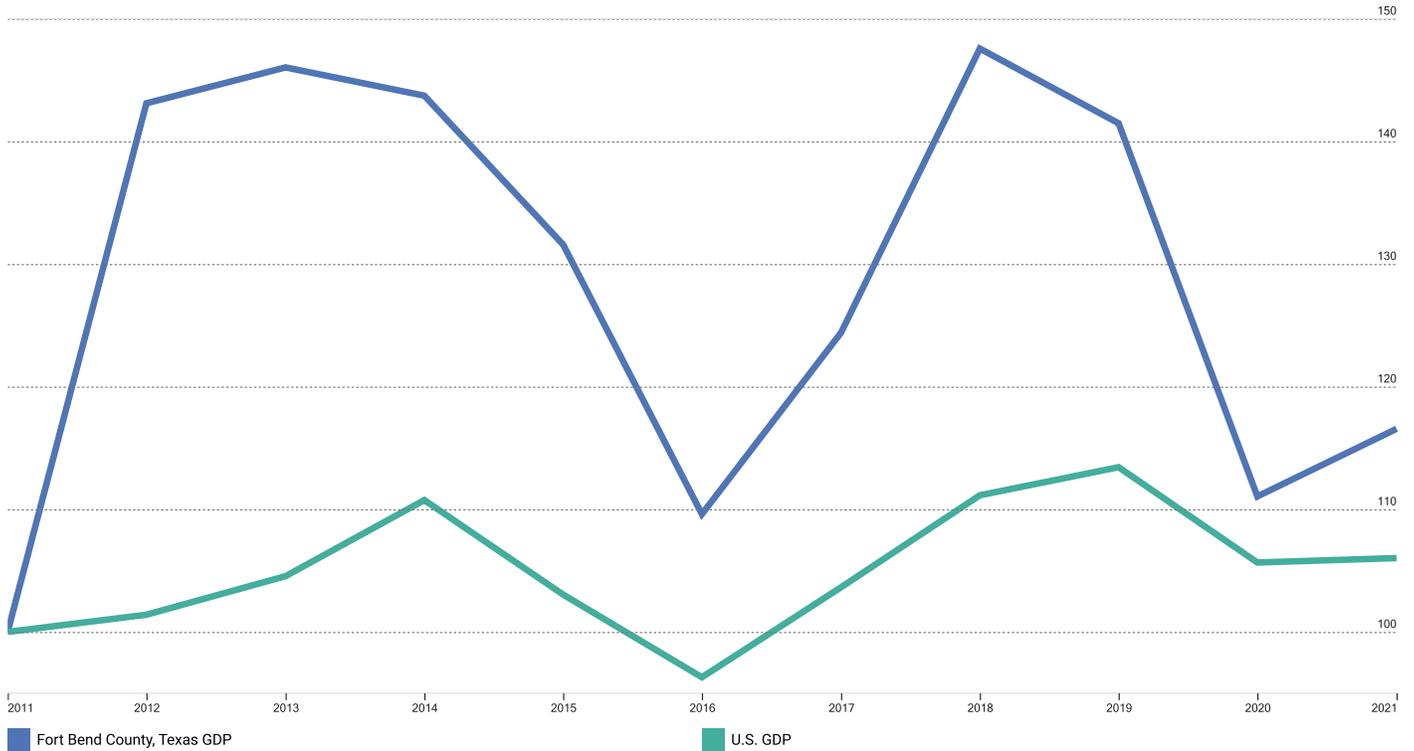


 New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business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

GDP & Productivity

In 2021, Energy (1) produced \$0.8 billion in GDP for Fort Bend County, Texas.

GDP: Indexed 2011 = 100



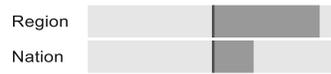
2.7 %

Industry Share of Total GDP /
1.1 % in the nation



1.5 % ↑

Avg Ann % Change Last 10 Yrs /
0.6 % in the nation



\$490k

Output per Worker /
\$449k in the nation



💡 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.

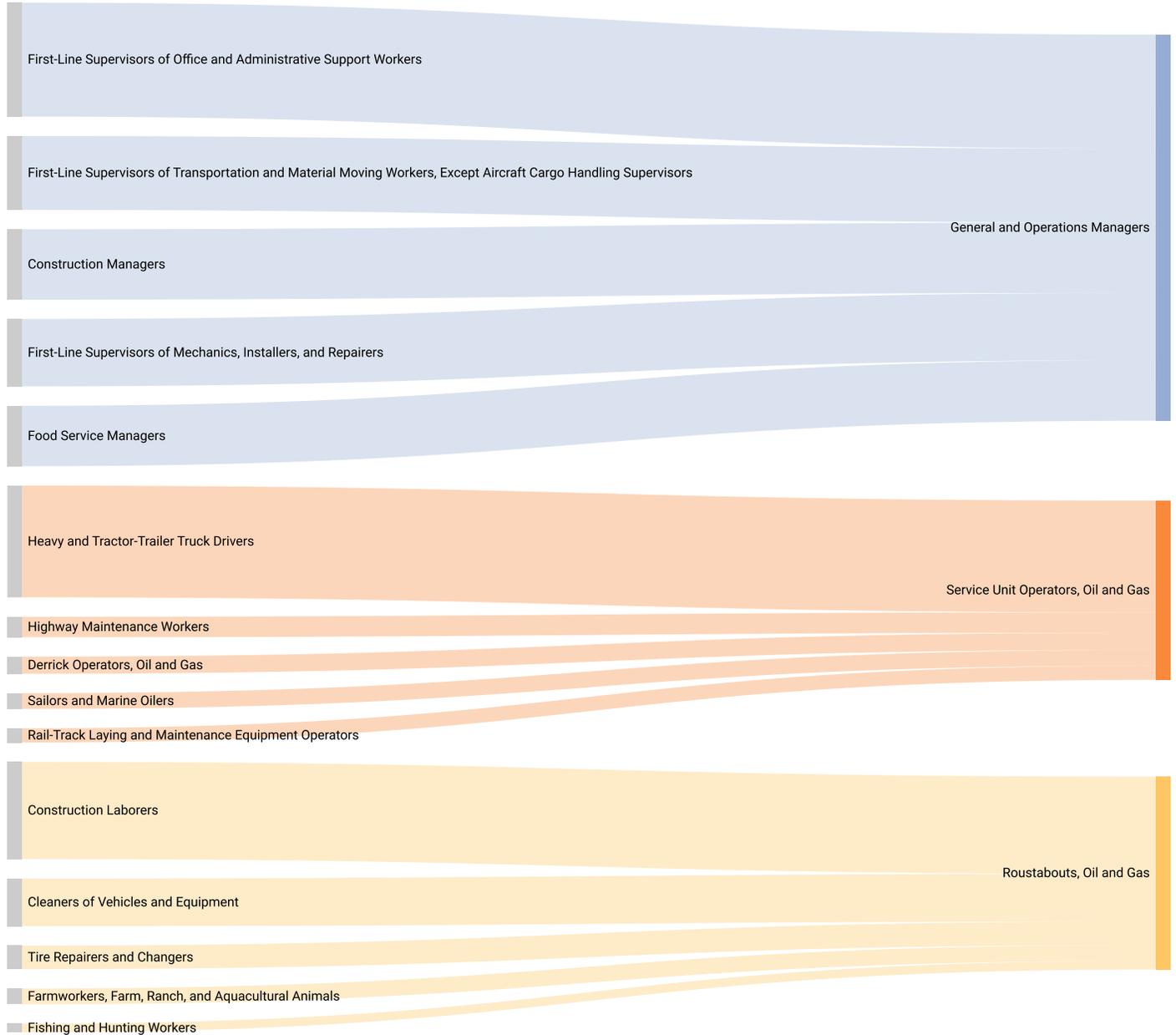
Supply Chain: Top Suppliers

As of 2022Q4, Energy (1) in Fort Bend County, Texas are estimated to make \$753.6 million in annual purchases from suppliers in the United States with about 22% or \$164.8 million of these purchases being made from businesses located in Fort Bend County, Texas.

6-digit Supplier Industries	Purchases from In-Region (\$M)	Purchases from Out-of-Region (\$M)
Petroleum Refineries	\$2.7	\$52.6
Portfolio Management and Investment Advice	\$5.6	\$37.5
Engineering Services	\$12.6	\$17.1
Crude Petroleum Extraction	\$3.5	\$18.5
Commercial Banking	\$3.5	\$14.1
Remaining Supplier Industries	\$136.9	\$449.1
Total	\$164.8	\$588.9

 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 Energy (1)

Program	Awards
North American University	
Business Administration and Management, General	31
Computer Science	66

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 Energy (1). 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 2022Q4 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 2022Q4 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data. Wages by occupation are as of 2022, utilizing BLS OEWS data and imputed by Chmura.
- 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 2020-2021 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

Industry Definition

Energy (1) is defined as the following NAICS industries:

Code	Description
213112	Support Activities for Oil and Gas Operations
221111	Hydroelectric Power Generation
221112	Fossil Fuel Electric Power Generation
221113	Nuclear Electric Power Generation
221114	Solar Electric Power Generation
221115	Wind Electric Power Generation
221116	Geothermal Electric Power Generation
221117	Biomass Electric Power Generation
221118	Other Electric Power Generation
237130	Power and Communication Line and Related Structures Construction
331318	Other Aluminum Rolling, Drawing, and Extruding
331420	Copper Rolling, Drawing, Extruding, and Alloying
331491	Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals
541690	Other Scientific and Technical Consulting Services
926110	Administration of General Economic Programs
926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities

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.