

Industry Spotlight

Biopharmaceuticals (US Cluster Mapping)

City of Sugar Land, TX



Spotlight Summary	3
Industry Snapshot	4
Staffing Pattern	5
Employment Distribution by Type	6
Sector Strategy Pathways	7
City of Sugar Land, TX Regional Map	8
Industry Definition	9
Data Notes	
FAQ	10



Spotlight Summary

Biopharmaceuticals (US Cluster Mapping) City of Sugar Land, TX – 2021Q1

EMPLOYMENT



496

Regional employment / 318,584 in the nation





Avg Ann % Change Last 10 Years / **+1.4%** in the U.S.

Region	
Nation	

% of Total Employment / 0.2% in the U.S.

Region Region Nation Nation

WAGES

\$37,551

Avg Wages per Worker / \$123,309 in the nation



Avg Ann % Change Last 10 Years / **+2.0%** in the U.S.

Region		
Nation		

TOP OCCUPATION GROUPS

٠	•	•	, ,	•
Production 33.6%	Life, Physical, and Socia 14.2%		Business and Financial Operations 7.9%	All Others 23.8%
		i Management 13.2%	Office and Administrative Support 7.3%	

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

12.4 %

Pharmaceutical Preparation Manufacturing



In-Vitro Diagnostic Substance Manufacturing



Medicinal and Botanical Manufacturing



Industry Snapshot

EMPLOYMENT





6-Digit Industry	Empl	Avg Ann Wages	LQ	5yr History	Annual Demand	Forecast Ann Growth
Pharmaceutical Preparation Manufacturing	470	\$34,539	4.36		58	2.7%
In-Vitro Diagnostic Substance Manufacturing	25	\$91,477	1.68		3	2.7%
Medicinal and Botanical Manufacturing	1	\$83,616	0.05		0	1.0%
Biological Product (except Diagnostic) Manufacturing	1	\$83,615	0.03	•	0	1.0%
Biopharmaceuticals (US Cluster Mapping)	496	\$37,551	3.10		61	2.7%

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

•	•	•		•
Production 33.6%	Life, Physical, an 14.2%	d Social Science	Business and Financial Operations 7.9%	All Others 23.8%
		Management 13.2%	Öffice and Administrative Su 7.3%	upport

6-digit Occupation	Empl	Avg Ann Wages	Annual Demand
Packaging and Filling Machine Operators and Tenders	45	\$32,200	7
Chemical Equipment Operators and Tenders	28	\$60,400	4
Inspectors, Testers, Sorters, Samplers, and Weighers	27	\$48,400	4
Chemists	22	\$101,200	3
First-Line Supervisors of Production and Operating Workers	18	\$81,000	3
Natural Sciences Managers	15	\$129,100	2
Mixing and Blending Machine Setters, Operators, and Tenders	14	\$35,500	2
Medical Scientists, Except Epidemiologists	13	\$67,800	2
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	13	\$79,400	2
Industrial Engineers	11	\$118,400	2
Remaining Component Occupations	269	\$81,200	37
Total	475		

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 Biopharmaceuticals (US Cluster Mapping) for the City of Sugar Land, TX. 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).

99.29	6	
	Empl	%
Private	493	99.2%
Self-Employment	4	0.8%

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.



Sector Strategy Pathways

Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other	
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	Chemical Equipment Operators and Tenders
Pump Operators, Except Wellhead Pumpers	
Hazardous Materials Removal Workers	
Shipping, Receiving, and Inventory Clerks	
Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	Inspectors, Testers, Sorters, Samplers, and Weighers
Packers and Packagers, Hand	
Bakers	
Mail Clerks and Mail Machine Operators, Except Postal Service	
Laborers and Freight, Stock, and Material Movers, Hand	Packaging and Filling Machine Operators and Tenders
Team Assemblers	
HelpersProduction Workers	
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	

Food Batchmakers

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.



City of Sugar Land, TX Regional Map





Industry Definition

Biopharmaceuticals (US Cluster Mapping) is defined as the following NAICS industries:

Code	Description
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing



Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2021Q1 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 2021Q1 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.

