

SOUTHWEST INFORMATION OFFICE
Dallas, Texas

For release: Thursday, April 9, 2015

15-603-DAL

Contact information: (972) 850-4800 • BLSInfoDallas@bls.gov • www.bls.gov/regions/southwest

OCCUPATIONAL EMPLOYMENT AND WAGES IN HOUSTON-SUGAR LAND-BAYTOWN, MAY 2014

Workers in the Houston-Sugar Land-Baytown Metropolitan Statistical Area had an average (mean) hourly wage of \$24.44 in May 2014, about 8 percent above the nationwide average of \$22.71, according to the U.S. Bureau of Labor Statistics. Regional Commissioner Stanley W. Suchman noted that, after testing for statistical significance, wages in the local area were higher than their respective national averages in 12 of the 22 major occupational groups, including architecture and engineering; life, physical, and social science; and legal. Six groups had wages that were measurably lower than their respective national averages; included in this grouping were personal care and service, as well as protective service.

When compared to the nationwide distribution, Houston employment was more highly concentrated in 6 of the 22 occupational groups including construction and extraction; architecture and engineering; and transportation and material moving. Conversely, 10 groups had employment shares significantly below their national representation, including healthcare practitioners and technical; healthcare support; and food preparation and serving related. (See table A and box note at end of release.)

Table A. Occupational employment and wages by major occupational group, United States and the Houston-Sugar Land-Baytown Metropolitan Statistical Area, and measures of statistical significance, May 2014

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Houston-Sugar Land-Baytown	United States	Houston-Sugar Land-Baytown	Percent difference ^[1]
Total, all occupations	100.0%	100.0%	\$22.71	\$24.44 *	8
Management	5.0	4.7 *	54.08	61.62 *	14
Business and financial operations	5.1	4.9 *	34.81	39.72 *	14
Computer and mathematical	2.8	2.9	40.37	42.42 *	5
Architecture and engineering	1.8	3.3 *	39.19	49.68 *	27
Life, physical, and social science	0.8	1.2 *	33.69	42.05 *	25
Community and social service	1.4	0.8 *	21.79	23.29 *	7
Legal	0.8	0.8	48.61	58.48 *	20
Education, training, and library	6.2	5.6 *	25.10	24.66	-2
Arts, design, entertainment, sports, and media	1.3	0.9 *	26.82	23.44 *	-13
Healthcare practitioners and technical	5.8	4.8 *	36.54	37.88 *	4
Healthcare support	2.9	2.0 *	13.86	13.77	-1
Protective service	2.4	2.4	21.14	19.04 *	-10
Food preparation and serving related	9.1	8.6 *	10.57	10.37 *	-2
Building and grounds cleaning and maintenance	3.2	2.9 *	12.68	10.77 *	-15
Personal care and service	3.1	3.0	12.01	10.48 *	-13
Sales and related	10.5	10.6	18.59	21.63 *	16
Office and administrative support	16.0	16.2	17.08	17.57 *	3
Farming, fishing, and forestry	0.3	0.1 *	12.09	13.21	9
Construction and extraction	3.9	6.1 *	22.40	20.81 *	-7
Installation, maintenance, and repair	3.9	4.2 *	21.74	21.85	1
Production	6.6	6.8 *	17.06	18.87 *	11
Transportation and material moving	6.8	7.3 *	16.57	18.39 *	11

* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

^[1] A positive percent difference measures how much the mean wage in Houston-Sugar Land-Baytown is above the national mean wage, while a negative difference reflects a lower wage.

One occupational group – architecture and engineering – was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Houston had 92,550 jobs in architecture and engineering, accounting for 3.3 percent of local area employment, significantly higher than the 1.8-percent national share. The local average hourly wage for this occupational group was \$49.68, more than 25 percent above the national average of \$39.19.

With employment of 11,570, petroleum engineers was one of the largest occupations within the architecture and engineering group, as were civil engineers (10,850) and mechanical engineers (9,260). Among the higher paying jobs were petroleum engineers and chemical engineers, with mean hourly wages of \$80.91 and \$61.72, respectively. At the lower end of the wage scale were surveying and mapping technicians (\$22.31) and civil engineering technicians (\$23.69). (Detailed occupational data for the architecture and engineering group are presented in table 1; for a complete listing of detailed occupations go to www.bls.gov/oes/current/oes_26420.htm.)

Location quotients allow us to explore the occupational make-up of a metropolitan area by comparing the composition of jobs in an area relative to the national average. (See table 1.) For example, a location quotient of 2.0 indicates that an occupation accounts for twice the share of employment in the area than it does nationally. In the Houston metropolitan area, above-average concentrations of employment were found in many of the detailed occupations within the architecture and engineering group. For instance, petroleum engineers were employed at 16.3 times the national rate in Houston, while marine engineers and naval architects were employed at 10.2 times the U.S. average. Both location quotients were among the highest in all metropolitan areas for these particular occupations. On the other hand, environmental engineers had a location quotient of 0.9 in Houston, indicating that this occupation's local and national employment shares were similar.

These statistics are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies, in this case, the Texas Workforce Commission.

Note: A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Technical Note

The Occupational Employment Statistics (OES) survey is a semiannual mail survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. Guam, Puerto Rico, and the Virgin Islands are also surveyed, but their data are not included in the national estimates. OES estimates are constructed from a sample of about 1.2 million establishments. Forms are mailed to approximately 200,000 sampled establishments in May and November each year. May 2014 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2014, November 2013, May 2013, November 2012, May 2012, and November 2011. The overall national response rate for the six panels is 74.3 percent based on establishments and 70.5 percent based on weighted sampled employment. The unweighted employment of sampled establishments across all six semiannual panels represents approximately 57.1 percent of total national employment. (Response rates are slightly lower for these estimates due to the federal shutdown in October 2013.) The sample in the Houston-Sugar Land-Baytown Metropolitan Statistical Area included 9,934 establishments with a response rate of 51 percent. For more information about OES concepts and methodology, go to www.bls.gov/news.release/ocwage.tn.htm.

The OES survey provides estimates of employment and hourly and annual wages for wage and salary workers in 22 major occupational groups and 821 detailed occupations for the nation, states, metropolitan statistical areas, metropolitan divisions, and nonmetropolitan areas. In addition, employment and wage estimates for 94 minor groups and 458 broad occupations are available in the national data. OES data by state and metropolitan/nonmetropolitan area are available from www.bls.gov/oes/current/oessrcst.htm and www.bls.gov/oes/current/oessrcma.htm, respectively.

The May 2014 OES estimates are based on the 2010 Standard Occupational Classification (SOC) system and the 2012 North American Industry Classification System (NAICS). Information about the 2010 SOC is available on the BLS website at www.bls.gov/soc and information about the 2012 NAICS is available at www.bls.gov/bls/naics.htm.

Area definitions

The substate area data published in this release reflect the standards and definitions established by the U.S. Office of Management and Budget.

The **Houston-Sugar Land-Baytown Metropolitan Statistical Area** includes Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto, and Waller Counties in Texas.

Additional information

OES data are available on our regional web page at www.bls.gov/regions/southwest. Answers to frequently asked questions about the OES data are available at www.bls.gov/oes/oes_ques.htm. Detailed technical information about the OES survey is available in our Survey Methods and Reliability Statement on the BLS website at www.bls.gov/oes/current/methods_statement.pdf.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; Federal Relay Service: 800-877-8339.

Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Houston-Sugar Land-Baytown Metropolitan Statistical Area, May 2014

Occupation ^[1]	Employment		Mean wages	
	Level ^[2]	Location quotient ^[3]	Hourly	Annual ^[4]
Architecture and engineering occupations	92,550	1.8	\$49.68	\$103,330
Architects, except landscape and naval	2,470	1.3	40.96	85,200
Landscape architects	400	1.0	34.61	71,980
Cartographers and photogrammetrists	260	1.1	35.83	74,530
Surveyors	2,290	2.6	28.06	58,360
Aerospace engineers	2,510	1.7	55.22	114,850
Biomedical engineers	200	0.5	44.35	92,240
Chemical engineers	4,320	6.1	61.72	128,380
Civil engineers	10,850	2.0	54.08	112,480
Electrical engineers	4,250	1.2	52.03	108,210
Electronics engineers, except computer	3,040	1.1	48.02	99,890
Environmental engineers	1,060	0.9	43.75	91,000
Health and safety engineers, except mining safety engineers and inspectors	1,160	2.2	53.55	111,370
Industrial engineers	6,140	1.2	54.46	113,270
Marine engineers and naval architects	1,620	10.2	55.77	116,010
Materials engineers	660	1.3	50.56	105,170
Mechanical engineers	9,260	1.6	51.26	106,620
Mining and geological engineers, including mining safety engineers	670	3.9	[5]	[5]
Nuclear engineers	[5]	[5]	38.61	80,320
Petroleum engineers	11,570	16.3	80.91	168,280
Engineers, all other	2,790	1.1	57.95	120,540
Architectural and civil drafters	4,770	2.5	30.09	62,580
Electrical and electronics drafters	1,480	2.4	39.39	81,930
Mechanical drafters	2,080	1.5	33.97	70,650
Drafters, all other	530	1.8	31.67	65,870
Aerospace engineering and operations technicians	30	0.1	33.77	70,240
Civil engineering technicians	2,230	1.5	23.69	49,270
Electrical and electronics engineering technicians	4,470	1.6	31.27	65,050
Electro-mechanical technicians	290	1.0	32.30	67,180
Environmental engineering technicians	310	0.8	31.83	66,200
Industrial engineering technicians	1,150	0.8	35.04	72,890
Mechanical engineering technicians	2,320	2.3	30.30	63,030
Engineering technicians, except drafters, all other	3,550	2.5	35.30	73,410
Surveying and mapping technicians	2,670	2.5	22.31	46,410

^[1] For a complete listing of all detailed occupations in the Houston-Sugar Land-Baytown MSA, see www.bls.gov/oes/current/oes_26420.htm.

^[2] Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

^[3] The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

^[4] Annual wages have been calculated by multiplying the hourly mean wage by a 'year-round, full-time' hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.

^[5] Estimates not released.