

WEST INFORMATION OFFICE
San Francisco, Calif.

For release: Friday, April 27, 2012

12-833-SAN

Technical information: (415) 625-2286
Media contact: (415) 625-2270

• BLSInfoSF@bls.gov

• www.bls.gov/ro9

OCCUPATIONAL EMPLOYMENT AND WAGES IN TUCSON, MAY 2011

Workers in the Tucson Metropolitan Statistical Area had an average (mean) hourly wage of \$20.55 in May 2011, about 5 percent below the nationwide average of \$21.74, according to the U.S. Bureau of Labor Statistics. Regional Commissioner Richard J. Holden noted that, after testing for statistical significance, no wages in the local area were significantly higher than their respective national averages in 22 major occupational groups. Eleven groups had significantly lower wages than their respective national averages, including legal; management; and life, physical, and social science.

When compared to the nationwide distribution, local employment was more highly concentrated in 11 of the 22 occupational groups, including office and administrative support, food preparation and serving related, and architecture and engineering. Conversely, five groups had employment shares significantly below their national representation, including production, transportation and material moving, and sales and 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 Tucson Metropolitan Statistical Area, and measures of statistical significance, May 2011

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Tucson	United States	Tucson	Percent difference ¹
Total, all occupations	100.0%	100.0%	\$21.74	\$20.55 *	-5
Management	4.8	5.2 *	51.64	43.16 *	-16
Business and financial operations	4.8	4.2 *	33.05	28.41 *	-14
Computer and mathematical	2.7	3.1 *	37.85	36.55	-3
Architecture and engineering	1.8	2.7 *	37.08	38.32	3
Life, physical, and social science	0.8	1.3 *	32.44	25.88 *	-20
Community and social service	1.5	2.0 *	21.07	17.51 *	-17
Legal	0.8	0.8	47.30	36.17 *	-24
Education, training, and library	6.6	6.6	24.46	23.04	-6
Arts, design, entertainment, sports, and media	1.3	1.3	25.89	20.05 *	-23
Healthcare practitioners and technical	5.9	6.5 *	34.97	36.29	4
Healthcare support	3.1	3.8 *	13.16	13.00	-1
Protective service	2.5	3.2 *	20.54	21.57	5
Food preparation and serving related	8.7	9.7 *	10.30	10.09	-2
Building and grounds cleaning and maintenance	3.3	3.6 *	12.29	11.48 *	-7
Personal care and service	2.8	2.7	11.84	11.88	0
Sales and related	10.6	9.6 *	18.04	14.98 *	-17
Office and administrative support	16.7	17.8 *	16.40	15.25 *	-7
Farming, fishing, and forestry	0.3	0.1 *	11.68	12.20	4
Construction and extraction	3.9	4.1	21.46	18.84 *	-12
Installation, maintenance, and repair	3.9	4.0	20.86	20.62	-1
Production	6.5	3.4 *	16.45	15.98	-3
Transportation and material moving	6.7	4.4 *	15.96	14.58 *	-9

* 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 Tucson is above the national mean wage, while a negative difference reflects a lower wage.

One occupational group—office and administrative support—was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Tucson had 61,540 jobs in office and administrative support, accounting for 17.8 percent of local area employment, significantly higher than the 16.7-percent share nationally. The average hourly wage for this occupational group locally was \$15.25, measurably below the national wage of \$16.40.

With employment of 9,530, customer service representatives was the largest occupation within the office and administrative support group, followed by general office clerks (7,450) and secretaries and administrative assistants, except legal, medical, and executive (6,480). Among the higher paying jobs were postal service clerks and postal service mail carriers, with mean hourly wages of \$25.51 and \$25.44, respectively. At the lower end of the wage scale were interviewers, except eligibility and loan (\$10.52) and hotel, motel, and resort desk clerks (\$10.58). (Detailed occupational data for office and administrative support are presented in table 1; for a complete listing of detailed occupations available go to www.bls.gov/oes/current/oes_46060.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 Tucson Metropolitan Statistical Area, above average concentrations of employment were found in some of the occupations within the office and administrative support group. For instance, customer service representatives were employed at 1.6 times the national rate in Tucson, and switchboard operators, including answering service, at 1.5 times the U.S. average. On the other hand, general office clerks had a location quotient of 1.0 in Tucson, indicating that this particular 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 Arizona Department of Commerce. The OES survey provides estimates of employment and hourly and annual wages for wage and salary workers in 22 major occupational groups and nearly 800 detailed occupations for the nation, states, metropolitan statistical areas, metropolitan divisions, and nonmetropolitan areas.

OES wage and employment data for the 22 major occupational groups in the Tucson Metropolitan Statistical Area were compared to their respective national averages based on statistical significance testing. Only those occupations with wages or employment shares above or below the national wage or share after testing for significance at the 90-percent confidence level meet the criteria.

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 also are 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 establishments in May and November of each year for a 3-year period. The nationwide response rate for the May 2011 survey was 77.3 percent based on establishments and 73.3 percent based on employment. May 2011 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2011, November 2010, May 2010, November 2009, May 2009, and November 2008. The sample in the Tucson Metropolitan Statistical Area included 2,763 establishments with a response rate of 74 percent. For more information about OES concepts and methodology, go to www.bls.gov/news.release/ocwage.tn.htm.

The May 2011 OES estimates mark the first set of estimates based in part on data collected using the 2010 Standard Occupational Classification (SOC) system. Nearly all the occupations in this release are 2010 SOC occupations; however, some are not. The May 2012 OES data will reflect the full set of detailed occupations in the 2010 SOC. For a list of all occupations, including 2010 SOC occupations, and how data collected on two structures were combined, see the OES Frequently Asked Questions online at www.bls.gov/oes/oes_ques.htm#Ques41.

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 **Tucson, Ariz. Metropolitan Statistical Area** includes Pima County.

Additional information

OES data are available on our regional web page at www.bls.gov/ro9/home.htm. If you have additional questions, contact the San Francisco Economic Analysis and Information Unit at (415) 625-2270. Information in this release will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; TDD message referral phone number: 1 (800) 877-8339.

Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Tucson Metropolitan Statistical Area, May 2011

Occupation ^[1]	Employment		Mean Wages	
	Level ^[2]	Location quotient ^[3]	Hourly	Annual ^[4]
Office and administrative support occupations	61,540	1.1	\$15.25	\$31,720
First-line supervisors of office and administrative support workers	4,440	1.2	22.17	46,120
Switchboard operators, including answering service	550	1.5	12.82	26,670
Bill and account collectors	1,010	1.0	15.50	32,250
Billing and posting clerks	1,220	0.9	15.63	32,510
Bookkeeping, accounting, and auditing clerks	3,440	0.8	16.25	33,810
Payroll and timekeeping clerks	400	0.9	17.41	36,220
Procurement clerks	230	1.2	17.66	36,740
Tellers	1,290	0.9	11.98	24,910
Brokerage clerks	50	0.3	19.73	41,050
Credit authorizers, checkers, and clerks	50	0.4	16.13	33,560
Customer service representatives	9,530	1.6	13.85	28,810
Eligibility interviewers, government programs	180	0.6	18.71	38,920
File clerks	370	0.8	12.38	25,740
Hotel, motel, and resort desk clerks	690	1.1	10.58	22,010
Interviewers, except eligibility and loan	570	1.1	10.52	21,880
Library assistants, clerical	30	0.1	12.45	25,890
New accounts clerks	120	0.8	17.01	35,380
Order clerks	380	0.7	12.76	26,550
Human resources assistants, except payroll and timekeeping	360	0.9	17.43	36,250
Receptionists and information clerks	2,540	1.0	12.35	25,690
Information and record clerks, all other	810	1.6	16.12	33,520
Cargo and freight agents	40	0.2	15.74	32,730
Couriers and messengers	140	0.6	11.74	24,420
Police, fire, and ambulance dispatchers	320	1.2	18.59	38,660
Dispatchers, except police, fire, and ambulance	460	0.9	18.03	37,510
Meter readers, utilities	100	0.9	19.21	39,960
Postal service clerks	150	0.9	25.51	53,050
Postal service mail carriers	780	0.9	25.44	52,920
Postal service mail sorters, processors, and processing machine operators	270	0.7	24.22	50,370
Production, planning, and expediting clerks	590	0.8	20.68	43,010
Shipping, receiving, and traffic clerks	1,370	0.7	13.99	29,100
Stock clerks and order fillers	5,040	1.1	10.87	22,610
Weighers, measurers, checkers, and samplers, recordkeeping	80	0.4	13.35	27,770
Executive secretaries and executive administrative assistants	2,160	0.8	20.86	43,380
Legal secretaries	520	0.9	16.80	34,940
Medical secretaries	1,830	1.4	14.29	29,720
Secretaries and administrative assistants, except legal, medical, and executive	6,480	1.2	15.64	32,540
Computer operators	250	1.2	18.67	38,830
Data entry keyers	630	1.1	12.98	26,990
Word processors and typists	130	0.5	13.94	29,000
Insurance claims and policy processing clerks	400	0.7	15.57	32,380
Mail clerks and mail machine operators, except postal service	210	0.7	12.36	25,710
Office clerks, general	7,450	1.0	13.34	27,750
Office machine operators, except computer	370	2.1	13.26	27,580
Office and administrative support workers, all other	*[5]	*[5]	15.98	33,240

[1] For a complete listing of all detailed occupations in Tucson, see www.bls.gov/oes/current/oes_46060.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] Estimate not released.