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Occupational Employment Statistics (OES) Highlights



Occupational Employment and Wages in Metropolitan and Nonmetropolitan Areas

Most U.S. employment is found in urban settings: in 2009, approximately 86 percent of U.S. nonfarm wage and salary jobs were located in one of nearly 370 metropolitan areas, ranging in size from the New York City metropolitan area, with total employment of over 8 million, to Palm Coast, Fla., with total employment of about 16,000.



Metropolitan and nonmetropolitan areas differed not only in their shares of total employment, but also in the types of occupations they contained. Employment breakdowns by occupational group for metropolitan and nonmetropolitan areas are shown in chart 1. (See page 8 to view these data in table format.) Compared to nonmetropolitan areas, metropolitan areas had higher employment concentrations in nearly all of the higher-paying occupational groups. For example, as a share of total employment, metropolitan areas had about twice as many legal and business and financial operations jobs, and more than three times as many computer and mathematical science jobs. Metropolitan areas also had higher employment shares of management; architecture and engineering; life, physical, and social science; and arts, design, entertainment, sports, and media occupations. Only one occupational group with above-average wages—education, training, and library occupations—had a higher employment share in nonmetropolitan areas than in metropolitan areas.

Production occupations made up about 10.6 percent of nonmetropolitan area employment, compared with 6.3 percent of employment in metropolitan areas. Nonmetropolitan areas also had higher employment shares of most of the other lower-paying occupational groups, including healthcare support; food preparation and serving related; farming, fishing, and forestry; and transportation and material moving occupations, although in many cases the differences were relatively small.¹ Personal care and service, sales and related, and office and administrative support occupations were the only lower-paying occupational groups with higher employment shares in metropolitan areas.

Some occupations were found almost exclusively in metropolitan areas. For example, nearly all subway and streetcar operators—99.8 percent—were located in metropolitan areas, and over 86 percent of employment in this occupation was found in metropolitan areas with employment of 1 million or more. Similarly, 98.7 percent of political scientists were employed in metropolitan areas, with approximately two-thirds located in a single metropolitan area, Washington, D.C.

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(See page 9 to view these data in table format.)

Other occupations that were highly concentrated in metropolitan areas are shown in chart 2. Aside from political scientists, these included other social science occupations, such as sociologists and industrial-organizational psychologists. Four occupations related to insurance and finance had 96 percent or more of their employment in metropolitan areas: actuaries; insurance appraisers, auto damage; financial analysts; and brokerage clerks. Other occupations found almost entirely in metropolitan areas included computer hardware and software engineers, several transportation-related occupations, and two personal care and service occupations— shampooers, and manicurists and pedicurists. Like subway and streetcar operators and political scientists, several of these occupations were especially concentrated in the largest metropolitan areas: 70 percent or more of flight attendants; airline pilots, copilots, and flight engineers; and shampooers were reported in metropolitan areas with employment of 1 million or more.



(See page 10 to view these data in table format.)

Although nonmetropolitan areas made up only about 14 percent of total U.S. employment, they contained the majority of employment in some occupations, shown in chart 3. Of the 17 occupations in the chart, 7 are related to mining and natural resource extraction, including shuttle car operators; underground mining loading machine operators; continuous mining machine operators; and mining roof bolters, each of which had over 70 percent of employment in nonmetropolitan areas. Most of the remaining occupations shown in the chart are related to logging or forestry, including fallers, logging equipment operators, and forest and conservation technicians. Nonmetropolitan areas also contained the majority of postmasters and mail superintendents, farm equipment mechanics, and two production occupations related to animal production and logging: slaughterers and meat packers and wood sawing machine setters, operators, and tenders.

Metropolitan areas had higher wages than nonmetropolitan areas for all occupational groups except farming, fishing, and forestry, as well as for most detailed

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occupations. However, some occupations had especially high wages in metropolitan areas relative to nonmetropolitan areas, including those shown in chart 4.



(See page 11 to view these data in table format.)

For example, the hourly mean wage for actors was \$13.81 in nonmetropolitan areas and \$29.52 in metropolitan areas, a difference of 114 percent. Arts, design, entertainment, sports, and media occupations made up 11 of the 20 occupations in the chart. In addition to actors, these occupations included broadcast news analysts, producers and directors, and radio and television announcers. Other occupations with high wage premiums in metropolitan areas included three occupations related to law and law enforcement (lawyers; administrative law judges, adjudicators, and hearing officers; and police and sheriff's patrol officers) and two related to advertising (advertising and promotions managers and advertising sales agents).



(See page 12 to view these data in table format.)

Occupations with the highest percentage wage premiums in nonmetropolitan areas are shown in chart 5. Compared with those shown in chart 4, the metropolitan/nonmetropolitan wage differences for these occupations were relatively small, ranging from nearly 18 percent for telephone operators to less than 5 percent for food batchmakers, and in some cases were not statistically significant.

Several healthcare practitioner occupations had higher wages in nonmetropolitan areas than in metropolitan areas, including general pediatricians, psychiatrists, and general dentists. Because these occupational categories include healthcare practitioners in training, such as medical residents, these data are consistent with a greater likelihood for teaching hospitals and dental schools to be located in metropolitan areas. Other occupations with higher wages in nonmetropolitan areas included three production occupations (tire builders, textile bleaching and dyeing machine operators, and food batchmakers) and two mining occupations (mine cutting and channeling machine operators and underground mining loading machine operators).

OES metropolitan area data are based on the Metropolitan Statistical Area definitions issued by the Office of Management and Budget; OES-defined nonmetropolitan areas contain the remainder of each state outside of the Metropolitan Statistical Areas. The aggregate metropolitan and nonmetropolitan area data presented here are based on a special tabulation performed for the purpose of this highlight. May 2009 OES data for individual metropolitan and nonmetropolitan areas, as well as national industry-specific estimates and national and state cross-industry estimates, are available from the OES home page at www.bls.gov/oes. This highlight was prepared by Audrey Watson. For more information, please contact the OES program at www.bls.gov/oes/home.htm#contact.

¹ Because OES does not cover the majority of the agricultural sector, with the exception of logging and support activities for crop and animal production, OES data may tend to understate metropolitan/nonmetropolitan differences in employment of farming, fishing, and forestry occupations.

Table 1. Distribution of employment in metropolitan and nonmetropolitan areas,by occupational group, May 2009

Occupational group	Employment in metropolitan areas	Percent of total metropolitan area employment	Employment in non- metropolitan areas	Percent of total non- metropolitan area employment
Management	5,409,080	4.8	665,420	3.8
Business and financial operations	5,571,050	5.0	444,650	2.5
Computer and mathematical science	3,127,800	2.8	141,120	0.8
Architecture and engineering	2,188,030	2.0	210,210	1.2
Life, physical, and social science	1,163,350	1.0	137,410	0.8
Community and social services	1,602,600	1.4	285,120	1.6
Legal	929,450	0.8	65,620	0.4
Education, training, and library	7,156,560	6.4	1,327,510	7.5
Arts, design, entertainment, sports, and media	1,578,230	1.4	144,430	0.8
Healthcare practitioner and technical	6,216,320	5.5	960,700	5.5
Healthcare support	3,256,800	2.9	616,760	3.5
Protective service	2,694,310	2.4	461,410	2.6
Food preparation and serving related	9,564,820	8.5	1,619,500	9.2
Building and grounds cleaning and maintenance	3,623,410	3.2	613,520	3.5
Personal care and service	3,022,620	2.7	423,560	2.4
Sales and related	11,866,960	10.6	1,730,730	9.8
Office and administrative support	19,534,520	17.4	2,638,180	15.0
Farming, fishing, and forestry	307,680	0.3	107,240	0.6
Construction and extraction	4,764,830	4.3	917,620	5.2
Installation, maintenance, and repair	4,236,510	3.8	819,990	4.7
Production	7,014,070	6.3	1,868,620	10.6
Transportation and material moving	7,274,100	6.5	1,387,830	7.9
All occupations	112,103,080		17,587,140	
Note: occupational group estimates may not sum to all-occupations totals due to rounding.				

metropolitan areas. May 2009				
Occupation	Total occupational employment	Percent of total occupational employment in metropolitan areas		
Subway and streetcar operators	6,040	99.8		
Flight attendants	94,710	98.9		
Political scientists	3,920	98.7		
Semiconductor processors	25,320	98.3		
Biochemists and biophysicists	22,320	97.6		
Shampooers	15,770	97.5		
Computer hardware engineers	63,790	97.5		
Actuaries	17,480	97.4		
Airline pilots, copilots, and flight engineers	72,460	97.4		
Medical scientists, except epidemiologists	99,030	97.3		
Insurance appraisers, auto damage	10,650	97.2		
Computer software engineers, systems software	373,880	97.1		
Financial analysts	228,170	97.0		
Prosthodontists	640	97.0		
Manicurists and pedicurists	51,320	96.8		
Parking lot attendants	125,800	96.8		
Brokerage clerks	60,450	96.8		
Sociologists	4,280	96.6		
Computer software engineers, applications	478,300	96.5		
Industrial-organizational psychologists	1,650	96.5		

Table 2. Occupations with the highest concentration of employment in

Table 3. Occupations found primarily in nonmetropolitan areas, May 2009					
Occupation	Total occupational employment	Percent of total occupational employment in nonmetropolitan areas			
Shuttle car operators	800	77.3			
Loading machine operators, underground mining	900	74.2			
Continuous mining machine operators	3,250	71.1			
Roof bolters, mining	1,600	70.6			
Fallers	1,970	69.6			
Logging equipment operators	7,350	68.9			
Log graders and scalers	1,150	60.5			
Forest and conservation technicians	13,220	57.9			
Postmasters and mail superintendents	10,910	56.2			
Explosives workers, ordnance handling experts, and blasters	2,750	55.6			
Slaughterers and meat packers	43,400	55.5			
Extraction workers, all other	3,160	54.2			
Forest fire inspectors and prevention specialists	710	53.9			
Mine cutting and channeling machine operators	3,660	53.8			
Logging workers, all other	1,910	52.4			
Sawing machine setters, operators, and tenders, wood	19,880	52.3			
Farm equipment mechanics	14,470	52.1			
Note: excludes some occupations that are concentrated in the agricultural sector, which is not covered					
by the OES survey (except logging and support activities for crop and animal production).					

 Table 4. Occupations with the highest percentage wage premiums in metropolitan areas, May 2009

Occupation	Mean hourly wage, metropolitan areas	Mean hourly wage, non- metropolitan areas	Wage difference between metropolitan and non- metropolitan areas	Percentage wage difference between metropolitan and non- metropolitan areas
Actors	\$29.52	\$13.81	\$15.71	113.8
Broadcast news analysts	34.27	17.38	16.89	97.2
Producers and directors	42.31	23.02	19.29	83.8
Radio and television announcers	21.98	12.17	9.81	80.6
Film and video editors	30.99	17.95	13.04	72.6
Reporters and correspondents	22.21	13.23	8.98	67.9
Administrative law judges, adjudicators, and hearing officers	43.71	26.49	17.22	65.0
Writers and authors	31.84	19.63	12.21	62.2
Advertising and promotions managers	47.96	30.22	17.74	58.7
Art directors	44.52	28.08	16.44	58.5
Multi-media artists and animators	30.34	19.18	11.16	58.2
Artists and related workers, all other	28.69	18.14	10.55	58.2
Lawyers	63.15	40.32	22.83	56.6
Economists	47.09	30.27	16.82	55.6
Historians	28.45	18.79	9.66	51.4
Editors	28.72	19.34	9.38	48.5
Advertising sales agents	26.42	17.80	8.62	48.4
Police and sheriff's patrol officers	27.91	18.82	9.09	48.3
Financial managers	56.19	37.98	18.21	47.9
Camera operators, television, video, and motion picture	24.03	16.25	7.78	47.9

Table 5. Occupations with the highest percentage wage premiums in nonmetropolitan areas, May 2009

			Wage	Percentage
			difference	wage
	Mean hourly	Mean hourly	between	difference
Occupation	wage, non-	wage,	non-	between non-
Occupation	metropolitan	metropolitan	metropolitan	metropolitan
	areas	areas	and	and
			metropolitan	metropolitan
			areas	areas
Telephone operators	\$18.14	\$15.40	\$2.74	17.8
Mine cutting and channeling machine	22.08	19.15	2.93	15.3
operators				
Bridge and lock tenders	22.14	19.38	2.76	14.2
Physicians and surgeons, all other	93.42	82.80	10.62	12.8
Health diagnosing and treating	41.72	37.07	4.65	12.5
practitioners, all other				
Transportation attendants, except	12.17	10.93	1.24	11.3
flight attendants and baggage				
porters	04.00	04.05	0.00	10 5
	34.98	31.65	3.33	10.5
Tire builders	19.55	17.69	1.86	10.5
Loading machine operators,	21.62	19.73	1.89	9.6
underground mining				
Pediatricians, general	84.19	77.02	7.17	9.3
Electromechanical technicians	26.00	23.80	2.20	9.2
Rail yard engineers, dinkey operators,	17.41	15.99	1.42	8.9
and hostlers				
Psychiatrists	83.71	78.20	5.51	7.0
Orthodontists	105.10	98.36	6.74	6.9
Avionics technicians	25.59	24.08	1.51	6.3
Segmental pavers	14.55	13.73	.82	6.0
Dentists, general	79.05	75.01	4.04	5.4
Motorboat operators	19.27	18.31	0.96	5.2
Textile bleaching and dyeing machine	12.29	11.68	0.61	5.2
operators and tenders				
Food batchmakers	13.34	12.73	0.61	4.8
Note: excludes some occupations that are concentrated in the agricultural sector, which is not covered				
by the OES survey (except logging and support activities for crop and animal production).				