

Ranking of Full-time Civilian Occupations by Hourly and Annual Earnings, July 2009

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The ranking of detailed occupations by annual and hourly earnings often shows considerable positional differences when scheduled annual hours are taken into account.

In June 2010, the Bureau of Labor Statistics published hourly, weekly, and annual earnings estimates from the [National Compensation Survey \(NCS\)](#) for 591 detailed occupations with a reference month of July 2009.¹ The average (mean) hourly earnings for all full-time civilian workers were \$22.36; the weekly and annual averages were \$884 and \$44,901, respectively. The NCS also provided average weekly and annual hours data for each of the 591 occupations meeting publication criteria, or about 72 percent of the 821 detailed occupations found in the *Standard Occupational Classification Manual 2000*, which is the classification system used by the NCS.²

The NCS program collects data in a sample of metropolitan and micropolitan areas defined by the U.S. [Office of Management and Budget \(OMB\)](#) and in a separate sample of counties located outside those defined areas. The NCS national estimates comprised 227 areas in 2009. The survey is designed so that each metropolitan, micropolitan, or nonmetropolitan area sampled is representative of itself and any other areas that may be in its sampling cell, and the sample estimates from all areas combined are representative of the civilian workforce of the United States. Agricultural, private household, and Federal Government workers are not included in the National Compensation Survey.³ As a sample survey, the NCS is subject to sampling and nonsampling error. Therefore, the rank of any occupation discussed in this article is an approximate rather than an exact ranking. The NCS classifies employees as working either a full-time or part-time schedule based on the definition used by each establishment.

This article presents an analysis of average earnings of full-time civilian workers for whom detailed occupational estimates were available, and demonstrates how the number of scheduled work hours can affect an occupations rank, depending on whether the rankings are for hourly or annual earnings. For example, in 2009, full-time general pediatricians had an average annual work schedule of 2,240 hours, compared with the 2,008 average annual scheduled work hours for all full-time workers. General pediatricians earned an average of \$56.67 per hour--placing them 18th on the hourly scale; when the hourly rate is multiplied by their 2,240 scheduled annual hours, they placed 9th on the annual scale.

Annual Versus Hourly Earnings: Top 20 Annual Ranking

Among the top 20 ranking full-time civilian occupations arrayed by annual earnings, 9 of them were within 2 places (plus or minus) of their hourly rank, 3 were within 3 places, the remaining 8 occupations were within 7 and 12 places. For example, as shown in table 1, economists, were ranked 14th in the annual earnings, yet they were 26th in hourly earnings.

Table 1. Ranking of full-time(1) civilian workers: Average annual earnings(2), relative standard errors(3), and average annual hours, top 20 ranked occupations, National Compensation Survey, July 2009

Hourly earnings rank(4)	Annual earnings rank(4)	Occupation	Annual earnings		Average annual hours
			Mean	Relative error (percent)	
3	1	Obstetricians and gynecologists	\$279,635	14.5	2,637
1	2	Anesthesiologists	271,264	15.7	2,400
6	3	Chief executives	192,780	8.1	2,271
5	4	Internists, general	181,081	15.7	2,009
7	5	Family and general practitioners	167,245	14.4	2,119
4	6	Law teachers, postsecondary	152,540	7.4	1,595
8	7	Psychiatrists	149,866	6.4	1,981
9	8	Dentists, general	145,458	9.9	2,049
18	9	Pediatricians, general	126,955	18.2	2,240
2	10	Airline pilots, copilots, and flight engineers	125,431	9.2	1,110
10	11	Health specialties teachers, postsecondary	124,357	7.0	1,805
15	12	Engineering managers	120,429	2.6	2,117
20	13	Lawyers	118,241	5.2	2,123
26	14	Economists	114,498	27.7	2,145
24	15	Computer and information systems managers	114,217	2.3	2,097
23	16	Securities, commodities, and financial services sales agents	114,064	7.1	2,089
25	17	Computer and information scientists, research	113,901	9.2	2,106
17	18	Physicists	113,817	11.5	2,007
16	19	Judges, magistrate judges, and magistrates	109,842	8.1	1,935
27	20	Petroleum engineers	109,635	12.6	2,074

Footnotes:

- (1) Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment.
- (2) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, non-production bonuses, and tips.
- (3) For information on earnings mean, relative standard error, and other calculations, see BLS Handbook of Methods, on the Internet at http://www.bls.gov/opub/hom/homch8_a.htm.
- (4) Rank is a descending order of average earnings.

Table 1 also shows that 5 top-ranked detailed occupations on the annual scale did not make it into the top 20 on the hourly scale. Airline pilots, copilots, and flight engineers were among the 15 occupations that remained in the top 20. At \$112.97, the average hourly earnings of airline pilots, copilots, and flight engineers placed them in 2nd place. However, when ranked by annual earnings they dropped to 10th place, considerably lower in rank than obstetricians and gynecologists and anesthesiologists, who are ranked 1st and 2nd, respectively. In 2009, full-time airline pilots, copilots, and flight engineers had an average annual work schedule of 1,110 hours, only about 55 percent of the estimated 2,008 hours for all full-time civilian workers in 2009.

Data for airline pilots, copilots, and flight engineers are somewhat anomalous because work schedules for individual members might vary every month, depending on flight assignments. As BLS economist Richard Schumann noted in a 2008 article, “These workers are paid an hourly rate when flying, but they also receive pay for time spent in other activities, such as training or ground travel between flights.” In addition, “In many cases, the hourly flight pay begins when the plane leaves the departure gate and ends when the plane pulls into the arrival gate. In these cases, time spent on pre- and post-flight activities is not compensated and is difficult to collect. As a result of these collection problems, the NCS collects only the hourly flight rate and the flight hours for flight crews.”⁴

Annual Versus Hourly Earnings: Lowest 20 Annual Ranking

As shown in table 2, among the 20 lowest ranked full-time civilian occupations in terms of annual earnings, several occupations had much greater differences in hourly and annual earnings ranks than did the top 20 ranked occupations. This is because of the greater variation in average annual scheduled work hours among the lowest ranked occupations compared with the highest ranked occupations. Teacher assistants, for example, were ranked 16th from the lowest in annual earnings; they were ranked 79th from the lowest in hourly earnings. Considerable differences were evident for lifeguards, ski patrol, and other recreational protective services workers, whose annual earnings were among the lowest ranks, compared with 66th lowest in hourly earnings. Average scheduled annual work hours for lifeguards, ski patrol, and other recreational protective services workers were 793; for teacher assistants the average was 1,465 hours, compared with 2,008 average scheduled annual work hours for all workers.

Table 2. Ranking of full-time(1) civilian workers: Average annual earnings(2), relative standard errors(3), and average annual hours, lowest 20 ranked occupations, National Compensation Survey, July 2009

Hourly earnings rank(4)	Annual earnings rank(4)	Occupation	Annual earnings		Average annual hours
			Mean	Relative error (percent)	
1	1	Waiters and waitresses	\$9,453	3.5	1,891
66	2	Lifeguards, ski patrol, and other recreational protective service workers	10,076	17.1	793
3	3	Bartenders	14,099	4.0	1,869
2	4	Gaming dealers	14,250	2.6	2,063
4	5	Dining room and cafeteria attendants and bartender helpers	15,980	3.9	1,943
26	6	Transportation attendants, except flight attendants and baggage porters	16,546	21.1	1,573
8	7	Hosts and hostesses, restaurant, lounge, and coffee shop	16,703	5.2	1,842
15	8	Amusement and recreation attendants	17,150	5.5	1,785
5	9	Cooks, fast food	17,760	4.1	1,980
10	10	Combined food preparation and serving workers, including fast food	17,765	1.4	1,912
7	11	Baggage porters and bellhops	17,960	8.3	1,987

Footnotes:

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- (2) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, non-production bonuses, and tips.
- (3) For information on earnings mean, relative standard error, and other calculations, see BLS Handbook of Methods, on the Internet at http://www.bls.gov/opub/hom/homch8_a.htm.
- (4) Rank is an ascending order of average earnings.

Hourly earnings rank(4)	Annual earnings rank(4)	Occupation	Annual earnings		Average annual hours
			Mean	Relative error (percent)	
12	12	Counter attendants, cafeteria, food concession, and coffee shop	18,146	3.8	1,916
6	13	Parking lot attendants	18,273	3.8	2,026
9	14	Dishwashers	18,443	2.5	2,000
14	15	Pressers, textile, garment, and related materials	18,969	4.8	1,980
79	16	Teacher assistants	19,186	1.2	1,465
53	17	Farmworkers and laborers, crop, nursery, and greenhouse	19,199	4.9	1,546
13	18	Food servers, nonrestaurant	19,286	5.9	2,017
11	19	Textile bleaching, and dyeing machine operators and tenders	19,488	5.4	2,075
16	20	Child care workers	19,573	1.8	1,981

Footnotes:

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- (3) For information on earnings mean, relative standard error, and other calculations, see BLS Handbook of Methods, on the Internet at http://www.bls.gov/opub/hom/homch8_a.htm.
- (4) Rank is an ascending order of average earnings.

Waiters and waitresses were among the lowest paid workers in terms of both annual and hourly earnings. The low earnings for these workers may be somewhat misleading because the NCS is designed to measure employers' costs for wages and salaries, which precludes collecting tips as part of wages. As a result, total earnings for waiters and waitresses are understated. Rates for some other low-ranked occupations--such as bartenders, baggage porters and bellhops, parking lot attendants, and tour guides and escorts--were similarly affected by the absence of information on tips.

Note that the ranking in table 2 counts from the lowest ranked upward. For example, the 66th hourly earnings rank for lifeguards, ski patrol, and other recreational protective service workers indicates that among the 591 published estimates, 525 occupations ranked higher, and 65 occupations ranked lower, in terms of average hourly earnings.⁵

In addition to presenting earnings data for detailed occupations, the NCS publishes average earnings for five broad occupational groups. Table 3 shows that average hourly earnings, by broad occupational group, are consistent with average annual earnings. Table 3 also shows the distribution into these five broad occupational groups of both the lowest and highest 20 detailed occupations among full-time civilian workers in terms of *hourly* earnings.

Table 3. Average hourly earnings and relative earnings of major occupational groups, full-time civilian workers, National Compensation Survey, July 2009 (All workers = 100)

Occupational group	Average hourly earnings	Relative earnings	Top 20 occupations ranked by hourly earnings	Lowest 20 occupations ranked by hourly earnings
All workers	\$22.36	100		
Management, professional, and related	34.41	154	19	0

Occupational group	Average hourly earnings	Relative earnings	Top 20 occupations ranked by hourly earnings	Lowest 20 occupations ranked by hourly earnings
Service	13.40	60	0	17
Sales and office	17.49	78	0	0
Natural resources, construction, and maintenance	21.16	95	0	0
Production, transportation, and material moving	16.37	73	1	3

Nineteen of the top 20 ranked occupations were in the management, professional, and related occupations group. Airline pilots, copilots, and flight engineers, which are classified under the production, transportation, and material moving group, were the one exception. When the list was extended to the top 50 ranked occupations (in terms of hourly earnings), the management, professional, and related group held 48 positions; the securities, commodities, and financial services sales agents (sales and office occupations) and airline pilots, copilots, and flight engineers (production, transportation, and material moving occupations) accounted for the remaining 2 positions.

Among the five major occupational groups, service workers had the lowest hourly earnings, averaging about 39 percent of the average hourly earnings of workers in management, professional, and related occupations. Thus, the service occupational group was strongly represented in the lowest 20 ranked occupations, holding 17 of the 20 positions. The three remaining occupations--parking lot attendants; textile bleaching and dyeing machine operators and tenders; and pressers, textile, garment, and related materials--were in the production, transportation, and material moving group. When the list was extended to the lowest 50 ranked occupations (in terms of hourly earnings), the services group held 27 positions; the production, transportation, and material moving group held 14; and the remaining 9 places were spread among the sales and office; natural resources, construction, and maintenance; and management, professional, and related occupations.

The [Standard Occupational Classification](#) places some occupations, such as apprentices and trainees, with the occupations for which they were being trained. Likewise, teacher assistants are classified in the same broad management, professional, and related group as teachers, even though the assistants low earnings are not consistent with the earnings of most occupations in the management and related group. Floral designers, which are classified under management, professional, and related occupations, is an occupation that provides another example of a low-paying job in a high-paying group.

The 2009 National Compensation Survey [bulletin](#) contains a broad variety of occupational wage data beyond those presented in this article. For example, the average hourly earnings of full-time civilian accountants and auditors were \$29.29. In addition, BLS published NCS data for nine levels of accountants and auditors, ranging from \$17.48 to \$61.07 per hour. The bulletin also presents data for State and local government separately from private industry, part-time, union and nonunion, and hospital industry workers, as well as earnings averages by earnings percentiles.

Note: Because of the relatively high standard errors for some occupations, users should exercise caution when making direct salary comparisons. This is especially applicable when the differences in average earnings are small. This article includes three appendix tables: Appendix table 1 ranks data by full-time hourly earnings for all civilian occupations. Appendix table 2 ranks full-time civilian annual earnings and annual hours scheduled. Appendix table 3 presents an alphabetic list of occupations, and annual hours, ranked by annual earnings.

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Notes

1 See *National Compensation Survey: Occupational Earnings in the United States, 2009*, Bulletin 2738 (Bureau of Labor Statistics, June 2010), on the Internet at <http://www.bls.gov/ncs/ncswage2009.htm>. Hourly earnings estimates for full-time surgeons and real estate brokers in the civilian sector were not published for July 2009. Although annual earnings estimates were published for these two occupations, they are omitted from this analysis. The NCS data in this bulletin were collected between December 2008 and January 2010, with an average reference month of July 2009.

2 See *Standard Occupational Classification Manual 2000* (Office of Management and Budget, October 2000); an online version of the 2000 Standard Occupational Classification (SOC) system is available on the Internet at http://www.bls.gov/soc/2000/soc_majo.htm.

3 For more information on the scope of the National Compensation Survey, see the technical note in *National Compensation Survey: Occupational Earnings in the United States, 2009*, Bulletin 2738, Appendix A, on the Internet at <http://www.bls.gov/ncs/ncswage2009.htm>.

4 See Richard Schumann, "Work Schedules in the National Compensation Survey," *Compensation and Working Conditions Online*, July 28, 2008, on the Internet at <http://www.bls.gov/opub/cwc/cm20080722ar01p1.htm>.

5 See notes at the end of appendix table 3.

Appendix Tables

- Appendix table 1. Ranking of full-time civilian workers: Average (mean) hourly earnings and relative errors, all occupations, National Compensation Survey, July 2009 [PDF] [XLS]
- Appendix table 2. Ranking of full-time civilian workers: Average (mean) annual earnings, relative errors, and average (mean) annual hours, all occupations, National Compensation Survey, July 2009 [PDF] [XLS]
- Appendix table 3. Alphabetic listing: Full-time civilian workers, average (mean) annual earnings, relative errors, and average (mean) annual hours, all occupations, National Compensation Survey, July 2009 [PDF] [XLS]

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