

# RELATIVE STANDARD ERRORS FOR ESTIMATES PUBLISHED IN EMPLOYER COSTS FOR EMPLOYEE COMPENSATION SUPPLEMENTARY TABLES December 2018

The following tables provide the relative standard errors for all cost estimates published in the Employer Costs for Employee Compensation – December 2018 supplementary tables.

Because the Employer Costs for Employee Compensation is a sample survey, it is subject to sampling errors. Sampling errors are differences that occur between the results computed from a sample of observations and those computed from all observations in the population. The estimates derived from different samples selected using the same sample design may differ from each other. A measure of the variation among these differing estimates is the standard error. The relative standard error is the standard error expressed as a percent of the cost. It can be used to measure the precision with which an estimate from a particular sample approximates the expected result of all possible samples. The chances are about 68 out of 100 that an estimate from the survey differs from a complete population figure by less than the standard error. The chances are about 90 out of 100 that this difference would be less than 1.6 times the standard error. Footnotes have been added for estimates with relative standard errors greater than 30 percent.

For a more detailed explanation of relative standard errors, see “Measuring Trends in the Structure and Levels of Employer Costs for Employee Compensation,” Compensation and Working Conditions, Summer 1997 and is available online at [www.bls.gov/opub/mlr/cwc/measuring-trends-in-the-structure-and-levels-of-employer-costs-for-employee-compensation.pdf](http://www.bls.gov/opub/mlr/cwc/measuring-trends-in-the-structure-and-levels-of-employer-costs-for-employee-compensation.pdf). For a detailed explanation of how to use standard error data to analyze differences in year-to-year changes, see “Analyzing Year-to-Year Changes in Employer Costs for Employee Compensation,” Compensation and Working Conditions, Spring 1998 and is available online at [www.bls.gov/opub/mlr/cwc/analyzing-year-to-year-changes-in-employer-costs-for-employee-compensation.pdf](http://www.bls.gov/opub/mlr/cwc/analyzing-year-to-year-changes-in-employer-costs-for-employee-compensation.pdf). This article supplements an article from the Summer 1997 issue of Compensation and Working Conditions, “Explaining the Differential Growth Rates of the ECI and ECEC,” which examined how differences in the construction of these measures contribute to differing trends and is available online at [www.bls.gov/opub/mlr/cwc/explaining-the-differential-growth-rates-of-the-eci-and-ecec.pdf](http://www.bls.gov/opub/mlr/cwc/explaining-the-differential-growth-rates-of-the-eci-and-ecec.pdf).

Standard errors relate to differences that occur from sampling errors, but not from nonsampling errors. Sampling errors are differences between the results computed from a sample of observations and those computed from all observations in the population. Nonsampling errors are not measured and include survey nonresponse and data collection and processing errors. Survey nonresponse is when sample members are unwilling or unable to participate in the survey. Data collection errors include provision of inaccurate data by respondents and definitional difficulties. Processing errors include errors in recording, coding, and entering data. Although nonsampling errors are not measured, BLS quality assurance programs contain procedures for reducing such errors. These procedures include data collection reinterviews, observed interviews, computer data edits, and systematic review of reports on which data are recorded. Extensive field economist training also is conducted to maintain high data collection standards.

## Obtaining information

Articles, bulletins, and other information may be obtained by contacting us by one of the methods listed below. Information will be made available to sensory impaired individuals upon request. Voice phone: (202) 691-5200; Federal Relay Service Number: 1-800-877-8339.



**Supplementary table 1. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in goods-producing industries, by occupational group, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in goods-producing industries <sup>1</sup> .....	\$39.49	\$26.35	\$13.14	\$2.55	\$1.68	\$3.63	\$1.94	\$3.34
<b>Occupational group</b>								
Management, professional, and related .....	69.00	46.59	22.41	6.04	2.72	5.12	3.94	4.59
Management, business, and financial .....	69.22	47.86	21.36	6.03	2.60	4.76	3.27	4.71
Professional and related .....	68.77	45.26	23.51	6.06	2.85	5.49	4.65	4.46
Sales and office .....	34.50	23.99	10.51	2.30	1.20	3.18	1.14	2.70
Office and administrative support .....	30.90	21.22	9.68	2.00	1.08	3.08	1.05	2.47
Natural resources, construction, and maintenance .....	37.23	24.99	12.24	1.55	1.39	3.25	2.21	3.84
Construction, extraction, farming, fishing, and forestry <sup>2</sup> .....	37.36	25.05	12.31	1.35	1.28	3.16	2.49	4.02
Installation, maintenance, and repair .....	36.83	24.81	12.02	2.17	1.71	3.51	1.35	3.29
Production, transportation, and material moving .....	29.48	19.08	10.40	1.81	1.57	3.39	1.05	2.58
Production .....	29.24	18.91	10.33	1.84	1.58	3.41	1.00	2.50
Transportation and material moving .....	30.65	19.89	10.76	1.64	1.51	3.30	1.35	2.96
Relative standard error								
All workers in goods-producing industries <sup>1</sup> .....	2.0	1.7	2.6	3.4	3.7	3.0	6.4	1.1
<b>Occupational group</b>								
Management, professional, and related .....	2.9	2.7	3.5	3.4	7.8	2.8	10.5	2.0
Management, business, and financial .....	2.8	2.7	3.4	4.3	5.8	3.3	11.8	2.3
Professional and related .....	4.3	4.2	4.8	4.0	13.2	3.1	13.9	2.6
Sales and office .....	3.1	3.1	3.8	5.4	9.0	3.7	9.2	2.4
Office and administrative support .....	2.3	2.0	3.3	3.8	6.6	3.5	11.1	2.4
Natural resources, construction, and maintenance .....	2.2	1.4	4.1	4.8	4.6	5.6	10.1	1.4
Construction, extraction, farming, fishing, and forestry <sup>2</sup> .....	2.8	1.7	5.0	6.9	5.6	7.4	10.7	1.7
Installation, maintenance, and repair .....	2.4	1.9	3.7	4.6	6.2	4.9	13.1	1.5
Production, transportation, and material moving .....	1.5	1.1	2.5	2.5	4.5	2.9	5.8	1.9
Production .....	1.6	1.2	2.9	3.1	5.2	3.3	5.5	1.9
Transportation and material moving .....	4.5	3.7	6.2	5.7	11.5	6.2	15.6	3.7

<sup>1</sup> Includes mining, construction, and manufacturing. The agriculture, forestry, farming, and hunting sector is excluded.

<sup>2</sup> Farming, fishing, and forestry occupations were combined with construction and extraction occupational group as of December 2006.

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 2. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in manufacturing industries, by occupational group, establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
<b>Cost per hour worked</b>								
All workers in manufacturing .....	\$39.09	\$25.59	\$13.49	\$2.96	\$1.92	\$3.88	\$1.74	\$3.00
<b>Occupational group</b>								
Management, professional, and related .....	69.50	46.22	23.28	6.35	3.09	5.37	3.94	4.52
Management, business, and financial .....	71.80	48.73	23.08	6.72	3.08	5.09	3.52	4.67
Professional and related .....	67.78	44.35	23.43	6.08	3.10	5.58	4.26	4.40
Sales and office .....	35.07	23.79	11.28	2.61	1.33	3.44	1.31	2.58
Office and administrative support .....	30.97	20.77	10.20	2.19	1.15	3.34	1.19	2.32
Natural resources, construction, and maintenance .....	39.84	25.35	14.49	2.74	2.28	4.12	2.05	3.31
Installation, maintenance, and repair .....	40.53	25.83	14.70	2.95	2.18	4.33	1.98	3.26
Production, transportation, and material moving .....	28.87	18.59	10.28	1.83	1.56	3.41	0.99	2.49
Production .....	29.22	18.78	10.44	1.87	1.60	3.48	1.01	2.48
Transportation and material moving .....	26.60	17.34	9.26	1.57	1.31	2.98	0.86	2.54
<b>Establishment size</b>								
1-99 workers .....	29.64	20.96	8.68	1.89	1.02	2.57	0.64	2.56
1-49 workers .....	28.31	20.46	7.85	1.72	0.96	2.14	0.52	2.51
50-99 workers .....	31.71	21.73	9.98	2.16	1.11	3.24	0.83	2.64
100 workers or more .....	43.96	27.99	15.98	3.51	2.39	4.55	2.31	3.22
100-499 workers .....	37.43	24.85	12.58	2.88	1.60	3.73	1.43	2.94
500 workers or more .....	52.03	31.86	20.17	4.28	3.35	5.57	3.40	3.57
<b>Bargaining status</b>								
Union .....	43.94	24.66	19.28	3.25	2.75	6.96	2.94	3.38
Nonunion .....	38.33	25.74	12.59	2.91	1.79	3.40	1.55	2.94
<b>Relative standard error</b>								
All workers in manufacturing .....	2.4	2.4	2.7	3.5	4.3	2.8	5.7	1.7
<b>Occupational group</b>								
Management, professional, and related .....	2.6	2.5	3.2	3.1	8.3	3.1	6.6	1.9
Management, business, and financial .....	3.6	3.6	4.2	5.0	6.7	4.5	7.8	2.7
Professional and related .....	3.0	2.6	4.1	3.2	13.0	3.2	7.7	2.2
Sales and office .....	4.8	4.6	5.7	7.6	12.8	4.7	12.0	3.8
Office and administrative support .....	3.2	2.6	4.8	5.1	9.6	4.5	12.6	3.0
Natural resources, construction, and maintenance .....	2.8	2.6	3.8	3.5	7.0	4.0	9.8	2.3
Installation, maintenance, and repair .....	3.3	2.6	4.8	4.3	7.0	5.0	13.4	2.0
Production, transportation, and material moving .....	1.6	1.1	2.7	2.6	4.9	3.2	5.3	1.8
Production .....	1.7	1.2	2.9	3.0	5.3	3.3	5.5	2.0
Transportation and material moving .....	3.8	3.1	5.6	6.3	8.7	6.5	11.7	3.4
<b>Establishment size</b>								
1-99 workers .....	3.2	3.0	4.1	5.9	6.0	4.3	11.9	2.6
1-49 workers .....	4.9	4.5	6.4	10.1	10.1	6.6	20.5	3.9
50-99 workers .....	4.3	3.8	5.9	8.2	7.2	7.8	15.7	3.6
100 workers or more .....	2.7	2.7	2.8	3.5	4.9	2.5	5.2	2.1
100-499 workers .....	2.8	2.6	3.4	4.4	4.6	3.0	10.5	1.9
500 workers or more .....	3.6	3.9	3.6	4.2	6.5	3.2	6.2	3.2
<b>Bargaining status</b>								
Union .....	3.7	3.6	4.4	5.6	11.5	3.2	7.7	4.4
Nonunion .....	2.8	2.7	3.1	4.0	4.7	2.7	6.8	1.9

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 3. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in service-providing industries, by occupational group, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in service providing industries <sup>1</sup> .....	\$32.95	\$23.34	\$9.61	\$2.42	\$0.98	\$2.53	\$1.19	\$2.50
<b>Occupational group</b>								
Management, professional, and related .....	58.34	40.86	17.48	5.21	1.96	4.10	2.37	3.84
Management, business, and financial .....	65.31	45.25	20.06	6.11	2.80	4.26	2.72	4.17
Professional and related .....	54.66	38.54	16.12	4.73	1.51	4.02	2.19	3.67
Sales and office .....	25.19	18.06	7.13	1.63	0.65	2.19	0.76	1.90
Sales and related .....	23.78	18.01	5.77	1.33	0.58	1.43	0.58	1.84
Office and administrative support .....	26.24	18.10	8.14	1.86	0.71	2.75	0.89	1.94
Service .....	16.75	12.64	4.11	0.71	0.34	1.18	0.29	1.59
Natural resources, construction, and maintenance .....	32.75	22.53	10.22	2.07	0.95	2.72	1.56	2.93
Installation, maintenance, and repair .....	33.45	23.10	10.34	2.21	0.96	2.80	1.48	2.90
Production, transportation, and material moving .....	27.78	18.66	9.12	1.62	0.85	2.59	1.39	2.66
Production .....	22.67	16.44	6.23	1.19	0.64	1.63	0.64	2.11
Transportation and material moving .....	29.34	19.34	10.00	1.75	0.92	2.89	1.62	2.83
Relative standard error								
All workers in service providing industries <sup>1</sup> .....	1.9	1.7	2.3	3.0	3.9	2.3	4.0	1.5
<b>Occupational group</b>								
Management, professional, and related .....	2.0	2.0	2.3	2.8	5.0	2.1	4.5	1.4
Management, business, and financial .....	1.8	1.7	2.5	2.8	7.5	2.4	5.4	1.2
Professional and related .....	2.9	3.0	2.9	3.7	4.9	3.0	5.8	1.8
Sales and office .....	1.5	1.4	1.9	2.6	3.9	2.0	5.7	1.1
Sales and related .....	2.7	2.5	3.8	5.1	6.9	3.3	12.4	1.9
Office and administrative support .....	1.3	1.2	1.9	2.4	4.2	2.5	4.9	1.3
Service .....	2.1	1.9	3.2	5.4	5.6	6.1	5.6	2.0
Natural resources, construction, and maintenance .....	2.4	2.1	4.1	2.7	5.5	5.0	12.6	3.4
Installation, maintenance, and repair .....	2.7	2.3	4.3	2.9	5.6	5.4	14.0	2.5
Production, transportation, and material moving .....	3.6	3.0	5.1	6.7	6.9	6.6	9.3	2.6
Production .....	4.6	4.0	6.9	8.5	12.1	8.8	23.1	3.1
Transportation and material moving .....	4.4	3.8	5.9	7.9	7.4	7.1	11.3	2.9

<sup>1</sup> Includes utilities; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional and technical services; management of companies and enterprises; administrative and waste services; educational services; health care and social assistance; arts, entertainment and recreation; accommodation and food services; other services, except public administration; and public administration.

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 4. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in trade, transportation, and utilities industries, by occupational group, establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
<b>Cost per hour worked</b>								
All workers in trade, transportation, and utilities .....	\$28.22	\$19.82	\$8.40	\$1.77	\$0.79	\$2.32	\$1.18	\$2.34
<b>Occupational group</b>								
Management, professional, and related .....	56.70	40.19	16.51	4.66	1.98	3.62	2.39	3.86
Management, business, and financial .....	62.22	43.97	18.24	5.18	2.52	3.83	2.55	4.16
Professional and related .....	49.13	35.00	14.13	3.94	1.24	3.34	2.17	3.44
Sales and office .....	21.41	15.88	5.53	1.15	0.46	1.62	0.58	1.73
Sales and related .....	20.24	15.56	4.68	0.97	0.43	1.19	0.43	1.66
Office and administrative support .....	23.68	16.50	7.18	1.48	0.51	2.46	0.86	1.86
Service .....	18.68	13.18	5.50	0.83	0.48	1.66	0.86	1.67
Natural resources, construction, and maintenance .....	35.39	24.01	11.38	2.36	1.17	3.04	1.72	3.10
Installation, maintenance, and repair .....	34.96	23.83	11.13	2.32	1.17	2.97	1.62	3.05
Production, transportation, and material moving .....	31.87	20.80	11.07	2.02	1.01	3.21	1.88	2.96
Transportation and material moving .....	32.21	20.91	11.30	2.04	1.01	3.27	1.95	3.03
<b>Establishment size</b>								
1-99 workers .....	25.06	18.66	6.41	1.37	0.57	1.63	0.65	2.18
1-49 workers .....	24.59	18.55	6.05	1.31	0.53	1.50	0.56	2.14
50-99 workers .....	26.70	19.03	7.67	1.57	0.70	2.09	0.97	2.34
100 workers or more .....	32.44	21.38	11.06	2.29	1.08	3.25	1.88	2.55
100-499 workers .....	26.80	18.43	8.37	1.69	0.83	2.51	1.17	2.17
500 workers or more .....	47.51	29.26	18.25	3.90	1.77	5.24	3.78	3.57
<b>Bargaining status</b>								
Union .....	43.84	25.69	18.16	3.30	1.26	6.02	4.21	3.37
Nonunion .....	25.79	18.91	6.88	1.53	0.72	1.75	0.71	2.18
<b>Relative standard error</b>								
All workers in trade, transportation, and utilities .....	1.9	1.8	2.4	3.1	5.1	2.4	5.0	1.5
<b>Occupational group</b>								
Management, professional, and related .....	3.4	3.4	3.8	3.8	11.1	3.0	8.3	2.6
Management, business, and financial .....	3.3	3.2	4.3	4.1	14.5	3.9	8.5	2.7
Professional and related .....	6.7	6.9	6.6	7.8	14.2	5.0	10.6	5.5
Sales and office .....	1.5	1.5	2.0	2.5	4.6	2.8	5.0	1.1
Sales and related .....	1.9	1.9	2.6	4.0	7.0	3.3	6.8	1.3
Office and administrative support .....	2.1	1.9	2.9	3.5	6.4	3.6	6.2	2.1
Service .....	3.0	2.3	5.3	7.2	7.4	6.8	11.5	2.8
Natural resources, construction, and maintenance .....	3.5	3.2	4.1	3.8	7.5	4.1	10.7	2.4
Installation, maintenance, and repair .....	3.5	3.4	4.0	3.9	7.9	4.0	10.9	2.6
Production, transportation, and material moving .....	3.9	3.7	4.6	7.1	6.8	5.1	8.2	2.7
Transportation and material moving .....	4.4	4.1	5.2	8.0	7.1	5.6	9.7	2.9
<b>Establishment size</b>								
1-99 workers .....	1.6	1.6	2.4	3.5	6.5	2.9	6.1	1.4
1-49 workers .....	2.0	2.1	2.7	3.8	6.7	3.7	6.3	1.5
50-99 workers .....	3.8	3.8	5.0	7.0	13.5	6.1	10.7	3.3
100 workers or more .....	3.2	2.9	3.9	4.7	6.0	3.9	6.9	2.6
100-499 workers .....	2.2	2.0	3.1	3.7	4.6	3.6	8.1	1.9
500 workers or more .....	5.4	5.4	5.7	7.2	10.8	5.1	8.2	4.3
<b>Bargaining status</b>								
Union .....	4.5	4.9	4.3	7.2	11.1	2.9	6.2	4.0
Nonunion .....	1.6	1.6	2.1	2.6	5.6	2.1	4.9	1.4

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 5. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in wholesale trade industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in wholesale trade .....	\$37.75	\$26.70	\$11.05	\$2.77	\$1.18	\$2.90	\$1.35	\$2.85
<b>Occupational group</b>								
Sales and office .....	35.31	25.75	9.56	2.49	0.82	2.70	1.01	2.54
Office and administrative support .....	26.17	18.40	7.76	1.77	0.70	2.62	0.69	1.99
Production, transportation, and material moving .....	26.67	18.05	8.62	1.57	0.92	2.53	1.12	2.48
Transportation and material moving .....	26.03	17.53	8.50	1.48	0.93	2.45	1.11	2.53
<b>Establishment size</b>								
1-99 workers .....	37.76	27.23	10.52	2.67	1.10	2.71	1.17	2.88
1-49 workers .....	37.92	27.48	10.44	2.63	1.06	2.68	1.19	2.89
100 workers or more .....	37.74	25.59	12.15	2.97	1.36	3.30	1.74	2.78
100-499 workers .....	35.46	24.62	10.84	2.69	0.91	3.04	1.50	2.70
Relative standard error								
All workers in wholesale trade .....	2.6	2.8	2.7	2.8	11.1	2.9	8.0	1.7
<b>Occupational group</b>								
Sales and office .....	4.2	4.9	4.0	5.3	9.1	4.1	12.2	3.0
Office and administrative support .....	2.5	2.3	3.4	3.4	11.6	5.4	11.2	2.0
Production, transportation, and material moving .....	2.8	2.4	4.2	4.9	7.9	5.0	13.5	2.8
Transportation and material moving .....	3.9	3.3	5.6	7.1	10.0	6.5	16.3	3.3
<b>Establishment size</b>								
1-99 workers .....	3.1	3.7	3.1	4.3	14.4	3.4	4.9	1.8
1-49 workers .....	4.5	5.4	3.5	4.9	17.2	3.3	4.8	2.6
100 workers or more .....	5.6	5.2	7.0	7.0	12.7	6.4	18.3	4.3
100-499 workers .....	7.2	7.0	8.1	9.8	9.7	7.8	22.1	5.2

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 6. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in retail trade industries, by occupational group, establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in retail trade .....	\$19.95	\$15.02	\$4.93	\$0.96	\$0.43	\$1.36	\$0.47	\$1.71
<b>Occupational group</b>								
Sales and office .....	17.67	13.46	4.21	0.77	0.36	1.20	0.38	1.50
Sales and related .....	17.14	13.32	3.82	0.69	0.37	0.99	0.30	1.48
Office and administrative support .....	19.37	13.93	5.44	1.03	0.35	1.87	0.65	1.55
Production, transportation, and material moving .....	18.86	13.50	5.35	0.85	0.38	1.63	0.51	1.98
Transportation and material moving .....	18.24	13.08	5.16	0.79	0.36	1.58	0.46	1.98
<b>Establishment size</b>								
1-99 workers .....	18.75	14.68	4.07	0.78	0.31	0.99	0.30	1.69
1-49 workers .....	18.34	14.53	3.82	0.75	0.31	0.87	0.22	1.67
50-99 workers .....	20.40	15.29	5.11	0.88	0.34	1.48	0.64	1.77
100 workers or more .....	21.82	15.55	6.27	1.24	0.62	1.95	0.73	1.74
100-499 workers .....	21.46	15.26	6.20	1.20	0.63	1.93	0.73	1.71
<b>Bargaining status</b>								
Union .....	23.98	13.98	10.00	1.32	0.36	4.19	2.26	1.87
Nonunion .....	19.61	15.10	4.51	0.93	0.44	1.13	0.32	1.70
Relative standard error								
All workers in retail trade .....	1.7	1.8	1.9	3.4	4.8	2.7	4.5	1.2
<b>Occupational group</b>								
Sales and office .....	0.9	0.9	1.5	2.0	5.5	3.2	5.5	0.8
Sales and related .....	0.9	0.9	1.8	2.1	6.5	3.7	5.3	0.9
Office and administrative support .....	2.1	2.2	2.8	4.5	7.8	3.6	7.9	2.0
Production, transportation, and material moving .....	2.6	2.0	4.1	5.3	9.9	6.0	8.5	1.8
Transportation and material moving .....	3.0	2.4	4.7	6.5	12.1	7.0	8.7	2.1
<b>Establishment size</b>								
1-99 workers .....	2.1	1.9	3.3	4.9	10.1	5.7	8.0	1.6
1-49 workers .....	2.4	2.1	3.9	4.8	12.2	6.6	11.8	2.0
50-99 workers .....	4.8	4.8	7.7	9.7	20.2	11.4	21.1	3.7
100 workers or more .....	2.6	2.6	2.9	4.4	4.7	3.5	6.3	1.8
100-499 workers .....	2.2	2.1	2.8	4.1	5.5	3.6	6.5	1.6
<b>Bargaining status</b>								
Union .....	1.5	1.9	3.3	3.5	8.8	4.0	7.8	2.1
Nonunion .....	1.9	1.9	2.3	3.6	5.0	3.1	4.5	1.3

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 7. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in transportation and warehousing industries, by establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in transportation and warehousing .....	\$38.80	\$24.96	\$13.84	\$2.71	\$1.26	\$4.03	\$2.44	\$3.39
<b>Establishment size</b>								
1-99 workers .....	29.43	20.91	8.52	1.60	0.73	2.32	0.88	2.99
1-49 workers .....	29.19	21.28	7.91	1.48	0.58	2.18	0.72	2.95
100 workers or more .....	44.87	27.59	17.29	3.43	1.61	5.14	3.45	3.65
100-499 workers .....	37.34	23.98	13.36	2.44	1.48	4.00	2.09	3.36
<b>Bargaining status</b>								
Union .....	54.69	31.98	22.71	4.43	1.77	7.11	5.22	4.18
Nonunion .....	30.96	21.50	9.46	1.87	1.02	2.51	1.07	3.00
Relative standard error								
All workers in transportation and warehousing .....	3.8	3.5	4.7	5.7	7.5	4.9	10.6	2.8
<b>Establishment size</b>								
1-99 workers .....	4.5	4.2	6.9	8.3	11.9	9.4	21.2	3.7
1-49 workers .....	4.5	4.7	7.1	11.4	12.5	11.2	22.0	2.5
100 workers or more .....	4.9	4.8	5.6	7.1	9.5	5.6	10.7	3.9
100-499 workers .....	5.5	4.5	8.0	7.9	9.7	12.3	20.6	5.0
<b>Bargaining status</b>								
Union .....	6.3	6.7	5.7	8.8	13.5	3.6	9.6	5.0
Nonunion .....	4.2	3.7	5.9	6.6	12.1	5.6	15.3	3.8

Note: The sum of individual items may not equal totals due to rounding.



**Supplementary table 8. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in information industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in information .....	\$57.29	\$37.98	\$19.31	\$5.18	\$2.58	\$4.89	\$2.97	\$3.70
<b>Occupational group</b>								
Management, professional, and related .....	72.66	49.00	23.66	6.96	3.58	5.61	2.96	4.55
Professional and related .....	65.02	43.51	21.52	6.00	3.08	5.43	2.78	4.22
Sales and office .....	36.62	23.78	12.84	2.77	1.38	3.88	(*)2.31	2.49
<b>Establishment size</b>								
1-99 workers .....	42.88	29.71	13.17	3.55	1.22	3.51	(*)1.94	2.95
100 workers or more .....	67.72	43.97	23.75	6.35	3.57	5.89	3.71	4.24
100-499 workers .....	62.39	40.65	21.74	5.62	2.80	5.36	(*)3.89	4.06
500 workers or more .....	73.72	47.71	26.01	7.17	4.43	6.48	3.50	4.43
Relative standard error								
All workers in information .....	4.1	3.7	5.5	6.1	6.4	3.7	17.0	3.3
<b>Occupational group</b>								
Management, professional, and related .....	3.7	3.4	4.7	5.8	7.2	3.5	13.1	3.1
Professional and related .....	3.6	3.2	4.8	4.0	7.6	3.5	14.9	3.4
Sales and office .....	6.5	6.5	10.7	7.4	11.1	7.4	38.5	5.3
<b>Establishment size</b>								
1-99 workers .....	7.2	7.6	8.8	11.1	11.9	7.6	31.1	5.7
100 workers or more .....	3.5	3.1	5.1	5.1	5.5	2.5	19.4	2.8
100-499 workers .....	5.7	5.0	8.8	6.7	10.4	3.6	32.4	4.2
500 workers or more .....	4.7	4.6	5.3	7.0	9.0	3.0	10.6	4.7

(\*) The relative standard error for this estimate is greater than 30 percent.

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 9. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in financial activities industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in financial activities .....	\$46.67	\$31.40	\$15.26	\$4.02	\$2.50	\$3.97	\$1.74	\$3.03
<b>Occupational group</b>								
Management, professional, and related .....	69.58	46.28	23.30	6.67	4.48	5.05	2.81	4.28
Management, business, and financial .....	69.79	46.32	23.46	6.61	4.89	4.94	2.78	4.25
Professional and related .....	68.95	46.15	22.80	6.85	3.26	5.40	2.90	4.40
Sales and office .....	32.95	22.52	10.44	2.45	1.35	3.37	1.07	2.18
Sales and related .....	45.14	33.05	12.08	3.18	1.77	2.99	1.38	2.77
Office and administrative support .....	29.44	19.48	9.96	2.24	1.23	3.49	0.98	2.02
<b>Establishment size</b>								
1-99 workers .....	37.45	26.10	11.34	2.86	1.63	3.11	1.14	2.60
1-49 workers .....	36.23	25.35	10.87	2.71	1.52	3.02	1.08	2.54
100 workers or more .....	57.94	37.88	20.06	5.44	3.57	5.03	2.47	3.55
100-499 workers .....	54.82	36.88	17.94	4.96	2.93	4.64	1.98	3.43
500 workers or more .....	60.37	38.66	21.71	5.80	4.06	5.34	2.86	3.64
Relative standard error								
All workers in financial activities .....	1.9	1.7	2.5	2.5	9.3	1.8	3.5	1.4
<b>Occupational group</b>								
Management, professional, and related .....	1.8	1.7	2.6	2.6	9.7	1.8	3.1	1.4
Management, business, and financial .....	1.9	1.8	2.9	2.7	11.1	2.2	3.6	1.4
Professional and related .....	3.1	3.4	2.8	4.2	5.1	2.2	4.7	2.3
Sales and office .....	2.6	2.9	2.6	2.3	7.7	2.1	5.7	1.7
Sales and related .....	7.9	8.5	8.7	8.0	18.0	8.3	14.5	5.4
Office and administrative support .....	1.3	1.0	2.0	2.1	6.5	2.1	5.1	1.1
<b>Establishment size</b>								
1-99 workers .....	2.6	2.3	4.0	4.2	17.8	3.3	5.5	2.1
1-49 workers .....	2.7	2.3	4.5	3.7	20.2	3.5	6.6	2.1
100 workers or more .....	2.6	2.8	2.5	3.5	7.8	1.9	4.4	1.9
100-499 workers .....	6.1	6.3	6.2	9.2	11.7	2.8	9.4	4.1
500 workers or more .....	2.1	2.2	2.1	2.8	8.1	2.9	7.6	2.0

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 10. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in professional and business services industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
<b>Cost per hour worked</b>								
All workers in professional and business services .....	\$40.65	\$29.25	\$11.41	\$3.21	\$1.28	\$2.58	\$1.33	\$3.01
<b>Occupational group</b>								
Management, professional, and related .....	60.92	43.34	17.58	5.41	2.03	3.72	2.33	4.09
Management, business, and financial .....	62.20	43.86	18.34	5.89	2.29	3.60	2.47	4.08
Professional and related .....	60.08	43.00	17.08	5.09	1.85	3.80	2.24	4.10
Sales and office .....	29.88	21.39	8.49	2.23	0.85	2.34	0.87	2.20
Office and administrative support .....	27.20	19.40	7.81	1.95	0.81	2.34	0.67	2.04
Service .....	18.24	14.02	4.22	0.73	0.44	1.03	0.22	1.79
Production, transportation, and material moving .....	19.82	14.92	4.90	0.71	0.64	1.17	0.22	2.17
Transportation and material moving .....	21.41	15.56	5.86	0.76	0.80	1.69	(*)0.24	2.37
<b>Establishment size</b>								
1-99 workers .....	38.14	28.41	9.74	2.75	0.95	2.26	0.86	2.91
1-49 workers .....	37.18	27.79	9.38	2.56	0.98	2.23	0.73	2.88
50-99 workers .....	40.93	30.17	10.76	3.29	0.88	2.34	(*)1.25	2.99
100 workers or more .....	43.24	30.11	13.12	3.68	1.62	2.90	1.81	3.12
100-499 workers .....	38.70	27.59	11.11	3.10	1.18	2.59	1.28	2.97
500 workers or more .....	48.36	32.97	15.39	4.33	2.13	3.25	2.40	3.29
<b>Relative standard error</b>								
All workers in professional and business services .....	3.5	3.2	4.7	5.5	7.7	5.7	9.3	3.0
<b>Occupational group</b>								
Management, professional, and related .....	2.6	2.3	3.9	4.3	9.6	4.0	9.4	2.0
Management, business, and financial .....	3.5	3.1	5.0	5.0	13.0	5.3	12.3	2.5
Professional and related .....	3.3	2.8	5.0	5.5	12.1	5.0	10.3	2.4
Sales and office .....	5.1	4.6	7.1	9.2	11.5	6.0	23.5	3.7
Office and administrative support .....	2.5	2.0	4.5	5.7	11.7	5.4	12.2	2.4
Service .....	3.7	3.3	7.8	12.5	12.3	18.6	30.0	4.3
Production, transportation, and material moving .....	6.4	5.0	11.4	14.8	17.3	20.7	28.7	5.7
Transportation and material moving .....	9.7	7.6	16.0	19.9	27.1	24.4	36.0	9.4
<b>Establishment size</b>								
1-99 workers .....	3.8	3.3	5.4	6.3	7.5	7.5	14.0	2.9
1-49 workers .....	3.6	3.2	5.1	6.7	9.1	8.6	10.6	2.8
50-99 workers .....	6.4	5.9	9.0	9.9	13.8	8.8	30.9	4.4
100 workers or more .....	4.7	4.4	5.9	7.4	10.1	6.2	11.7	3.9
100-499 workers .....	6.1	5.6	7.8	8.6	14.7	7.9	17.4	5.5
500 workers or more .....	8.4	8.2	9.2	12.7	13.1	8.6	15.0	6.6

(\*) The relative standard error for this estimate is greater than 30 percent.

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 11. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in education and health services industries, by occupational group, establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in education and health services .....	\$36.85	\$25.92	\$10.93	\$3.04	\$0.80	\$3.15	\$1.34	\$2.60
<b>Occupational group</b>								
Management, professional, and related .....	52.99	37.30	15.70	4.74	1.11	4.14	2.21	3.49
Management, business, and financial .....	68.61	47.94	20.67	7.21	1.10	4.77	3.35	4.25
Professional and related .....	51.25	36.11	15.14	4.47	1.11	4.07	2.09	3.41
Sales and office .....	26.11	17.94	8.16	2.04	0.44	3.03	0.79	1.87
Office and administrative support .....	26.19	17.98	8.21	2.05	0.44	3.04	0.81	1.87
Service .....	20.42	14.53	5.89	1.26	0.54	1.94	0.43	1.73
<b>Establishment size</b>								
1-99 workers .....	30.38	22.69	7.69	2.18	0.43	1.99	0.78	2.30
1-49 workers .....	31.02	23.33	7.69	2.33	0.41	1.84	0.80	2.32
50-99 workers .....	28.54	20.85	7.69	1.78	0.51	2.41	0.71	2.27
100 workers or more .....	41.75	28.37	13.38	3.69	1.08	4.03	1.76	2.82
100-499 workers .....	34.56	24.55	10.01	2.81	0.57	3.05	1.14	2.44
500 workers or more .....	47.59	31.47	16.12	4.40	1.50	4.82	2.27	3.13
<b>Bargaining status</b>								
Union .....	51.09	30.87	20.22	4.66	1.45	7.44	3.17	3.51
Nonunion .....	35.76	25.54	10.21	2.92	0.75	2.82	1.20	2.53
Relative standard error								
All workers in education and health services .....	4.1	4.2	4.4	5.9	5.9	4.9	8.3	2.6
<b>Occupational group</b>								
Management, professional, and related .....	4.6	4.7	4.5	5.9	5.3	4.3	8.7	2.7
Management, business, and financial .....	8.1	8.5	7.4	8.6	24.1	4.8	17.8	4.6
Professional and related .....	5.0	5.3	4.7	6.3	5.0	4.8	9.0	2.9
Sales and office .....	2.3	2.1	4.1	4.5	9.5	8.8	7.1	1.9
Office and administrative support .....	2.3	2.1	4.2	4.7	9.6	9.0	7.3	1.9
Service .....	3.8	3.5	5.6	8.0	10.3	9.3	8.4	3.4
<b>Establishment size</b>								
1-99 workers .....	5.7	5.3	7.3	10.0	16.9	9.4	16.2	4.0
1-49 workers .....	6.4	6.1	8.3	10.9	22.6	11.1	19.8	4.7
50-99 workers .....	6.1	5.8	7.8	12.0	13.9	11.4	19.2	4.5
100 workers or more .....	4.7	4.9	4.6	6.1	6.1	4.6	8.6	2.8
100-499 workers .....	11.4	11.6	11.4	14.8	9.9	10.9	27.3	5.8
500 workers or more .....	4.1	4.0	4.3	6.4	6.4	3.8	7.4	3.0
<b>Bargaining status</b>								
Union .....	8.0	8.1	8.0	14.5	12.4	4.9	12.1	7.0
Nonunion .....	4.5	4.4	4.7	6.1	5.8	5.2	10.1	2.7

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 12. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in educational services industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in educational services .....	\$46.85	\$33.76	\$13.09	\$3.63	\$0.24	\$3.77	\$2.26	\$3.19
<b>Occupational group</b>								
Management, professional, and related .....	51.53	37.66	13.87	3.93	0.23	3.80	2.43	3.48
Management, business, and financial .....	66.24	46.00	20.24	7.42	0.40	4.81	3.46	4.15
Professional and related .....	49.01	36.23	12.77	3.33	0.20	3.63	2.25	3.36
Sales and office .....	31.49	20.78	10.71	2.73	0.19	4.02	1.64	2.12
Office and administrative support .....	31.53	20.63	10.90	2.77	0.20	4.13	1.70	2.11
Service .....	26.26	17.13	9.13	2.16	0.33	3.13	1.53	1.99
<b>Establishment size</b>								
1-99 workers .....	34.04	26.31	7.73	1.64	0.10	2.16	1.27	2.56
100 workers or more .....	54.51	38.22	16.30	4.82	0.33	4.74	2.85	3.56
100-499 workers .....	43.96	31.71	12.25	3.66	0.08	3.53	1.81	3.17
500 workers or more .....	63.19	43.57	19.62	5.78	0.54	5.72	3.70	3.88
Relative standard error								
All workers in educational services .....	3.6	4.0	3.8	5.9	7.5	4.3	7.1	3.9
<b>Occupational group</b>								
Management, professional, and related .....	4.2	4.6	4.4	6.8	9.1	5.1	7.7	4.7
Management, business, and financial .....	4.0	4.5	3.6	5.3	12.3	3.7	4.7	3.9
Professional and related .....	4.5	5.1	4.9	7.3	10.6	5.9	9.4	5.1
Sales and office .....	3.2	2.8	5.0	5.5	19.9	6.9	8.3	2.4
Office and administrative support .....	3.3	2.7	4.9	5.8	20.4	6.4	7.9	2.6
Service .....	6.5	6.1	9.2	11.1	11.8	10.2	16.7	7.7
<b>Establishment size</b>								
1-99 workers .....	6.1	6.6	10.7	15.8	28.0	14.5	26.4	5.7
100 workers or more .....	3.2	3.4	3.3	4.6	9.6	3.9	4.8	4.0
100-499 workers .....	6.4	6.1	9.1	14.6	25.8	11.2	14.2	8.9
500 workers or more .....	2.9	3.0	2.7	4.2	7.1	2.8	2.6	2.0

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 13. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in health care and social assistance industries, by occupational group, establishment size and bargaining status, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
<b>Cost per hour worked</b>								
All workers in health care and social assistance .....	\$35.39	\$24.78	\$10.61	\$2.95	\$0.88	\$3.06	\$1.20	\$2.51
<b>Occupational group</b>								
Management, professional, and related .....	53.38	37.20	16.18	4.95	1.34	4.23	2.16	3.50
Professional and related .....	51.80	36.08	15.72	4.74	1.34	4.17	2.05	3.42
Sales and office .....	25.43	17.59	7.84	1.95	0.47	2.90	0.69	1.84
Office and administrative support .....	25.54	17.66	7.88	1.96	0.47	2.91	0.70	1.84
Service .....	20.25	14.46	5.80	1.23	0.55	1.90	0.40	1.72
<b>Establishment size</b>								
1-99 workers .....	29.92	22.24	7.68	2.25	0.47	1.97	0.72	2.27
1-49 workers .....	30.90	23.13	7.77	2.39	0.44	1.84	0.79	2.30
50-99 workers .....	26.93	19.51	7.43	1.83	0.58	2.35	0.47	2.19
100 workers or more .....	39.67	26.77	12.91	3.50	1.20	3.91	1.59	2.70
100-499 workers .....	33.02	23.37	9.64	2.67	0.65	2.97	(*)1.03	2.32
500 workers or more .....	45.07	29.52	15.55	4.18	1.66	4.67	2.04	3.01
<b>Bargaining status</b>								
Union .....	49.99	29.89	20.10	4.75	1.56	7.40	2.93	3.45
Nonunion .....	34.23	24.37	9.86	2.81	0.83	2.71	1.07	2.44
<b>Relative standard error</b>								
All workers in health care and social assistance .....	4.9	4.9	5.1	6.8	6.3	5.7	10.3	3.0
<b>Occupational group</b>								
Management, professional, and related .....	5.6	5.9	5.3	7.0	5.4	5.1	11.1	3.2
Professional and related .....	6.1	6.5	5.5	7.2	5.1	5.7	11.1	3.4
Sales and office .....	2.5	2.3	4.6	5.3	9.9	10.1	8.5	2.1
Office and administrative support .....	2.5	2.3	4.7	5.4	10.0	10.3	8.7	2.1
Service .....	3.9	3.7	5.8	8.4	10.5	9.8	8.8	3.5
<b>Establishment size</b>								
1-99 workers .....	6.4	6.1	8.1	10.7	17.1	10.5	19.0	4.5
1-49 workers .....	7.0	6.7	9.0	11.6	23.0	12.0	21.7	5.1
50-99 workers .....	7.8	7.5	9.4	13.5	14.2	13.6	22.4	5.6
100 workers or more .....	5.7	5.9	5.4	7.3	6.5	5.4	10.9	3.1
100-499 workers .....	13.8	14.0	13.7	17.7	10.1	12.8	34.8	6.8
500 workers or more .....	4.7	4.6	5.0	7.5	6.9	4.5	9.0	3.4
<b>Bargaining status</b>								
Union .....	8.9	8.9	8.9	16.0	13.1	5.3	12.9	7.7
Nonunion .....	5.3	5.2	5.6	7.2	6.2	6.1	12.8	3.1

(\*) The relative standard error for this estimate is greater than 30 percent.

Note: The sum of individual items may not equal totals due to rounding.

**Supplementary table 14. Employer costs per hour worked for employee compensation and the relative standard error: private industry workers in leisure and hospitality industries, by occupational group and establishment size, December 2018**

(Relative standard error in percent)

Series	Total compensation	Wages and salaries	Benefit costs					
			Total	Paid leave	Supplemental pay	Insurance	Retirement and savings	Legally required benefits
Cost per hour worked								
All workers in leisure and hospitality .....	\$15.40	\$12.05	\$3.35	\$0.50	\$0.22	\$0.85	\$0.24	\$1.53
<b>Occupational group</b>								
Sales and office .....	18.38	14.00	4.37	0.91	0.25	1.36	(*)0.32	1.54
Service .....	13.75	10.91	2.83	0.35	0.19	0.70	0.17	1.43
<b>Establishment size</b>								
1-99 workers .....	13.56	11.00	2.56	0.30	0.17	0.54	0.11	1.44
1-49 workers .....	13.34	10.87	2.47	0.29	0.16	0.50	(*)0.09	1.44
50-99 workers .....	14.26	11.40	2.86	0.34	0.23	0.66	(*)0.17	1.46
100 workers or more .....	21.18	15.36	5.83	1.13	0.38	1.84	0.66	1.81
100-499 workers .....	20.12	14.89	5.23	0.99	0.37	1.51	0.57	1.79
500 workers or more .....	24.67	16.89	7.78	1.62	0.40	2.93	0.93	1.90
Relative standard error								
All workers in leisure and hospitality .....	3.7	3.2	5.4	9.5	10.1	6.7	13.9	3.3
<b>Occupational group</b>								
Sales and office .....	9.8	8.2	15.9	27.1	20.8	17.8	35.2	7.8
Service .....	2.7	2.6	3.8	7.0	9.1	6.0	11.2	3.3
<b>Establishment size</b>								
1-99 workers .....	3.5	3.0	6.5	12.8	19.7	11.1	19.9	3.2
1-49 workers .....	4.7	3.9	8.7	18.4	27.0	13.2	36.2	4.1
50-99 workers .....	5.5	5.1	8.2	17.9	18.9	14.1	32.4	4.9
100 workers or more .....	8.4	7.7	10.7	14.9	19.2	11.4	19.8	6.9
100-499 workers .....	11.1	10.2	14.3	20.8	20.2	14.8	28.3	8.9
500 workers or more .....	6.5	6.3	7.9	10.9	26.6	8.6	12.7	8.5

(\*) The relative standard error for this estimate is greater than 30 percent.

Note: The sum of individual items may not equal totals due to rounding.