# Fresno, CA National Compensation Survey March 2010



U.S. Department of Labor U.S. Bureau of Labor Statistics February 2011

This summary provides results of a March 2010 survey of occupational pay in the Fresno, CA, Metropolitan Statistical Area (MSA). The MSA consists of Fresno County.

Data shown in this summary were collected as part of the Bureau of Labor Statistics (BLS) National Compensation Survey (NCS). The NCS provides comprehensive measures of occupational earnings, compensation cost trends, benefit incidence, and detailed plan provisions. This summary is limited to data on occupational wages and salaries.

Table 1 presents an overview of all tables in this summary. Mean hourly earnings, weekly hours, and relative standard errors are given for all industries, private industry, and State and local government for selected worker and establishment characteristics.

Table 2 presents mean hourly earnings data by work level for occupational major groups and for detailed occupations. Separate data are also shown for full-time and part-time workers. Table 3 provides work level data for private industry workers. Table 4 provides similar data for State and local government workers.

Tables 5 through 7 present hourly wage percentiles that describe the distribution of hourly earnings for individual workers within each published occupation. Data are provided for the 10th, 25th, 50th, 75th, and 90th percentiles for detailed occupations within all industries, private industry, and State and local government.

Table 8 presents mean and median hourly, weekly, and annual earnings, and the associated hours, for major occupational groups and detailed occupations for full-time workers. Table 9 provides the same type of information for

private industry workers. Table 10 provides similar data for State and local government workers.

The survey could not have been conducted without the cooperation of the many government agencies that provided pay data included in this summary. The Bureau thanks these respondents for their cooperation. Field economists of the Bureau of Labor Statistics collected and reviewed the survey data. The Office of Compensation and Working Conditions, in cooperation with the Office of Field Operations and the Office of Technology and Survey Processing in the BLS National Office, designed the survey, processed the data, and prepared the survey for publication.

#### Where to find more information

The data contained in this summary are available at <a href="http://www.bls.gov/ncs/ocs/compub.htm">http://www.bls.gov/ncs/ocs/compub.htm</a>, the BLS Internet site. Data are presented in a Portable Document Format (PDF) file and in an ASCII file containing the published table formats.

For additional information regarding this survey, including a list of occupational classifications, please contact any BLS regional office. You may also write to the Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning, 2 Massachusetts Ave., NE., Room 4175, Washington, DC 20212, telephone (202) 691-6199, or send an e-mail to NCSinfo@bls.gov.

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Table 1. Summary: Mean hourly earnings1 and weekly hours for selected worker and establishment characteristics, Fresno, CA, March 2010

		Civilian workers			ate industry workers			local goveri workers	nment
Worker and establishment characteristics	Hourly ea	arnings	Mean	Hourly ea	arnings	Mean	Hourly ea	arnings	Mean
	Mean	Relative error <sup>2</sup> (percent)	weekly hours <sup>3</sup>	Mean	Relative error <sup>2</sup> (percent)	weekly hours <sup>3</sup>	Mean	Relative error <sup>2</sup> (percent)	weekly hours <sup>3</sup>
All workers	\$19.37	4.5	35.0	\$16.56	5.5	34.8	\$30.25	5.9	35.8
Worker characteristics <sup>4,5</sup>									
Management, professional, and related Management, business, and financial Professional and related Service Sales and office Sales and related Office and administrative support Natural resources, construction, and maintenance Construction and extraction Installation, maintenance, and repair Production, transportation, and material moving Production Transportation and material moving Full time Part time	31.04 33.00 30.46 16.44 14.12 11.55 15.18 18.19 17.88 20.92 13.87 13.95 13.72 20.69 11.76	8.6 12.1 10.6 8.8 6.0 24.0 4.0 13.3 18.8 14.2 11.3 13.5 16.9 5.3 5.7	37.2 38.2 37.0 33.1 34.3 28.0 37.8 33.3 40.0 40.0 35.5 39.7 29.9 39.8 20.7	26.76 32.81 24.91 11.56 13.37 11.55 14.31 18.34 17.88 21.52 13.60 13.56 13.69 17.76 10.55	11.7 17.8 12.9 5.5 8.5 24.0 6.1 13.1 18.8 12.7 11.4 13.7 17.1 6.4 4.3	39.7 37.3 40.5 30.5 33.9 28.0 38.1 33.1 40.0 40.0 35.5 39.7 29.9 40.1 21.0	38.21 33.35 39.56 25.20 18.50 - 18.50 - - - - - - 30.81 22.84	3.4 13.8 3.9 12.9 3.3 - 3.3 - - - - - - - - - - - - - - -	33.7 40.0 32.3 39.1 36.9 - 36.9 - - - - - 38.7 18.1
Union Nonunion	26.72 16.59 19.22	11.7 5.8 4.4	37.8 34.1 34.9	18.20 16.29 16.29	16.0 6.3 5.3	39.6 34.2 34.7	32.51 21.46 30.25	4.8 12.7 5.9	36.6 33.1 35.8
Incentive  Establishment characteristics	_	_	_	_	_	_	_	_	_
Goods producing Service providing	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	_ 15.92	- 6.4	_ 33.7	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
1-99 workers	15.27 16.46 30.33	7.6 11.3 6.7	33.7 36.9 35.6	15.27 15.22 26.78	7.9 12.5 15.7	33.5 37.3 35.2	_ 28.49 32.33	9.2 5.6	- 33.3 35.9

<sup>&</sup>lt;sup>1</sup> 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, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

<sup>2</sup> The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see appendix A.

<sup>3</sup> Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

hourly rate or salary; incentive workers are those whose wages are at least partially based on productivity payments such as piece rates, commissions, and production

based on productivity payments such as pleased.

5 Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

6 Estimates for goods-producing and service-providing industries are published for private industry only. Industries are determined by the 2007 North American Industry Classification System (NAICS).

NOTE: Dashes indicate that no data were reported or that data did not meet publication

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

exclusive of overtime.

<sup>&</sup>lt;sup>4</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Union workers are those whose wages are determined through collective bargaining. Wages of time workers are based solely on

Table 2. Civilian workers: Mean hourly earnings<sup>1</sup> for full-time and part-time workers<sup>2</sup> by work levels<sup>3</sup>, Fresno, CA, March 2010

	To	otal	Full-time	e workers	Part-time	e workers
Occupation <sup>4</sup> and level	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
All workers	\$19.37	4.5	\$20.69	5.3	\$11.76	5.7
Management occupations	40.15	8.4	40.34	8.3	-	_
Business and financial operations occupations	25.72	13.2	25.72	13.2	-	_
Education, training, and library occupations	38.71	7.4	41.61	8.8	20.94	22.8
Level 7	42.51	8.8	_	_	_	_
Level 9	50.79	.9	50.79	.9	_	-
Not able to be leveled	39.16	1.2	_	-	_	-
Primary, secondary, and special education school						
teachers	45.05	4.3	45.52	4.4	_	_
Level 7	42.51	8.8	_	_	_	_
Level 9	50.67	1.4	50.67	1.4	_	_
Elementary and middle school teachers	45.92	1.4	46.57	1.2	_	l –
Elementary school teachers, except special education	46.12	1.5	47.04	1.0	_	_
Secondary school teachers	48.92	3.1	49.42	4.8	_	l –
Secondary school teachers, except special and	.5.02	J.,	.5.12			
vocational education	48.92	3.1	49.42	4.8	_	_
		6.5	43.42	_	15.07	6.0
Teacher assistants	14.87	0.5	_	_	15.07	6.0
1110	00.00	00.4	00.00	00.0		
Healthcare practitioner and technical occupations	30.83	22.1	30.23	23.6	_	_
Not able to be leveled	45.59	19.7	_	_	_	_
Healthcare support occupations	13.70	8.5	13.21	5.5	_	_
Dratastiva convice econoctions	20.62	6.7	20.62	6.7		
Protective service occupations	30.63		30.63		_	_
Police officers	28.96	1.6	28.96	1.6	_	_
Police and sheriff's patrol officers	28.96	1.6	28.96	1.6	_	_
Food preparation and serving related occupations	9.07 8.07	5.1 .7	10.37	4.1	8.54	.9
Level 2	8.38	2.4	_	_	8.42	3.3
Food service, tipped	8.04	.4	_	_	0.42	3.3
Fast food and counter workers			_	_	_	_
Fast 1000 and counter workers	8.53	3.0	_	_	_	_
Building and grounds cleaning and maintenance						
occupations	13.31	8.2	13.54	8.8	_	_
Not able to be leveled	14.31	7.6	13.34	0.0	_	_
			- 12.50	12.6	_	_
Building cleaning workers	12.28	11.6	12.50	13.6	_	_
Janitors and cleaners, except maids and	40.05		40.05			
housekeeping cleaners	13.35	14.4	13.35	14.4	_	_
Color and valeted accountions	11 55	240	14.00	24.4	0.05	10
Sales and related occupations	11.55	24.0	14.02	24.4	8.35	1.2
Level 2	8.19	2.6	-		-	
Retail sales workers	11.08	27.3	13.98	29.7	8.35	1.2
Level 2	8.21	2.7	_	_	_	_
Cashiers, all workers	8.19	1.3	_	_	_	_
Cashiers	8.19	1.3	_	-	-	_
Retail salespersons	12.13	29.3	-	-	-	_
Office and administrative support occupations	15.18	4.0	15.52	3.5	_	_
Level 3	11.33	3.2	11.33	3.3	_	
Level 4	16.27	10.6	15.74	7.7	_	
Level 5	17.00	8.1	17.00	8.1		_
Financial clerks	15.22	6.8	17.00	6.8	_	_
Office clerks, general	16.66	13.8	15.22	9.2	_	_
Construction and extraction occupations	17.88	18.8	17.88	18.8	_	_
·	20.92	14.2	20.92	14.2	-	_
Installation, maintenance, and repair occupations Industrial machinery installation, repair, and maintenance	20.92	14.4	20.92	14.4	_	_
workers	18.93	8.7	18.93	8.7	-	_
Production occupations	13.95	13.5	14.08	13.9	_	-
Level 2	10.40	7.4	10.57	7.8		

See footnotes at end of table.

Table 2. Civilian workers: Mean hourly earnings1 for full-time and part-time workers2 by work levels3, Fresno, CA, March 2010 — Continued

	To	otal	Full-time	workers	Part-time	e workers
Occupation <sup>4</sup> and level	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
Production occupations -Continued						
Level 3	\$15.92	7.1	\$15.92	7.1	_	_
Not able to be leveled	14.31	19.4	14.31	19.4	_	_
Miscellaneous production workers	9.71	8.9	9.71	8.9	-	-
Transportation and material moving occupations	13.72	16.9	15.27	21.8	_	_
Level 3	11.56	22.0	_	_	_	_
Laborers and material movers, hand Laborers and freight, stock, and material movers,	11.56	9.9	_	_	_	_
hand	11.57	12.6	_	_	_	_

<sup>1</sup> 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, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the

occupation's rank within each factor. The points are summed to determine the

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

number of workers, weighted by hours. See appendix A for more information.

<sup>2</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where

a 40-hour week is the minimum full-time schedule.

<sup>3</sup> Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

overall level of the occupation. See appendix A for more information.

4 Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

5 The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around

a sample estimate. For more information about RSEs, see appendix A.

Table 3. Private industry workers: Mean hourly earnings1 for full-time and part-time workers2 by work levels3, Fresno, CA, March 2010

	To	otal	Full-time	workers	Part-time	e workers
Occupation <sup>4</sup> and level	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
All workers	\$16.56	5.5	\$17.76	6.4	\$10.55	4.3
Management occupations	40.05	10.4	40.30	10.2	_	_
Healthcare practitioner and technical occupations	29.65	25.2	29.20	26.0	-	_
Healthcare support occupations	13.74	8.7	_	_	-	_
Food preparation and serving related occupations	8.98	5.2	_	-	8.54	.9
Level 1	8.07	.7	-	_	_	_
Level 2	8.38	2.4	-	_	8.42	3.3
Food service, tipped	8.04	.4	-	-	-	_
Building and grounds cleaning and maintenance						
occupations	10.84	17.7	_	_	_	_
Building cleaning workers	10.84	17.7	_	-	-	_
Sales and related occupations	11.55	24.0	14.02	24.4	8.35	1.2
Level 2	8.19	2.6	_	_	_	_
Retail sales workers	11.08	27.3	13.98	29.7	8.35	1.2
Level 2	8.21	2.7	_	_	_	_
Cashiers, all workers	8.19	1.3	_	_	_	_
Cashiers	8.19	1.3	_	_	_	_
Retail salespersons	12.13	29.3	_	-	-	_
Office and administrative support occupations	14.31	6.1	14.61	4.9	_	_
Level 3	11.25	3.2	11.25	3.2	_	_
Level 4	16.08	15.5	15.31	11.3	_	_
Financial clerks	14.22	3.9	14.22	3.9	_	_
Office clerks, general	16.95	19.4	-	-	_	_
Construction and extraction occupations	17.88	18.8	17.88	18.8	-	_
Installation, maintenance, and repair occupations Industrial machinery installation, repair, and maintenance	21.52	12.7	21.52	12.7	-	_
workers	19.71	9.0	19.71	9.0	-	_
Production occupations	13.56	13.7	13.68	14.1	_	_
Level 2	10.40	7.4	10.57	7.8	_	_
Level 3	15.92	7.1	15.92	7.1	_	_
Not able to be leveled	14.31	19.4	14.31	19.4	_	_
Miscellaneous production workers	9.71	8.9	9.71	8.9	-	_
Transportation and material moving occupations	13.69	17.1	15.27	21.8	_	_
Level 3	11.42	22.6	_	_	_	_
Laborers and material movers, hand Laborers and freight, stock, and material movers,	11.56	9.9	_	-	-	_
handhand meight, stock, and material movers,	11.57	12.6	_	-	-	_

<sup>&</sup>lt;sup>1</sup> 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, nonproduction bonuses, and

occupation's rank within each factor. The points are summed to determine the

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

<sup>2</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time

worker with a 35-hour-per-week scredule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

3 Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

overall level of the occupation. See appendix A for more information.

4 Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

5 The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see appendix A.

Table 4. State and local government workers: Mean hourly earnings1 for full-time and part-time workers2 by work levels<sup>3</sup>, Fresno, CA, March 2010

	To	otal	Full-time	workers	Part-time	workers
Occupation <sup>4</sup> and level	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)	Mean	Relative error <sup>5</sup> (percent)
All workers	\$30.25	5.9	\$30.81	6.1	\$22.84	11.1
Business and financial operations occupations	29.72	3.6	29.72	3.6	-	_
Community and social services occupations	33.29	13.4	_	-	_	_
Education, training, and library occupations	41.95	.9	45.33	4.4	22.01	23.1
Level 7	46.25	3.6	_	_	_	_
Level 9	50.79	.9	50.79	.9	_	l –
Not able to be leveled	39.16	1.2	_		_	_
Primary, secondary, and special education school	03.10	1.2				
teachers	47.08	.8	47.64	1.1		
		-	47.04	1.1	_	_
Level 7	46.25	3.6	-		_	_
Level 9	50.67	1.4	50.67	1.4	_	_
Elementary and middle school teachers	45.92	1.4	46.57	1.2	_	_
Elementary school teachers, except special						
education	46.12	1.5	47.04	1.0	_	_
Secondary school teachers	48.92	3.1	49.42	4.8	_	_
Secondary school teachers, except special and						
vocational education	48.92	3.1	49.42	4.8	_	_
Teacher assistants	16.23	1.4	-	-	-	-
Healthcare practitioner and technical occupations	37.43	16.0	37.82	17.8	_	-
Protective service occupations	32.84	5.3	32.84	5.3	_	_
Police officers	28.96	1.6	28.96	1.6	_	_
Police and sheriff's patrol officers	28.96	1.6	28.96	1.6	_	_
Building and grounds cleaning and maintenance						
occupations	14.81	4.1	15.00	3.7	_	-
Not able to be leveled	14.31	7.6	-	-	-	-
Building cleaning workers	14.52	7.3	14.98	4.7	_	-
Office and administrative support occupations	18.50	3.3	18.79	3.7	_	_
Level 4	16.72	3.2	16.72	3.2	_	_
Level 5	18.62	4.8	18.62	4.8	_	l _
Office clerks, general	15.91	7.2	10.02		_	_
omoo olonto, goriorar	10.51	'				

<sup>1</sup> 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, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

2 Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

3 Each occupation for which data are collected in an establishment is evaluated based on four factors, including knowledge, job controls and complexity, contacts, and physical environment. The knowledge factor is tailored to 24 families of closely related jobs. Points are assigned based on the

occupation's rank within each factor. The points are summed to determine the

occupation's rank within each factor. The polinis are summed to determine the overall level of the occupation. See appendix A for more information.

4 Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

5 The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around

a sample estimate. For more information about RSEs, see appendix A.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Table 5. Civilian workers: Hourly wage percentiles1, Fresno, CA, March 2010

Occupation <sup>2</sup>	10	25	Median 50	75	90
All workers	\$8.50	\$10.24	\$14.80	\$24.00	\$41.74
Management occupations	25.07	25.35	42.72	52.14	55.57
Business and financial operations occupations	15.56	15.56	25.56	29.70	34.52
Education, training, and library occupations Primary, secondary, and special education school	15.71	18.84	46.07	50.79	51.55
teachers	28.53	42.23	48.14	50.79	51.55
Elementary and middle school teachers  Elementary school teachers, except special	35.56	43.94	47.36	50.79	50.79
education	37.09	45.49	46.75	50.79	50.79
Secondary school teachers	37.09	46.38	50.79	51.55	58.71
Secondary school teachers, except special and	07.00	40.00	50.70	54.55	50.74
vocational education	37.09	46.38	50.79	51.55	58.71
Teacher assistants	11.22	13.26	16.32	16.79	16.79
Healthcare practitioner and technical occupations	10.72	14.70	26.30	49.42	56.00
Healthcare support occupations	11.19	11.62	13.26	13.26	23.51
Protective service occupations	14.07	25.17	32.85	36.20	43.05
Police officers	11.15	25.16	31.85	35.32	35.90
Police and sheriff's patrol officers	11.15	25.16	31.85	35.32	35.90
Food preparation and serving related occupations	8.00	8.00	8.25	9.00	13.47
Food service, tipped	8.00	8.00	8.00	8.00	8.00
Fast food and counter workers	8.00	8.00	8.00	8.70	9.18
Building and grounds cleaning and maintenance					
occupations	8.03	10.25	10.98	17.11	19.18
Building cleaning workers	8.03	9.00	10.50	15.61	17.69
Janitors and cleaners, except maids and					
housekeeping cleaners	8.03	9.25	14.11	15.61	21.10
Sales and related occupations	8.00	8.00	8.53	15.00	17.55
Retail sales workers	8.00	8.00	8.28	11.00	20.33
Cashiers, all workers	8.00	8.00	8.00	8.16	8.54
Cashiers	8.00	8.00	8.00	8.16	8.54
Retail salespersons	8.00	8.08	9.10	14.00	20.58
Office and be held to have been a second as a second as	40.00	44.45	40.00	47.40	00.40
Office and administrative support occupations	10.00	11.15	13.36	17.16	23.49
Financial clerks	12.34	13.05	13.36	15.85	22.71
Office clerks, general	10.00	12.50	15.00	17.38	33.77
Construction and extraction occupations	10.50	13.00	16.50	24.00	24.00
Installation, maintenance, and repair occupations Industrial machinery installation, repair, and maintenance	10.00	13.04	18.81	24.74	31.93
workers	10.00	13.04	18.01	24.74	24.74
Production occupations	9.00	9.00	10.91	19.40	22.22
Miscellaneous production workers	8.00	9.00	9.00	9.18	11.21
Towns at the and material made a second to	0.00	0.50	40.00	40.04	00.45
Transportation and material moving occupations	8.00	9.50	10.08	16.64	20.15
Laborers and material movers, hand	8.05	9.08	10.41	12.99	17.39
Laborers and freight, stock, and material movers, hand	8.05	9.08	10.41	16.64	17.39

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

nonproduction bonuses; and tips.  $^2$  Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more

Table 6. Private industry workers: Hourly wage percentiles<sup>1</sup>, Fresno, CA, March 2010

Occupation <sup>2</sup>	10	25	Median 50	75	90
All workers	\$8.08	\$9.96	\$13.13	\$19.20	\$26.66
Management occupations	25.07	25.35	36.91	53.32	57.87
Healthcare practitioner and technical occupations	10.72	12.07	15.90	49.42	56.00
Healthcare support occupations	11.19	11.62	13.26	13.26	23.51
Food preparation and serving related occupations Food service, tipped	8.00 8.00	8.00 8.00	8.15 8.00	9.00 8.00	12.95 8.00
Building and grounds cleaning and maintenance occupations  Building cleaning workers		8.03 8.03	9.25 9.25	10.50 10.50	21.10 21.10
Sales and related occupations  Retail sales workers  Cashiers, all workers  Cashiers  Retail salespersons	8.00 8.00	8.00 8.00 8.00 8.00 8.08	8.53 8.28 8.00 8.00 9.10	15.00 11.00 8.16 8.16 14.00	17.55 20.33 8.54 8.54 20.58
Office and administrative support occupations Financial clerks Office clerks, general	9.18 12.21 10.00	10.74 13.04 12.50	13.05 13.36 14.95	15.00 14.39 15.97	26.65 16.67 33.77
Construction and extraction occupations	10.50	13.00	16.50	24.00	24.00
Installation, maintenance, and repair occupations Industrial machinery installation, repair, and maintenance	10.00	14.53	20.73	24.74	31.93
workers	10.00	16.05	18.01	24.74	24.74
Production occupations Miscellaneous production workers	9.00 8.00	9.00 9.00	10.80 9.00	19.09 9.18	22.22 11.21
Transportation and material moving occupations  Laborers and material movers, hand	8.00 8.05	9.50 9.08	10.08 10.41	16.64 12.99	20.15 17.39
hand	8.05	9.08	10.41	16.64	17.39

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

nonproduction bonuses; and tips.  $^2$  Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Table 7. State and local government workers: Hourly wage percentiles1, Fresno, CA, March 2010

Occupation <sup>2</sup>	10	25	Median 50	75	90
All workers	\$15.23	\$17.45	\$28.39	\$42.72	\$50.79
Business and financial operations occupations	25.56	25.67	29.70	34.02	34.52
Community and social services occupations	19.19	22.90	32.98	45.80	50.44
Education, training, and library occupations	16.32	37.09	46.75	50.79	51.55
teachers	37.09	45 49	49.35	50.79	51.55
Elementary and middle school teachers  Elementary school teachers, except special	35.56	43.94	47.36	50.79	50.79
education	37.09	45.49	46.75	50.79	50.79
Secondary school teachers	37.09	46.38	50.79	51.55	58.71
vocational education	37.09	46.38	50.79	51.55	58.71
Teacher assistants	15.19	16.32	16.32	16.79	16.79
Healthcare practitioner and technical occupations	15.87	28.13	34.43	42.81	60.85
Protective service occupations	23.83	27.70	33.31	36.20	43.05
Police officers		25.16	31.85	35.32	35.90
Police and sheriff's patrol officers	11.15	25.16	31.85	35.32	35.90
Building and grounds cleaning and maintenance					
occupations		10.98	15.61	17.55	19.18
Building cleaning workers	10.19	13.40	15.61	15.61	16.67
Office and administrative support occupations	15.23	16.30	17.45	21.22	22.86
Office clerks, general	11.45	15.81	17.38	17.45	17.45

<sup>1</sup> Percentiles designate position in the earnings distribution and are calculated from individual-worker earnings and the hours they are scheduled to work. At the 50th percentile, the median, half of the hours are paid the same as or more than the rate shown, and half are paid the same as or less than the rate shown. At the 25th percentile, one-fourth of the hours are paid the same as or less than the rate shown. At the 75th percentile, one-fourth are paid the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic. Hourly shown. The 10th and 90th percentiles follow the same logic. Hourly wages are the straight-time wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays;

nonproduction bonuses; and tips. <sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Table 8. Full-time¹ civilian workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Fresno, CA, March 2010

	Hourly ea	arnings <sup>3</sup>	Wee	kly earnings	s <sup>4</sup>	Ann	ual earnings	<sub>5</sub> 5
Occupation <sup>2</sup>	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$20.69	\$16.00	\$823	\$660	39.8	\$40,924	\$33,912	1,978
Management occupations	40.34	42.72	1,607	1,709	39.8	81,264	78,610	2,014
Business and financial operations occupations	25.72	25.56	1,029	1,022	40.0	53,494	53,156	2,080
Education, training, and library occupations	41.61	46.75	1,461	1,649	35.1	55,960	62,108	1,345
Primary, secondary, and special education school teachers	45.52	49.08	1,593	1,718	35.0	60,562	63,907	1,330
Elementary and middle school teachers  Elementary school teachers,	46.57	47.36	1,633	1,658	35.1	61,928	63,656	1,330
except special education Secondary school teachers Secondary school teachers, except special and vocational	47.04 49.42	47.36 50.79	1,650 1,689	1,658 1,744	35.1 34.2	62,252 63,154	61,672 64,530	1,323 1,278
education	49.42	50.79	1,689	1,744	34.2	63,154	64,530	1,278
Healthcare practitioner and technical occupations	30.23	16.00	1,422	1,296	47.0	73,432	67,392	2,429
Healthcare support occupations	13.21	13.26	526	510	39.9	27,100	26,499	2,052
Protective service occupations  Police officers  Police and sheriff's patrol officers	30.63 28.96 28.96	32.85 31.85 31.85	1,260 1,158 1,158	1,332 1,274 1,274	41.1 40.0 40.0	65,507 60,237 60,237	69,285 66,248 66,248	2,138 2,080 2,080
Food preparation and serving related occupations	10.37	8.95	415	320	40.0	21,151	16,640	2,039
Building and grounds cleaning and maintenance occupations Building cleaning workers	13.54 12.50	11.31 10.44	541 500	452 418	40.0 40.0	22,777 23,909	19,240 21,715	1,683 1,913
maids and housekeeping cleaners	13.35	14.11	534	564	40.0	27,301	27,467	2,046
Sales and related occupations	14.02 13.98	13.53 11.00	561 559	541 440	40.0 40.0	29,168 29,083	28,142 22,880	2,080 2,080
Office and administrative support occupations	15.52 15.22 15.83	13.81 13.36 15.00	620 609 633	552 534 600	40.0 40.0 40.0	31,972 31,657 32,775	28,457 27,789 31,200	2,060 2,080 2,071
Construction and extraction occupations	17.88	16.50	715	660	40.0	37,195	34,320	2,080
Installation, maintenance, and repair occupationsIndustrial machinery installation,	20.92	18.81	837	752	40.0	43,512	39,121	2,080
repair, and maintenance workers	18.93	18.01	757	720	40.0	39,381	37,461	2,080
Production occupations	14.08	10.91	563	436	40.0	27,911	22,689	1,982

See footnotes at end of table.

Table 8. Full-time1 civilian workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Fresno, CA, March 2010 — Continued

	Hourly earnings <sup>3</sup>		Weel	kly earnings	<sub>5</sub> 4	Annual earnings <sup>5</sup>		
Occupation <sup>2</sup>	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
Production occupations –Continued Miscellaneous production workers	\$9.71	\$9.00	\$388	\$360	40.0	\$17,704	\$18,720	1,824
Transportation and material moving occupations	15.27	11.50	568	465	37.2	29,539	24,190	1,934

<sup>1</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of

overtime.

5 Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual hours are the hours an employee is scheduled to work in a year, exclusive of

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

2 Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

3 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, reported to houses, and tips. The mean is computed by totaling the nay. nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

<sup>4</sup> Mean weekly earnings are the straight-time weekly wages or salaries

Table 9. Full-time1 private industry workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Fresno, CA, March 2010

	Hourly ea	rnings <sup>3</sup>	Weel	kly earnings	<sub>5</sub> 4	Annı	ual earnings	5
2		T					1	
Occupation <sup>2</sup>	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$17.76	\$13.62	\$713	\$570	40.1	\$36,432	\$29,120	2,051
Management occupations	40.30	36.91	1,603	1,477	39.8	83,337	76,779	2,068
Healthcare practitioner and technical occupations	29.20	15.90	1,414	1,052	48.4	73,536	54,704	2,518
Sales and related occupations Retail sales workers	14.02 13.98	13.53 11.00	561 559	541 440	40.0 40.0	29,168 29,083	28,142 22,880	2,080 2,080
Office and administrative support occupations	14.61 14.22	13.31 13.36	584 569	522 534	40.0 40.0	30,044 29,587	27,144 27,789	2,056 2,080
Construction and extraction occupations	17.88	16.50	715	660	40.0	37,195	34,320	2,080
Installation, maintenance, and repair occupations Industrial machinery installation,	21.52	20.73	861	829	40.0	44,761	43,118	2,080
repair, and maintenance workers	19.71	18.01	789	720	40.0	41,005	37,461	2,080
Production occupations Miscellaneous production workers	13.68 9.71	10.91 9.00	547 388	436 360	40.0 40.0	27,066 17,704	21,320 18,720	1,979 1,824
Transportation and material moving occupations	15.27	11.50	568	465	37.2	29,539	24,190	1,934

<sup>1</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of

Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual hours are the hours an employee is scheduled to work in a year, exclusive of

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more information.

<sup>3</sup> 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, reported the houses and time. The mean is computed by totaling the nav nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

4 Mean weekly earnings are the straight-time weekly wages or salaries

Table 10. Full-time<sup>1</sup> State and local government workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours, Fresno, CA, March 2010

	Hourly ea	ırnings <sup>3</sup>	Wee	kly earnings	s <sup>4</sup>	Ann	ual earnings	5
Occupation <sup>2</sup>	Mean	Median	Mean	Median	Mean weekly hours	Mean	Median	Mean annual hours
All workers	\$30.81	\$29.53	\$1,192	\$1,213	38.7	\$54,282	\$58,510	1,762
Business and financial operations								
occupations	29.72	29.70	1,189	1,188	40.0	61,815	61,778	2,080
Education, training, and library								
occupationsPrimary, secondary, and special	45.33	49.08	1,579	1,718	34.8	59,520	63,907	1,313
education school teachersElementary and middle school	47.64	49.35	1,659	1,727	34.8	62,473	63,907	1,311
teachers  Elementary school teachers,	46.57	47.36	1,633	1,658	35.1	61,928	63,656	1,330
except special education	47.04	47.36	1,650	1,658	35.1	62,252	61,672	1,323
Secondary school teachers	49.42	50.79	1,689	1,744	34.2	63,154	64,530	1,278
except special and vocational education	49.42	50.79	1,689	1,744	34.2	63,154	64,530	1,278
Healthcare practitioner and technical								
occupations	37.82	37.38	1,465	1,495	38.7	72,852	80,031	1,926
Protective service occupations	32.84 28.96	33.31 31.85	1,356 1,158	1,393 1,274	41.3 40.0	70,489 60,237	72,419 66,248	2,146 2,080
Police and sheriff's patrol officers	28.96	31.85	1,158	1,274	40.0	60,237	66,248	2,080
Building and grounds cleaning and								
maintenance occupations	15.00	15.61	600	624	40.0	24,107	27,456	1,607
Building cleaning workers	14.98	15.61	599	624	40.0	30,170	32,469	2,014
Office and administrative support occupations	18.79	17.86	752	714	40.0	38,943	37,149	2,073

<sup>1</sup> Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm,

paid to employees. Median weekly earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

where a 40-hour week is the minimum full-time schedule.

<sup>2</sup> Workers are classified by occupation using the 2000 Standard Occupational Classification (SOC) system. See appendix B for more

information.

3 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, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours. See appendix A for more information.

4 Mean weekly earnings are the straight-time weekly wages or salaries

overtime.

Mean annual earnings are the straight-time annual wages or salaries paid to employees. Median annual earnings designates position - one-half of the hours are paid the same as or more than the rate shown. Mean annual the bours are paid the same as or more than the rate shown. Mean annual the bours are applyace is scheduled to work in a year, exclusive of hours are the hours an employee is scheduled to work in a year, exclusive of

# **Appendix: Technical note**

#### Survey scope

This survey of the Fresno, CA, Metropolitan Statistical Area (MSA) covered establishments employing one worker or more in private goods-producing industries (mining, construction, and manufacturing); private service-providing industries (trade, transportation, and utilities, information, financial activities, professional and business services, education and health services, leisure and hospitality, and other services); State governments; and local governments. Agriculture, forestry, fishing and hunting, private households, and the Federal Government were excluded from the scope of the survey. For purposes of this survey, an establishment is an economic unit that produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. For private industries in this survey, the establishment is usually at a single physical location. For State and local governments, an establishment is defined as all locations of a government agency within the sampled area.

## Sampling frame

The list of establishments from which the survey sample was selected (sampling frame) was developed from State unemployment insurance reports. Due to the volatility of industries within the private sector, sampling frames were developed using the most recent month of reference available at the time the sample was selected.

#### Sample design

The sample for this survey area was selected using a twostage stratified design with probability proportional to employment sampling at each stage. The first stage of sample selection was a probability-proportional-to-size sample of establishments. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

## Occupational selection and classification

Identification of the occupations for which wage data were to be collected was a multistep process:

1. Probability-proportional-to-size selection of establishment jobs

- Classification of jobs into occupations based on the 2000 Standard Occupational Classification (SOC) system
- 3. Characterization of jobs as full-time or part-time, union or nonunion, and time or incentive
- 4. Determination of the level of work of each job

For each occupation, wage data were collected for those workers whose jobs could be characterized by the criteria identified in the last three steps. In step one, the jobs to be sampled were selected at each establishment by the BLS field economist. A complete list of employees was used for sampling, with each selected worker representing a job within the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The second step of the process entailed classifying the selected jobs into occupations based on their duties. NCS uses the 2000 Standard Occupational Classification (SOC) system. A selected job may fall into any one of about 800 occupational classifications, from accountant to zoologist. When workers could be classified in more than one occupation, they were classified in the occupation that required the higher skill level. When there was no perceptible difference in skill level, the workers were classified in the occupation that described their primary activity.

Each occupational classification is an element of a broader classification known as a major group. Occupations can fall into any of 22 major groups. A complete list of all individual occupations, classified by the major group to which they belong, is available from BLS.

In step three, certain other job characteristics of the chosen worker were identified. First, the worker was identified as holding either a full-time or part-time job, based on the establishment's definition of those terms. Then, the worker was classified as having a time versus incentive job and also identified as being in a union or a nonunion job.

#### Occupational leveling

In the last step before wage data were collected, the work level of each selected job was determined using a "point factor leveling" process. Point factor leveling matches certain aspects of a job to specific levels of work with assigned point values. Points for each factor are then totaled to determine the overall work level for the job.

The NCS program is in the process of converting from a nine-factor to a four-factor occupational leveling system. The conversion is being phased in via annual NCS sample replenishment groups and will require several years for full implementation. The four occupational leveling factors are:

- Knowledge
- Job controls and complexity
- Contacts (nature and purpose)
- Physical environment

Each factor consists of several levels, and each level has an associated description and assigned points. A know-ledge guide for 24 families of closely related occupations contains short definitions of the point levels of knowledge expected for the occupations and presents relevant examples. The other three factors use identical descriptions for all occupational categories and contain a definition of each point level within each factor.

The description within each factor best matching the job is chosen. The point levels within each factor are designed to describe the thresholds of distinct levels of work. When a job does not meet the full description of a point level, the next lowest point level is used. Points for the four factors are totaled to determine the overall work level. NCS publishes data for up to 15 work levels.

Most supervisory occupations are evaluated based on their duties and responsibilities. A modified approach is used for professional and administrative supervisors when they direct professional work and are paid primarily to supervise. Such supervisory occupations are leveled based on the work level of the highest position reporting to them.

For a complete description of point factor leveling, refer to the publication "National Compensation Survey: Guide for Evaluating Your Firm's Jobs and Pay," available at the BLS National Compensation Survey Internet site at <a href="http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf">http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf</a>.

#### **Collection period**

Survey data were collected over a 14-month period for the larger areas in the NCS program. For the smaller areas, data were collected over a 5-month period. For each establishment in the survey, the data reflect the establishment's most recent information at the time of collection. The payroll reference month shown in the tables reflects the average date of this information for all sample units.

#### **Earnings**

Earnings were defined as regular payments from the employer to the employee as compensation for straight-time hourly work, or for any salaried work performed. The following components were included as part of earnings:

- Incentive pay, including commissions, production bonuses, and piece rates
- Cost-of-living allowances
- Hazard pay
- Payments of income deferred due to participation in a salary reduction plan
- Deadhead pay, defined as pay given to transportation workers returning in a vehicle without freight or passengers

The following forms of payments were *not* considered part of straight-time earnings:

- Shift differentials, defined as extra payment for working a schedule that varies from the norm, such as night or weekend work
- Premium pay for overtime, holidays, and weekends
- Bonuses not directly tied to production (such as Christmas and profit-sharing bonuses)
- Uniform and tool allowances
- Free or subsidized room and board
- Payments made by third parties (for example, tips)
- On-call pay

To calculate earnings for various periods (hourly, weekly, and annual), data on work schedules also were collected. For hourly workers, scheduled hours worked per day and per week, exclusive of overtime, were recorded. Annual weeks worked were determined. Because salaried workers who are exempt from overtime provisions often work beyond the assigned work schedule, their typical number of hours actually worked was collected.

#### Weighting and nonresponse

Sample weights were calculated for each establishment and occupation in the survey. These weights reflected the relative size of the occupation within the establishment and of the establishment within the sample universe. Weights were used to aggregate data for the individual establishments or occupations into the various data series.

If data were not provided by a sample member during the initial interview, the weights of responding sample members in the same or similar "cells" were adjusted to account for the missing data. This technique assumes that the mean value of data for the nonrespondents equals the mean value of data for the respondents at some detailed "cell" level. Responding and nonresponding establishments were classified into these cells according to industry and employment size. Responding and nonresponding occupations within responding establishments were classified into cells that were additionally defined by major occupation group.

If average hourly earnings data were not provided by a sample member during the update interview, then missing average hourly earnings were imputed by multiplying prior average hourly earnings by the rate of change in the average hourly earnings of respondents. The regression model that takes into account available establishment characteristics is used to derive the rate of change in the average hourly earnings.

Establishments that were determined to be out of business or outside the scope of the survey had their weights changed to zero.

#### Survey response

	Establish-
Total in sampling frame	ments 11,929
Total in sample	91
Responding	66
Refused or unable to provide data	17
Out of business or not in survey scope	8

#### **Estimation**

The wage series in the tables are computed by combining the wages for each sampled occupation. Before being combined, individual wage rates are weighted by the number of workers; the sample weight, adjusted for nonresponding establishments and other factors; and the occupation's scheduled hours of work.

The sample weight reflects the inverse of each unit's probability of selection at each sample selection stage and four weight adjustment factors. The first factor adjusts for establishment nonresponse and the second factor adjusts for occupational nonresponse. The third factor adjusts for any special situations that may have occurred during data collection. The fourth factor, post-stratification, also called benchmarking, is introduced to adjust estimated employment totals to the current counts of employment by industry. The latest available employment counts were used to derive average hourly earnings in this publication.

Not all calculated series met the criteria for publication. Before any series was published, it was reviewed to make sure that the number of observations underlying it was sufficient. This review prevented the publication of a series that could have revealed information about a specific establishment.

#### **Data reliability**

The data in this summary are estimates from a scientifically selected probability sample. There are two types of errors possible in an estimate based on a sample survey, sampling and nonsampling.

Sampling errors occur because observations come only from a sample and not from an entire population. The sample used for this survey is one of a number of possible samples of the same size that could have been selected using the sample design. Estimates derived from the different samples would differ from each other.

A measure of variation among these differing estimates is called the standard error or sampling error. It indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error (RSE) is the standard error divided by the estimate. RSE data are provided alongside the earnings data in the summary tables.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose a table shows that mean hourly earnings for all workers were \$17.75, with a relative standard error of 1.0 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is from \$17.46 to \$18.04 (\$17.75 minus and plus \$0.29, where \$0.29 is the product of 1.645 times 1.0 percent times \$17.75). If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time.

Nonsampling errors also affect survey results. They can stem from many sources, such as inability to obtain information for some establishments, difficulties with survey definitions, inability of the respondents to provide correct information, or mistakes in recording or coding the data obtained. Although they were not specifically measured, the nonsampling errors were expected to be minimal due to the extensive training of the field economists who gathered the survey data, computer edits of the data, and detailed data review.