Iowa City, IA National Compensation Survey December 1998



U.S. Department of Labor Alexis M. Herman, Secretary

Bureau of Labor Statistics Katharine G. Abraham, Commissioner

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Preface

Data shown in this bulletin were collected as part of the Bureau of Labor Statistics' (BLS) National Compensation Survey (NCS). The survey could not have been conducted without the cooperation of the many private firms and government jurisdictions that provided pay data included in this bulletin. 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.

For additional information regarding this survey, please contact any BLS regional office at the address and telephone number listed on the inside back cover of this bulletin. You may also write to the Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning,

2 Massachusetts Avenue, NE, Room 4175, Washington, DC 20212-0001, or call (202) 606-6199, or send e-mail to ocltinfo@bls.gov.

The data contained in this bulletin are also available at http://stats.bls.gov/comhome.htm, the BLS Internet site. Data are in three formats: An ASCII file containing the published table formats; an ASCII file containing positional columns of data for manipulation as a data base or spreadsheet; and a Portable Document Format (PDF) file containing the entire bulletin.

Results of earlier surveys of this area are also available from BLS regional offices, the Division of Compensation Data Analysis, or at the BLS Internet site.

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Introduction

The tables in this bulletin summarize the NCS survey results for the Iowa City, IA metropolitan area. Tabulations provide information on earnings of workers in a variety of occupations and at a wide range of work levels. Also contained in this bulletin are information on the program, a technical note describing survey procedures, and several appendixes with detailed information on occupational classifications and the generic leveling methodology.

NCS products

The National Compensation Survey of the Bureau of Labor Statistics provides data on the occupational wages and employee benefits for localities, broad geographic regions, and the Nation as a whole. The Employment Cost Index, a quarterly measure of the change in employer costs for wages and benefits, will be derived from the NCS. Another product, Employer Costs for Employee Compensation, measures employers' average hourly costs for total compensation, that is, wages and benefits. Still another NCS product measures the incidence of benefit plans and their provisions. This bulletin is limited to data on occupational wages and salaries.

About the tables

The tables that follow present data on straight-time occupational earnings. Straight-time earnings include wages and salaries, incentive pay, cost-of-living adjustments, and hazard pay. These earnings exclude premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. A total of 480 detailed occupations are used to describe all occupations in the civilian nonfarm economy (excluding the Federal Government and private households).

Table A-1 presents straight-time earnings for detailed occupations. Data are not shown for any occupations if they would raise concerns about the confidentiality of the survey respondent or if the data are insufficient to support reliable estimates. The earnings shown include the mean for each occupation, as well as earnings for selected percentiles in each occupation.

Table A-2 compares the type of data and details shown in table A-1 for the private industry and State and local government sector.

Table A-3 compares the type of data and details shown in table A-1 for full-time and part-time workers. The definitions of full-time and part-time workers are those used in the surveyed establishments.

Table A-4 presents the weekly and annual straight-time earnings for full-time employees in specific occupations across all industries. For the weekly and annual earnings, the mean and median earnings and the mean hours are shown. The mean hours reflect hours employees are scheduled to work, excluding overtime hours.

Table B-1 presents mean straight-time hourly earnings for groups of occupations and for levels of job requirements related to occupations in the group. Separate data are also shown for private industry and government workers, and for full-time and part-time workers in all industries. (See appendix C, Generic Leveling Criteria, for more information on job ranking in this survey. Average work levels for published occupation groups and their component occupations are presented in appendix table 3.)

Table B-2 also presents mean straight-time hourly earnings, but for detailed occupations at several levels of job requirements for each detailed occupation.

Table C-1 presents mean straight-time hourly earnings for occupation groups and selected occupation characteristics. The occupation characteristics include full-time and part-time status, union and nonunion status, and time or incentive pay status. Union workers' wages are determined through collective bargaining. Time workers' wages are based solely on hourly rate or salary. Incentive workers' wages are at least partially based on productivity payments such as piece rates, commissions and production bonuses.

Table C-2 presents mean straight-time hourly earnings for occupation groups and industry division of employers; these are limited to the private sector.

Table C-3 presents mean straight-time hourly earnings for occupation groups and the employment size of employers; these are also limited to the private sector.

Table C-4 presents the employment scope of this survey. The occupation employment estimates shown relate to all employers in the area surveyed, not just the surveyed employers.

Table A-1. Hourly earnings 1 for selected occupations, all workers 2 , all industries, lowa City, IA, December 1998

			All in	dustries		
Occupation ³				Percentil	es	
·	Mean	10	25	Median 50	75	90
All occupations	\$16.10	\$7.50	\$10.24	\$13.88	\$18.85	\$25.43
All occupations excluding sales		8.12	10.66	14.29	18.86	26.44
White-collar occupations		8.89	12.02	16.35	21.35	31.16
White-collar occupations excluding sales	20.04	10.46	13.17	17.18	21.80	32.50
Professional specialty and technical occupations	21.39	12.46	15.05	19.02	24.40	31.36
Professional specialty occupations	23.07	14.45	17.40	20.67	26.44	32.50
Engineers, architects, and surveyors	_	_	_	-	_	_
Mathematical and computer scientists	_	_	_	-	_	_
Natural scientists	_	_	_	-	-	_
Health related occupations	19.66	13.75	15.98	18.05	21.01	21.63
Registered nurses	18.68	14.58	16.42	19.10	21.01	21.43
Teachers, college and university	-	_	_	_	_	_
Teachers, except college and university	25.91	15.13	20.48	27.31	31.62	35.58
Elementary school teachers	27.25	17.64	22.15	29.18	32.50	36.08
Secondary school teachers	26.91	17.04	21.91	26.32	31.62	35.58
Social scientists and urban planners	_	_	_	_	_	_
Social, recreation, and religious workers	-	_	_	_	_	_
Lawyers and judges	_	_	_	_	_	_
Writers, authors, entertainers, athletes, and						
professionals, N.E.C.	-	_	_	_	_	_
Technical occupations	13.53	9.37	11.49	13.17	14.50	19.02
Executive, administrative, and managerial occupations	31.92	16.11	19.95	23.56	51.75	51.96
Executives, administrators, and managers	34.62	19.95	19.95	27.78	51.96	51.96
Managers and administrators, N.E.C	45.09	18.02	33.65	45.67	51.75	51.75
Management related occupations	19.91	11.29	13.56	21.75	21.75	34.60
Sales occupations	8.57	6.00	6.30	7.25	9.00	13.37
Sales workers, other commodities	9.99	6.56	7.25	8.71	10.00	17.27
Cashiers	6.58	6.00	6.00	6.30	6.85	8.15
Administrative support occupations, including clerical	12.92	8.89	10.46	12.89	15.48	16.35
Secretaries		10.46	12.22	14.75	16.35	18.41
Records clerks, N.E.C.	9.17	6.50	8.00	9.30	10.50	10.80
Bookkeepers, accounting and auditing clerks		8.00	8.51	9.00	10.25	10.50
General office clerks	12.96	9.50	10.71	13.51	14.29	15.49
Administrative support occupations, N.E.C	11.72	8.75	11.25	12.21	12.63	12.63
Blue-collar occupations	12.62	8.13	10.20	12.20	14.85	16.85
Precision production, craft, and repair occupations		9.25	12.80	14.85	16.15	18.42
Machine operators, assemblers, and inspectors		9.55	10.20	11.69	12.20	13.03
Transportation and material moving occupations		10.42	11.49	14.19	16.45	19.17
Bus drivers	13.21	10.70	11.83	12.85	14.97	14.97
Handlers, equipment cleaners, helpers, and laborers	8.95	6.50	7.50	7.90	10.61	12.92
Stock handlers and baggers	7.27	5.50	6.20	7.25	8.50	8.75
Freight, stock, and material handlers, N.E.C		7.50	7.50	7.60	8.00	10.75
Laborers except construction, N.E.C.	10.85	7.00	7.50	9.97	13.08	15.71
Service occupations	10.43	6.25	7.50	9.44	11.83	18.85
Protective service occupations		12.51	12.51	16.28	18.68	20.31
Food service occupations	6.81	3.50	6.08	7.00	7.75	9.25
Waiters and waitresses		3.09	3.09	3.09	3.33	3.50
Cooks	6.83	6.00	6.25	7.00	7.00	7.90
Food preparation occupations, N.E.C	7.36	6.50	6.50	7.00	7.78	9.25

See footnotes at end of table.

Table A-1. Hourly earnings1 for selected occupations, all workers2, all industries, lowa City, IA, December 1998 — Continued

			All in	dustries		
Occupation ³				Percentil	es	
	Mean	10	25	Median 50	75	90
Service occupations (-Continued) Health service occupations	\$11.89 7.02 10.20	- \$7.54 6.25 8.21 5.25 5.25	- \$9.44 6.45 9.44 5.62 5.45	- \$10.31 7.00 10.27 7.01 6.50	- \$13.24 7.54 11.52 7.83 7.27	- \$18.85 7.54 11.83 9.21 7.70

¹ 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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. At the 75th percentile, one-fourth earn the same as or more than the rate shown. The 10th and 90th

the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic.

All workers include full-time and part-time workers. 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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Iowa City, IA, December 1998

			Private	e industry	'			State	and loc	al govern	ment	
Occupation ³				Percentil	es				F	Percentile	s	
	Mean	10	25	Median 50	75	90	Mean	10	25	Median 50	75	90
All occupations	\$13.40 14.03	\$6.50 7.00	\$8.05 9.15	\$11.64 11.96	\$15.11 15.78	\$21.54 21.75	\$18.69 18.69	\$10.27 10.27	\$12.84 12.84	\$16.35 16.35	\$20.42 20.42	\$28.61 28.61
White-collar occupations White-collar occupations excluding sales	16.06 18.45	6.60 8.99	8.85 10.56	12.21 13.90	20.47 21.75	27.78 32.86	20.79 20.79	11.90 11.90	14.29 14.29	17.81 17.81	22.44 22.44	31.62 31.62
Professional specialty and technical occupations	20.15 22.66 –	11.98 13.00 –	13.65 15.90 –	17.86 20.67	21.77 24.40 –	29.00 32.86	21.78 23.18 -	12.98 14.70 –	15.73 17.40 –	19.33 20.75	25.72 26.97 –	31.46 32.50 –
Mathematical and computer scientists Natural scientists	_	_	_	_ _	<u> </u>	_ _	_ _	_	_ _	_ _	- -	_ _
Health related occupations	- - -	- - -	- - - -	- - -	-	- - -	27.00 27.82 26.95	- 17.64 18.95 17.96	22.17 22.66 22.28	- 28.42 29.48 26.32	32.02 32.50	35.58 36.16 35.58
Secondary school teachers	- - -	- - -	- - -	- - -	- - -	- - -	- - - -	- - -	- - - -	- - - -	31.62 - - -	- - - -
and professionals, N.E.C. Technical occupations Executive, administrative, and managerial occupations	- 14.58 30.48	_ 10.97 13.33	- 11.98 21.04	- 13.25 24.03	- 15.61 39.76	21.64 51.75	33.42	- - 19.95	- - 19.95	- - 19.95	- - 51.96	- - 51.96
Executives, administrators, and managers	34.98 45.09	16.11 18.02	22.87 33.65	33.65 45.67	45.67 51.75	51.75 51.75	34.33	19.95 –	19.95 –	20.55	51.96 -	51.96 -
Management related occupations Sales occupations Sales workers, other commodities Cashiers	20.28 8.57 9.99 6.58	11.29 6.00 6.56 6.00	13.33 6.30 7.25 6.00	21.75 7.25 8.71 6.30	21.75 9.00 10.00 6.85	34.60 13.37 17.27 8.15	- - -	- - -	- - -	- - -	- - -	- - -
Administrative support occupations, including clerical	10.51 10.75 9.17	7.75 8.65 6.50	9.00 9.50 8.00	10.30 10.70 9.30	12.21 11.83 10.50	13.13 12.83 10.80	14.50 15.15 –	10.71 10.94 –	12.91 13.51 –	14.29 15.90 –	16.35 16.35 –	17.16 19.44 –
Bookkeepers, accounting and auditing clerks	9.29 11.68 11.72	8.00 9.35 8.75	8.51 9.35 11.25	9.00 10.40 12.21	10.25 13.63 12.63	10.50 18.19 12.63	_ _	_ _	_ _	_ _	_ _	_ _
Blue-collar occupations	12.23	7.75	10.20	12.00	13.64	16.83	15.16	12.99	14.85	14.85	15.71	18.23
Precision production, craft, and repair occupations	14.32	8.79	10.34	14.81	16.85	19.23	_	-	-	_	-	_
inspectors Transportation and material moving occupations	11.47 –	9.55 –	10.20	11.69 –	12.20 -	13.03 -	15.82	11.83	12.85	14.97	20.74	20.74
Bus drivers Handlers, equipment cleaners, helpers, and laborers Stock handlers and baggers	- 8.95 7.27	6.50 5.50	7.50 6.20	7.90 7.25	10.61 8.50	12.92 8.75	13.99	12.76	12.85	14.97	14.97	14.97 –
Freight, stock, and material handlers, N.E.C. Laborers except construction, N.E.C.	8.30 10.85	7.50 7.00	7.50 7.50	7.60 9.97	8.00 13.08	10.75 15.71	_ _ _	_ _ _	_ _ _	_ _ _	_ _ _	_ _ _
Service occupations	7.30 - 6.52	5.30 - 3.33	6.19 - 6.00	7.00 - 6.50	7.75 - 7.62	9.38 - 7.97	12.36 16.44	8.45 12.51	9.44 12.51	10.71 16.28	14.94 18.68	18.85 20.31
Food service occupations Waiters and waitresses Cooks Health service occupations Cleaning and building service	3.28 6.78	3.33 3.09 6.00	3.09 6.25	3.09 6.75	7.62 3.33 7.00	7.97 3.50 7.65	- - -	- - -	- - -	- - -	- - -	- - -
occupations	9.40 7.02	6.30 6.25	6.50 6.45	7.54 7.00	10.00 7.54	15.34 7.54	12.56 –	8.79 -	10.27 –	11.52 –	13.96 -	18.85 –

See footnotes at end of table.

Table A-2. Hourly earnings1 for selected occupations, all workers2, private industry and State and local government, lowa City, IA, December 1998 — Continued

			Private	e industry	1			State	and loca	al govern	ment				
Occupation ³				Percentil	es				F	Percentile	s	00			
	Mean	10	25	Median 50	75	90	Mean	10	25	Median 50	75	90			
Service occupations (-Continued) Cleaning and building service occupations (-Continued) Janitors and cleaners Personal service occupations	\$8.21 7.05	\$6.30 5.30	\$6.30 5.62		\$10.00 7.83	\$10.91 9.21	\$10.50 -	\$8.50 -	\$9.73 -	\$10.27 -	\$11.52 -	\$11.83 -			

 $^{^{1}}$ 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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. At the 75th percentile, one-fourth earn the same as or more than the rate shown. The 10th and 90th percentiles follow the same logic.

2 All workers include full-time and part-time workers. 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. $^3\,$ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Iowa City, IA, December 1998

						All indu	stries						
			Fu	II-time					Part	-time			
Occupation ³				Percentil	es				F	Percentiles			
	Mean	10	25	Median 50	75	90	Mean	10	25	Median 50	75	90	
All occupations	\$16.88	\$8.60	\$11.05	\$14.29	\$19.23	\$26.97	\$9.03	\$5.91	\$6.40	\$7.54	\$9.38	\$16.29	
All occupations excluding sales		9.35	11.49	14.71	19.44	27.16	9.35	5.91	6.50	7.62	10.09	16.94	
White-collar occupations White-collar occupations excluding sales	19.48 20.33	9.37 10.71	12.47 13.20	16.35 17.40	21.66 22.17	31.62 32.86	11.63 14.05	6.20 7.00	6.78 8.00	8.71 13.90	16.29 19.29	21.01 21.01	
, ,	20.00	10.71	10.20	17.40	22.17	32.00	14.00	7.00	0.00	10.50	10.20	21.01	
Professional specialty and technical	21.64	12.70	15.07	10.10	24.40	21.46	17.10	0.67	12.61	1751	24.04	22.40	
occupations Professional specialty occupations	21.64 23.27	12.70 14.48	15.07 17.40	19.18 20.67	24.40 26.97	31.46 32.50	19.08	9.67 13.70	13.61 16.18	17.51 20.75	21.01 21.01	22.40	
Engineers, architects, and surveyors		-	- 17.40	20.07	-	- 52.50	-	-	-	20.73	-		
Mathematical and computer scientists		_	_	_	_	_	_	_	_	_	_	_	
Natural scientists	-	-	-	_	_	-	-	-	_	-	_	-	
Health related occupations	19.73	13.75	15.94	17.88	21.01	21.54	19.11	13.90	16.94	20.75	21.01	22.40	
Registered nurses	18.62	14.94	16.42	18.79	21.01	21.43	-	-	_	-	_	-	
Teachers, college and university					-		-	-	_	-	-	-	
Teachers, except college and university	26.18	15.32	20.76	27.38	31.62	35.58	-	-	_	-	_	-	
Elementary school teachers	27.25	17.64	22.15	29.18	32.50	36.08	-	-	_	-	_	-	
Secondary school teachers Social scientists and urban planners	26.95	17.96 –	22.28	26.32	31.62	35.58	_	_	_	_	_	_	
Social, recreation, and religious workers	_	_	_	_	_		_	_	_	_	_	-	
Lawyers and judges	_	_	_	_	_	_	_	_	_	_	_	_	
Writers, authors, entertainers, athletes,													
and professionals, N.E.C.	_	_	_	_	_	_	_	_	_	_	_	_	
Technical occupations	13.66	9.37	11.49	13.17	14.50	19.65	12.28	9.15	9.15	10.97	16.29	16.35	
Executive, administrative, and managerial													
occupations	32.03	16.11	19.95	23.56	51.75	51.96	-	-	-	-	-	-	
Executives, administrators, and													
managers	34.77	19.95	19.95	27.78	51.96	51.96	-	-	_	-	_	-	
Managers and administrators, N.E.C.	45.09	18.02	33.65	45.67	51.75	51.75	-	-	_	-	_	-	
Management related occupations	19.91	11.29	13.56	21.75	21.75	34.60		-	-	-	- 7.40		
Sales occupations	9.06	6.00	6.30	7.35	9.50	15.68	7.05	6.00	6.20	6.60	7.40	8.71	
Sales workers, other commodities	10.87	7.25	7.35	9.33	11.39	17.83	7.80	6.23	6.44	7.19	8.71	9.33	
Administrative support occupations, including clerical	13.15	9.35	10.70	13.08	15.48	16.35	8.71	6.10	6.85	7.30	8.50	15.69	
Secretaries	14.72	10.60	12.22	14.75	16.35	18.41	0.71	0.10	- 0.00	7.50	0.50	15.03	
Bookkeepers, accounting and auditing		10.00	12.22	14.75	10.00	10.41							
clerks	9.38	8.25	8.51	9.00	10.25	10.50	_	_	_	_	_	_	
General office clerks	12.98	9.50	10.71	13.63	14.29	15.49	_	-	-	_	-	_	
Plus celler ecounctions	12.00	0.25	10.74	12.20	1/1 05	17.04	9 24	6.00	7.00	7.60	0.20	11 21	
Blue-collar occupations Precision production, craft, and repair	12.98	9.25	10.74	12.20	14.85	17.04	8.24	6.00	7.00	7.60	9.20	11.31	
occupations	14.51	9.25	12.80	14.85	16.15	18.42	_	_	_	_	_	_	
Machine operators, assemblers, and													
inspectors	11.59	9.75	10.20	11.89	12.20	13.03	8.34	6.00	7.00	8.50	9.20	10.15	
Transportation and material moving													
occupations	14.53	10.62	11.99	14.51	16.48	19.44	10.68	7.75	8.87	10.88	12.03	13.16	
Handlers, equipment cleaners, helpers, and													
laborers	9.88	7.05	7.75	9.30	11.12	13.08	7.38	5.50	6.50	7.50	7.60	8.50	
Service occupations	11.57	7.00	8.45	10.27	13.06	18.85	6.97	4.09	6.03	6.93	8.21	9.38	
Protective service occupations		12.51	12.51	16.28	18.68	20.31	-		-	- 0.55	-	- 5.50	
Food service occupations		6.25	7.00	7.50	7.76	8.87	6.55	3.09	6.00	6.48	7.62	9.38	
Waiters and waitresses			_	-		_	3.26	3.09	3.09	3.09	3.50	3.50	

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, lowa City, IA, December 1998 — Continued

						All indu	stries					
			Fu	II-time					Part	-time		
Occupation ³				Percentil	es				F	Percentile	s	
	Mean	10	25	Median 50	75	90	Mean	10	25	Median 50	75	90
Service occupations (-Continued) Health service occupations Cleaning and building service occupations Janitors and cleaners Personal service occupations	- \$12.08 10.26 7.07	- \$8.21 8.21 5.30	- \$9.73 9.44 5.70	- \$10.72 10.27 7.00	- \$13.96 11.52 7.49	- \$18.85 11.83 9.21	- \$7.28 - 7.03	- \$6.32 - 5.25	- \$7.50 - 5.50	- \$7.54 - 7.59	- \$7.54 - 7.83	- \$7.54 - 8.68

¹ 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. The 10th, 25th, 50th, 75th and 90th percentiles designate position in the earnings distribution. At the 50th percentile, the median, half of the workers receive the same as or more than the rate shown, and half receive the same as or less than the rate shown. At the 25th percentile, one-fourth of the workers earn the same as or less than the rate shown. The 10th and 90th percentiles follow the same logic.

² Employees are classified as working either a full-time or a part-time schedule based

minimum full-time schedule.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

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

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Iowa City, IA, December 1998

			All ind	ustries		
Occupation ³	Mean weekly	Weekly	earnings	Mean annual	Annual e	arnings
	hours ⁴	Mean	Median	hours	Mean	Median
All occupations	40.6	\$685	\$590	2.050	\$34,602	\$30.801
All occupations excluding sales	40.6	702	596	2,048	35,383	31,075
White-collar occupations	40.0	780	654	1,994	38,834	34,008
White-collar occupations excluding sales	40.0	814	695	1,987	40,400	36,078
Professional specialty and technical occupations	39.7	859	764	1,904	41,207	38,024
Professional specialty occupations	39.6	922	827	1,872	43,550	39,728
Engineers, architects, and surveyors	_	_	_	_	_	-
Mathematical and computer scientists	_	_	_	_	_	_
Natural scientists	_	_	_	_	_	-
Health related occupations	40.0	789	715	2,075	40,947	37,190
Registered nurses	40.0	745	752	2,080	38,731	39,083
Teachers, college and university	_	_	_	_	_	-
Teachers, except college and university	36.3	950	1,021	1,369	35,838	38,609
Elementary school teachers	36.0	981	1,032	1,349	36,749	39,004
Secondary school teachers	36.3	979	1,033	1,342	36,182	38,923
Social scientists and urban planners	_	_	_	_	-	-
Social, recreation, and religious workers	_	_	_	_	_	_
Lawyers and judges	_	_	_	_	_	_
Writers, authors, entertainers, athletes, and						
professionals, N.E.C.	- 40.1	547	527	2.002	20 444	_ 27,394
Technical occupations	40.1	1.344	981	2,083 2.178	28,441 69.764	51.012
Executive, administrative, and managerial occupations Executives, administrators, and managers	41.8	1,344	1,058	2,178	75,393	55,010
	46.2					,
Managers and administrators, N.E.C	46.2 42.8	2,082 851	2,055 731	2,401 2.224	108,284 44,270	106,868 38,022
			-	,		,
Sales occupations	40.0	362	294	2,080	18,836	15,288
Sales workers, other commodities	40.0	435 523	373	2,080	22,607	19,406
Administrative support occupations, including clerical	39.8		516	2,066	27,166	26,853
Secretaries	39.8	586	590	2,067	30,432	30,680
Bookkeepers, accounting and auditing clerks	40.0 39.7	375	360	2,080	19,507	18,720
General office clerks	39.7	515	540	2,062	26,768	28,101
Blue-collar occupations	42.8	556	501	2,226	28,892	26,062
Precision production, craft, and repair occupations	40.5	588	594	2.106	30,555	30,888
Machine operators, assemblers, and inspectors	40.0	464	476	2,080	24,113	24,731
Transportation and material moving occupations	52.4	761	749	2.722	39,563	38.938
Handlers, equipment cleaners, helpers, and laborers	39.6	392	372	2,060	20,359	19,349
Service occupations	39.9	461	411	2,053	23.744	21,362
Protective service occupations	43.3	712	663	2.253	37,046	34,478
Food service occupations	36.9	268	280	1,800	13,071	14,560
Health service occupations	-	-	-	- 1,000		-
Cleaning and building service occupations	39.8	481	429	2.072	25,029	22,305
Janitors and cleaners	39.9	409	411	2,076	21,294	21,362
Personal service occupations	38.2	270	245	1,949	13.785	12.740
. o.conal outrice ecoapations	00. <u>L</u>			1,010	10,7 00	12,1 10

¹ Earnings 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, 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. The median designates position-one-half of the workers receive the same as or more, and one-half receive the same as or less than the rate shown.
2 Employees are classified as working either a full-time or a part-time sorkedule 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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified

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to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

 $^{^{\}rm 4}\,$ Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

Table B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, lowa City, IA, December 1998

		All workers 4		All ind	ustries
Occupational group ³ and level	All indus- tries	Private industry	State and local government	Full-time workers	Part-time workers
l occupations	\$16.10	\$13.40	\$18.69	\$16.88	\$9.03
All occupations excluding sales	16.55	14.03	18.69	17.28	9.35
White caller accountions	40.07	16.06	20.70	10.40	11.60
White-collar occupationsLevel 2	18.97 7.72	16.06 7.71	20.79	19.48 8.45	11.63
Level 3	8.82	8.66	_	9.71	6.95
Level 4	10.74	10.15	_	10.89	7.86
Level 5	13.57	12.65	13.82	13.66	11.92
Level 6	15.12	14.91	_	15.12	_
Level 7	18.72	13.60	19.61	18.75	18.37
Level 8	20.66	17.82	21.48	20.77	-
Level 9	21.67	21.15	22.13	21.71	_
Level 12	27.99	35.99	21.18	27.94	_
Level 13	36.64	10.45	20.70	36.64	14.05
White-collar occupations excluding sales	20.04	18.45	20.79	20.33	14.05
Level 2 Level 3	7.90 9.96	7.91 9.78	_	8.44 10.30	7.13 7.22
Level 4	11.14	10.73	_	11.24	8.25
Level 5	13.49	11.96	13.82	13.57	- 0.20
Level 6	15.50	15.56	-	15.50	_
Level 7	18.73	13.47	19.61	18.76	18.37
Level 8	20.80	18.01	21.48	20.91	_
Level 9	21.67	21.15	22.13	21.71	_
Level 12	27.99	35.99	21.18	27.94	_
Level 13	36.64	-	_	36.64	_
Professional specialty and technical occupations Professional specialty occupations	21.39 23.07	20.15 22.66	21.78 23.18	21.64 23.27	17.10 19.08
Level 5	14.01	_	14.13	14.06	-
Level 7	20.18	_	20.86	20.28	_
Level 8	21.72	19.23	22.22	21.80	_
Level 9 Level 12	22.22 23.23	20.39	21.18	22.34 22.97	_
Engineers, architects, and surveyors	25.25	_	21.10		_
Mathematical and computer scientists	_	_	_	_	_
Natural scientists	-	_	_	_	_
Health related occupations	19.66	_	_	19.73	19.11
Teachers, college and university		_	_	-	_
Teachers, except college and university	25.91	_	27.00	26.18	-
Level 5	15.57	_	15.57		_
Level 8	28.12	_	28.62	28.14	_
Social scientists and urban planners	_	_	_	_	_
Social, religious, and recreation workers Lawyers and judges	_	_	_	_	_
Writers, authors, entertainers, athletes, and			_	_	_
professionals, N.E.C.	_	_	_	_	_
Technical occupations		14.58	_	13.66	12.28
Executive, administrative, and managerial occupations	31.92	30.48	33.42	32.03	_
Level 9	20.95	22.54	20.14	20.95	_
Level 12	37.04	37.04	-	37.04	-
Executives, administrators, and managers	34.62	34.98	34.33	34.77	_
Level 9 Level 12	20.88	22.94	_	20.88	_
Management related occupations	37.04 19.91	37.04 20.28	_	37.04 19.91	_
Sales occupations		8.57	_	9.06	7.05
Level 3	7.24	7.24	_	-	6.89
Level 4	8.05	8.05	_	_	_
Administrative support occupations, including clerical	12.92	10.51	14.50	13.15	8.71
Level 2	7.89	7.89	_	8.44	7.09
Level 3	9.98	9.81	_	10.30	7.21
Level 4	11.32	10.62	-	11.45	_
	13.55	_	-	13.55	-
Level 5				1 4 4 4 4	1
Level 5 Level 7	14.94 17.05	_	_	14.94	_

See footnotes at end of table.

Table B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, lowa City, IA, December 1998 — Continued

		All workers 4	ŀ	All ind	ustries
Occupational group ³ and level	All indus- tries	Private industry	State and local government	Full-time workers	Part-time workers
Blue-collar occupations	\$12.62	\$12.23	\$15.16	\$12.98	\$8.24
Level 1	7.47	7.47	_	7.57	7.42
Level 3	9.03	8.39	_	9.83	6.84
Level 5	13.01	11.84	_	13.01	_
Level 6	14.42	14.43	_	14.43	_
Level 7	14.55	14.01	_	14.56	_
Precision production, craft, and repair occupations	14.51	14.32	_	14.51	_
Level 7	14.31	13.68	_	14.31	_
Machine operators, assemblers, and inspectors		11.47	_	11.59	8.34
Transportation and material moving occupations	14.30	_	15.82	14.53	10.68
Handlers, equipment cleaners, helpers, and laborers	8.95	8.95	_	9.88	7.38
Level 1	7.22	7.22	_	_	7.10
Level 3	8.75	8.75	-	_	_
Service occupations	10.43	7.30	12.36	11.57	6.97
Level 2	8.92	7.75	_	9.17	8.35
Level 3	7.90	6.39	10.00	8.89	6.15
Level 4	10.67	_	_	11.07	_
Level 7	16.59	_	17.13	16.73	_
Protective service occupations	16.44	_	16.44	16.44	_
Food service occupations	6.81	6.52	_	7.26	6.55
Level 3		5.85	_	6.43	5.62
Health service occupations		_	_	_	_
Cleaning and building service occupations		9.40	12.56	12.08	7.28
Level 2		7.79	_	_	
Level 3	9.89		_	_	_
Personal service occupations		7.05	_	7.07	7.03

¹ 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.

2 Each occupation for which wage data are collected in an anotablishment in payleted by any forester including teaching and are collected.

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

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

² Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall level of the occupation. See technical note for more information.

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.
⁴ All workers include full-time and part-time workers. Employees

⁴ All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule

Table B-2. Mean hourly earnings¹ for selected occupations and levels², all industries, private industry, State and local government, full-time and part-time workers, Iowa City, IA, December 1998

		All workers ⁴		All ind	ustries
Occupation ³ and level	All indus- tries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations:					
Professional specialty and technical occupations:					
Professional specialty occupations:					
Registered nurses	\$18.68	_	_	\$18.62	_
Elementary school teachers	27.25	_	\$27.82	27.25	_
Secondary school teachers			26.95	26.95	
Executive, administrative, and managerial occupations:	20.51		20.55	20.55	
Managers and administrators, N.E.C.	45.09	\$45.09	_	45.09	_
Sales occupations:	45.09	φ45.09	_	45.09	_
Sales workers, other commodities	9.99	9.99		10.87	\$7.80
Level 4	8.43	8.43	_	10.67	\$7.00
Cashiers	6.58	6.58	_	_	_
	0.56	0.56	_	_	_
Administrative support occupations, including clerical:	44.05	40.75	45.45	4470	
Secretaries	14.65	10.75	15.15	14.72	_
Level 4	12.40	- 0.47	_	_	_
Records clerks, N.E.C.	9.17	9.17	_	_	_
Bookkeepers, accounting and auditing clerks	9.25	9.29	_	9.38	_
General office clerks	12.96	11.68	_	12.98	_
Administrative support occupations, N.E.C	11.72	11.72	_	_	_
Blue-collar occupations:					
Transportation and material moving occupations:					
Bus drivers	13.21	_	13.99	_	_
Handlers, equipment cleaners, helpers, and laborers:					
Stock handlers and baggers	7.27	7.27	_	_	_
Freight, stock, and material handlers, N.E.C	8.30	8.30	_	_	_
Laborers except construction, N.E.C.	10.85	10.85	_	_	_
Service occupations:					
Food service occupations:					
Waiters and waitresses	3.28	3.28	l _	_	3.26
Cooks	6.83	6.78	l _	_	-
Level 3	6.69	6.62	_	_	_
Food preparation occupations, N.E.C.	7.36	- 0.02	_	_	_
Cleaning and building service occupations:	7.50				
Maids and housemen	7.02	7.02	_	_	_
Level 2	7.02	7.02	_		_
Janitors and cleaners	10.20	8.21	10.50	10.26	I [
Personal service occupations:	10.20	0.21	10.50	10.20	_
Early childhood teachers' assistants	6.44	_	_	_	_
Larry Grillottota teachers assistants	0.44	_	_	_	_

¹ 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.

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.

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workers, weighted by hours.

² Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall level of the occupation. See technical note for more information.

more information.

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

⁴ All underpresided full time and a second control of the cont

⁴ All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule

Table C-1. Mean hourly earnings1 by occupational group and selected characteristics, all industries, lowa City, IA, December 1998

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$16.88	\$9.03	\$14.98	\$16.30	\$16.16	\$15.16
All occupations excluding sales	17.28	9.35	14.98	16.85	16.60	-
White-collar occupations	19.48	11.63	22.58	18.75	18.98	18.51
White-collar excluding sales	20.33	14.05	22.58	19.87	19.94	_
Professional specialty and technical occupations	21.64	17.10	24.37	21.08	21.39	_
Professional specialty occupations	23.27	19.08	27.86	22.62	23.07	_
Technical occupations	13.66	12.28	_	13.48	13.53	_
Executive, administrative, and managerial occupations	32.03	_	_	31.92	31.50	_
Sales occupations	9.06	7.05	_	8.57	7.48	13.24
Administrative support including clerical occupations	13.15	8.71	-	12.93	12.92	_
Blue-collar occupations	12.98	8.24	12.58	12.64	12.19	_
Precision production, craft, and repair occupations	14.51	_	_	14.13	14.51	_
Machine operators, assemblers, and inspectors	11.59	8.34	11.49	11.36	11.47	_
Transportation and material moving occupations	14.53	10.68	17.20	-	14.43	_
Handlers, equipment cleaners, helpers, and laborers		7.38	_	8.67	8.57	_
Service occupations	11.57	6.97	13.10	9.96	10.43	_

¹ 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

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

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of all workers and dividing by the number of workers, weighted by hours.

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are

classified into one of nine major occupational groups.

3 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.

⁴ Union workers are those whose wages are determined through collective bargaining.

Time workers' wages are based solely on an hourly rate or salary;

Table C-2. Mean hourly earnings¹ by occupational group and industry division, private industry, all workers², lowa City, IA, December 1998

		Goods-producing industries ⁴				Service-producing industries ⁵				
Occupational group ³	All private industries	Total	Mining	Con- struc- tion	Manu- factur- ing	Total	Transportation and public utilities	Whole- sale and retail trade	Fin- ance, insur- ance, and real estate	Serv- ices
All occupations	\$13.40 14.03	- -	- -	-	_ _	\$13.35 14.26	- -	\$9.44 10.06	\$16.22 16.82	\$16.69 16.94
White-collar occupations	16.06 18.45	_ _	_ _	-	_ _	15.80 18.51	- -	10.58 16.48	16.22 16.82	19.57 20.01
Professional specialty and technical occupations Professional specialty occupations	20.15 22.66	_ _	_ _	<u>-</u>	_ _	21.70 23.42	_ _	_ _	_ _	21.96 23.42
Technical occupations	14.58	_	-	_	-		_	_	_	
Executive, administrative, and managerial occupations		_	-	_	-	32.35	_	_	_	39.15
Sales occupations	8.57 10.51	_	_	_	_	8.29 10.47	_	8.27 9.03	9.77	11.15
Blue-collar occupations	12.23	_	-	-	-	12.19	_	10.56	_	_
Precision production, craft, and repair occupations	14.32	_	-	_	-	12.45	_	12.45	-	-
Machine operators, assemblers, and inspectors	11.47	_	-	_	-	8.80	_	-	_	-
Transportation and material moving occupations	_	_	-	_	-	-	_	-	_	-
Handlers, equipment cleaners, helpers, and laborers	8.95	_	_	_	-	8.21	_	8.29	_	_
Service occupations	7.30	_	_	-	_	7.24	_	6.49	_	8.31

¹ 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.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

weighted by hours.

All workers include full-time and part-time workers. 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.

A classification system including about 480 individual occupations is used to cover

³ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

Goods-producing industries include mining, construction, and manufacturing.

⁵ Service-producing industries include transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

Table C-3. Mean hourly earnings¹ by occupational group and establishment employment size, private industry, all workers², Iowa City, IA, December 1998

			100 workers or more			
Occupational group ³	All private industry workers	50 - 99 workers	Total	100 - 499 workers	500 workers or more	
All occupations	\$13.40 14.03	\$12.34 12.49	\$13.78 14.60	\$9.87 10.85	\$16.15 16.15	
White-collar occupations		15.11 16.41	16.36 19.11	10.74 15.34	20.07 20.07	
Professional specialty and technical occupations	22.66 14.58 30.48	13.03 13.09 - 29.07 11.01 9.59	21.49 24.93 14.74 31.28 7.80 10.85	14.79 14.79 - 28.87 7.80 9.57	22.08 26.36 14.74 32.31 - 11.41	
Blue-collar occupations Precision production, craft, and repair occupations Machine operators, assemblers, and inspectors Transportation and material moving occupations Handlers, equipment cleaners, helpers, and laborers	14.32 11.47 –	12.66 14.13 9.59 14.28 8.49	12.09 - 11.53 - 9.21	10.30 - 11.83 - 9.21	12.64 - 11.49 - -	
Service occupations	7.30	6.26	8.06	7.46	_	

¹ 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.

2 All workers include full-time and part-time workers. Employees

Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

All workers include full-time and part-time workers. 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.

schedule. $\frac{3}{3}$ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy.

Table C-4. Number of workers¹ represented by occupational group, lowa City, IA, December 1998

		All workers	
Occupational group ²	All industries	Private industry	State and local govern- ment
All occupations All occupations excluding sales	33,211 31,168	16,411 14,367	16,800 16,800
White-collar occupations	20,074 18,030	7,763 5,719	12,311 12,311
Professional specialty and technical occupations	2,044	2,449 1,707 742 982 2,044	8,013 7,053 - - -
Administrative support including clerical occupations Blue-collar occupations Precision production, craft, and repair occupations Machine operators, assemblers, and inspectors Transportation and material moving occupations	5,536 6,367 1,488 2,466 1,414	2,288 5,487 928 2,466 -	3,248 - - - 320
Handlers, equipment cleaners, helpers, and laborers Service occupations	1,000 6,770	1,000 3,161	3,609

¹ Both full-time and part-time workers were included in the survey. 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 establishment, where a 40-hour week is the minimum full-time schedule.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

in another establishment, where a 40-hour week is the minimum full-time schedule.

² A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

Appendix A: Technical Note

This section provides basic information on the procedures and concepts used to produce the data contained in this bulletin. It is divided into three parts: Planning for the survey; data collection; and processing and analyzing the data. Although this section answers some questions commonly asked by data users, it is not a comprehensive description of all the steps required to produce the data.

Planning for the survey

The overall design of the survey includes questions of scope, frame, and sample selection.

Survey scope

This survey covered establishments employing 50 workers or more in goods-producing industries (mining, construction and manufacturing); service-producing industries (transportation, communications, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; and services industries); and State and local governments. Agriculture, private households, and the Federal Government were excluded from the scope of the survey. For purposes of this survey an establishment was an economic unit which 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 was usually at a single physical location. For State and local governments, an establishment was defined as all locations of a government entity.

The Iowa City, IA, Metropolitan Statistical Area includes Johnson County.

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. The sampling frame was reviewed prior to the survey and, when necessary, missing establishments were added, out-of-business and out-of-scope establishments were removed, and addresses, employment levels, industry classification, and other information were updated.

Sample design

The sample for this survey area was selected using a two stage stratified design with probability proportional to employment sampling at each stage. The first stage of sample selection was a probability sample of establishments. The sample of establishments was drawn by first stratifying the sampling frame by industry and ownership. The number of sample establishments allocated to each stratum is approximately proportional to the stratum employment. Each sampled establishment is selected within a stratum with a probability proportional to its employment. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. Weights were applied to each establishment when the data were tabulated so that it represents similar units (by industry and employment size) in the economy which were not selected for collection. See appendix table 1 for a count of establishments in the survey by employment size. The second stage of sample selection, detailed below, was a probability sample of occupations within a sampled establishment.

Data collection

The collection of data from survey respondents required detailed procedures. Collection was the responsibility of the field economists, working out of the Regional Office, who visited each establishment surveyed. Other contact methods, such as mail and telephone, were used to follow-up and update data.

Occupational selection and classification

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

- 1. Probability-proportional-to-size selection of establishment jobs.
- 2. Classification of jobs into occupations based on the Census of Population system.
- 3. Characterization of jobs as full-time v. part-time, union v. nonunion, and time v. incentive.
- 4. Determination of the level of work of each job.

For each occupation, wage data were collected for those workers who met all the criteria identified in the last three steps. Special procedures were developed for jobs for which a correct classification or level could not be determined.

In step one, the jobs to be sampled were selected at each establishment by the BLS field economist during a personal visit. A complete list of employees was used for sampling, with each selected worker representing a job within the es-

tablishment.

As with the selection of establishments, the selection of a job was based on probability proportional to its size in the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The number of jobs collected in each establishment was based on an establishment's employment size as shown in the following schedule:

Number of employees	Number of selected jobs
50-99	8
100-249	10
250-999	12
1000-2,499	16
2,500+	20

The second step of the process entailed classifying the selected jobs into occupations based on their duties. The National Compensation Survey occupational classification system is based on the 1990 Census of Population. A selected job may fall into any one of about 480 occupational classifications, from accountant to wood lathe operator. In cases where a job's duties overlapped two or more census classification codes, the duties used to set the wage level were used to classify the job. Classification by primary duties was the fallback.

Each occupational classification is an element of a broader classification known as a major occupational group (MOG). Occupations can fall into any of the following MOGs:

- · Professional specialty and technical
- Executive, administrative, and managerial
- Sales
- Administrative support including clerical
- Precision production, craft, and repair
- Machine operators, assemblers, and inspectors
- Transportation and material moving
- Handlers, equipment cleaners, helpers, and laborers
- Service occupations

Appendix B contains a complete list of all individual occupations, classified by the MOG to which they belong. 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, depending on whether any part of pay was directly based on the actual production of the worker, rather than solely on hours worked. Finally, the worker was identified as being in a union job or a nonunion job. See the "Definition of Terms" section on the following page for more detail.

Generic leveling through point factor analysis

In the last step before wage data were collected, the work level of each selected job was determined using a "generic leveling" process. Generic leveling ranks and compares all occupations randomly selected in an establishment using the same criteria. This is a major departure from the method used in the past in the Bureau's Occupational Compensation Surveys which studied specifically defined occupations with leveling definitions unique to each occupation.

For this survey, the level of each occupation in an establishment was determined by an analysis of each of 10 leveling factors. Nine of these factors are drawn from the U.S. Government Office of Personnel Management's Factor Evaluation System, which is the underlying structure for evaluation of General Schedule Federal employees. The tenth factor, supervisory duties, attempts to account for the effect of supervisory duties. It is considered experimental. The 10 factors are:

- Knowledge
- Supervision received
- Guidelines
- Complexity
- Scope and effect
- Personal contacts
- Purpose of contacts
- Physical demands
- Work environment
- Supervisory duties

Each factor contains a number of levels and each level has an associated written description and point value. The number and range of points differ among the factors. For each factor, an occupation was assigned a level based on which written description best matched the job. Within each occupation, the points for 9 factors (supervisory duties was excluded) were recorded and totaled. The total determines the overall level of the occupation. Appendix table 3 presents average work levels for published occupational groups and selected occupations. A description of the levels for each factor is shown in appendix C.

Tabulations of levels of work for occupations in the survey follow the Federal Government's white-collar General Schedule. Point ranges for each of the 15 levels are shown in appendix D. It also includes an example of a leveled job and a guide to help data users evaluate jobs in their firm.

Wage data collected in prior surveys using the new generic leveling method were evaluated by BLS researchers using regression techniques. For each of the major occupational groups, wages were compared to the 10 generic level factors (and levels within those factors). The analysis showed that several of the generic level factors, most notably knowledge and supervision received, had strong explanatory power for wages. That is, as the levels within a

given factor increased, the wages also increased. Detailed research continues in the area. The results of this research will be published by BLS in the future.

Collection period

The survey data were collected over several months. 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 (e.g., Christmas bonuses, profit-sharing bonuses)
- Uniform and tool allowances
- Free room and board
- Payments made by third parties (e.g., tips, bonuses given by manufacturers to department store salespeople, referral incentives in real estate)
- On-call pay

In order to calculate earnings for various time periods (hourly, weekly, and annual), data on work schedules were also 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, exempt from overtime provisions, often work beyond the assigned work schedule, their typical number of hours actually worked was collected.

Definition of terms

Full-time worker. Any employee that the employer considers to be full time.

Incentive worker. Any employee whose earnings are tied,

at least in part, to commissions, piece rates, production bonuses, or other incentives based on production or sales.

Level. A ranking of an occupation based on the requirements of the position. (See the description in the technical note and the example for more details on the leveling process.)

Nonunion worker. An employee in an occupation not meeting the conditions for union coverage (see below).

Part-time worker. Any employee that the employer considers to be part-time.

Straight-time. Time worked at the standard rate of pay for the job.

Time-based worker. Any employee whose earnings are tied to an hourly rate or salary, and not to a specific level of production.

Union worker. Any employee is in a union occupation when all of the following conditions are met:

- A labor organization is recognized as the bargaining agent for all workers in the occupation
- Wage and salary rates are determined through collective bargaining or negotiations
- Settlement terms, which must include earnings provisions and may include benefit provisions, are embodied in a signed mutually binding collective bargaining agreement

Processing and analyzing the data

Data were processed and analyzed at the Bureau's National Office following collection.

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 the individual establishments or occupations into the various data series. Some of the establishments surveyed could not supply or refused to supply information. If data were not provided by a sample member, 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 the nonrespondents equals the mean value of 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 and job level.

Establishments that were determined to be out of business or outside the scope of the survey had their weights changed to zero. If only partial data were given by a sample establishment or occupation, or data were missing, the response was treated as a refusal.

Survey response

	Establish-
	ments
Total in sample	81
Responding	63
Out of business or not in	
survey scope	1
Unable or refused to pro-	
vide data	17

Some surveys may have a high nonresponse rate for the all industries or private industry iterations. Such instances are noted in the bulletin table footnotes.

Estimation

The wage series in the tables are computed by combining the wages for individual establishment/occupations. Before being combined, individual wage rates are weighted by: number of workers; the sample weight adjusted for nonresponding establishments and other factors; and the occupation work schedule, varying depending on whether hourly, weekly, or annual rates are being calculated.

Not all series that were calculated 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 publishing a series that could have revealed information about a specific establishment.

The number of workers estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures among establishments differ, estimates of the number of workers obtained from the sample of establishments serve only to indicate the relative importance of the occupational groups studied.

Data reliability

The data in this bulletin 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 the 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. Appendix table 2 contains RSE data for selected series in this bulletin. RSE data for all series in this bulletin are available on the Internet web site and by request to the BLS National Office.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose table A-1 shows that mean hourly earnings for all workers was \$12.79 per hour, and appendix table 2 shows a relative standard error of 3.6 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is \$13.55 to \$12.03 (\$12.79 plus and minus 1.645 times 3.6 percent times \$12.79). 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. A Technical Reinterview Program done in all survey areas will be used in the development of a formal quality assessment process to help compute nonsampling error. 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 by personal visit, computer edits of the data, and detailed data review.

Appendix table 1. Number of establishments studied by industry division and establishment employment size, and number of establishments represented, lowa City, IA, December 1998

	N 1 6		Number o	f establishments studied			
Number of establish-		50 - 99 workers	100 workers or more				
,	I lotal studied I		Total	100 - 499 workers	500 workers or more		
All industries Private industry Goods-producing industries Construction Manufacturing Service-producing industries Tranportation and public utilities Wholesale and retail trade Finance, insurance and real estate Services State and local government	117 15 4 12 101 6 55 9	63 52 10 1 9 42 4 16 4 18	29 28 5 1 4 23 3 8 2	34 24 5 - 5 19 1 8 2 8	22 17 2 - 2 15 - 8 2 5	12 7 3 - 3 4 1 - -	

NOTE: Dashes indicate that no data were reported. Overall industry and industry groups may include data for categories not shown separately.

Appendix table 2. Relative standard errors of mean hourly earnings¹ for selected occupations, all industries, private industry, and State and local government, all workers², lowa City, IA, December 1998

(in percent)

(iii percent)			
Occupation ³	All indus- tries	Private industry	State and local government
All occupations	4.9	4.9	7.4
All occupations excluding sales	4.8	4.7	7.4
White-collar occupations	6.6	8.5	8.6
White-collar occupations excluding sales	6.4	7.7	8.6
Professional specialty and technical occupations	7.2	11.1	8.7
Professional specialty occupations	7.4	13.3	8.6
Engineers, architects, and surveyors	_	_	_
Mathematical and computer scientists	_	_	_
Natural scientists	-	_	_
Health related occupations	8.8	_	_
Registered nurses	1.7	_	_
Teachers, college and university	-	_	_
Teachers, except college and university	4.2	_	2.6
Elementary school teachers	3.4	_	2.8
Secondary school teachers	5.9	_	5.8
Social scientists and urban planners	-	_	_
Social, recreation, and religious workers	_	_	_
Lawyers and judges	_	_	_
Writers, authors, entertainers, athletes, and			
professionals, N.E.C.		_	_
_ Technical occupations	8.1	7.7	
Executive, administrative, and managerial occupations	16.2	10.1	29.8
Executives, administrators, and managers	17.6	10.6	30.4
Managers and administrators, N.E.C.	12.1	12.1	_
Management related occupations	12.9	14.9	_
Sales occupations	10.3	10.3	_
Sales workers, other commodities	14.6	14.6	_
Cashiers	2.3	2.3	_
Administrative support occupations, including clerical	4.3	3.0	4.6
Secretaries	6.7	5.0	6.7
Records clerks, N.E.C.	6.6	6.6	_
Bookkeepers, accounting and auditing clerks	2.0	2.1	_
General office clerks	3.7 3.7	9.7 3.7	_
Administrative support occupations, N.E.C	3.7	3.7	_
Blue-collar occupations	2.6	2.6	3.9
Precision production, craft, and repair occupations	5.0	8.1	_
Machine operators, assemblers, and inspectors	1.5	1.5	_
Transportation and material moving occupations	2.3	_	9.6
Bus drivers	5.3	_	4.3
Handlers, equipment cleaners, helpers, and laborers	4.2	4.2	_
Stock handlers and baggers	3.6	3.6	_
Freight, stock, and material handlers, N.E.C	6.1	6.1	-
Laborers except construction, N.E.C.	12.2	12.2	_
Service occupations	7.9	5.5	8.8
Protective service occupations	9.0	_	9.0
Food service occupations	5.5	6.4	-
Waiters and waitresses	1.7	1.7	_
Cooks	3.9	3.7	_
Food preparation occupations, N.E.C.	5.8	_	_

See footnotes at end of table.

Appendix table 2. Relative standard errors of mean hourly earnings¹ for selected occupations, all industries, private industry, and State and local government, all workers², Iowa City, IA, December 1998 — Continued

(in percent)

Occupation ³	All indus- tries	Private industry	State and local government
Service occupations (-Continued) Health service occupations Cleaning and building service occupations Maids and housemen Janitors and cleaners Personal service occupations Early childhood teachers' assistants	- 12.6 3.0 3.8 6.4 5.7	- 13.0 3.0 9.6 7.4	- 14.4 - 4.1 -

¹ The relative standard error is the standard error expressed as a percent of the estimate. Hourly earnings for these occupations are presented in Tables A-1 and A-2. Reliable relative standard errors could not be determined for all occupations.
2 All workers include full-time and part-time

2 All workers include full-time and part-time workers. 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.

as part-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 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are

classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may include data for categories not shown separately. N.E.C. means "not elsewhere classified."

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, lowa City, IA, December 1998

Occupation ¹	All workers	Full-time workers	Part-time workers
All occupations	6	7	4
All occupations excluding sales	6	7	4
	_		_
White-collar occupations	1	8	5
White-collar occupations excluding sales	8	8	6
Professional specialty and technical occupations		9	7
Professional specialty occupations	10	10	8
Engineers, architects, and surveyors	-	_	_
Mathematical and computer scientists	-	_	_
Natural scientists		_	_
Health related occupations		9	8
Registered nurses	8	8	_
Teachers, college and university		8	_
Teachers, except college and university Elementary school teachers		8	_
Secondary school teachers		8	_
Social scientists and urban planners		0	_
Social, recreation, and religious workers			_
Lawyers and judges			
Writers, authors, entertainers, athletes, and professionals,	_	_	_
N.E.C.	_	_	_
Technical occupations	6	6	6
Executive, administrative, and managerial occupations		11	_
Executives, administrators, and managers		11	_
Managers and administrators, N.E.C.		13	_
Management related occupations		8	_
Sales occupations		3	3
Sales workers, other commodities	4	4	4
Cashiers	2	_	_
Administrative support occupations, including clerical	5	5	4
Secretaries	5	5	_
Records clerks, N.E.C.	3	_	_
Bookkeepers, accounting and auditing clerks	4	4	_
General office clerks		5	_
Administrative support occupations, N.E.C	4	_	_
Blue-collar occupations	5	5	3
Precision production, craft, and repair occupations	7	7	_
Machine operators, assemblers, and inspectors	4	4	2
Transportation and material moving occupations		6	4
Bus drivers		_	_
Handlers, equipment cleaners, helpers, and laborers	3	3	2
Stock handlers and baggers	2	_	_
Freight, stock, and material handlers, N.E.C	2	_	_
Laborers except construction, N.E.C.	4	_	-
Service occupations	4	4	2
Protective service occupations	7	7	
Food service occupations		3	2
Waiters and waitresses	2	_	2
Cooks	3	_	_
Food preparation occupations, N.E.C.		-	_
Health service occupations		-	_
Cleaning and building service occupations	4	4	2
Maids and housemen	2	-	-
Janitors and cleaners		3	_
Personal service occupations		5	3
Early childhood teachers' assistants	4	I _	1

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups. The occupations titled authors, musicians, actors, painters, photographers, dancers, artists, athletes, and legislators cannot be assigned a work level.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups and occupational levels may

include data for categories not shown separately. N.E.C. means "not elsewhere classified."