

Cleveland-Akron, OH National Compensation Survey February 1998



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

Bureau of Labor Statistics
Katharine G. Abraham, Commissioner

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The Bureau of Labor Statistics has identified data errors in the National Compensation Survey bulletin previously published for this area. This revised bulletin presents the corrected data.

Preface

This bulletin provides results of a February 1998 survey of occupational pay in the Cleveland-Akron, OH, Consolidated Metropolitan Statistical Area (CMSA). Data shown in this bulletin were collected as part of the Bureau of Labor Statistics' (BLS) new program known as the 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.

Survey data were collected and reviewed by Bureau of Labor Statistics field economists under the direction of Greg Philipaitis, Assistant Regional Commissioner for Operations of the Chicago Regional Office. 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 analyzed the survey results.

For additional information regarding this survey, please contact the BLS Chicago Regional Office at (312) 353-1880. 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) 606-6220, or send e-mail to ocltinfo@bls.gov.

The data contained in this bulletin are also available at the BLS Internet site (<http://stats.bls.gov/comhome.htm>). 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.

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Introduction

This survey of occupational pay was conducted in the Cleveland-Akron, OH, Consolidated Metropolitan Statistical Area (CMSA). The CMSA includes Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit Counties, OH.

This bulletin consists primarily of tables whose data are analyzed in the initial textual section. 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 is 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 design and products

The Bureau of Labor Statistics' (BLS) new National Compensation Survey (NCS) is designed to provide data on the levels and rates of change of occupational wages and employee benefits for localities, broad geographic regions, and the nation as a whole. One output of the NCS will be the Employment Cost Index, a quarterly measure of the change in employer costs for wages and benefits. This bulletin is limited to data on wages and salaries. These data are similar to those released under the Occupational Compensation Survey (OCS), which has been discontinued.

NCS more extensive than OCS

The wage data in this bulletin differ from those in previous Occupational Compensation Surveys by providing

broader coverage of occupations and establishments within the survey area.

Occupations surveyed for this bulletin were selected using probability techniques from a list of all those present in each establishment. Previous OCS bulletins were limited to a preselected list of occupations, which represented a small subset of all occupations in the economy. Information in the new bulletin is published for a variety of occupation-based data. This new approach includes data on broad occupational classifications such as white-collar workers, major occupational groups such as sales workers, and individual occupations such as cashiers.

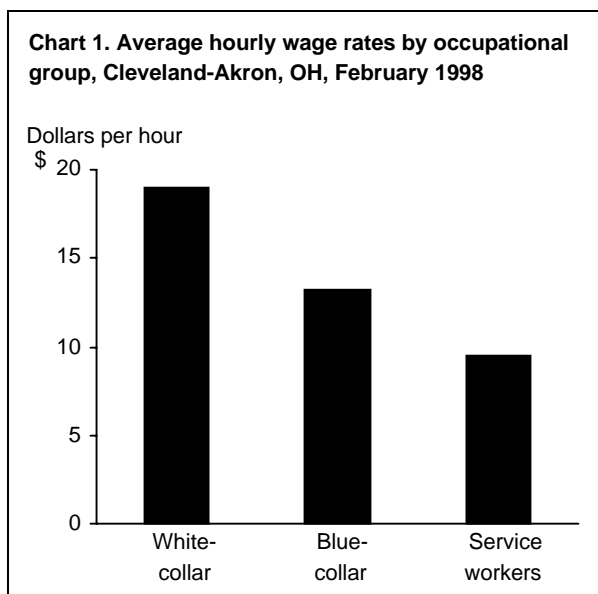
In tables containing work levels within occupational series, the work levels are derived from generic standards that *apply to all* occupational groups. The job levels in the OCS bulletins were based on narrowly-defined descriptions that were not comparable across specific occupations.

Occupational data in this bulletin are also tabulated for other classifications such as industry group, full-time versus part-time workers, union versus nonunion status, time versus incentive status, and establishment employment size. Not all of these series were generated by the OCS program.

The establishments surveyed for this bulletin were limited to those with 50 or more employees. Eventually, NCS will be expanded to cover those now-excluded establishments. Then, virtually all workers in the civilian economy will be surveyed, excluding only agriculture, private households, and employees of the Federal Government.

Wages in the Cleveland-Akron, OH Consolidated Metropolitan Statistical Area

Straight-time wages in the Cleveland-Akron, OH, Consolidated Metropolitan Statistical Area averaged \$15.80 per hour during February 1998. White-collar workers had an average wage of \$18.96 per hour. Blue-collar workers averaged \$13.26 per hour, while service workers had average earnings of \$9.53 per hour. (All comparisons in this analysis cover hourly rates for both full- and part-time workers, unless otherwise noted.)



Within each of these occupational groups, average hourly wages for individual occupations varied. For example, white-collar occupations included registered nurses at \$19.83 per hour, secretaries at \$13.00, and general office clerks at \$10.89. Among occupations in the blue-collar category, truck drivers averaged \$15.96 per hour while stock handlers and baggers averaged \$8.55. Finally, service occupations included nursing aides, orderlies and attendants at \$8.23 per hour and maids and housemen at \$7.15. Table A-1 presents earnings data for 142 detailed occupations; data for other detailed occupations surveyed could not be reported separately due to concerns about the confidentiality of survey respondents and the reliability of the data.

Survey results show that private industry workers in Cleveland-Akron, OH earned \$15.17 per hour, while sur-

veyed State and local government workers averaged \$18.71. Table A-2 reports the average hourly rate for white-collar occupations as \$18.31 in private industry and \$21.48 in State and local government. Blue-collar occupations showed an average hourly rate of \$13.11 in private industry and \$15.02 in State and local government. Service occupations within private industry averaged \$7.78 per hour while those found in State and local government averaged \$13.61.

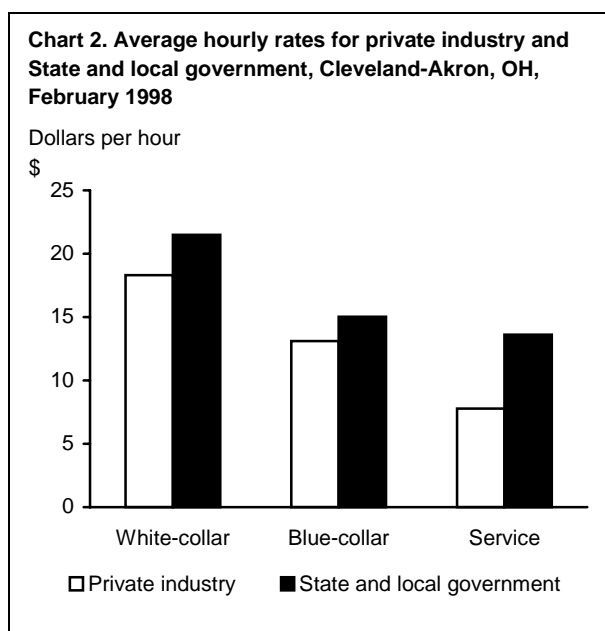
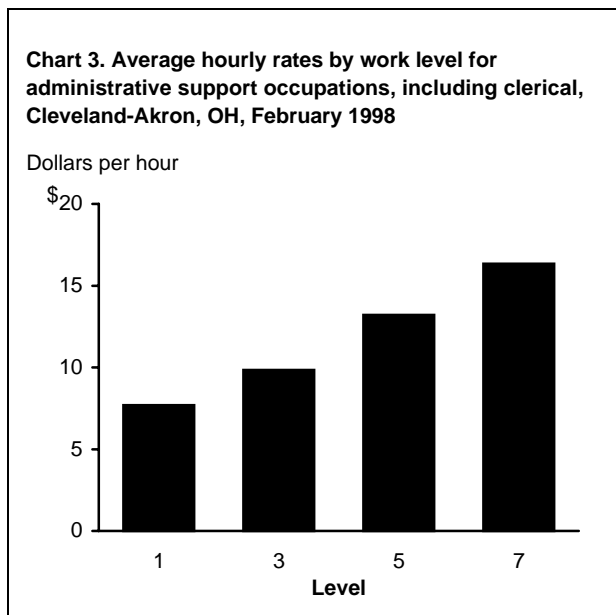


Table A-3 presents data for workers considered by the survey respondents to be either full-time or part-time. Average wages for full-time workers, all occupations, were \$16.76 per hour, compared with an average of \$8.83 per hour for part-time workers.

Data for specific work levels within major occupational groups are reported in table B-1. Occasionally, wage estimates for lower levels of work within major occupational groups are greater than estimates for higher levels. This can occur due to the mix of specific occupations (and industries) represented by the broad group as well as by the variability of the estimate. Some levels within a group may not be published because no workers were identified at that

level or because there were not enough data to guarantee confidentiality and reliability.

Work levels for all major groups span several levels, with professional specialty occupations and executive, administrative, and managerial occupations typically starting and ending at higher work levels than the other groups. Published data for administrative support occupations, including clerical, ranged from level 1 to level 9. As illustrated in Chart 3, the average hourly rate was \$7.69 for level 1, \$9.85 for level 3, \$13.20 for level 5, and \$16.35 for level 7.

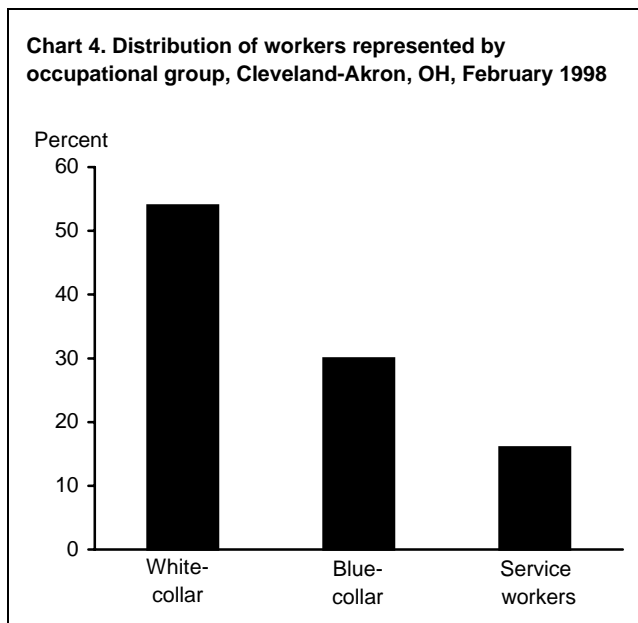


Surveyed union workers had an average hourly rate of \$16.83, as reported in table C-1. Wages for nonunion workers averaged \$15.42. Time workers, whose wages were based solely on an hourly rate or a salary, averaged \$15.61 per hour. Incentive workers, whose wages were at least partially based on productivity payments, averaged \$19.63 per hour.

Table C-2 shows wage data for specific industry divisions within private industry. In the private sector,

hourly wages averaged \$17.00 in all goods-producing industries; \$16.92 in manufacturing. In service producing industries, hourly wages averaged \$14.38 in services. Data for other industry divisions did not meet publication criteria.

Table C-4 reports that a total of 874,466 workers were represented by the Cleveland-Akron, OH survey. White-collar occupations included 472,249 workers, or 54 percent, blue-collar occupations included 263,742 workers, or 30 percent; and service occupations included 138,475 workers, or 16 percent.



Data are also presented in appendix table 1 on the number of establishments studied by industry group and employment size. The relative standard errors of published mean hourly earnings for all industries, private industry, and State and local government are available in appendix table 2. The average work levels for published occupational groups and selected occupations are presented in appendix table 3.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Cleveland-Akron, OH, February 1998

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
All occupations	\$15.80	\$6.75	\$9.25	\$13.53	\$19.54	\$27.00
All occupations excluding sales	15.91	7.00	9.50	13.70	19.67	27.04
White-collar occupations	18.96	8.00	11.19	16.00	23.05	33.65
White-collar occupations excluding sales	19.56	8.95	11.88	16.73	23.56	34.11
Professional specialty and technical occupations	22.24	12.11	15.57	20.22	26.81	34.88
Professional specialty occupations	23.91	13.46	17.75	21.76	29.10	35.94
Engineers, architects, and surveyors	27.26	19.73	22.12	26.44	30.75	35.37
Electrical and electronic engineers	29.49	24.00	24.46	27.41	30.83	44.23
Industrial engineers	24.65	19.81	20.70	23.82	26.70	31.96
Mechanical engineers	24.09	20.32	20.67	23.22	26.50	28.85
Engineers, N.E.C.	27.70	18.91	22.12	26.44	32.02	35.74
Mathematical and computer scientists	27.47	19.76	23.88	26.71	31.25	35.36
Computer systems analysts and scientists	27.74	20.94	23.88	27.01	31.25	35.61
Natural scientists	28.73	16.98	18.60	23.09	40.43	46.06
Health related occupations	21.17	15.75	17.75	20.10	21.76	25.40
Physicians	36.42	16.94	16.94	20.10	57.69	78.80
Registered nurses	19.83	15.81	17.94	20.00	21.49	22.87
Dietitians	15.25	11.00	11.00	15.61	17.30	18.45
Respiratory therapists	17.03	14.47	16.00	17.50	18.00	18.46
Physical therapists	26.64	20.68	22.94	25.38	28.00	33.33
Teachers, college and university	34.84	20.08	25.92	32.22	42.63	48.82
Teachers, except college and university	26.07	11.50	18.38	26.32	34.29	39.24
Prekindergarten and kindergarten	15.15	6.50	7.00	8.57	21.43	35.84
Elementary school teachers	29.42	16.06	21.81	32.02	35.96	40.14
Secondary school teachers	30.23	17.71	23.62	32.43	36.95	40.14
Teachers, special education	25.72	18.30	20.53	25.91	31.93	34.58
Teachers, N.E.C.	26.65	15.74	19.04	26.07	33.33	39.94
Substitute teachers	10.45	6.67	8.57	11.43	12.75	12.75
Vocational and educational counselors	21.08	13.64	14.01	18.47	24.64	35.96
Librarians, archivists, and curators	21.11	12.82	14.21	19.75	25.24	35.94
Librarians	21.16	12.82	14.00	19.80	25.24	35.94
Social scientists and urban planners	27.04	19.92	22.56	24.68	30.65	37.12
Social, recreation, and religious workers	15.88	11.12	12.02	14.63	18.50	23.79
Social workers	15.87	11.12	12.05	14.63	18.50	23.79
Lawyers and judges	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	17.38	11.54	13.09	15.70	19.89	26.76
Designers	18.96	13.44	15.70	18.80	21.00	23.63
Editors and reporters	21.51	11.28	14.87	20.88	26.92	37.26
Professional occupations, N.E.C.	15.41	9.99	12.81	14.94	16.83	18.39
Technical occupations	16.67	10.75	12.50	15.15	18.66	21.98
Radiological technicians	16.58	11.33	14.17	16.73	19.76	21.10
Licensed practical nurses	13.58	11.86	12.50	13.31	14.33	15.84
Health technologists and technicians, N.E.C.	14.92	8.50	11.08	14.38	16.99	19.81
Electrical and electronic technicians	17.94	11.90	14.37	18.19	21.98	21.98
Engineering technicians, N.E.C.	12.77	8.00	9.50	11.85	14.91	19.62
Drafters	14.23	10.40	11.64	13.11	17.00	20.25
Computer programmers	19.12	12.40	15.47	17.16	25.00	25.00
Technical and related occupations, N.E.C.	16.58	10.91	13.00	15.93	18.66	23.31
Executive, administrative, and managerial occupations ...	27.54	14.43	17.10	22.84	33.81	44.83
Executives, administrators, and managers	31.41	15.83	20.20	27.96	37.13	49.59
Administrators and officials, public administration	23.90	11.67	17.38	20.65	34.62	34.62
Financial managers	31.64	17.70	21.34	27.35	38.22	49.18
Managers., marketing, advertising and public relations	35.13	16.05	20.44	33.03	36.76	59.81
Administrators, education and related fields	35.00	20.09	31.25	37.13	38.69	47.01
Managers, medicine and health	30.68	20.19	20.19	25.25	34.41	65.00
Managers, service organizations, N.E.C.	16.47	10.71	10.77	11.56	17.81	21.55
Managers and administrators, N.E.C.	32.90	16.81	21.41	28.09	37.02	55.24
Management related occupations	20.07	13.46	15.53	17.74	22.60	28.85
Accountants and auditors	21.35	13.94	15.91	18.27	24.52	29.88
Other financial officers	22.77	12.98	15.38	17.79	27.44	33.81
Personnel, training, and labor relations specialists	17.86	14.42	15.82	17.08	19.24	22.76

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
White-collar occupations (-Continued)						
Executive, administrative, and managerial occupations (-Continued)						
Management related occupations (-Continued)						
Purchasing agents and buyers, N.E.C.	\$20.69	\$15.27	\$15.38	\$19.90	\$23.15	\$29.71
Management related occupations, N.E.C.	18.58	13.95	15.87	17.26	19.96	23.94
Sales occupations	14.06	5.50	6.29	10.45	17.31	26.44
Supervisors, sales occupations	16.99	9.20	10.85	15.00	22.71	27.31
Advertising and related sales occupations	13.72	5.57	13.22	13.75	15.00	17.68
Sales occupations, other business services	19.22	6.75	10.03	17.73	23.92	32.45
Sales representatives, mining, manufacturing, and wholesale	31.19	15.39	18.17	26.44	41.31	54.77
Sales workers, motor vehicles and boats	15.80	7.99	11.54	14.30	17.88	29.09
Sales workers, other commodities	9.80	5.20	5.84	7.29	10.71	19.50
Cashiers	7.94	5.25	5.50	6.00	7.29	10.45
Administrative support occupations, including clerical	11.56	7.25	9.00	11.00	13.96	16.25
Supervisors, general office	16.05	10.57	12.04	15.10	18.23	24.04
Supervisors, distribution, scheduling, and adjusting clerks	16.89	9.75	11.63	16.03	21.51	21.51
Computer operators	13.47	10.00	11.83	14.42	15.81	15.85
Secretaries	13.00	9.50	10.96	12.77	14.78	16.83
Receptionists	9.83	7.69	8.41	9.86	10.98	11.57
Information clerks, N.E.C.	10.10	8.07	8.07	8.11	9.76	16.08
Order clerks	11.60	6.35	9.00	11.50	14.00	17.25
Personnel clerks except payroll & timekeeping	14.09	9.00	10.00	14.02	16.06	22.75
Library clerks	9.05	5.50	6.87	9.00	10.87	12.69
Records clerks, N.E.C.	10.55	7.26	8.50	10.79	13.19	13.89
Bookkeepers, accounting and auditing clerks	11.17	8.50	9.19	10.61	12.82	14.95
Payroll and timekeeping clerks	13.40	9.50	10.92	13.08	16.37	17.83
Billing clerks	10.07	7.39	8.15	9.62	12.18	13.99
Telephone operators	9.20	7.50	8.26	9.84	10.17	10.26
Mail clerks except postal service	7.71	6.24	6.50	7.68	9.15	9.81
Dispatchers	9.44	5.80	6.55	8.18	13.96	16.67
Production coordinators	16.69	13.85	14.79	16.92	18.89	19.72
Traffic, shipping and receiving clerks	12.03	8.50	9.10	11.45	14.26	15.84
Insurance adjusters, examiners, & investigators	12.64	9.83	10.47	12.35	13.70	15.36
Investigators and adjusters except insurance	12.08	8.00	9.00	12.14	13.45	17.31
Bill and account collectors	11.23	9.38	9.61	11.09	11.68	12.67
General office clerks	10.89	7.20	8.45	10.18	12.98	15.75
Bank tellers	8.76	7.05	7.84	8.50	9.16	10.70
Data entry keyers	9.87	7.50	8.05	8.79	11.17	14.38
Teachers' aides	11.85	7.15	8.82	10.38	14.42	17.51
Administrative support occupations, N.E.C.	12.29	8.41	9.93	12.61	15.00	15.47
Blue-collar occupations						
Precision production, craft, and repair occupations	13.26	7.00	9.12	12.55	16.87	20.61
Automobile mechanics	16.80	10.55	13.29	16.25	19.84	23.62
Bus, truck, and stationary engine mechanics	15.84	13.50	15.00	15.56	16.45	18.34
Industrial machinery repairers	16.88	12.02	14.43	16.28	20.69	20.69
Machinery maintenance occupations	17.35	11.16	12.20	18.13	21.91	23.62
Millwrights	11.21	8.50	8.50	10.29	11.18	18.05
Mechanics and repairers, N.E.C.	21.63	17.25	17.77	23.27	23.31	23.31
Supervisors, construction trades, N.E.C.	16.33	10.50	14.50	16.56	18.15	20.23
Carpenters	24.41	14.31	19.13	27.20	30.61	33.26
Electricians	18.98	10.62	18.99	19.47	22.60	22.60
Plumbers, pipefitters and steamfitters	20.42	15.69	16.63	19.38	23.62	26.03
Construction trades, N.E.C.	17.90	11.94	13.85	15.21	23.31	23.31
Supervisors, production occupations	14.61	9.72	12.67	13.98	18.40	18.40
Tool and die makers	17.99	10.90	13.75	17.50	21.20	26.20
Precision assemblers, metal	19.03	14.00	14.95	18.50	23.62	24.31
Machinists	12.26	8.64	10.36	11.48	14.35	16.25
Miscellaneous precision workers, N.E.C.	14.89	12.90	14.00	14.93	16.17	17.35
Inspectors, testers, and graders	15.53	13.34	14.26	16.40	16.87	18.45
Machine operators, assemblers, and inspectors	16.09	10.74	13.75	15.04	18.20	19.81
Lathe and turning machine operators	12.27	7.50	8.63	11.50	14.79	20.07
	14.59	10.50	11.75	15.00	17.00	20.50

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Blue-collar occupations (-Continued)						
Machine operators, assemblers, and inspectors (-Continued)						
Punching and stamping press operators	\$11.66	\$6.00	\$7.35	\$9.75	\$16.38	\$20.08
Grinding, abrading, buffing, and polishing machine operators	12.76	9.00	10.00	12.64	15.13	16.57
Fabricating machine operators, N.E.C.	14.01	8.00	10.69	12.92	20.28	20.61
Molding and casting machine operators	10.41	7.68	8.40	10.30	10.75	13.48
Printing press operators	14.51	9.34	12.21	14.48	17.90	18.48
Textile sewing machine operators	8.76	7.16	7.80	8.52	9.22	10.94
Laundering and dry cleaning machine operators	7.63	6.25	7.25	7.25	8.00	8.54
Packaging and filling machine operators	10.45	7.50	8.00	9.00	11.70	18.08
Extruding and forming machine operators	10.88	9.40	9.50	10.59	11.14	14.94
Mixing and blending machine operators	15.26	8.00	11.95	17.25	18.28	20.16
Painting and paint spraying machine operators ..	13.16	9.30	9.56	12.40	15.58	20.16
Slicing and cutting machine operators	11.01	7.50	7.65	9.05	14.78	17.25
Miscellaneous machine operators, N.E.C.	12.22	7.50	9.52	12.05	14.32	17.09
Welders and cutters	15.92	10.00	12.35	13.48	20.32	21.86
Assemblers	11.72	6.00	8.20	10.00	14.57	20.02
Miscellaneous hand working occupations, N.E.C. ..	12.37	8.00	9.35	14.30	14.70	14.79
Production inspectors, checkers and examiners ..	12.31	8.45	9.50	11.24	14.22	19.37
Production testers	11.03	6.00	6.75	10.18	13.45	18.19
Transportation and material moving occupations	15.09	8.60	11.48	14.85	18.83	20.65
Truck drivers	15.96	9.50	12.87	16.00	20.65	20.65
Bus drivers	14.55	11.28	13.53	13.77	17.06	17.06
Crane and tower operators	18.58	16.38	16.91	19.48	20.14	20.14
Industrial truck and tractor equipment operators ..	12.57	8.00	10.50	11.70	14.92	19.89
Handlers, equipment cleaners, helpers, and laborers	9.69	5.45	6.25	9.20	12.40	14.79
Groundskeepers and gardeners except farm	9.33	6.00	7.00	8.60	11.58	13.38
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	13.50	10.00	10.25	13.17	14.09	23.02
Construction laborers	16.11	13.39	13.39	15.68	19.15	19.90
Production helpers	8.67	5.15	5.35	8.55	10.70	14.78
Stock handlers and baggers	8.55	5.25	5.79	7.25	10.95	13.05
Machine feeders and offbearers	8.18	6.05	6.25	7.60	8.85	11.82
Freight, stock, and material handlers, N.E.C.	10.11	6.25	7.50	9.75	11.38	16.87
Hand packers and packagers	9.37	6.50	7.00	8.50	12.61	12.85
Laborers except construction, N.E.C.	9.73	5.15	5.35	10.04	13.04	13.55
Service occupations	9.53	5.15	6.15	8.25	11.70	16.97
Protective service occupations	14.04	6.84	9.60	13.56	18.13	21.12
Firefighting occupations	15.41	11.69	12.46	14.34	19.21	19.21
Police and detectives, public service	18.21	15.98	16.97	17.61	19.90	20.95
Guards and police except public service	8.85	5.75	6.43	7.50	10.21	13.72
Food service occupations	6.67	2.13	4.80	6.50	8.63	11.23
Supervisors, food preparation and service occupations	11.89	7.50	9.68	11.29	13.85	15.00
Bartenders	4.49	2.13	2.13	4.00	6.00	8.25
Waiters and waitresses	3.01	2.13	2.13	2.13	2.32	4.80
Cooks	8.39	6.00	7.00	8.00	9.00	11.60
Food counter, fountain, and related occupations ..	5.99	5.15	5.15	5.63	6.68	7.11
Kitchen workers, food preparation	6.61	5.15	5.25	6.00	7.25	9.85
Waiters/Waitresses' assistants	3.02	2.13	2.13	2.13	3.60	5.50
Food preparation occupations, N.E.C.	7.38	5.50	6.00	7.00	8.42	10.09

See footnotes at end of table.

Table A-1. Hourly earnings¹ for selected occupations, all workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries					
	Mean	Percentiles				
		10	25	Median 50	75	90
Service occupations (-Continued)						
Health service occupations	\$8.85	\$6.50	\$7.34	\$8.25	\$9.75	\$12.00
Health aides, except nursing	9.89	6.00	7.62	9.25	11.91	13.28
Nursing aides, orderlies and attendants	8.23	6.70	7.25	7.98	9.00	10.37
Cleaning and building service occupations	9.15	5.50	6.00	8.17	11.18	14.25
Supervisors, cleaning & building service workers	11.88	7.25	7.25	12.79	15.64	18.00
Maids and housemen	7.15	5.75	6.00	6.64	8.33	9.09
Janitors and cleaners	9.17	5.50	6.00	8.17	11.18	14.25
Personal service occupations	11.41	5.50	7.12	9.47	14.09	20.79
Early childhood teachers' assistants	7.80	5.15	6.29	6.98	9.62	10.68
Service occupations, N.E.C.	9.70	6.00	7.22	8.65	11.93	15.68

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. 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-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Cleveland-Akron, OH, February 1998

Occupation ³	Private industry						State and local government					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
All occupations	\$15.17	\$6.39	\$8.70	\$12.88	\$18.89	\$25.48	\$18.71	\$9.30	\$12.26	\$16.33	\$22.03	\$34.34
All occupations excluding sales	15.26	6.74	9.00	12.98	19.04	25.26	18.72	9.28	12.25	16.37	22.03	34.35
White-collar occupations	18.31	7.69	10.61	15.32	21.78	31.47	21.48	10.52	13.57	18.85	28.55	37.08
White-collar occupations excluding sales	18.99	8.54	11.42	15.94	22.16	32.16	21.50	10.52	13.57	18.85	28.63	37.08
Professional specialty and technical occupations	21.00	12.00	15.00	19.58	24.64	31.00	25.28	12.99	17.94	23.96	33.40	38.79
Professional specialty occupations	22.72	13.46	17.33	21.00	26.75	33.00	26.21	13.36	18.70	25.32	33.98	39.51
Engineers, architects, and surveyors	27.26	19.73	22.10	26.19	30.89	35.45	-	-	-	-	-	-
Electrical and electronic engineers	29.49	24.00	24.46	27.41	30.83	44.23	-	-	-	-	-	-
Industrial engineers	24.65	19.81	20.70	23.82	26.70	31.96	-	-	-	-	-	-
Mechanical engineers	24.09	20.32	20.67	23.22	26.50	28.85	-	-	-	-	-	-
Engineers, N.E.C.	27.70	18.91	22.12	26.44	32.02	35.74	-	-	-	-	-	-
Mathematical and computer scientists	27.75	19.36	23.88	27.40	31.39	35.61	-	-	-	-	-	-
Computer systems analysts and scientists	28.07	20.38	23.88	27.53	32.54	35.61	-	-	-	-	-	-
Natural scientists	-	-	-	-	-	-	-	-	-	-	-	-
Health related occupations	21.26	16.00	17.79	20.10	21.63	25.38	19.88	7.75	15.75	18.45	25.32	26.42
Physicians	36.42	16.94	16.94	20.10	57.69	78.80	-	-	-	-	-	-
Registered nurses	19.83	16.00	18.06	20.05	21.49	22.52	19.94	15.00	15.75	16.00	24.00	30.79
Dietitians	15.25	11.00	11.00	15.61	17.30	18.45	-	-	-	-	-	-
Respiratory therapists	17.03	14.47	16.00	17.50	18.00	18.46	-	-	-	-	-	-
Physical therapists	26.64	20.68	22.94	25.38	28.00	33.33	-	-	-	-	-	-
Teachers, college and university	33.44	20.44	25.92	29.29	42.63	45.38	-	-	-	-	-	-
Teachers, except college and university	14.86	7.00	8.86	14.23	18.13	25.76	28.66	17.37	20.93	30.26	35.64	39.96
Elementary school teachers	-	-	-	-	-	-	32.22	21.25	26.93	33.43	37.71	41.36
Secondary school teachers	20.57	14.22	16.05	18.42	24.45	29.98	33.02	22.70	29.67	34.08	37.95	40.55
Teachers, special education	-	-	-	-	-	-	25.72	18.30	20.53	25.91	31.93	34.58
Teachers, N.E.C.	18.99	12.50	15.74	17.01	20.00	29.59	27.90	18.28	20.00	26.97	33.40	39.96
Vocational and educational counselors	-	-	-	-	-	-	21.37	14.01	14.01	18.47	25.05	35.96
Librarians, archivists, and curators	18.01	12.82	12.82	18.01	21.78	25.24	24.51	14.00	16.21	21.53	35.94	35.94
Librarians	18.01	12.82	12.82	18.01	21.78	25.24	24.65	14.00	16.57	21.53	35.94	35.94
Social scientists and urban planners	-	-	-	-	-	-	-	-	-	-	-	-
Social, recreation, and religious workers	14.36	10.73	12.02	13.94	16.39	18.50	16.61	11.35	12.10	15.37	20.41	24.94
Social workers	14.36	10.73	12.02	13.94	16.39	18.50	16.61	11.35	12.25	15.37	20.41	24.94
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	17.34	11.54	13.09	15.68	19.80	26.92	-	-	-	-	-	-
Designers	18.96	13.44	15.70	18.80	21.00	23.63	-	-	-	-	-	-
Editors and reporters	21.51	11.28	14.87	20.88	26.92	37.26	-	-	-	-	-	-
Professional occupations, N.E.C.	15.40	9.99	12.81	14.94	16.83	18.39	-	-	-	-	-	-
Technical occupations	16.72	11.02	12.40	14.83	18.51	21.98	16.25	8.50	14.24	16.39	19.66	22.02
Radiological technicians	16.58	11.33	14.17	16.73	19.76	21.10	-	-	-	-	-	-
Licensed practical nurses	13.32	11.80	12.36	13.23	14.10	15.20	-	-	-	-	-	-
Health technologists and technicians, N.E.C.	15.73	10.64	12.11	14.40	18.25	20.16	-	-	-	-	-	-
Electrical and electronic technicians	18.31	12.50	14.53	19.52	21.98	21.98	-	-	-	-	-	-
Engineering technicians, N.E.C.	12.71	8.00	9.25	11.54	14.86	19.62	-	-	-	-	-	-
Drafters	14.23	10.40	11.64	13.11	17.00	20.25	-	-	-	-	-	-
Computer programmers	19.09	12.40	15.41	16.83	25.00	25.00	-	-	-	-	-	-
Technical and related occupations, N.E.C.	16.06	10.00	11.91	15.92	18.37	27.04	17.54	13.83	15.39	16.83	20.63	22.02
Executive, administrative, and managerial occupations	28.69	14.90	17.23	23.73	33.81	47.38	22.91	11.67	15.87	19.96	32.99	38.69
Executives, administrators, and managers	32.98	16.54	21.34	29.42	37.98	55.29	25.12	10.77	15.87	20.65	34.62	38.69
Administrators and officials, public administration	-	-	-	-	-	-	23.90	11.67	17.38	20.65	34.62	34.62
Financial managers	31.65	17.70	21.34	27.35	38.22	52.88	-	-	-	-	-	-
Managers, marketing, advertising and public relations	35.90	16.05	20.44	33.48	38.51	59.81	-	-	-	-	-	-
Administrators, education and related fields	25.23	10.50	13.99	26.10	29.13	31.95	38.24	32.99	37.08	38.69	38.99	48.05
Managers, medicine and health	30.68	20.19	20.19	25.25	34.41	65.00	-	-	-	-	-	-

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	Private industry						State and local government						
	Mean	Percentiles					Mean	Percentiles					
		10	25	Median 50	75	90		10	25	Median 50	75	90	
White-collar occupations (-Continued)													
Executive, administrative, and managerial occupations (-Continued)													
Executives, administrators, and managers (-Continued)													
Managers, service organizations, N.E.C.	\$27.59	\$18.80	\$18.80	\$21.55	\$46.88	\$46.88	-	-	-	-	-	-	-
Managers and administrators, N.E.C.	33.78	17.50	21.63	29.66	37.16	55.29	\$22.42	\$13.80	\$15.50	\$19.63	\$23.44	\$32.70	
Management related occupations	20.43	13.17	15.39	17.23	23.32	29.88	18.58	14.56	15.90	18.99	20.04	23.33	
Accountants and auditors	21.50	13.39	15.87	17.79	25.48	31.25	-	-	-	-	-	-	
Other financial officers	23.36	12.50	14.67	19.56	28.21	33.81	-	-	-	-	-	-	
Personnel, training, and labor relations specialists	17.43	13.41	15.82	16.93	18.54	22.76	18.91	15.22	17.08	18.99	20.43	23.35	
Purchasing agents and buyers, N.E.C.	20.69	15.27	15.38	19.90	23.15	29.71	-	-	-	-	-	-	
Management related occupations, N.E.C.	18.44	13.94	15.38	16.67	20.75	27.88	-	-	-	-	-	-	
Sales occupations	14.04	5.50	6.25	10.45	17.41	26.44	-	-	-	-	-	-	
Supervisors, sales occupations	17.01	9.20	10.85	14.99	22.71	27.70	-	-	-	-	-	-	
Advertising and related sales occupations	13.73	5.57	13.22	13.75	15.00	17.68	-	-	-	-	-	-	
Sales occupations, other business services	19.22	6.75	10.03	17.73	23.92	32.45	-	-	-	-	-	-	
Sales representatives, mining, manufacturing, and wholesale	31.19	15.39	18.17	26.44	41.31	54.77	-	-	-	-	-	-	
Sales workers, motor vehicles and boats	15.80	7.99	11.54	14.30	17.88	29.09	-	-	-	-	-	-	
Sales workers, other commodities	9.80	5.20	5.84	7.29	10.71	19.50	-	-	-	-	-	-	
Cashiers	7.81	5.25	5.50	6.00	7.25	10.45	-	-	-	-	-	-	
Administrative support occupations, including clerical	11.34	7.25	8.75	10.70	13.68	15.77	12.65	7.46	10.26	12.58	14.78	17.83	
Supervisors, general office	15.25	10.57	10.75	13.39	16.83	24.04	-	-	-	-	-	-	
Supervisors, distribution, scheduling, and adjusting clerks	16.89	9.75	11.63	16.03	21.51	21.51	-	-	-	-	-	-	
Secretaries	13.04	9.48	11.06	12.74	14.86	16.75	12.88	9.82	10.64	12.99	14.78	16.83	
Receptionists	9.63	7.69	8.25	9.63	10.58	11.75	-	-	-	-	-	-	
Information clerks, N.E.C.	10.10	8.07	8.07	8.11	9.76	16.08	-	-	-	-	-	-	
Order clerks	11.60	6.35	9.00	11.50	14.00	17.25	-	-	-	-	-	-	
Personnel clerks except payroll & timekeeping	13.35	9.00	9.00	10.95	15.53	22.75	-	-	-	-	-	-	
Library clerks	8.95	6.38	7.29	10.09	10.87	10.87	9.07	5.50	6.67	9.00	10.85	13.35	
Records clerks, N.E.C.	10.63	7.27	8.54	10.79	13.19	13.89	-	-	-	-	-	-	
Bookkeepers, accounting and auditing clerks	10.94	8.50	9.19	10.61	12.50	14.33	12.86	8.06	11.48	12.51	16.32	16.83	
Payroll and timekeeping clerks	12.33	9.50	10.15	11.20	13.64	17.67	-	-	-	-	-	-	
Billing clerks	10.07	7.39	8.15	9.62	12.18	13.99	-	-	-	-	-	-	
Telephone operators	9.20	7.50	8.26	9.84	10.17	10.26	-	-	-	-	-	-	
Mail clerks except postal service	7.71	6.24	6.50	7.68	9.15	9.81	-	-	-	-	-	-	
Production coordinators	16.69	13.85	14.79	16.92	18.89	19.72	-	-	-	-	-	-	
Traffic, shipping and receiving clerks	12.03	8.50	9.10	11.45	14.26	15.84	-	-	-	-	-	-	
Insurance adjusters, examiners, & investigators	12.64	9.83	10.47	12.35	13.70	15.36	-	-	-	-	-	-	
Investigators and adjusters except insurance	12.06	8.00	9.00	12.14	13.52	17.31	-	-	-	-	-	-	
Bill and account collectors	11.23	9.38	9.61	11.09	11.68	12.67	-	-	-	-	-	-	
General office clerks	10.10	7.21	8.08	9.73	11.30	13.70	12.98	6.99	10.18	12.05	15.75	17.98	
Bank tellers	8.76	7.05	7.84	8.50	9.16	10.70	-	-	-	-	-	-	
Data entry keyers	9.11	7.00	8.00	8.50	9.69	12.50	-	-	-	-	-	-	
Teachers' aides	-	-	-	-	-	-	11.88	7.15	8.82	10.38	14.46	17.61	
Administrative support occupations, N.E.C.	12.61	8.50	10.05	13.25	15.10	15.47	9.43	6.00	6.77	8.76	10.90	13.57	
Blue-collar occupations	13.11	7.00	8.75	12.05	16.88	20.61	15.02	11.09	13.29	14.63	16.63	18.85	
Precision production, craft, and repair occupations	17.02	10.50	13.00	16.50	20.69	23.62	15.40	12.26	14.00	15.56	16.63	18.39	

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	Private industry						State and local government						
	Mean	Percentiles					Mean	Percentiles					
		10	25	Median 50	75	90		10	25	Median 50	75	90	
Blue-collar occupations (-Continued)													
Precision production, craft, and repair occupations (-Continued)													
Automobile mechanics	\$15.82	\$12.00	\$15.00	\$15.55	\$16.70	\$21.00	-	-	-	-	-	-	-
Bus, truck, and stationary engine mechanics	17.73	12.02	15.69	17.52	20.69	20.69	-	-	-	-	-	-	-
Industrial machinery repairers	17.36	11.16	12.20	18.13	21.91	23.62	-	-	-	-	-	-	-
Machinery maintenance occupations	11.05	8.50	8.50	10.29	10.29	18.05	-	-	-	-	-	-	-
Millwrights	21.63	17.25	17.77	23.27	23.31	23.31	-	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	16.13	10.50	13.17	16.25	18.15	23.62	\$16.91	\$11.51	\$16.32	\$16.64	\$20.23	\$20.23	\$20.23
Carpenters	18.98	10.62	18.99	19.47	22.60	22.60	-	-	-	-	-	-	-
Electricians	21.23	15.64	17.43	21.91	24.70	26.03	-	-	-	-	-	-	-
Plumbers, pipefitters and steamfitters	20.26	10.50	15.21	23.27	23.31	23.31	-	-	-	-	-	-	-
Supervisors, production occupations ..	17.99	10.90	13.75	17.50	21.20	26.20	-	-	-	-	-	-	-
Tool and die makers	19.03	14.00	14.95	18.50	23.62	24.31	-	-	-	-	-	-	-
Precision assemblers, metal	12.26	8.64	10.36	11.48	14.35	16.25	-	-	-	-	-	-	-
Machinists	14.89	12.90	14.00	14.93	16.17	17.35	-	-	-	-	-	-	-
Miscellaneous precision workers, N.E.C.	15.53	13.34	14.26	16.40	16.87	18.45	-	-	-	-	-	-	-
Inspectors, testers, and graders	15.81	11.07	13.70	15.01	17.15	19.40	-	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.25	7.50	8.62	11.50	14.78	20.07	-	-	-	-	-	-	-
Lathe and turning machine operators	14.59	10.50	11.75	15.00	17.00	20.50	-	-	-	-	-	-	-
Punching and stamping press operators	11.66	6.00	7.35	9.75	16.38	20.08	-	-	-	-	-	-	-
Grinding, abrading, buffing, and polishing machine operators	12.76	9.00	10.00	12.64	15.13	16.57	-	-	-	-	-	-	-
Fabricating machine operators, N.E.C.	14.01	8.00	10.69	12.92	20.28	20.61	-	-	-	-	-	-	-
Molding and casting machine operators	10.41	7.68	8.40	10.30	10.75	13.48	-	-	-	-	-	-	-
Printing press operators	14.51	9.34	12.21	14.48	17.90	18.48	-	-	-	-	-	-	-
Textile sewing machine operators	8.76	7.16	7.80	8.52	9.22	10.94	-	-	-	-	-	-	-
Laundering and dry cleaning machine operators	7.63	6.25	7.25	7.25	8.00	8.54	-	-	-	-	-	-	-
Packaging and filling machine operators	10.45	7.50	8.00	9.00	11.70	18.08	-	-	-	-	-	-	-
Extruding and forming machine operators	10.88	9.40	9.50	10.59	11.14	14.94	-	-	-	-	-	-	-
Mixing and blending machine operators	15.26	8.00	11.95	17.25	18.28	20.16	-	-	-	-	-	-	-
Painting and paint spraying machine operators	13.16	9.30	9.56	12.40	15.58	20.16	-	-	-	-	-	-	-
Slicing and cutting machine operators	11.01	7.50	7.65	9.05	14.78	17.25	-	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	12.14	7.50	9.50	12.05	14.32	17.09	-	-	-	-	-	-	-
Welders and cutters	15.92	10.00	12.35	13.48	20.32	21.86	-	-	-	-	-	-	-
Assemblers	11.72	6.00	8.20	10.00	14.57	20.02	-	-	-	-	-	-	-
Miscellaneous hand working occupations, N.E.C.	12.37	8.00	9.35	14.30	14.70	14.79	-	-	-	-	-	-	-
Production inspectors, checkers and examiners	12.31	8.45	9.50	11.24	14.22	19.37	-	-	-	-	-	-	-
Production testers	11.03	6.00	6.75	10.18	13.45	18.19	-	-	-	-	-	-	-
Transportation and material moving occupations	15.02	8.15	11.19	15.10	19.89	20.65	15.27	11.28	13.64	14.15	17.06	19.60	19.60
Truck drivers	16.01	9.25	12.55	16.34	20.65	20.65	-	-	-	-	-	-	-
Bus drivers	-	-	-	-	-	-	14.60	11.33	13.65	13.77	17.06	17.06	17.06
Crane and tower operators	18.58	16.38	16.91	19.48	20.14	20.14	-	-	-	-	-	-	-
Industrial truck and tractor equipment operators	12.57	8.00	10.50	11.70	14.92	19.89	-	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	9.58	5.35	6.25	8.85	11.97	14.79	12.30	10.14	11.04	13.04	13.39	14.10	14.10
Groundskeepers and gardeners except farm	9.05	6.00	7.00	8.00	11.70	13.44	-	-	-	-	-	-	-

See footnotes at end of table.

Table A-2. Hourly earnings¹ for selected occupations, all workers², private industry and State and local government, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	Private industry						State and local government					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
Blue-collar occupations (-Continued)												
Handlers, equipment cleaners, helpers, and laborers (-Continued)												
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	\$13.50	\$10.00	\$10.25	\$13.17	\$14.09	\$23.02	-	-	-	-	-	-
Production helpers	8.67	5.15	5.35	8.55	10.70	14.78	-	-	-	-	-	-
Stock handlers and baggers	8.52	5.25	5.79	7.10	11.00	13.05	-	-	-	-	-	-
Machine feeders and offbearers	8.18	6.05	6.25	7.60	8.85	11.82	-	-	-	-	-	-
Freight, stock, and material handlers, N.E.C.	10.11	6.25	7.50	9.75	11.38	16.87	-	-	-	-	-	-
Hand packers and packagers	9.37	6.50	7.00	8.50	12.61	12.85	-	-	-	-	-	-
Laborers except construction, N.E.C.	9.28	5.15	5.35	9.59	12.99	13.55	-	-	-	-	-	-
Service occupations	7.78	2.32	5.75	7.25	9.08	11.91	\$13.61	\$8.03	\$9.70	\$12.63	\$16.97	\$20.40
Protective service occupations	8.43	5.75	6.25	7.25	9.90	12.96	16.03	10.00	12.46	16.50	19.21	22.00
Firefighting occupations	-	-	-	-	-	-	15.41	11.69	12.46	14.34	19.21	19.21
Police and detectives, public service ..	-	-	-	-	-	-	18.21	15.98	16.97	17.61	19.90	20.95
Guards and police except public service	8.46	5.75	6.25	7.08	9.90	13.09	-	-	-	-	-	-
Food service occupations	6.35	2.13	2.33	6.00	8.00	11.00	9.69	8.00	8.63	9.72	10.87	11.60
Supervisors, food preparation and service occupations	12.07	7.50	10.33	11.53	14.04	15.00	-	-	-	-	-	-
Bartenders	4.49	2.13	2.13	4.00	6.00	8.25	-	-	-	-	-	-
Waiters and waitresses	3.01	2.13	2.13	2.13	2.32	4.80	-	-	-	-	-	-
Cooks	8.00	5.65	7.00	7.75	8.75	10.50	-	-	-	-	-	-
Kitchen workers, food preparation	6.59	5.15	5.20	6.00	7.00	9.85	-	-	-	-	-	-
Waiters/Waitresses' assistants	3.02	2.13	2.13	2.13	3.60	5.50	-	-	-	-	-	-
Food preparation occupations, N.E.C.	6.84	5.50	5.85	6.75	7.50	8.43	9.73	8.29	9.08	9.79	10.35	10.87
Health service occupations	8.51	6.30	7.10	8.20	9.31	11.03	11.30	7.34	7.34	12.02	13.00	13.56
Health aides, except nursing	8.97	6.00	6.75	8.37	9.90	11.68	12.64	11.34	11.73	12.72	13.22	14.16
Nursing aides, orderlies and attendants	8.28	6.65	7.20	8.00	9.02	10.37	-	-	-	-	-	-
Cleaning and building service occupations	8.60	5.50	5.85	7.25	9.65	13.96	10.40	7.16	8.49	9.36	12.60	14.25
Supervisors, cleaning & building service workers	11.00	7.25	7.25	9.18	12.79	18.00	-	-	-	-	-	-
Maids and housemen	7.15	5.75	6.00	6.64	8.33	9.09	-	-	-	-	-	-
Janitors and cleaners	8.63	5.50	5.75	7.00	10.00	18.85	10.16	6.20	8.17	9.23	12.11	14.25
Personal service occupations	9.98	4.75	6.29	8.25	10.78	20.48	13.76	6.28	8.65	12.73	18.41	21.36
Early childhood teachers' assistants ..	7.09	5.15	6.29	6.74	8.12	9.87	-	-	-	-	-	-
Service occupations, N.E.C.	7.73	3.50	6.00	7.75	9.00	11.43	-	-	-	-	-	-

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 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, Cleveland-Akron, OH, February 1998

Occupation ³	All industries											
	Full-time						Part-time					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
All occupations	\$16.76	\$7.91	\$10.30	\$14.42	\$20.16	\$28.24	\$8.83	\$5.18	\$5.75	\$7.00	\$10.45	\$16.00
All occupations excluding sales	16.74	8.00	10.33	14.43	20.16	28.03	9.20	5.15	5.98	7.25	11.18	17.51
White-collar occupations	19.96	9.19	12.14	16.86	24.08	34.62	10.84	5.50	6.25	8.00	13.85	20.08
White-collar occupations excluding sales	20.22	9.50	12.50	17.10	24.52	34.62	12.62	6.25	7.21	10.73	16.42	21.01
Professional specialty and technical occupations	22.73	12.48	15.93	20.52	27.50	35.26	17.38	8.72	12.76	16.97	20.71	25.25
Professional specialty occupations	24.50	14.25	18.01	22.46	29.86	36.59	18.28	8.57	13.64	18.47	21.49	26.52
Engineers, architects, and surveyors	27.26	19.73	22.12	26.44	30.75	35.37	-	-	-	-	-	-
Electrical and electronic engineers	29.49	24.00	24.46	27.41	30.83	44.23	-	-	-	-	-	-
Industrial engineers	24.65	19.81	20.70	23.82	26.70	31.96	-	-	-	-	-	-
Mechanical engineers	24.09	20.32	20.67	23.22	26.50	28.85	-	-	-	-	-	-
Engineers, N.E.C.	27.70	18.91	22.12	26.44	32.02	35.74	-	-	-	-	-	-
Mathematical and computer scientists	27.47	19.76	23.88	26.71	31.25	35.36	-	-	-	-	-	-
Computer systems analysts and scientists	27.74	20.94	23.88	27.00	31.25	35.61	-	-	-	-	-	-
Natural scientists	28.73	16.98	18.60	23.09	40.43	46.06	-	-	-	-	-	-
Health related occupations	21.21	15.61	17.55	19.99	21.63	25.32	20.99	16.00	18.50	20.71	22.17	26.44
Physicians	35.09	16.94	16.94	20.10	57.69	72.12	-	-	-	-	-	-
Registered nurses	19.68	15.75	17.75	19.93	21.31	22.36	20.46	16.86	19.06	20.86	21.88	24.00
Teachers, college and university	35.62	23.32	27.09	32.86	42.63	49.59	-	-	-	-	-	-
Teachers, except college and university	27.96	15.74	20.53	29.22	35.19	39.65	15.35	7.00	9.88	14.01	18.47	25.00
Prekindergarten and kindergarten	16.43	6.50	7.22	9.68	25.55	35.84	-	-	-	-	-	-
Elementary school teachers	29.91	17.71	22.54	32.03	36.34	40.35	15.80	9.02	10.83	11.11	19.65	33.09
Secondary school teachers	30.00	17.71	23.43	31.86	35.96	40.00	-	-	-	-	-	-
Teachers, special education	27.21	19.39	22.35	26.72	32.19	34.60	-	-	-	-	-	-
Teachers, N.E.C.	28.96	17.01	21.68	28.55	34.18	39.96	18.62	7.73	15.00	18.50	19.69	33.40
Substitute teachers	-	-	-	-	-	-	10.45	6.67	8.57	11.43	12.75	12.75
Vocational and educational counselors	25.83	15.71	18.73	22.09	35.15	37.17	-	-	-	-	-	-
Librarians, archivists, and curators	21.36	12.82	14.70	20.09	25.24	35.94	19.53	10.30	13.57	16.97	22.53	29.60
Librarians	21.36	12.82	14.70	20.09	25.24	35.94	19.77	10.30	13.57	17.55	29.54	29.60
Social scientists and urban planners	27.04	19.92	22.56	24.68	30.65	37.12	-	-	-	-	-	-
Social, recreation, and religious workers	15.99	11.35	12.36	14.66	18.50	23.80	-	-	-	-	-	-
Social workers	15.96	11.35	12.36	14.66	18.50	23.80	-	-	-	-	-	-
Lawyers and judges	-	-	-	-	-	-	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	17.44	11.54	12.82	16.00	20.00	26.67	-	-	-	-	-	-
Designers	18.96	13.44	15.70	18.80	21.00	23.63	-	-	-	-	-	-
Editors and reporters	21.51	11.28	14.87	20.88	26.92	37.26	-	-	-	-	-	-
Professional occupations, N.E.C.	15.22	9.99	12.81	14.86	16.83	18.21	-	-	-	-	-	-
Technical occupations	16.91	10.68	12.50	15.39	18.77	21.98	13.86	10.88	12.35	14.00	15.20	16.51
Clinical laboratory technologists and technicians	-	-	-	-	-	-	16.62	13.77	13.77	17.79	18.35	18.35
Radiological technicians	-	-	-	-	-	-	13.94	10.60	11.75	14.17	15.94	16.73
Licensed practical nurses	13.59	11.73	12.44	13.25	14.32	15.84	13.56	12.35	12.58	13.32	14.45	15.15
Health technologists and technicians, N.E.C.	15.40	8.50	11.19	14.38	18.29	21.12	13.21	9.64	11.03	14.39	15.57	15.57
Electrical and electronic technicians	17.93	11.90	14.37	18.19	21.98	21.98	-	-	-	-	-	-
Engineering technicians, N.E.C.	12.77	8.00	9.50	11.85	14.91	19.62	-	-	-	-	-	-
Drafters	14.23	10.40	11.64	13.11	17.00	20.25	-	-	-	-	-	-
Computer programmers	19.51	12.40	16.83	19.76	25.00	25.00	-	-	-	-	-	-
Technical and related occupations, N.E.C.	16.61	11.06	13.00	15.99	18.66	22.14	12.86	9.15	9.68	10.40	10.96	30.00
Executive, administrative, and managerial occupations	27.80	14.65	17.31	23.15	34.13	45.40	14.43	11.67	11.67	12.12	16.67	19.21
Executives, administrators, and managers	31.71	16.05	20.60	28.85	37.13	49.70	-	-	-	-	-	-
Administrators and officials, public administration	26.72	17.38	20.65	20.65	34.62	34.62	-	-	-	-	-	-
Financial managers	31.90	17.90	21.34	27.35	38.22	62.15	-	-	-	-	-	-
Managers, marketing, advertising and public relations	35.13	16.05	20.44	33.03	36.76	59.81	-	-	-	-	-	-

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries																						
	Full-time					Part-time																	
	Mean	Percentiles					Mean	Percentiles															
10		25	Median 50	75	90	10		25	Median 50	75	90												
White-collar occupations (-Continued)																							
Executive, administrative, and managerial occupations (-Continued)																							
Executives, administrators, and managers (-Continued)																							
Administrators, education and related fields	\$35.00	\$20.09	\$31.25	\$37.13	\$38.69	\$47.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Managers, medicine and health	30.68	20.19	20.19	25.25	34.41	65.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Managers, service organizations, N.E.C.	16.47	10.71	10.77	11.56	17.81	21.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Managers and administrators, N.E.C.	32.91	16.83	21.41	28.09	37.02	55.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Management related occupations	20.17	13.52	15.66	17.74	22.76	28.97	\$16.44	\$12.12	\$14.67	\$16.00	\$17.90	\$20.75											
Accountants and auditors	21.35	13.94	15.91	18.27	24.52	29.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other financial officers	22.77	12.98	15.38	17.79	27.44	33.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Personnel, training, and labor relations specialists	18.15	14.42	15.87	17.18	19.75	23.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Purchasing agents and buyers, N.E.C.	20.69	15.27	15.38	19.90	23.15	29.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Management related occupations, N.E.C.	18.51	13.95	15.87	16.93	19.96	22.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales occupations	17.18	6.50	9.52	13.94	20.66	31.50	6.64	5.20	5.45	5.91	7.00	8.94											
Supervisors, sales occupations	17.63	9.70	11.45	15.41	22.71	28.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales occupations, other business services	19.22	6.75	10.03	17.73	23.92	32.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales representatives, mining, manufacturing, and wholesale	31.19	15.39	18.17	26.44	41.31	54.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales workers, motor vehicles and boats	15.80	7.99	11.54	14.30	17.88	29.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sales workers, other commodities	-	-	-	-	-	-	6.42	5.20	5.50	6.00	6.60	8.23											
Cashiers	11.29	5.55	6.00	7.00	11.67	16.67	6.46	5.20	5.45	5.79	6.55	8.94											
Administrative support occupations, including clerical	12.05	8.05	9.50	11.50	14.21	16.74	8.03	6.25	6.25	7.50	9.16	11.31											
Supervisors, general office	16.05	10.57	12.04	15.10	18.23	24.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supervisors, distribution, scheduling, and adjusting clerks	17.08	9.75	11.63	16.03	21.51	21.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Computer operators	13.47	10.00	11.83	14.42	15.81	15.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Secretaries	13.14	9.65	11.12	12.99	14.78	16.83	10.11	8.00	8.74	10.00	11.70	12.00											
Receptionists	9.92	7.69	9.00	9.89	10.98	11.57	9.03	7.00	7.50	8.25	9.27	13.00											
Order clerks	11.60	6.35	9.00	11.50	14.00	17.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Personnel clerks except payroll & timekeeping	14.36	9.00	10.00	14.74	16.74	22.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Library clerks	10.95	7.05	9.64	10.87	11.98	15.16	7.41	5.50	5.70	7.00	8.61	10.43											
Records clerks, N.E.C.	10.59	7.26	8.53	10.79	13.19	13.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bookkeepers, accounting and auditing clerks	11.26	8.50	9.33	10.61	12.98	15.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payroll and timekeeping clerks	13.55	10.00	10.92	13.08	16.37	17.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Billing clerks	10.33	7.39	8.50	9.75	12.18	13.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Telephone operators	-	-	-	-	-	-	8.51	7.50	7.50	7.75	9.77	10.56											
Mail clerks except postal service	7.74	6.24	6.50	7.68	9.15	9.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dispatchers	10.08	6.35	7.30	8.18	13.96	16.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Production coordinators	16.69	13.85	14.79	16.92	18.89	19.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Traffic, shipping and receiving clerks	12.09	8.50	9.10	11.45	14.26	15.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Stock and inventory clerks	11.31	8.25	9.64	11.78	12.54	14.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Insurance adjusters, examiners, & investigators	12.64	9.83	10.47	12.35	13.70	15.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Investigators and adjusters except insurance	12.80	9.00	10.76	12.42	15.28	17.31	9.44	7.38	8.00	8.00	12.07	12.50											
Bill and account collectors	11.23	9.38	9.61	11.09	11.68	12.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
General office clerks	11.06	7.24	8.65	10.45	12.98	15.75	8.20	6.50	6.75	8.00	9.00	10.60											
Bank tellers	8.94	7.28	8.50	8.50	9.33	10.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Data entry keyers	9.93	7.50	8.05	9.00	11.17	14.38	8.14	7.00	7.40	7.50	8.00	10.00											
Teachers' aides	-	-	-	-	-	-	8.84	6.92	7.79	9.07	9.97	10.57											

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries											
	Full-time						Part-time					
	Mean	Percentiles					Mean	Percentiles				
		10	25	Median 50	75	90		10	25	Median 50	75	90
White-collar occupations (-Continued)												
Administrative support occupations, including clerical (-Continued)												
Administrative support occupations, N.E.C.	\$12.80	\$8.76	\$10.09	\$13.57	\$15.29	\$15.60	\$9.48	\$6.00	\$7.50	\$9.50	\$10.89	\$13.07
Blue-collar occupations	13.69	7.65	9.75	13.00	17.09	20.61	7.65	5.20	5.70	6.50	8.75	11.39
Precision production, craft, and repair occupations	16.81	10.60	13.30	16.25	19.84	23.62	13.69	8.12	8.50	10.69	23.80	23.80
Automobile mechanics	15.84	13.50	15.00	15.56	16.45	18.34	-	-	-	-	-	-
Bus, truck, and stationary engine mechanics	16.88	12.02	14.43	16.28	20.69	20.69	-	-	-	-	-	-
Industrial machinery repairers	17.35	11.16	12.20	18.13	21.91	23.62	-	-	-	-	-	-
Machinery maintenance occupations	11.23	8.50	8.50	10.29	11.18	18.05	-	-	-	-	-	-
Millwrights	21.63	17.25	17.77	23.27	23.31	23.31	-	-	-	-	-	-
Mechanics and repairers, N.E.C.	16.50	11.08	14.72	16.56	18.19	23.06	-	-	-	-	-	-
Supervisors, construction trades, N.E.C.	24.41	14.31	19.13	27.20	30.61	33.26	-	-	-	-	-	-
Carpenters	18.98	10.62	18.99	19.47	22.60	22.60	-	-	-	-	-	-
Electricians	20.42	15.69	16.63	19.38	23.62	26.03	-	-	-	-	-	-
Plumbers, pipefitters and steamfitters	17.90	11.94	13.85	15.21	23.31	23.31	-	-	-	-	-	-
Construction trades, N.E.C.	14.76	9.54	12.67	13.98	18.40	18.40	-	-	-	-	-	-
Supervisors, production occupations ..	17.99	10.90	13.75	17.50	21.20	26.20	-	-	-	-	-	-
Tool and die makers	19.03	14.00	14.95	18.50	23.62	24.31	-	-	-	-	-	-
Precision assemblers, metal	12.26	8.64	10.36	11.48	14.35	16.25	-	-	-	-	-	-
Machinists	14.89	12.90	14.00	14.93	16.17	17.35	-	-	-	-	-	-
Miscellaneous precision workers, N.E.C.	15.53	13.34	14.26	16.40	16.87	18.45	-	-	-	-	-	-
Inspectors, testers, and graders	16.09	10.74	13.75	15.04	18.20	19.81	-	-	-	-	-	-
Machine operators, assemblers, and inspectors	12.39	7.60	8.85	11.60	14.95	20.07	6.61	5.30	5.70	6.10	7.25	8.70
Lathe and turning machine operators	14.59	10.50	11.75	15.00	17.00	20.50	-	-	-	-	-	-
Punching and stamping press operators	11.66	6.00	7.35	9.75	16.38	20.08	-	-	-	-	-	-
Grinding, abrading, buffing, and polishing machine operators	12.76	9.00	10.00	12.64	15.13	16.57	-	-	-	-	-	-
Fabricating machine operators, N.E.C.	14.01	8.00	10.69	12.92	20.28	20.61	-	-	-	-	-	-
Molding and casting machine operators	10.51	7.75	8.62	10.30	10.75	13.48	-	-	-	-	-	-
Printing press operators	14.51	9.34	12.21	14.48	17.90	18.48	-	-	-	-	-	-
Textile sewing machine operators	8.78	7.07	7.75	8.52	9.25	11.03	-	-	-	-	-	-
Packaging and filling machine operators	10.45	7.50	8.00	9.00	11.70	18.08	-	-	-	-	-	-
Extruding and forming machine operators	10.88	9.40	9.50	10.59	11.14	14.94	-	-	-	-	-	-
Mixing and blending machine operators	15.26	8.00	11.95	17.25	18.28	20.16	-	-	-	-	-	-
Painting and paint spraying machine operators	13.16	9.30	9.56	12.40	15.58	20.16	-	-	-	-	-	-
Slicing and cutting machine operators	11.01	7.50	7.65	9.05	14.78	17.25	-	-	-	-	-	-
Miscellaneous machine operators, N.E.C.	12.26	7.55	9.52	12.05	14.32	17.09	-	-	-	-	-	-
Welders and cutters	15.92	10.00	12.35	13.48	20.32	21.86	-	-	-	-	-	-
Assemblers	12.19	7.25	8.46	10.50	14.69	20.07	6.35	5.30	5.65	6.00	7.00	9.27
Miscellaneous hand working occupations, N.E.C.	12.37	8.00	9.35	14.30	14.70	14.79	-	-	-	-	-	-
Production inspectors, checkers and examiners	12.31	8.45	9.50	11.24	14.22	19.37	-	-	-	-	-	-
Production testers	11.03	6.00	6.75	10.18	13.45	18.19	-	-	-	-	-	-
Transportation and material moving occupations	15.28	8.75	11.60	15.13	19.48	20.65	11.47	7.28	10.00	11.67	13.77	13.77
Truck drivers	16.19	10.52	13.10	16.30	20.65	20.65	-	-	-	-	-	-

See footnotes at end of table.

Table A-3. Hourly earnings¹ for selected occupations, full-time and part-time workers², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries											
	Full-time						Part-time					
	Mean	Percentiles					Mean	Percentiles				
10		25	Median 50	75	90	10		25	Median 50	75	90	
Blue-collar occupations (-Continued)												
Transportation and material moving occupations (-Continued)												
Bus drivers	\$15.21	\$11.94	\$13.68	\$16.85	\$17.06	\$17.06	\$12.63	\$11.08	\$11.39	\$12.71	\$13.77	\$13.94
Crane and tower operators	18.58	16.38	16.91	19.48	20.14	20.14	-	-	-	-	-	-
Industrial truck and tractor equipment operators	12.61	8.00	10.50	11.70	14.92	19.89	-	-	-	-	-	-
Handlers, equipment cleaners, helpers, and laborers	10.55	6.00	7.28	10.00	13.04	15.06	7.28	5.20	5.70	6.25	8.20	10.45
Groundskeepers and gardeners except farm	9.67	6.25	7.00	9.04	11.70	13.44	-	-	-	-	-	-
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	13.94	10.00	11.70	13.17	14.15	23.02	-	-	-	-	-	-
Construction laborers	16.11	13.39	13.39	15.68	19.15	19.90	-	-	-	-	-	-
Production helpers	8.95	5.15	5.15	9.20	12.40	14.78	-	-	-	-	-	-
Stock handlers and baggers	10.77	6.55	9.17	10.62	12.92	14.88	6.30	5.20	5.35	5.80	6.50	8.20
Machine feeders and offbearers	8.34	6.25	6.60	7.70	8.95	11.82	-	-	-	-	-	-
Freight, stock, and material handlers, N.E.C.	10.27	6.00	7.50	9.92	11.53	16.87	9.76	7.00	7.50	9.50	10.75	13.34
Hand packers and packagers	9.65	6.95	7.15	9.55	12.67	12.85	-	-	-	-	-	-
Laborers except construction, N.E.C.	10.16	5.15	5.35	11.04	13.19	14.97	6.65	5.65	6.00	6.50	7.25	7.75
Service occupations	10.71	5.91	7.34	9.23	12.98	19.20	6.56	2.13	5.15	6.00	7.69	11.18
Protective service occupations	14.27	7.00	9.90	14.15	18.69	21.12	10.97	5.65	6.68	8.55	16.50	18.50
Firefighting occupations	15.47	11.69	12.82	14.34	19.21	19.21	-	-	-	-	-	-
Police and detectives, public service ..	18.44	16.74	16.97	17.67	20.40	20.95	-	-	-	-	-	-
Guards and police except public service	8.56	5.75	6.25	7.50	10.05	13.33	10.32	6.25	6.74	7.45	16.00	18.50
Food service occupations	7.99	2.13	5.50	8.00	10.33	12.98	5.49	2.13	2.13	5.75	7.00	9.00
Supervisors, food preparation and service occupations	12.34	7.75	10.33	11.53	14.04	15.00	-	-	-	-	-	-
Waiters and waitresses	3.27	2.13	2.13	2.13	4.80	4.80	2.78	2.13	2.13	2.13	2.13	6.50
Cooks	8.59	7.00	7.50	8.40	9.00	10.50	8.12	5.45	6.25	7.50	9.00	11.60
Kitchen workers, food preparation	-	-	-	-	-	-	6.27	5.15	5.15	6.00	6.75	8.30
Waiters/Waitresses' assistants	-	-	-	-	-	-	3.12	2.13	2.13	2.13	4.25	5.50
Food preparation occupations, N.E.C.	8.01	5.75	6.80	7.50	9.79	10.46	6.84	5.49	5.75	6.50	7.75	8.69
Health service occupations	8.95	6.65	7.34	8.33	9.98	12.00	8.13	5.92	6.75	7.60	9.01	11.96
Health aides, except nursing	10.06	6.00	7.94	9.36	11.78	13.28	8.82	5.15	6.00	7.52	12.11	13.11
Nursing aides, orderlies and attendants	8.30	6.75	7.34	8.00	9.02	10.54	7.72	5.92	6.75	7.60	8.65	9.50
Cleaning and building service occupations	9.74	5.91	7.00	8.92	11.38	14.72	7.64	5.50	5.50	6.00	8.00	12.11
Supervisors, cleaning & building service workers	11.88	7.25	7.25	12.79	15.64	18.00	-	-	-	-	-	-
Maids and housemen	7.13	5.75	6.00	6.64	8.23	9.05	-	-	-	-	-	-
Janitors and cleaners	9.92	5.85	7.08	9.00	11.38	14.25	7.65	5.50	5.50	6.00	7.50	12.60
Personal service occupations	13.13	6.53	8.25	11.36	17.59	22.57	6.99	3.50	6.00	6.37	8.65	12.32
Service occupations, N.E.C.	11.49	7.50	8.65	10.78	13.18	17.84	6.16	2.13	6.00	6.37	7.69	8.65

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 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-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Cleveland-Akron, OH, February 1998

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
All occupations	39.7	\$665	\$574	2,011	\$33,710	\$29,723
All occupations excluding sales	39.7	664	576	2,009	33,630	29,744
White-collar occupations	39.5	789	673	1,979	39,499	34,320
White-collar occupations excluding sales	39.5	799	678	1,972	39,878	35,006
Professional specialty and technical occupations	39.2	891	814	1,882	42,785	41,101
Professional specialty occupations	39.2	959	888	1,841	45,095	43,597
Engineers, architects, and surveyors	40.3	1,097	1,060	2,093	57,056	55,120
Electrical and electronic engineers	40.0	1,180	1,096	2,080	61,348	57,013
Industrial engineers	41.3	1,019	1,012	2,149	52,981	52,645
Mechanical engineers	40.0	964	929	2,080	50,111	48,298
Engineers, N.E.C.	40.1	1,112	1,096	2,088	57,819	56,992
Mathematical and computer scientists	39.5	1,084	1,058	2,053	56,384	54,995
Computer systems analysts and scientists	39.7	1,100	1,069	2,063	57,220	55,578
Natural scientists	40.0	1,149	924	2,080	59,758	48,027
Health related occupations	39.7	841	794	2,054	43,564	41,309
Physicians	40.0	1,404	804	2,080	72,995	41,805
Registered nurses	39.6	778	788	2,046	40,250	40,959
Teachers, college and university	39.6	1,411	1,292	1,584	56,427	57,143
Teachers, except college and university	37.4	1,045	1,107	1,443	40,351	42,882
Prekindergarten and kindergarten	37.9	622	387	1,665	27,362	20,134
Elementary school teachers	36.3	1,087	1,190	1,348	40,332	43,887
Secondary school teachers	37.8	1,134	1,235	1,411	42,340	46,161
Teachers, special education	38.2	1,038	1,035	1,478	40,212	40,167
Teachers, N.E.C.	37.7	1,093	1,096	1,478	42,815	42,436
Vocational and educational counselors	39.2	1,012	949	1,713	44,249	43,701
Librarians, archivists, and curators	38.2	817	769	1,778	37,979	39,978
Librarians	38.2	817	769	1,778	37,979	39,978
Social scientists and urban planners	39.7	1,074	987	1,849	49,981	47,520
Social, recreation, and religious workers	39.9	637	586	2,024	32,361	30,285
Social workers	39.9	636	586	2,023	32,292	30,285
Lawyers and judges	-	-	-	-	-	-
Writers, authors, entertainers, athletes, and professionals, N.E.C.	39.6	690	631	2,046	35,687	32,656
Designers	39.8	754	752	2,067	39,196	39,104
Editors and reporters	38.1	820	728	1,982	42,640	37,869
Professional occupations, N.E.C.	40.0	609	594	2,073	31,549	30,909
Technical occupations	39.3	664	616	2,033	34,383	31,845
Licensed practical nurses	38.9	529	520	1,969	26,756	26,770
Health technologists and technicians, N.E.C.	39.9	614	550	2,074	31,946	28,621
Electrical and electronic technicians	39.8	714	703	2,043	36,634	36,566
Engineering technicians, N.E.C.	40.0	511	474	2,080	26,569	24,648
Drafters	40.0	569	524	2,080	29,594	27,269
Computer programmers	40.0	780	790	2,080	40,572	41,101
Technical and related occupations, N.E.C.	40.0	664	637	2,079	34,522	33,134
Executive, administrative, and managerial occupations ...	39.9	1,110	923	2,062	57,331	47,944
Executives, administrators, and managers	40.0	1,269	1,124	2,064	65,438	58,157
Administrators and officials, public administration	40.0	1,068	827	2,078	55,519	42,994
Financial managers	39.6	1,263	1,094	2,059	65,682	56,888
Managers., marketing, advertising and public relations	40.1	1,410	1,327	2,087	73,324	68,994
Administrators, education and related fields	39.6	1,384	1,485	1,846	64,593	61,553
Managers, medicine and health	40.0	1,227	1,010	2,080	63,818	52,520
Managers, service organizations, N.E.C.	40.0	659	462	2,080	34,259	24,045
Managers and administrators, N.E.C.	40.2	1,322	1,154	2,088	68,735	60,008
Management related occupations	39.8	802	710	2,059	41,531	36,899
Accountants and auditors	39.9	851	723	2,038	43,514	37,226
Other financial officers	39.6	901	712	2,058	46,861	37,003
Personnel, training, and labor relations specialists	39.8	723	687	2,072	37,611	35,734
Purchasing agents and buyers, N.E.C.	41.6	860	796	2,162	44,740	41,392
Management related occupations, N.E.C.	39.5	731	677	2,053	37,997	35,214
Sales occupations	39.6	680	556	2,058	35,349	28,891
Supervisors, sales occupations	40.3	710	616	2,094	36,920	32,053
Sales occupations, other business services	40.1	772	713	2,088	40,134	37,086

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
White-collar occupations (-Continued)						
Sales occupations (-Continued)						
Sales representatives, mining, manufacturing, and wholesale	40.0	\$1,248	\$1,058	2,080	\$64,874	\$54,995
Sales workers, motor vehicles and boats	41.4	655	572	2,155	34,050	29,765
Cashiers	37.9	428	257	1,973	22,269	13,354
Administrative support occupations, including clerical	39.6	478	458	2,038	24,557	23,504
Supervisors, general office	40.0	642	604	2,080	33,384	31,408
Supervisors, distribution, scheduling, and adjusting clerks	40.0	683	641	2,080	35,520	33,342
Computer operators	40.0	539	577	2,080	28,020	29,994
Secretaries	39.6	520	510	2,038	26,786	26,499
Receptionists	39.7	394	394	2,059	20,431	20,509
Order clerks	39.7	461	460	2,066	23,967	23,920
Personnel clerks except payroll & timekeeping	39.7	570	590	2,064	29,634	30,659
Library clerks	38.0	416	408	1,977	21,647	21,197
Records clerks, N.E.C.	38.7	410	405	2,012	21,314	21,041
Bookkeepers, accounting and auditing clerks	39.5	444	424	1,929	21,714	22,069
Payroll and timekeeping clerks	39.9	540	523	2,074	28,101	27,206
Billing clerks	40.0	413	390	2,080	21,496	20,280
Mail clerks except postal service	39.1	302	307	2,032	15,726	15,974
Dispatchers	40.0	403	327	2,080	20,970	17,014
Production coordinators	40.0	668	677	2,080	34,711	35,194
Traffic, shipping and receiving clerks	40.0	483	458	2,080	25,138	23,816
Stock and inventory clerks	40.5	458	471	2,108	23,829	24,502
Insurance adjusters, examiners, & investigators	38.3	484	469	1,991	25,158	24,375
Investigators and adjusters except insurance	39.8	510	497	2,070	26,506	25,834
Bill and account collectors	40.0	449	444	2,080	23,361	23,067
General office clerks	39.7	439	418	2,057	22,749	21,715
Bank tellers	40.0	358	340	2,080	18,600	17,680
Data entry keyers	40.0	397	360	2,080	20,655	18,720
Administrative support occupations, N.E.C.	39.6	507	536	2,047	26,204	27,706
Blue-collar occupations						
Precision production, craft, and repair occupations	40.0	547	520	2,055	28,123	26,874
Automobile mechanics	40.1	674	651	2,065	34,716	33,779
Bus, truck, and stationary engine mechanics	40.2	637	622	2,093	33,144	32,365
Industrial machinery repairers	40.0	675	651	2,080	35,115	33,862
Machinery maintenance occupations	40.0	694	725	1,991	34,551	37,710
Millwrights	40.0	449	412	1,911	21,471	21,341
Mechanics and repairers, N.E.C.	40.0	865	931	1,888	40,833	48,402
Supervisors, construction trades, N.E.C.	40.0	660	662	2,078	34,304	34,445
Carpenters	40.0	977	1,088	2,080	50,778	56,576
Electricians	40.0	759	779	2,080	39,484	40,498
Plumbers, pipefitters and steamfitters	40.0	817	775	2,080	42,480	40,310
Construction trades, N.E.C.	40.0	716	608	2,080	37,231	31,637
Supervisors, production occupations	40.0	591	559	2,080	30,706	29,078
Tool and die makers	40.7	733	700	2,118	38,103	36,400
Precision assemblers, metal	40.0	761	740	2,080	39,577	38,480
Machinists	40.0	490	459	2,080	25,497	23,878
Miscellaneous precision workers, N.E.C.	40.0	596	597	1,996	29,726	31,054
Inspectors, testers, and graders	40.0	621	656	2,080	32,294	34,112
Machine operators, assemblers, and inspectors	40.0	644	602	2,080	33,476	31,283
Lathe and turning machine operators	40.1	496	464	2,058	25,509	24,024
Punching and stamping press operators	40.0	583	600	2,080	30,339	31,200
Grinding, abrading, buffing, and polishing machine operators	40.0	466	390	2,080	24,256	20,280
Fabricating machine operators, N.E.C.	40.0	510	506	2,080	26,532	26,291
Molding and casting machine operators	39.9	559	517	2,037	28,539	26,618
Printing press operators	40.1	421	412	2,002	21,038	21,424
Textile sewing machine operators	40.0	580	579	2,080	30,186	30,118
Packaging and filling machine operators	40.0	351	341	2,080	18,264	17,722
Extruding and forming machine operators	40.6	424	368	2,110	22,052	19,110
Mixing and blending machine operators	40.0	435	424	2,080	22,635	22,027
Painting and paint spraying machine operators	40.0	610	690	2,080	31,740	35,880
Slicing and cutting machine operators	40.0	527	496	2,080	27,381	25,792
	40.0	440	362	2,080	22,900	18,824

See footnotes at end of table.

Table A-4. Weekly and annual earnings¹ and hours for selected occupations, full-time workers only², all industries, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³	All industries					
	Mean weekly hours ⁴	Weekly earnings		Mean annual hours	Annual earnings	
		Mean	Median		Mean	Median
Blue-collar occupations (-Continued)						
Machine operators, assemblers, and inspectors (-Continued)						
Miscellaneous machine operators, N.E.C.	40.1	\$491	\$482	2,040	\$25,000	\$25,064
Welders and cutters	40.0	637	539	2,080	33,112	28,038
Assemblers	40.1	488	420	2,084	25,399	21,840
Miscellaneous hand working occupations, N.E.C.	40.7	503	572	2,116	26,163	29,744
Production inspectors, checkers and examiners ..	40.0	492	450	2,080	25,601	23,379
Production testers	40.0	441	407	2,080	22,950	21,174
Transportation and material moving occupations	39.6	606	602	1,998	30,525	30,888
Truck drivers	39.9	646	651	2,070	33,517	33,363
Bus drivers	37.0	563	666	1,720	26,167	28,392
Crane and tower operators	40.0	743	779	1,276	23,702	34,549
Industrial truck and tractor equipment operators ..	40.2	506	468	2,088	26,336	24,336
Handlers, equipment cleaners, helpers, and laborers	40.0	422	400	2,074	21,873	20,800
Groundskeepers and gardeners except farm	40.0	387	362	2,080	20,115	18,803
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	39.6	552	527	2,059	28,692	27,394
Construction laborers	40.0	644	627	2,080	33,511	32,614
Production helpers	40.0	358	368	2,080	18,616	19,136
Stock handlers and baggers	40.0	431	425	2,058	22,176	22,048
Machine feeders and offbearers	40.0	334	308	2,080	17,355	16,016
Freight, stock, and material handlers, N.E.C.	40.0	411	397	2,080	21,358	20,634
Hand packers and packagers	40.0	386	382	2,080	20,074	19,864
Laborers except construction, N.E.C.	39.9	405	442	2,074	21,066	22,963
Service occupations						
Protective service occupations	41.5	592	627	2,156	30,760	32,614
Firefighting occupations	45.3	701	668	2,356	36,453	34,736
Police and detectives, public service	40.0	737	707	2,080	38,348	36,754
Guards and police except public service	40.0	342	300	2,080	17,802	15,600
Food service occupations	39.1	312	310	1,996	15,940	15,113
Supervisors, food preparation and service occupations	41.1	508	528	2,096	25,856	27,477
Waiters and waitresses	38.0	124	85	1,973	6,459	4,430
Cooks	38.8	333	320	2,016	17,306	16,640
Food preparation occupations, N.E.C.	39.0	313	284	1,907	15,285	14,768
Health service occupations	39.5	354	330	2,053	18,376	17,160
Health aides, except nursing	39.7	399	373	2,062	20,732	19,282
Nursing aides, orderlies and attendants	39.4	327	310	2,048	17,007	16,120
Cleaning and building service occupations	39.6	386	357	2,058	20,057	18,554
Supervisors, cleaning & building service workers	41.1	489	469	2,139	25,412	24,398
Maids and housemen	37.8	269	250	1,965	14,001	13,000
Janitors and cleaners	39.8	395	360	2,065	20,497	18,720
Personal service occupations	35.3	463	428	1,757	23,069	22,131
Service occupations, N.E.C.	39.8	458	431	1,985	22,807	22,422

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 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.

⁴ Mean weekly hours are the hours an employee is scheduled to work in a week, exclusive of overtime.

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 B-1. Mean hourly earnings¹ by occupational group and levels², all industries, private industry, State and local government, full-time and part-time workers, Cleveland-Akron, OH, February 1998

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
All occupations	\$15.80	\$15.17	\$18.71	\$16.76	\$8.83
All occupations excluding sales	15.91	15.26	18.72	16.74	9.20
White-collar occupations	18.96	18.31	21.48	19.96	10.84
Level 1	6.65	6.64	6.77	8.32	6.18
Level 2	8.17	8.04	8.76	8.84	7.08
Level 3	9.49	9.13	12.13	9.83	7.76
Level 4	11.18	10.88	12.82	11.49	8.51
Level 5	13.95	13.41	16.77	14.20	12.04
Level 6	15.28	15.64	13.72	15.44	13.57
Level 7	18.85	18.32	20.64	18.94	16.11
Level 8	20.75	20.04	22.39	20.75	20.79
Level 9	23.83	22.07	26.81	24.12	19.03
Level 10	28.70	28.82	27.75	28.95	—
Level 11	31.31	31.14	32.66	31.58	25.67
Level 12	38.21	38.51	36.67	38.21	—
Level 13	49.25	50.27	43.96	48.94	—
Level 14	70.56	72.30	—	70.56	—
Not able to be leveled	21.54	21.45	22.45	22.28	10.01
White-collar occupations excluding sales	19.56	18.99	21.50	20.22	12.62
Level 1	7.69	7.97	6.77	8.43	6.46
Level 2	8.12	7.98	8.76	8.79	7.03
Level 3	9.87	9.55	11.97	10.04	8.60
Level 4	11.60	11.30	12.82	11.77	9.73
Level 5	13.79	13.07	16.77	14.02	12.26
Level 6	14.71	14.96	13.73	14.82	13.57
Level 7	18.51	17.81	20.64	18.59	16.11
Level 8	20.65	19.71	22.49	20.64	20.70
Level 9	23.82	22.01	26.81	24.12	19.03
Level 10	28.30	28.38	27.75	28.56	—
Level 11	30.76	30.51	32.66	31.01	25.67
Level 12	38.16	38.46	36.67	38.16	—
Level 13	49.25	50.27	43.96	48.94	—
Level 14	70.56	72.30	—	70.56	—
Not able to be leveled	21.78	21.71	22.45	22.10	11.85
Professional specialty and technical occupations	22.24	21.00	25.28	22.73	17.38
Professional specialty occupations	23.91	22.72	26.21	24.50	18.28
Level 5	14.81	10.75	17.48	15.60	13.01
Level 6	14.83	14.59	15.69	15.24	12.94
Level 7	20.80	18.71	26.78	20.91	17.85
Level 8	21.56	19.71	24.75	21.60	21.30
Level 9	25.07	22.16	28.05	25.62	18.99
Level 10	23.09	23.34	22.07	23.09	—
Level 11	29.69	29.75	29.07	30.08	25.67
Level 12	35.11	34.89	—	35.11	—
Level 13	47.20	47.85	—	46.63	—
Not able to be leveled	20.42	19.76	—	20.47	—
Engineers, architects, and surveyors	27.26	27.26	—	27.26	—
Level 9	26.02	25.97	—	26.02	—
Level 10	23.23	23.60	—	23.23	—
Level 11	31.04	31.04	—	31.04	—
Level 13	43.19	43.19	—	43.19	—
Mathematical and computer scientists	27.47	27.75	—	27.47	—
Level 9	24.27	24.28	—	24.27	—
Level 11	30.85	30.85	—	30.86	—
Level 12	33.56	33.56	—	33.56	—
Natural scientists	28.73	—	—	28.73	—
Health related occupations	21.17	21.26	19.88	21.21	20.99
Level 7	19.49	19.49	—	19.27	22.52
Level 8	19.64	19.55	—	19.50	20.18
Level 9	20.50	20.59	19.37	20.96	18.75
Level 11	24.73	24.73	—	—	—
Not able to be leveled	18.97	18.97	—	18.97	—
Teachers, college and university	34.84	33.44	—	35.62	—

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, Cleveland-Akron, OH, February 1998 — Continued

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations (-Continued)					
Teachers, college and university (-Continued)					
Level 12	\$35.29	\$34.72	—	\$35.29	—
Level 13	42.26	—	—	42.26	—
Teachers, except college and university					
Level 5	26.07	14.86	\$28.66	27.96	\$15.35
Level 6	17.23	—	22.33	—	12.52
Level 7	11.68	10.22	—	—	13.31
Level 8	28.28	17.36	33.67	29.38	—
Level 9	26.84	—	27.86	26.56	—
Level 10	28.39	—	29.74	29.19	19.03
Librarians, archivists, and curators					
Level 9	21.11	18.01	24.51	21.36	19.53
Level 10	23.87	—	—	23.36	—
Level 11	21.58	—	21.58	21.58	—
Social scientists and urban planners					
Level 6	27.04	—	—	27.04	—
Social, religious, and recreation workers					
Level 6	15.88	14.36	16.61	15.99	—
Level 7	14.33	—	—	—	—
Level 9	16.44	14.03	—	16.44	—
Level 10	17.01	16.20	—	17.01	—
Lawyers and judges					
Level 10	—	—	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.					
Level 5	17.38	17.34	—	17.44	—
Level 7	12.88	12.88	—	—	—
Level 8	18.16	18.22	—	18.16	—
Not able to be leveled	16.59	16.40	—	16.40	—
Technical occupations					
Level 4	16.67	16.72	16.25	16.91	13.86
Level 5	12.07	12.07	—	12.11	—
Level 6	13.77	13.78	—	13.84	12.89
Level 7	14.29	14.76	—	14.35	14.01
Level 8	18.29	18.63	16.78	18.46	15.29
Level 9	20.03	20.64	18.35	20.21	—
Level 10	19.52	—	—	19.54	—
Not able to be leveled	15.79	—	—	15.79	—
Executive, administrative, and managerial occupations ...					
Level 5	27.54	28.69	22.91	27.80	14.43
Level 6	14.69	15.76	—	15.81	—
Level 7	16.02	16.91	—	16.02	—
Level 8	17.04	17.28	16.48	17.16	—
Level 9	19.04	18.82	19.47	19.04	—
Level 10	21.59	22.07	19.35	21.62	—
Level 11	27.22	26.29	—	27.22	—
Level 12	31.92	31.39	—	31.92	—
Level 13	39.60	40.22	36.73	39.60	—
Level 14	52.28	53.59	—	52.28	—
Level 15	72.42	73.72	—	72.42	—
Not able to be leveled	36.91	37.58	—	36.91	—
Executives, administrators, and managers					
Level 7	31.41	32.98	25.12	31.71	—
Level 8	16.09	—	—	16.13	—
Level 9	17.81	18.05	—	17.81	—
Level 10	21.65	22.21	19.19	21.69	—
Level 11	27.22	25.91	—	27.22	—
Level 12	32.40	31.90	—	32.40	—
Level 13	39.69	40.38	36.73	39.69	—
Level 14	52.28	53.59	—	52.28	—
Level 15	72.42	73.72	—	72.42	—
Not able to be leveled	36.80	37.70	—	36.80	—
Management related occupations					
Level 5	20.07	20.43	18.58	20.17	16.44
Level 6	15.61	15.56	—	15.61	—
Level 7	16.67	16.75	—	16.67	—
Level 8	17.29	17.33	17.16	17.44	—
Level 9	19.98	19.57	—	19.98	—
Level 10	21.46	21.74	—	21.44	—
Level 11	27.22	27.26	—	27.22	—
Level 12	27.32	27.32	—	27.32	—
Sales occupations					
Level 1	14.06	14.04	—	17.18	6.64
Level 2	6.22	6.22	—	—	6.14

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, Cleveland-Akron, OH, February 1998 — Continued

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations (-Continued)					
Sales occupations (-Continued)					
Level 3	\$7.10	\$6.79	—	\$7.65	\$6.51
Level 4	9.63	9.63	—	10.33	6.49
Level 5	14.73	14.73	—	15.04	—
Level 6	22.35	22.49	—	22.35	—
Level 7	23.60	23.60	—	23.60	—
Level 8	21.52	21.76	—	21.50	—
Administrative support occupations, including clerical	11.56	11.34	\$12.65	12.05	8.03
Level 1	7.69	7.97	6.77	8.43	6.46
Level 2	8.12	7.98	8.77	8.80	7.03
Level 3	9.85	9.52	11.97	10.01	8.56
Level 4	11.55	11.19	12.82	11.72	9.56
Level 5	13.20	13.03	16.60	13.36	—
Level 6	14.15	14.18	14.06	14.17	—
Level 7	16.35	16.18	16.92	16.35	—
Level 9	22.66	23.20	—	22.66	—
Not able to be leveled	11.41	10.71	—	11.72	9.72
Blue-collar occupations					
Level 1	13.26	13.11	15.02	13.69	7.65
Level 2	7.89	7.80	—	8.29	6.98
Level 3	9.83	9.49	14.60	10.05	7.63
Level 4	12.25	12.20	13.01	12.34	10.09
Level 5	14.07	14.07	14.02	14.13	9.68
Level 6	14.33	14.13	15.64	14.36	12.38
Level 7	15.50	15.44	16.17	15.52	—
Level 8	18.37	18.65	16.55	18.37	—
Level 9	20.75	20.75	—	20.75	—
Level 9	26.28	26.33	—	26.28	—
Not able to be leveled	11.34	11.34	—	—	—
Precision production, craft, and repair occupations	16.80	17.02	15.40	16.81	13.69
Level 2	10.14	10.14	—	—	—
Level 3	10.24	9.86	—	10.25	—
Level 4	12.71	12.80	—	12.71	—
Level 5	14.09	14.09	14.08	14.06	—
Level 6	15.61	15.51	16.17	15.64	—
Level 7	18.73	19.13	16.15	18.73	—
Level 9	26.77	26.83	—	26.77	—
Machine operators, assemblers, and inspectors	12.27	12.25	—	12.39	6.61
Level 1	7.66	7.66	—	7.78	—
Level 2	8.85	8.85	—	9.02	—
Level 3	12.44	12.44	—	12.50	—
Level 4	13.79	13.79	—	13.79	—
Level 5	13.61	13.61	—	13.61	—
Level 6	15.48	15.48	—	15.48	—
Level 7	16.62	16.64	—	16.62	—
Transportation and material moving occupations	15.09	15.02	15.27	15.28	11.47
Level 1	7.66	7.32	—	7.66	—
Level 2	13.06	9.07	14.60	13.22	—
Level 3	14.15	14.28	—	14.34	—
Level 4	15.71	15.86	—	15.96	—
Level 5	16.78	16.49	17.30	16.96	—
Level 7	18.53	—	—	18.53	—
Handlers, equipment cleaners, helpers, and laborers	9.69	9.58	12.30	10.55	7.28
Level 1	7.98	7.88	—	8.68	7.03
Level 2	10.39	10.39	—	10.81	8.02
Level 3	11.46	11.34	—	11.77	8.16
Level 4	11.90	11.74	—	11.97	—
Level 5	13.62	13.59	—	13.88	—
Service occupations					
Level 1	9.53	7.78	13.61	10.71	6.56
Level 2	6.50	6.13	8.74	7.43	5.79
Level 3	7.50	6.88	10.31	8.40	6.19
Level 3	7.96	7.61	10.00	8.21	7.10

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, Cleveland-Akron, OH, February 1998 — Continued

Occupational group ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Service occupations (-Continued)					
Level 4	\$10.64	\$10.26	\$11.29	\$10.77	\$9.68
Level 5	12.55	11.69	13.40	12.54	—
Level 6	15.26	13.81	—	15.27	—
Level 7	17.47	—	17.74	17.66	—
Level 8	18.73	17.16	19.20	18.75	—
Protective service occupations	14.04	8.43	16.03	14.27	10.97
Level 2	7.04	6.75	—	—	—
Level 4	10.21	—	—	10.23	—
Level 5	12.25	—	—	—	—
Level 6	16.02	—	—	16.02	—
Level 7	17.68	—	17.67	17.90	—
Food service occupations	6.67	6.35	9.69	7.99	5.49
Level 1	5.98	5.70	9.34	7.33	5.53
Level 2	4.82	4.35	—	5.55	4.43
Level 3	5.76	5.76	—	5.84	5.63
Level 4	9.00	8.72	—	9.05	8.87
Level 5	11.07	10.79	—	—	—
Health service occupations	8.85	8.51	11.30	8.95	8.13
Level 1	6.28	6.28	—	—	—
Level 2	7.89	7.89	—	8.05	—
Level 3	8.39	8.46	—	8.49	7.74
Level 4	8.92	8.73	—	8.56	—
Cleaning and building service occupations	9.15	8.60	10.40	9.74	7.64
Level 1	7.09	6.65	—	7.52	5.97
Level 2	10.27	10.20	10.38	11.26	8.77
Level 3	9.07	8.50	9.68	9.48	—
Level 4	10.35	—	—	10.34	—
Personal service occupations	11.41	9.98	13.76	13.13	6.99
Level 1	6.85	6.44	—	—	6.52
Level 2	5.30	5.25	—	—	3.42
Level 3	8.74	8.34	—	—	8.54
Level 4	14.57	14.66	—	15.04	—

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 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 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.

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 B-2. Mean hourly earnings¹ for selected occupations and levels², all industries, private industry, State and local government, full-time and part-time workers, Cleveland-Akron, OH, February 1998

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations:					
Professional specialty and technical occupations:					
Professional specialty occupations:					
Electrical and electronic engineers	\$29.49	\$29.49	—	\$29.49	—
Industrial engineers	24.65	24.65	—	24.65	—
Level 9	25.22	25.22	—	25.22	—
Mechanical engineers	24.09	24.09	—	24.09	—
Engineers, N.E.C.	27.70	27.70	—	27.70	—
Level 9	28.02	28.02	—	28.02	—
Level 11	32.68	32.68	—	32.68	—
Computer systems analysts and scientists	27.74	28.07	—	27.74	—
Level 9	23.89	23.85	—	23.89	—
Level 11	30.91	30.91	—	30.92	—
Level 12	33.56	33.56	—	33.56	—
Physicians	36.42	36.42	—	35.09	—
Registered nurses	19.83	19.83	\$19.94	19.68	\$20.46
Level 7	19.54	19.54	—	19.32	22.52
Level 8	19.48	19.81	—	19.27	20.34
Level 9	19.75	19.37	25.17	19.79	19.62
Level 11	23.83	23.83	—	—	—
Dietitians	15.25	15.25	—	—	—
Respiratory therapists	17.03	17.03	—	—	—
Physical therapists	26.64	26.64	—	—	—
Prekindergarten and kindergarten	15.15	—	—	16.43	—
Level 9	27.94	—	—	28.00	—
Elementary school teachers	29.42	—	32.22	29.91	15.80
Level 9	28.75	—	32.31	29.17	—
Secondary school teachers	30.23	20.57	33.02	30.00	—
Level 9	30.61	20.40	—	30.61	—
Teachers, special education	25.72	—	25.72	27.21	—
Level 9	25.55	—	25.55	27.16	—
Teachers, N.E.C.	26.65	18.99	27.90	28.96	18.62
Level 9	27.82	—	27.81	—	—
Substitute teachers	10.45	—	—	—	10.45
Vocational and educational counselors	21.08	—	21.37	25.83	—
Librarians	21.16	18.01	24.65	21.36	19.77
Level 9	23.87	—	—	23.36	—
Level 11	21.58	—	21.58	21.58	—
Social workers	15.87	14.36	16.61	15.96	—
Level 6	14.41	—	—	—	—
Level 7	16.44	14.03	—	16.44	—
Level 9	17.01	16.20	—	17.01	—
Designers	18.96	18.96	—	18.96	—
Editors and reporters	21.51	21.51	—	21.51	—
Technical occupations:					
Clinical laboratory technologists and technicians	—	—	—	—	16.62
Radiological technicians	16.58	16.58	—	—	13.94
Licensed practical nurses	13.58	13.32	—	13.59	13.56
Level 5	12.89	12.89	—	12.83	—
Level 6	13.51	13.51	—	13.44	13.72
Level 7	14.35	—	—	—	—
Health technologists and technicians, N.E.C.	14.92	15.73	—	15.40	13.21
Level 4	12.76	12.76	—	—	—
Level 6	12.45	14.52	—	—	—
Electrical and electronic technicians	17.94	18.31	—	17.93	—
Level 7	19.97	20.29	—	19.97	—
Engineering technicians, N.E.C.	12.77	12.71	—	12.77	—
Drafters	14.23	14.23	—	14.23	—
Level 5	14.40	14.40	—	14.40	—
Computer programmers	19.12	19.09	—	19.51	—
Technical and related occupations, N.E.C.	16.58	16.06	17.54	16.61	12.86
Level 8	20.52	—	18.34	20.53	—
Executive, administrative, and managerial occupations:					
Administrators and officials, public administration	23.90	—	23.90	26.72	—
Financial managers	31.64	31.65	—	31.90	—

See footnotes at end of table.

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, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations: (-Continued)					
Executive, administrative, and managerial occupations: (-Continued)					
Financial managers (-Continued)					
Level 9	\$20.54	\$20.54	—	\$20.73	—
Level 11	31.00	31.00	—	31.00	—
Level 12	44.84	45.11	—	44.84	—
Managers, marketing, advertising and public relations					
Level 12	35.13	35.90	—	35.13	—
Level 12	41.14	41.14	—	41.14	—
Administrators, education and related fields					
Level 12	35.00	25.23	\$38.24	35.00	—
Level 12	37.30	—	37.66	37.30	—
Managers, medicine and health					
Managers, service organizations, N.E.C.	30.68	30.68	—	30.68	—
Managers and administrators, N.E.C.	16.47	27.59	—	16.47	—
Level 8	32.90	33.78	22.42	32.91	—
Level 9	19.20	19.94	—	19.20	—
Level 10	22.95	23.45	—	22.95	—
Level 11	28.04	28.04	—	28.04	—
Level 12	32.18	32.18	—	32.18	—
Level 13	37.61	37.61	—	37.61	—
Level 14	53.28	54.67	—	53.28	—
Level 14	77.14	79.30	—	77.14	—
Not able to be leveled	38.71	40.26	—	38.71	—
Accountants and auditors					
Level 9	21.35	21.50	—	21.35	—
Level 9	24.67	—	—	24.67	—
Other financial officers					
Level 9	22.77	23.36	—	22.77	—
Level 9	22.36	22.36	—	22.36	—
Personnel, training, and labor relations specialists					
Level 7	17.86	17.43	18.91	18.15	—
Level 9	16.83	16.05	—	17.29	—
Level 9	21.54	21.54	—	21.62	—
Purchasing agents and buyers, N.E.C.					
Management related occupations, N.E.C.	20.69	20.69	—	20.69	—
Level 6	18.58	18.44	—	18.51	—
Level 9	15.57	15.57	—	15.57	—
Level 9	19.07	—	—	—	—
Sales occupations:					
Supervisors, sales occupations					
Level 8	16.99	17.01	—	17.63	—
Level 8	20.07	20.71	—	20.07	—
Advertising and related sales occupations					
Sales occupations, other business services	13.72	13.73	—	—	—
Sales representatives, mining, manufacturing, and wholesale	19.22	19.22	—	19.22	—
Sales workers, motor vehicles and boats	31.19	31.19	—	31.19	—
Sales workers, other commodities	15.80	15.80	—	15.80	—
Level 3	9.80	9.80	—	—	\$6.42
Level 3	6.90	6.90	—	—	—
Cashiers					
Level 1	7.94	7.81	—	11.29	6.46
Level 3	6.38	6.38	—	—	6.26
Level 3	7.06	6.63	—	7.32	6.72
Administrative support occupations, including clerical:					
Supervisors, general office					
Supervisors, distribution, scheduling, and adjusting clerks	16.05	15.25	—	16.05	—
Computer operators	16.89	16.89	—	17.08	—
Secretaries	13.47	—	—	13.47	—
Level 2	13.00	13.04	12.88	13.14	10.11
Level 3	8.23	—	—	—	—
Level 4	10.84	10.02	—	10.89	—
Level 5	11.56	11.31	12.09	11.67	10.31
Level 6	13.62	13.63	—	13.67	—
Level 7	14.03	14.14	—	14.03	—
Level 7	16.58	16.64	16.38	16.58	—
Receptionists					
Level 2	9.83	9.63	—	9.92	9.03
Level 3	9.03	9.03	—	9.09	—
Level 3	9.96	9.68	—	10.15	—
Information clerks, N.E.C.					
Level 3	10.10	10.10	—	—	—
Level 3	8.34	8.34	—	—	—

See footnotes at end of table.

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, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
White-collar occupations: (-Continued)					
Administrative support occupations, including clerical: (-Continued)					
Order clerks	\$11.60	\$11.60	—	\$11.60	—
Personnel clerks except payroll & timekeeping	14.09	13.35	—	14.36	—
Library clerks	9.05	8.95	\$9.07	10.95	\$7.41
Level 1	5.99	—	6.03	—	5.99
Level 2	9.55	—	—	—	—
Level 4	10.42	—	10.54	—	8.34
Records clerks, N.E.C.	10.55	10.63	—	10.59	—
Level 4	11.67	11.67	—	11.67	—
Bookkeepers, accounting and auditing clerks	11.17	10.94	12.86	11.26	—
Level 3	9.91	9.60	—	9.99	—
Level 4	10.71	10.71	—	10.71	—
Level 5	12.54	—	—	12.54	—
Payroll and timekeeping clerks	13.40	12.33	—	13.55	—
Billing clerks	10.07	10.07	—	10.33	—
Telephone operators	9.20	9.20	—	—	8.51
Level 2	9.19	9.19	—	—	—
Mail clerks except postal service	7.71	7.71	—	7.74	—
Level 2	7.72	7.72	—	7.72	—
Dispatchers	9.44	—	—	10.08	—
Production coordinators	16.69	16.69	—	16.69	—
Traffic, shipping and receiving clerks	12.03	12.03	—	12.09	—
Level 3	11.38	11.38	—	11.52	—
Stock and inventory clerks	—	—	—	11.31	—
Insurance adjusters, examiners, & investigators ..	12.64	12.64	—	12.64	—
Investigators and adjusters except insurance	12.08	12.06	—	12.80	9.44
Level 3	9.48	—	—	—	—
Level 4	10.22	10.22	—	—	—
Bill and account collectors	11.23	11.23	—	11.23	—
General office clerks	10.89	10.10	12.98	11.06	8.20
Level 2	7.94	8.15	—	8.03	—
Level 3	9.12	9.10	—	9.10	9.27
Level 4	11.84	12.07	—	11.84	—
Level 5	14.14	11.93	—	14.14	—
Bank tellers	8.76	8.76	—	8.94	—
Data entry keyers	9.87	9.11	—	9.93	8.14
Level 2	9.08	9.08	—	—	—
Teachers' aides	11.85	—	11.88	—	8.84
Administrative support occupations, N.E.C.	12.29	12.61	9.43	12.80	9.48
Level 2	9.41	9.83	—	—	9.19
Level 3	10.89	10.63	—	10.93	—
Level 4	13.01	13.01	—	13.20	—
Level 5	12.67	12.67	—	13.62	—
Level 6	12.21	—	—	—	—
Level 7	15.25	15.25	—	15.25	—
Not able to be leveled	10.56	—	—	—	—
Professional occupations, N.E.C.	15.41	15.40	—	15.22	—
Not able to be leveled	15.34	15.34	—	—	—
Blue-collar occupations:					
Precision production, craft, and repair occupations:					
Automobile mechanics	15.84	15.82	—	15.84	—
Level 7	16.04	—	—	16.04	—
Bus, truck, and stationary engine mechanics	16.88	17.73	—	16.88	—
Industrial machinery repairers	17.35	17.36	—	17.35	—
Level 6	14.05	14.05	—	14.05	—
Level 7	20.77	20.82	—	20.77	—
Machinery maintenance occupations	11.21	11.05	—	11.23	—
Millwrights	21.63	21.63	—	21.63	—
Level 7	21.63	21.63	—	21.63	—
Mechanics and repairers, N.E.C.	16.33	16.13	16.91	16.50	—
Level 5	12.21	12.67	—	12.68	—
Level 6	17.28	17.97	—	17.28	—

See footnotes at end of table.

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, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Blue-collar occupations: (-Continued)					
Precision production, craft, and repair occupations: (-Continued)					
Mechanics and repairers, N.E.C. (-Continued)					
Level 7	\$18.97	\$18.54	—	\$18.97	—
Supervisors, construction trades, N.E.C.	24.41	—	—	24.41	—
Carpenters	18.98	18.98	—	18.98	—
Electricians	20.42	21.23	—	20.42	—
Level 7	20.45	21.26	—	20.45	—
Plumbers, pipefitters and steamfitters	17.90	20.26	—	17.90	—
Level 7	18.76	22.18	—	18.76	—
Construction trades, N.E.C.	14.61	—	—	14.76	—
Supervisors, production occupations	17.99	17.99	—	17.99	—
Level 7	16.74	16.74	—	16.74	—
Level 9	23.61	23.61	—	23.61	—
Tool and die makers	19.03	19.03	—	19.03	—
Level 7	19.03	19.03	—	19.03	—
Precision assemblers, metal	12.26	12.26	—	12.26	—
Machinists	14.89	14.89	—	14.89	—
Level 7	15.56	15.56	—	15.56	—
Miscellaneous precision workers, N.E.C.	15.53	15.53	—	15.53	—
Inspectors, testers, and graders	16.09	15.81	—	16.09	—
Machine operators, assemblers, and inspectors:					
Lathe and turning machine operators	14.59	14.59	—	14.59	—
Punching and stamping press operators	11.66	11.66	—	11.66	—
Grinding, abrading, buffing, and polishing machine operators	12.76	12.76	—	12.76	—
Level 4	13.63	13.63	—	13.63	—
Fabricating machine operators, N.E.C.	14.01	14.01	—	14.01	—
Level 3	12.90	12.90	—	12.90	—
Molding and casting machine operators	10.41	10.41	—	10.51	—
Level 4	10.72	10.72	—	10.72	—
Printing press operators	14.51	14.51	—	14.51	—
Textile sewing machine operators	8.76	8.76	—	8.78	—
Laundering and dry cleaning machine operators	7.63	7.63	—	—	—
Packaging and filling machine operators	10.45	10.45	—	10.45	—
Extruding and forming machine operators	10.88	10.88	—	10.88	—
Mixing and blending machine operators	15.26	15.26	—	15.26	—
Painting and paint spraying machine operators ...	13.16	13.16	—	13.16	—
Level 3	12.47	12.47	—	12.47	—
Slicing and cutting machine operators	11.01	11.01	—	11.01	—
Miscellaneous machine operators, N.E.C.	12.22	12.14	—	12.26	—
Level 2	8.54	8.54	—	8.54	—
Level 4	12.95	12.95	—	12.95	—
Welders and cutters	15.92	15.92	—	15.92	—
Assemblers	11.72	11.72	—	12.19	\$6.35
Level 1	7.23	7.23	—	7.40	—
Level 2	9.42	9.42	—	10.77	—
Level 3	15.31	15.31	—	15.46	—
Level 4	10.86	10.86	—	10.86	—
Miscellaneous hand working occupations, N.E.C.	12.37	12.37	—	12.37	—
Production inspectors, checkers and examiners ...	12.31	12.31	—	12.31	—
Level 3	11.34	11.34	—	11.34	—
Level 5	14.45	14.45	—	14.45	—
Production testers	11.03	11.03	—	11.03	—
Transportation and material moving occupations:					
Truck drivers	15.96	16.01	—	16.19	—
Level 3	14.06	—	—	14.06	—
Level 4	16.79	16.90	—	17.10	—
Level 5	16.11	16.27	—	16.40	—
Bus drivers	14.55	—	\$14.60	15.21	12.63
Level 2	14.60	—	14.60	—	—
Crane and tower operators	18.58	18.58	—	18.58	—
Industrial truck and tractor equipment operators ...	12.57	12.57	—	12.61	—

See footnotes at end of table.

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, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Blue-collar occupations: (-Continued)					
Transportation and material moving occupations:					
(-Continued)					
Industrial truck and tractor equipment operators					
(-Continued)					
Level 3	\$14.44	\$14.44	—	\$14.80	—
Level 4	12.65	12.65	—	12.65	—
Handlers, equipment cleaners, helpers, and laborers:					
Groundskeepers and gardeners except farm	9.33	9.05	—	9.67	—
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	13.50	13.50	—	13.94	—
Construction laborers	16.11	—	—	16.11	—
Production helpers	8.67	8.67	—	8.95	—
Stock handlers and baggers	8.55	8.52	—	10.77	\$6.30
Level 1	7.16	7.16	—	9.48	6.05
Level 2	11.47	11.47	—	11.85	—
Level 3	10.91	11.05	—	11.63	—
Machine feeders and offbearers	8.18	8.18	—	8.34	—
Level 1	6.66	6.66	—	6.81	—
Freight, stock, and material handlers, N.E.C.	10.11	10.11	—	10.27	9.76
Level 1	8.81	8.81	—	—	—
Level 2	10.17	10.17	—	10.67	—
Level 3	11.27	11.27	—	11.27	—
Hand packers and packagers	9.37	9.37	—	9.65	—
Level 1	7.80	7.80	—	—	—
Laborers except construction, N.E.C.	9.73	9.28	—	10.16	6.65
Level 1	8.00	6.93	—	8.04	—
Level 2	11.04	11.04	—	—	—
Service occupations:					
Protective service occupations:					
Firefighting occupations	15.41	—	\$15.41	15.47	—
Police and detectives, public service	18.21	—	18.21	18.44	—
Level 7	18.21	—	18.21	—	—
Guards and police except public service	8.85	8.46	—	8.56	10.32
Food service occupations:					
Supervisors, food preparation and service occupations	11.89	12.07	—	12.34	—
Level 4	9.59	—	—	—	—
Bartenders	4.49	4.49	—	—	—
Waiters and waitresses	3.01	3.01	—	3.27	2.78
Level 1	3.73	3.73	—	—	3.65
Level 2	2.33	2.33	—	—	2.13
Level 3	2.94	2.94	—	—	—
Cooks	8.39	8.00	—	8.59	8.12
Level 3	7.56	7.56	—	8.18	—
Food counter, fountain, and related occupations	5.99	—	—	—	—
Kitchen workers, food preparation	6.61	6.59	—	—	6.27
Level 1	6.08	6.08	—	—	5.95
Level 3	7.41	7.41	—	—	7.39
Waiters/Waitresses' assistants	3.02	3.02	—	—	3.12
Food preparation occupations, N.E.C.	7.38	6.84	9.73	8.01	6.84
Level 1	7.43	6.94	—	8.30	6.54
Level 2	7.27	6.60	—	7.63	6.99
Health service occupations:					
Health aides, except nursing	9.89	8.97	12.64	10.06	8.82
Level 3	8.54	8.55	—	8.58	—
Level 4	10.49	10.16	—	9.81	—
Nursing aides, orderlies and attendants	8.23	8.28	—	8.30	7.72
Level 2	8.18	8.18	—	8.34	—
Level 3	8.35	8.43	—	8.46	7.72
Level 4	7.87	7.87	—	—	—
Cleaning and building service occupations:					
Supervisors, cleaning & building service workers	11.88	11.00	—	11.88	—

See footnotes at end of table.

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, Cleveland-Akron, OH, February 1998 — Continued

Occupation ³ and level	All workers ⁴			All industries	
	All industries	Private industry	State and local government	Full-time workers	Part-time workers
Service occupations: (-Continued)					
Cleaning and building service occupations: (-Continued)					
Maids and housemen	\$7.15	\$7.15	—	\$7.13	—
Level 1	7.44	7.44	—	7.48	—
Janitors and cleaners	9.17	8.63	\$10.16	9.92	\$7.65
Level 1	7.04	6.51	—	7.52	5.81
Level 2	10.67	10.90	10.38	12.17	8.77
Level 3	9.56	9.37	9.68	10.19	—
Level 4	12.25	—	—	—	—
Personal service occupations:					
Early childhood teachers' assistants	7.80	7.09	—	—	—
Service occupations, N.E.C.	9.70	7.73	—	11.49	6.16
Level 1	7.42	—	—	—	—

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 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 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.

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 C-1. Mean hourly earnings¹ by occupational group and selected characteristics, all industries, Cleveland-Akron, OH, February 1998

Occupational group ²	Full-time workers ³	Part-time workers ³	Union ⁴	Nonunion ⁴	Time ⁵	Incentive ⁵
All occupations	\$16.76	\$8.83	\$16.83	\$15.42	\$15.61	\$19.63
All occupations excluding sales	16.74	9.20	17.00	15.48	15.80	19.58
White-collar occupations	19.96	10.84	20.50	18.68	18.76	22.21
White-collar excluding sales	20.22	12.62	21.45	19.21	19.39	26.54
Professional specialty and technical occupations	22.73	17.38	26.54	21.03	22.26	—
Professional specialty occupations	24.50	18.28	27.80	22.59	23.91	—
Technical occupations	16.91	13.86	16.30	16.71	16.49	—
Executive, administrative, and managerial occupations ...	27.80	14.43	21.16	27.76	26.83	41.63
Sales occupations	17.18	6.64	9.84	14.59	11.28	19.69
Administrative support including clerical occupations	12.05	8.03	12.21	11.45	11.56	—
Blue-collar occupations	13.69	7.65	15.82	11.26	13.19	14.80
Precision production, craft, and repair occupations	16.81	13.69	17.97	15.63	16.71	19.22
Machine operators, assemblers, and inspectors	12.39	6.61	15.68	10.42	12.23	12.78
Transportation and material moving occupations	15.28	11.47	16.04	12.95	14.97	17.82
Handlers, equipment cleaners, helpers, and laborers	10.55	7.28	12.31	8.07	9.62	—
Service occupations	10.71	6.56	13.45	7.60	9.52	—

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 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.

⁵ Time workers' wages are based solely on an 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 bonuses.

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 C-2. Mean hourly earnings¹ by occupational group and industry division, private industry, all workers², Cleveland-Akron, OH, February 1998

Occupational group ³	All private industries	Goods-producing industries ⁴				Service-producing industries ⁵				
		Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services
All occupations	\$15.17	\$17.00	—	—	\$16.92	—	—	—	—	\$14.38
All occupations excluding sales	15.26	16.84	—	—	16.75	—	—	—	—	14.34
White-collar occupations	18.31	22.49	—	—	22.63	—	—	—	—	17.22
White-collar excluding sales	18.99	22.32	—	—	22.45	—	—	—	—	17.31
Professional specialty and technical occupations	21.00	22.93	—	—	22.99	—	—	—	—	19.51
Professional specialty occupations	22.72	27.27	—	—	27.27	—	—	—	—	21.12
Technical occupations	16.72	15.96	—	—	15.96	—	—	—	—	14.63
Executive, administrative, and managerial occupations	28.69	31.85	—	—	32.05	—	—	—	—	25.94
Sales occupations	14.04	25.95	—	—	25.95	—	—	—	—	15.43
Administrative support, including clerical occupations	11.34	13.36	—	—	13.47	—	—	—	—	10.34
Blue-collar occupations	13.11	13.84	—	—	13.56	—	—	—	—	8.55
Precision production, craft, and repair occupations	17.02	18.04	—	—	17.52	—	—	—	—	14.78
Machine operators, assemblers, and inspectors	12.25	12.49	—	—	12.49	—	—	—	—	6.73
Transportation and material moving occupations	15.02	13.80	—	—	13.66	—	—	—	—	8.39
Handlers, equipment cleaners, helpers, and laborers	9.58	11.39	—	—	11.07	—	—	—	—	6.72
Service occupations	7.78	13.03	—	—	13.04	—	—	—	—	7.96

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 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.

⁴ 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.

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 C-3. Mean hourly earnings¹ by occupational group and establishment employment size, private industry, all workers², Cleveland-Akron, OH, February 1998

Occupational group ³	All private industry workers	50 - 99 workers	100 workers or more		
			Total	100 - 499 workers	500 workers or more
All occupations	\$15.17	\$13.24	\$15.72	\$13.89	\$17.85
All occupations excluding sales	15.26	12.90	15.87	13.99	17.95
White-collar occupations	18.31	16.85	18.66	17.44	19.73
White-collar excluding sales	18.99	17.33	19.31	18.43	19.97
Professional specialty and technical occupations	21.00	16.97	21.45	19.49	22.49
Professional specialty occupations	22.72	16.78	23.41	22.60	23.75
Technical occupations	16.72	17.51	16.65	14.63	18.41
Executive, administrative, and managerial occupations ...	28.69	32.37	27.87	28.37	27.34
Sales occupations	14.04	15.60	13.04	12.74	14.14
Administrative support, including clerical occupations	11.34	10.36	11.61	11.08	12.10
Blue-collar occupations	13.11	11.86	13.49	11.86	16.05
Precision production, craft, and repair occupations	17.02	14.95	17.89	16.01	19.89
Machine operators, assemblers, and inspectors	12.25	9.88	12.81	11.28	16.07
Transportation and material moving occupations	15.02	14.13	15.31	12.72	17.96
Handlers, equipment cleaners, helpers, and laborers	9.58	9.63	9.57	9.26	10.04
Service occupations	7.78	6.25	8.43	7.57	10.07

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 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 C-4. Number of workers¹ represented by occupational group, Cleveland-Akron, OH, February 1998

Occupational group ²	All workers		
	All industries	Private industry	State and local government
All occupations	874,466	704,198	170,268
All occupations excluding sales	818,631	648,718	169,913
White-collar occupations	472,249	361,336	110,913
White-collar excluding sales	416,414	305,855	110,558
Professional specialty and technical occupations	194,554	126,614	67,940
Professional specialty occupations	154,464	90,982	63,482
Technical occupations	40,090	35,632	4,458
Executive, administrative, and managerial occupations ...	76,500	60,910	15,589
Sales occupations	55,835	55,480	—
Administrative support including clerical occupations	145,360	118,331	27,029
Blue-collar occupations	263,742	243,383	20,359
Precision production, craft, and repair occupations	64,272	55,830	8,442
Machine operators, assemblers, and inspectors	103,264	102,933	—
Transportation and material moving occupations	32,451	23,021	9,430
Handlers, equipment cleaners, helpers, and laborers	63,756	61,599	2,157
Service occupations	138,475	99,480	38,996

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.

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.

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 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. While 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, which was based on the type of data to be produced, had to be developed before data collection could begin.

Survey scope

This survey of the Cleveland-Akron, OH, Consolidated Metropolitan Statistical Area 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 Cleveland-Akron, OH, CMSA includes Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit Counties, OH.

Sampling frame

The list of establishments from which the survey sample was selected (sampling frame) was developed from the State unemployment insurance reports for the Cleveland-Akron, OH, Consolidated Metropolitan Statistical Area. The reference month for the public sector is June 1994. 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 reference month for the private sector is June 1996. 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.

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 establishment.

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:

<i>Number of employees</i>	<i>Number of selected jobs</i>
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 MOG's:

- 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

A complete list of all individual occupations, classified by the MOG to which they belong, is contained in appendix B.

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 was collected from October 1997 through May 1998. The average payroll reference month was February 1998. For each establishment in the survey, the data reflect the establishment's practices on the day of collection.

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/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 establishment/occupations into the various data series. Of the establishments surveyed, 28.2 percent (representing 236,896 employees) 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 which were additionally defined by major occupation group and job level.

Establishments which were determined to be out of business or outside the scope of the survey (3.5 percent of the total sample) 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.

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, Cleveland-Akron, OH, February 1998

Industry	Number of establishments represented	Number of establishments studied				
		Total studied	50 - 99 workers	100 workers or more		
				Total	100 - 499 workers	500 workers or more
All industries	4,447	382	105	277	168	109
Private industry	4,114	335	101	234	150	84
Goods-producing industries	1,337	120	29	91	59	32
Mining	4	2	1	1	1	-
Construction	149	9	7	2	2	-
Manufacturing	1,184	109	21	88	56	32
Service-producing industries	2,776	215	72	143	91	52
Transportation and public utilities	297	16	5	11	5	6
Wholesale and retail trade	1,224	59	30	29	25	4
Finance, insurance and real estate	115	15	3	12	4	8
Services	1,141	125	34	91	57	34
State and local government	334	47	4	43	18	25

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, Cleveland-Akron, OH, February 1998

(in percent)

Occupation ³	All industries	Private industry	State and local government
All occupations	1.7	2.0	2.6
All occupations excluding sales	1.7	2.0	2.6
White-collar occupations	2.0	2.5	3.1
White-collar occupations excluding sales	2.1	2.6	3.1
Professional specialty and technical occupations	2.1	2.6	3.7
Professional specialty occupations	2.2	2.7	3.9
Engineers, architects, and surveyors	2.8	2.9	—
Electrical and electronic engineers	4.1	4.1	—
Industrial engineers	4.6	4.6	—
Mechanical engineers	7.0	7.0	—
Engineers, N.E.C.	3.9	3.9	—
Mathematical and computer scientists	4.2	4.4	—
Computer systems analysts and scientists	4.6	4.9	—
Natural scientists	13.9	—	—
Health related occupations	4.2	4.4	13.2
Physicians	27.5	27.5	—
Registered nurses	1.3	1.2	12.8
Dietitians	8.2	8.2	—
Respiratory therapists	1.5	1.5	—
Physical therapists	4.4	4.4	—
Teachers, college and university	5.8	9.6	—
Teachers, except college and university	4.7	12.4	3.5
Prekindergarten and kindergarten	30.2	—	—
Elementary school teachers	4.0	—	2.8
Secondary school teachers	4.6	6.5	2.3
Teachers, special education	7.2	—	7.2
Teachers, N.E.C.	8.3	12.6	8.4
Substitute teachers	12.9	—	—
Vocational and educational counselors	17.2	—	17.8
Librarians, archivists, and curators	9.7	10.1	12.2
Librarians	9.7	10.1	12.2
Social scientists and urban planners	8.2	—	—
Social, recreation, and religious workers	6.2	4.8	8.3
Social workers	6.3	4.8	8.4
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	5.1	5.2	—
Designers	5.6	5.6	—
Editors and reporters	17.8	17.8	—
Professional occupations, N.E.C.	6.3	6.4	—
Technical occupations	4.7	5.2	7.5
Radiological technicians	10.0	10.0	—
Licensed practical nurses	2.1	1.1	—
Health technologists and technicians, N.E.C.	8.7	7.4	—
Electrical and electronic technicians	8.9	9.2	—
Engineering technicians, N.E.C.	13.7	14.0	—
Drafters	6.8	6.8	—
Computer programmers	9.7	9.9	—
Technical and related occupations, N.E.C.	5.6	8.7	5.1
Executive, administrative, and managerial occupations ...	3.3	3.6	7.8
Executives, administrators, and managers	4.3	4.6	10.5
Administrators and officials, public administration	22.7	—	22.7
Financial managers	9.1	9.1	—
Managers., marketing, advertising and public relations	10.1	10.2	—
Administrators, education and related fields	5.8	17.2	3.1
Managers, medicine and health	14.4	14.4	—
Managers, service organizations, N.E.C.	18.9	16.9	—
Managers and administrators, N.E.C.	6.8	7.1	15.7
Management related occupations	3.5	4.2	4.1
Accountants and auditors	8.0	8.7	—
Other financial officers	9.7	10.4	—

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, Cleveland-Akron, OH, February 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
White-collar occupations (-Continued)			
Executive, administrative, and managerial occupations (-Continued)			
Management related occupations (-Continued)			
Personnel, training, and labor relations specialists	3.1	3.6	4.3
Purchasing agents and buyers, N.E.C.	7.7	7.7	-
Management related occupations, N.E.C.	5.0	6.1	-
Sales occupations	6.6	6.6	-
Supervisors, sales occupations	11.2	11.5	-
Advertising and related sales occupations	5.8	5.9	-
Sales occupations, other business services	11.7	11.7	-
Sales representatives, mining, manufacturing, and wholesale	11.3	11.3	-
Sales workers, motor vehicles and boats	8.8	8.8	-
Sales workers, other commodities	13.2	13.2	-
Cashiers	12.4	12.6	-
Administrative support occupations, including clerical	2.2	2.5	3.1
Supervisors, general office	8.7	11.5	-
Supervisors, distribution, scheduling, and adjusting clerks	14.4	14.6	-
Computer operators	7.2	-	-
Secretaries	2.6	3.0	5.3
Receptionists	3.2	3.0	-
Information clerks, N.E.C.	10.6	10.6	-
Order clerks	9.4	9.4	-
Personnel clerks except payroll & timekeeping	10.7	14.9	-
Library clerks	5.4	7.9	6.4
Records clerks, N.E.C.	6.2	6.2	-
Bookkeepers, accounting and auditing clerks	4.1	4.6	9.2
Payroll and timekeeping clerks	6.6	6.1	-
Billing clerks	9.3	9.3	-
Telephone operators	3.6	3.6	-
Mail clerks except postal service	4.9	4.9	-
Dispatchers	15.5	-	-
Production coordinators	4.7	4.7	-
Traffic, shipping and receiving clerks	6.2	6.2	-
Insurance adjusters, examiners, & investigators ..	4.7	4.7	-
Investigators and adjusters except insurance	8.0	8.4	-
Bill and account collectors	5.7	5.7	-
General office clerks	4.3	3.7	9.1
Bank tellers	4.2	4.2	-
Data entry keyers	6.8	7.7	-
Teachers' aides	10.9	-	10.8
Administrative support occupations, N.E.C.	4.5	4.4	11.5
Blue-collar occupations			
Precision production, craft, and repair occupations	1.8	2.0	3.3
Automobile mechanics	2.0	2.3	2.8
Bus, truck, and stationary engine mechanics	3.6	5.6	-
Industrial machinery repairers	6.3	7.5	-
Machinery maintenance occupations	4.8	4.9	-
Millwrights	12.1	12.7	-
Mechanics and repairers, N.E.C.	4.0	4.0	-
Supervisors, construction trades, N.E.C.	3.8	4.3	7.4
Carpenters	9.9	-	-
Electricians	8.1	8.1	-
Plumbers, pipefitters and steamfitters	4.4	4.2	-
Construction trades, N.E.C.	9.1	8.9	-
Supervisors, production occupations	8.6	-	-
Tool and die makers	5.8	5.8	-
Precision assemblers, metal	6.6	6.6	-
Machinists	9.1	9.1	-
Miscellaneous precision workers, N.E.C.	3.5	3.5	-
	6.1	6.1	-

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, Cleveland-Akron, OH, February 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Blue-collar occupations (-Continued)			
Precision production, craft, and repair occupations (-Continued)			
Inspectors, testers, and graders	8.8	10.1	—
Machine operators, assemblers, and inspectors	2.7	2.7	—
Lathe and turning machine operators	7.8	7.8	—
Punching and stamping press operators	19.9	19.9	—
Grinding, abrading, buffing, and polishing machine operators	6.6	6.6	—
Fabricating machine operators, N.E.C.	7.3	7.3	—
Molding and casting machine operators	5.5	5.5	—
Printing press operators	5.8	5.8	—
Textile sewing machine operators	5.0	5.0	—
Laundering and dry cleaning machine operators	4.5	4.5	—
Packaging and filling machine operators	9.6	9.6	—
Extruding and forming machine operators	6.3	6.3	—
Mixing and blending machine operators	12.4	12.4	—
Painting and paint spraying machine operators ...	7.4	7.4	—
Slicing and cutting machine operators	12.6	12.6	—
Miscellaneous machine operators, N.E.C.	4.8	4.8	—
Welders and cutters	8.2	8.2	—
Assemblers	5.6	5.6	—
Miscellaneous hand working occupations, N.E.C.	10.8	10.8	—
Production inspectors, checkers and examiners ..	6.6	6.6	—
Production testers	17.8	17.8	—
Transportation and material moving occupations	3.4	3.9	6.6
Truck drivers	4.4	4.8	—
Bus drivers	2.3	—	2.3
Crane and tower operators	3.6	3.6	—
Industrial truck and tractor equipment operators ..	5.7	5.7	—
Handlers, equipment cleaners, helpers, and laborers	3.1	3.1	4.4
Groundskeepers and gardeners except farm	9.6	11.4	—
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	10.6	10.6	—
Construction laborers	8.7	—	—
Production helpers	10.8	10.8	—
Stock handlers and baggers	5.3	5.4	—
Machine feeders and offbearers	6.9	6.9	—
Freight, stock, and material handlers, N.E.C.	5.5	5.5	—
Hand packers and packagers	8.0	8.0	—
Laborers except construction, N.E.C.	10.4	12.5	—
Service occupations	3.6	2.9	5.4
Protective service occupations	7.9	10.9	6.0
Firefighting occupations	7.3	—	7.3
Police and detectives, public service	1.5	—	1.5
Guards and police except public service	11.7	11.7	—
Food service occupations	4.6	4.8	4.4
Supervisors, food preparation and service occupations	6.1	6.9	—
Bartenders	20.6	20.6	—
Waiters and waitresses	10.6	10.6	—
Cooks	6.0	5.9	—
Food counter, fountain, and related occupations	2.9	—	—
Kitchen workers, food preparation	5.8	5.9	—
Waiters/Waitresses' assistants	15.1	15.1	—
Food preparation occupations, N.E.C.	4.1	2.7	3.1
Health service occupations	2.7	2.3	8.8
Health aides, except nursing	5.3	5.4	2.7
Nursing aides, orderlies and attendants	2.4	2.4	—
Cleaning and building service occupations	5.4	6.4	6.0
Supervisors, cleaning & building service workers	12.2	14.3	—
Maids and housemen	4.6	4.6	—
Janitors and cleaners	6.4	8.0	6.3

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, Cleveland-Akron, OH, February 1998 — Continued

(in percent)

Occupation ³	All industries	Private industry	State and local government
Service occupations (-Continued)			
Personal service occupations	12.1	10.2	15.5
Early childhood teachers' assistants	8.9	7.2	—
Service occupations, N.E.C.	15.8	9.6	—

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 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."

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Cleveland-Akron, OH, February 1998

Occupation ¹	All workers	Full-time workers	Part-time workers
All occupations	5	6	3
All occupations excluding sales	5	6	3
White-collar occupations	7	7	5
White-collar occupations excluding sales	7	7	5
Professional specialty and technical occupations	8	8	7
Professional specialty occupations	8	9	7
Engineers, architects, and surveyors	10	10	—
Electrical and electronic engineers	11	11	—
Industrial engineers	9	9	—
Mechanical engineers	10	10	—
Engineers, N.E.C.	9	9	—
Mathematical and computer scientists	10	10	—
Computer systems analysts and scientists	10	10	—
Natural scientists	10	10	—
Health related occupations	8	8	9
Physicians	13	13	—
Registered nurses	8	8	8
Dietitians	8	—	—
Respiratory therapists	6	—	—
Physical therapists	10	—	—
Teachers, college and university	11	11	—
Teachers, except college and university	8	8	7
Prekindergarten and kindergarten	7	7	—
Elementary school teachers	8	8	8
Secondary school teachers	8	9	—
Teachers, special education	9	9	—
Teachers, N.E.C.	8	8	7
Substitute teachers	6	—	6
Vocational and educational counselors	6	8	—
Librarians, archivists, and curators	9	9	8
Librarians	9	9	8
Social scientists and urban planners	9	9	—
Social, recreation, and religious workers	7	7	—
Social workers	7	7	—
Lawyers and judges	—	—	—
Writers, authors, entertainers, athletes, and professionals, N.E.C.	7	7	—
Designers	7	7	—
Editors and reporters	9	9	—
Professional occupations, N.E.C.	7	7	—
Technical occupations	6	6	6
Clinical laboratory technologists and technicians	—	—	7
Radiological technicians	7	—	6
Licensed practical nurses	6	6	6
Health technologists and technicians, N.E.C.	6	6	6
Electrical and electronic technicians	7	7	—
Engineering technicians, N.E.C.	5	5	—
Drafters	5	5	—
Computer programmers	7	7	—
Technical and related occupations, N.E.C.	6	7	6
Executive, administrative, and managerial occupations	9	10	6
Executives, administrators, and managers	10	11	—
Administrators and officials, public administration	9	10	—
Financial managers	11	11	—
Managers., marketing, advertising and public relations	11	11	—
Administrators, education and related fields	11	11	—
Managers, medicine and health	10	10	—
Managers, service organizations, N.E.C.	8	8	—
Managers and administrators, N.E.C.	11	11	—
Management related occupations	8	8	7
Accountants and auditors	7	7	—
Other financial officers	8	8	—
Personnel, training, and labor relations specialists	7	7	—
Purchasing agents and buyers, N.E.C.	8	8	—
Management related occupations, N.E.C.	8	8	—
Sales occupations	4	6	2
Supervisors, sales occupations	6	7	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Cleveland-Akron, OH, February 1998 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
White-collar occupations (-Continued)			
Sales occupations (-Continued)			
Advertising and related sales occupations	6	—	—
Sales occupations, other business services	6	6	—
Sales representatives, mining, manufacturing, and wholesale	7	7	—
Sales workers, motor vehicles and boats	6	6	—
Sales workers, other commodities	4	—	3
Cashiers	2	4	2
Administrative support occupations, including clerical	4	4	3
Supervisors, general office	6	6	—
Supervisors, distribution, scheduling, and adjusting clerks	7	7	—
Computer operators	5	5	—
Secretaries	5	5	4
Receptionists	3	2	3
Information clerks, N.E.C.	4	—	—
Order clerks	4	4	—
Personnel clerks except payroll & timekeeping	5	5	—
Library clerks	2	4	2
Records clerks, N.E.C.	3	3	—
Bookkeepers, accounting and auditing clerks	4	4	—
Payroll and timekeeping clerks	5	5	—
Billing clerks	4	4	—
Telephone operators	3	—	3
Mail clerks except postal service	2	2	—
Dispatchers	3	4	—
Production coordinators	6	6	—
Traffic, shipping and receiving clerks	4	4	—
Stock and inventory clerks	—	4	—
Insurance adjusters, examiners, & investigators	5	5	—
Investigators and adjusters except insurance	4	5	3
Bill and account collectors	4	4	—
General office clerks	4	4	2
Bank tellers	4	4	—
Data entry keyers	3	3	2
Teachers' aides	3	—	2
Administrative support occupations, N.E.C.	4	5	3
Blue-collar occupations			
Precision production, craft, and repair occupations	4	4	2
Automobile mechanics	6	6	4
Bus, truck, and stationary engine mechanics	7	7	—
Industrial machinery repairers	6	6	—
Machinery maintenance occupations	6	6	—
Millwrights	4	4	—
Mechanics and repairers, N.E.C.	7	7	—
Supervisors, construction trades, N.E.C.	6	6	—
Carpenters	7	7	—
Electricians	6	6	—
Plumbers, pipefitters and steamfitters	7	7	—
Construction trades, N.E.C.	4	4	—
Supervisors, production occupations	7	7	—
Tool and die makers	7	7	—
Precision assemblers, metal	6	6	—
Machinists	6	6	—
Miscellaneous precision workers, N.E.C.	6	6	—
Inspectors, testers, and graders	5	5	—
Machine operators, assemblers, and inspectors	4	4	2
Lathe and turning machine operators	5	5	—
Punching and stamping press operators	3	3	—
Grinding, abrading, buffing, and polishing machine operators	3	3	—
Fabricating machine operators, N.E.C.	4	4	—
Molding and casting machine operators	3	3	—
Printing press operators	6	6	—
Textile sewing machine operators	3	2	—
Laundry and dry cleaning machine operators	2	—	—

See footnotes at end of table.

Appendix table 3. Average work levels for selected occupations, all workers, full-time and part-time workers, Cleveland-Akron, OH, February 1998 — Continued

Occupation ¹	All workers	Full-time workers	Part-time workers
Blue-collar occupations (-Continued)			
Machine operators, assemblers, and inspectors (-Continued)			
Packaging and filling machine operators	3	3	—
Extruding and forming machine operators	3	3	—
Mixing and blending machine operators	4	4	—
Painting and paint spraying machine operators	3	3	—
Slicing and cutting machine operators	3	3	—
Miscellaneous machine operators, N.E.C.	4	4	—
Welders and cutters	5	5	—
Assemblers	3	3	2
Miscellaneous hand working occupations, N.E.C.	5	5	—
Production inspectors, checkers and examiners	4	4	—
Production testers	4	4	—
Transportation and material moving occupations	4	4	3
Truck drivers	4	4	—
Bus drivers	3	2	3
Crane and tower operators	5	5	—
Industrial truck and tractor equipment operators	3	3	—
Handlers, equipment cleaners, helpers, and laborers	2	2	2
Groundskeepers and gardeners except farm	2	3	—
Supervisors, handlers, equipment cleaners, and laborers, N.E.C.	6	6	—
Construction laborers	3	3	—
Production helpers	2	2	—
Stock handlers and baggers	2	2	1
Machine feeders and offbearers	2	2	—
Freight, stock, and material handlers, N.E.C.	2	3	1
Hand packers and packagers	2	2	—
Laborers except construction, N.E.C.	2	2	2
Service occupations	3	4	2
Protective service occupations	5	6	3
Firefighting occupations	7	7	—
Police and detectives, public service	7	7	—
Guards and police except public service	3	3	3
Food service occupations	2	3	2
Supervisors, food preparation and service occupations	5	6	—
Bartenders	2	—	—
Waiters and waitresses	2	2	2
Cooks	3	4	3
Food counter, fountain, and related occupations	2	—	—
Kitchen workers, food preparation	2	—	2
Waiters/Waitresses' assistants	2	—	2
Food preparation occupations, N.E.C.	2	2	2
Health service occupations	3	3	3
Health aides, except nursing	4	4	3
Nursing aides, orderlies and attendants	3	3	3
Cleaning and building service occupations	2	2	2
Supervisors, cleaning & building service workers	5	5	—
Maids and housemen	2	2	—
Janitors and cleaners	2	2	2
Personal service occupations	3	4	2
Early childhood teachers' assistants	3	—	—
Service occupations, N.E.C.	3	4	2

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."