

Occupational Compensation Survey: Pay Only

Cleveland–Akron, OH,
Consolidated Metropolitan Area,
August 1996



U.S. Department of Labor
Bureau of Labor Statistics

Bulletin 3085-42

Preface

This bulletin provides results of an August 1996 survey of occupational pay in the Cleveland–Akron, OH Consolidated Metropolitan Statistical Area, which combines the Cleveland, OH, the Lorain–Elyria, OH, and the Akron, OH Primary Metropolitan Statistical Areas. A bulletin providing results of the survey for only the Cleveland, OH Primary Metropolitan Statistical Area has been published as Bulletin 3085-35. This survey was conducted as part of the U.S. Bureau of Labor Statistics Occupational Compensation Survey Program. Data from this program are for use in implementing the Federal Employees Pay Comparability Act of 1990. The survey was conducted by the Bureau's regional office in Chicago, under the direction of Ronald H. Pritzlaff, Assistant Regional Commissioner for Operations.

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.

For additional information regarding this survey or similar surveys conducted in this regional area, please contact the BLS Chicago Regional Office at (312) 353-1880. You may also write to the Bureau of Labor Statistics at: Office of Compensation Levels and Trends, 2 Massachusetts Avenue, NE, Room 4175, Washington, D.C. 20212-0001 or call the Occupational Compensation Survey Program information line at (202) 606-6220.

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Occupational Compensation Survey: Pay Only

Cleveland–Akron, OH, Consolidated Metropolitan Area, August 1996



U.S. Department of Labor

Bureau of Labor Statistics
Katharine G. Abraham,
Commissioner

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Introduction

This survey of occupational pay in the Cleveland–Akron, OH Consolidated Metropolitan Statistical Area (Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit Counties) was conducted as part of the U.S. Bureau of Labor Statistics Occupational Compensation Survey Program. The survey is one of a number conducted annually in metropolitan areas throughout the United States. (See listing of reports for other surveys at the end of this bulletin.)

A major objective of the Occupational Compensation Survey Program is to describe the level and distribution of occupational pay in a variety of the Nation's local labor markets, using a consistent survey approach. Another Program objective is to provide information on the incidence of employee benefits among and within local labor markets. However, no benefits data were collected for this survey.

The Program develops information that is used for a variety of purposes, including wage and salary administration, collective bargaining, and assistance in determining business or plant location. Survey results also are used by the U.S. Department of Labor in making wage determinations under the Service Contract Act, and by the President's Pay Agent (the Secretary of Labor and Directors of the U.S. Office of Personnel Management and the U.S. Office of Management and Budget) in determining local pay adjustments under the Federal Employee Pay Comparability Act of 1990. This latter requirement resulted in: (1) Expanding the survey's industrial coverage to include all private nonfarm establishments (except households) employing 50 workers or more and to State and local governments and

(2) adding more professional, administrative, technical, and protective service occupations to the surveys.

Pay

The A-series tables provide estimates of straight-time weekly or hourly pay by occupation. Tables A-1 through A-5 provide data for selected white- and blue-collar occupations common to a variety of industries. Tables A-6 through A-10 include similar information, but are limited to establishments employing 500 workers or more.

Occupational pay information is presented for all industries covered by the survey and, where possible, for private industry (e.g., for goods- and service-producing industries) and for State and local governments. Within private industry, more detailed information is presented to the extent that the survey establishment sample can support such detail.

Appendixes

Appendix A describes the concepts, methods, and coverage used in the Occupational Compensation Survey Program. It also includes information on the area's industrial composition and the reliability of occupational pay estimates.

Appendix B includes the descriptions used by Bureau field economists to classify workers in the survey occupations.

Table A-1. All establishments: Weekly hours and pay of professional and administrative occupations, Cleveland-Akron, OH, August 1996 — Continued

Table with columns for Occupation and level, Number of workers, Average weekly hours (standard), Weekly pay (in dollars) (Mean, Median, Middle range), and Percent of workers receiving straight-time weekly pay (in dollars) of— (ranging from 300 and under 350 to 2000 and over).

See footnotes at end of table.

Table A-1. All establishments: Weekly hours and pay of professional and administrative occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																				
			Mean	Median	Middle range	300 and under 350	350 - 400	400 - 450	450 - 500	500 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 900	900 - 1000	1000 - 1100	1100 - 1200	1200 - 1300	1300 - 1400	1400 - 1500	1500 - 1600	1600 - 1800	1800 - 2000	2000 and over
Level III	447	39.9	\$809	\$779	\$712 - \$904	-	-	-	-	-	1	9	12	13	22	17	17	6	2	2	(³)	-	-	-	-	-
Private industry	388	39.9	813	779	712 - 915	-	-	-	-	-	1	8	13	12	22	16	18	6	2	3	(³)	-	-	-	-	-
Goods-producing industries	231	40.0	818	750	712 - 923	-	-	-	-	-	-	12	8	12	26	14	18	4	2	4	(³)	-	-	-	-	-
Manufacturing	231	40.0	818	750	712 - 923	-	-	-	-	-	-	12	8	12	26	14	18	4	2	4	(³)	-	-	-	-	-
Service-producing industries	157	39.6	804	779	692 - 904	-	-	-	-	-	3	3	21	13	16	18	17	8	1	-	-	-	-	-	-	-
State and local government	59	39.9	783	768	707 - 842	-	-	-	-	-	-	19	3	17	22	22	10	7	-	-	-	-	-	-	-	-
Level IV	369	39.8	1,022	1,005	902 - 1,115	-	-	-	-	-	-	-	-	2	1	18	23	29	16	8	2	1	1	-	-	-
Private industry	344	39.9	1,023	1,006	902 - 1,125	-	-	-	-	-	-	-	-	2	1	18	22	29	16	8	2	1	1	-	-	-
Goods-producing industries	184	40.0	1,010	1,000	889 - 1,139	-	-	-	-	-	-	-	-	3	2	23	20	24	19	4	2	2	2	-	-	-
Manufacturing	183	40.0	1,009	1,000	889 - 1,140	-	-	-	-	-	-	-	-	3	2	23	20	24	19	4	2	2	2	-	-	-
Service-producing industries	160	39.7	1,039	1,039	926 - 1,123	-	-	-	-	-	-	-	-	1	1	12	24	34	13	13	2	-	-	-	-	-
State and local government	25	39.2	1,004	990	940 - 1,048	-	-	-	-	-	-	-	-	-	-	12	40	36	12	-	-	-	-	-	-	-
Level V	104	39.6	1,326	1,333	1,263 - 1,383	-	-	-	-	-	-	-	-	-	-	-	-	5	13	26	34	16	2	2	2	-
Private industry	101	39.6	1,326	1,335	1,263 - 1,370	-	-	-	-	-	-	-	-	-	-	-	-	5	14	26	33	17	2	2	2	-
Goods-producing industries	55	39.8	1,320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	22	33	18	16	-	4	4	-
Manufacturing	53	39.8	1,321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	23	34	15	17	-	4	4	-
Tax Collectors																										
Level I	6	40.0	533	-	-	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State and local government	6	40.0	533	-	-	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to compute means, medians, and middle ranges.

³ Less than 0.5 percent.

⁴ Workers were distributed as follows: 13 percent at \$2,000 and under \$2,200; 16 percent at \$2,200 and under \$2,400; 18 percent at \$2,400 and under \$2,600; 16 percent at \$2,600 and under \$2,800; and 1 percent at \$2,800 and under \$3,000.

⁵ Workers were distributed as follows: 39 percent at \$2,000 and under \$2,200; 3 percent at \$2,200 and under \$2,400; 6 percent at \$2,400 and under \$2,600; 1 percent at \$2,600 and under \$2,800; and 1 percent at \$2,800 and under \$3,000.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-2. All establishments: Weekly hours and pay of technical and protective service occupations, Cleveland-Akron, OH, August 1996

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																							
			Mean	Median	Middle range	275 and under 300	300 - 325	325 - 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 525	525 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 850	850 - 900	900 - 1000	1000 - 1100	1100 - 1200			
TECHNICAL OCCUPATIONS																													
Computer Operators																													
Level I	73	38.2	\$320	-	- - -	15	64	7	5	4	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Private industry	73	38.2	320	-	- - -	15	64	7	5	4	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Service-producing industries	73	38.2	320	-	- - -	15	64	7	5	4	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Level II	500	39.6	415	\$413	\$359 - \$476	6	9	8	14	7	8	11	10	9	10	5	2	(³)	-	-	-	-	-	-	-	-	-	-	
Private industry	460	39.6	410	400	353 - 469	7	10	8	15	8	9	10	10	8	10	4	1	(³)	-	-	-	-	-	-	-	-	-	-	
Goods-producing industries	85	40.0	478	482	448 - 508	-	-	-	-	-	11	15	20	14	27	13	-	-	-	-	-	-	-	-	-	-	-	-	
Manufacturing	85	40.0	478	482	448 - 508	-	-	-	-	-	11	15	20	14	27	13	-	-	-	-	-	-	-	-	-	-	-	-	
Service-producing industries	375	39.5	395	382	346 - 448	9	12	10	18	10	9	9	8	7	6	2	2	(³)	-	-	-	-	-	-	-	-	-	-	
State and local government	40	40.0	467	466	431 - 511	-	-	5	7	-	2	22	15	17	10	13	5	2	-	-	-	-	-	-	-	-	-	-	
Level III	341	39.8	552	544	505 - 598	-	-	-	-	1	3	7	2	10	14	15	25	14	3	5	-	1	-	-	-	-	-	-	
Private industry	316	39.8	551	544	502 - 596	-	-	-	-	2	3	8	2	9	13	15	26	14	2	5	-	1	-	-	-	-	-	-	
Goods-producing industries	130	40.0	577	560	531 - 620	-	-	-	-	-	-	2	-	3	15	22	31	16	1	12	-	-	-	-	-	-	-	-	
Manufacturing	130	40.0	577	560	531 - 620	-	-	-	-	-	-	2	-	3	15	22	31	16	1	12	-	-	-	-	-	-	-	-	
Service-producing industries	186	39.7	533	530	475 - 590	-	-	-	-	3	5	12	3	13	12	11	23	12	3	1	-	2	-	-	-	-	-	-	
State and local government	25	39.7	564	538	520 - 620	-	-	-	-	-	-	-	-	16	24	16	12	16	16	-	-	-	-	-	-	-	-	-	
Level IV	57	39.7	652	-	- - -	-	-	-	-	-	-	-	-	-	-	2	32	19	23	11	12	-	2	-	-	-	-	-	
Private industry	54	39.8	650	-	- - -	-	-	-	-	-	-	-	-	-	-	-	33	20	24	11	9	-	2	-	-	-	-	-	
Drafters																													
Level I:																													
State and local government	11	40.0	427	-	- - -	-	-	-	-	-	45	36	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Level II	253	40.0	498	487	462 - 500	-	-	-	-	1	5	2	35	21	16	3	6	4	7	-	-	-	-	-	-	-	-	-	
Private industry	217	40.0	499	481	462 - 500	-	-	-	-	-	6	1	41	17	18	1	5	5	8	-	-	-	-	-	-	-	-	-	
Goods-producing industries	160	40.0	503	465	462 - 509	-	-	-	-	-	7	-	46	21	3	2	4	7	11	-	-	-	-	-	-	-	-	-	
State and local government	36	39.9	494	493	478 - 521	-	-	-	-	8	-	11	-	47	8	11	11	-	3	-	-	-	-	-	-	-	-	-	
Level III	187	40.0	608	608	560 - 644	-	-	-	-	-	-	-	-	-	9	5	35	29	21	2	-	-	-	-	-	-	-	-	
Private industry	179	40.0	605	596	558 - 636	-	-	-	-	-	-	-	-	-	9	5	36	30	18	2	-	-	-	-	-	-	-	-	
Goods-producing industries	128	40.0	599	586	553 - 650	-	-	-	-	-	-	-	-	-	11	7	44	14	24	-	-	-	-	-	-	-	-	-	
Manufacturing	126	40.0	599	586	553 - 650	-	-	-	-	-	-	-	-	-	11	7	44	13	25	-	-	-	-	-	-	-	-	-	
Service-producing industries	51	40.0	620	-	- - -	-	-	-	-	-	-	-	-	-	4	-	18	71	2	6	-	-	-	-	-	-	-	-	
Level IV	146	40.0	696	679	648 - 739	-	-	-	-	-	-	-	-	-	-	-	8	26	26	18	6	11	5	-	-	-	-	-	
Private industry	146	40.0	696	679	648 - 739	-	-	-	-	-	-	-	-	-	-	-	8	26	26	18	6	11	5	-	-	-	-	-	
Goods-producing industries	142	40.0	696	679	645 - 739	-	-	-	-	-	-	-	-	-	-	-	8	27	27	16	6	11	5	-	-	-	-	-	
Manufacturing	142	40.0	696	679	645 - 739	-	-	-	-	-	-	-	-	-	-	-	8	27	27	16	6	11	5	-	-	-	-	-	

See footnotes at end of table.

Table A-2. All establishments: Weekly hours and pay of technical and protective service occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																						
			Mean	Median	Middle range	275 and under 300	300 - 325	325 - 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 525	525 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 850	850 - 900	900 - 1000	1000 - 1100	1100 - 1200		
Engineering Technicians																												
Level II	176	40.0	\$510	\$515	\$476 - \$536	-	-	-	-	-	11	-	13	18	21	16	15	5	2	-	-	-	-	-	-	-	-	-
Private industry	148	40.0	505	511	464 - 535	-	-	-	-	-	13	-	14	18	22	16	9	5	3	-	-	-	-	-	-	-	-	-
Goods-producing industries	139	40.0	502	508	464 - 535	-	-	-	-	-	13	-	14	19	24	17	6	5	2	-	-	-	-	-	-	-	-	-
Manufacturing	139	40.0	502	508	464 - 535	-	-	-	-	-	13	-	14	19	24	17	6	5	2	-	-	-	-	-	-	-	-	-
Level III	487	40.0	631	636	558 - 670	-	-	-	-	-	-	-	3	3	5	8	17	22	26	3	5	5	2	-	-	-	-	-
Private industry	455	40.0	630	635	555 - 670	-	-	-	-	-	-	-	4	3	5	9	18	21	25	4	5	5	2	-	-	-	-	-
State and local government	32	40.0	636	642	619 - 674	-	-	-	-	-	-	-	-	-	9	-	9	38	44	-	-	-	-	-	-	-	-	-
Level IV	492	40.0	751	749	700 - 800	-	-	-	-	-	-	-	-	-	-	-	2	11	7	32	22	6	10	10	-	-	-	
Private industry	490	40.0	751	749	700 - 800	-	-	-	-	-	-	-	-	-	-	-	2	11	7	32	22	6	10	10	-	-	-	
Goods-producing industries	361	40.0	750	749	700 - 792	-	-	-	-	-	-	-	-	-	-	-	2	11	8	32	24	4	5	14	-	-	-	
Manufacturing	361	40.0	750	749	700 - 792	-	-	-	-	-	-	-	-	-	-	-	2	11	8	32	24	4	5	14	-	-	-	
Level V	152	40.0	881	868	785 - 952	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13	14	11	22	24	11	5		
Private industry	151	40.0	881	868	785 - 952	-	-	-	-	-	-	-	-	-	-	-	-	-	1	13	15	11	22	23	11	5		
Service-producing industries	102	40.0	893	890	809 - 960	-	-	-	-	-	-	-	-	-	-	-	-	-	1	8	11	17	18	30	10	6		
Engineering Technicians, Civil																												
Level I:																												
State and local government	26	39.6	448	489	367 - 497	-	-	-	31	4	-	-	8	50	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Level II	56	40.0	470	-	- - -	-	4	-	4	14	7	-	25	14	11	7	14	-	-	-	-	-	-	-	-	-	-	
State and local government	28	40.0	499	495	455 - 530	-	-	-	-	7	-	36	14	14	7	21	-	-	-	-	-	-	-	-	-	-	-	
Level III	316	40.0	608	632	560 - 650	-	-	-	-	-	-	-	2	3	11	25	34	25	1	-	-	-	-	-	-	-	-	
State and local government	203	40.0	623	641	596 - 653	-	-	-	-	-	-	-	3	2	3	19	42	30	1	-	-	-	-	-	-	-	-	
Level IV	88	39.9	734	746	710 - 772	-	-	-	-	-	-	-	-	-	-	1	10	9	32	41	3	1	2	-	-	-		
State and local government	37	39.7	701	-	- - -	-	-	-	-	-	-	-	-	-	-	3	24	22	24	22	5	-	-	-	-	-		
PROTECTIVE SERVICE OCCUPATIONS																												
Corrections Officers																												
State and local government	1,958	40.0	467	471	373 - 526	-	-	-	30	2	5	1	14	15	6	8	18	(³)	(³)	-	-	-	-	-	-	-	-	
State and local government	1,958	40.0	467	471	373 - 526	-	-	-	30	2	5	1	14	15	6	8	18	(³)	(³)	-	-	-	-	-	-	-	-	
Firefighters																												
State and local government	1,723	50.4	727	738	717 - 754	-	-	-	-	-	-	-	(³)	-	-	1	11	10	52	13	12	-	-	-	-	-		
State and local government	1,723	50.4	727	738	717 - 754	-	-	-	-	-	-	-	(³)	-	-	1	11	10	52	13	12	-	-	-	-	-		
Police Officers																												
Level I	4,562	40.0	692	702	643 - 740	-	-	-	-	(³)	(³)	(³)	2	1	1	6	25	7	35	13	9	-	-	-	-	-		
State and local government	4,468	40.0	693	702	643 - 740	-	-	-	-	(³)	(³)	(³)	2	1	1	5	25	7	36	13	10	-	-	-	-	-		

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to

compute means, medians, and middle ranges.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-3. All establishments: Weekly hours and pay of clerical occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																					
			Mean	Median	Middle range	200 and under 225	225 - 250	250 - 275	275 - 300	300 - 325	325 - 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 850	850 - 900	900 and over	
Level IV	548	39.8	\$615	\$614	\$550 - \$669	-	-	-	-	-	-	-	-	-	(³)	2	3	3	16	20	19	19	10	5	2	-	(³)
Private industry	453	39.8	621	623	557 - 673	-	-	-	-	-	-	-	-	-	(³)	3	2	2	16	18	19	20	10	7	2	-	(³)
Goods-producing industries	208	40.0	607	607	570 - 658	-	-	-	-	-	-	-	-	-	-	4	1	3	13	25	21	23	5	3	2	-	-
Manufacturing	208	40.0	607	607	570 - 658	-	-	-	-	-	-	-	-	-	-	4	1	3	13	25	21	23	5	3	2	-	-
Service-producing industries	245	39.6	633	637	546 - 709	-	-	-	-	-	-	-	-	-	(³)	2	3	2	19	12	18	18	14	9	3	-	(³)
State and local government	95	39.7	587	598	521 - 647	-	-	-	-	-	-	-	-	-	-	1	9	8	13	29	19	12	8	-	-	-	-
Level V	190	39.9	768	773	702 - 827	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	9	9	21	16	26	12	6
Private industry	185	39.9	772	773	711 - 827	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	9	8	21	16	26	12	6
Goods-producing industries	148	40.0	777	776	702 - 827	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	7	22	13	28	13	7
Manufacturing	148	40.0	777	776	702 - 827	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	7	22	13	28	13	7
Switchboard Operator-Receptionists	1,082	39.8	354	344	320 - 391	1	3	3	8	15	27	14	5	6	10	4	3	(³)	-	-	-	-	-	-	-	-	-
Private industry	983	39.8	353	344	320 - 390	1	3	4	8	13	29	14	5	7	9	3	3	(³)	-	-	-	-	-	-	-	-	-
Goods-producing industries	273	40.0	363	346	337 - 388	-	1	1	3	11	44	13	3	2	15	4	3	-	-	-	-	-	-	-	-	-	-
Manufacturing	255	40.0	366	346	337 - 390	-	1	1	4	7	45	14	4	2	16	4	3	-	-	-	-	-	-	-	-	-	-
Service-producing industries	710	39.7	349	340	312 - 391	1	4	5	10	14	23	15	5	8	7	3	3	(³)	-	-	-	-	-	-	-	-	-
State and local government	99	39.5	371	358	322 - 430	-	1	2	-	33	7	15	10	4	15	10	1	1	-	-	-	-	-	-	-	-	-
Word Processors																											
Level I	95	39.8	397	400	354 - 433	-	-	-	3	1	20	15	3	28	15	3	7	4	-	-	-	-	-	-	-	-	-
Private industry	62	39.7	368	-	-	-	-	-	5	2	31	21	3	34	3	2	-	-	-	-	-	-	-	-	-	-	-
Service-producing industries	62	39.7	368	-	-	-	-	-	5	2	31	21	3	34	3	2	-	-	-	-	-	-	-	-	-	-	-
State and local government	33	40.0	451	444	433 - 490	-	-	-	-	-	-	-	-	3	3	18	36	6	21	12	-	-	-	-	-	-	-
Level II	395	39.9	485	490	451 - 537	-	-	-	-	1	5	1	7	6	5	19	11	30	15	1	-	(³)	-	-	-	-	-
Private industry	131	39.7	481	476	410 - 543	-	-	-	-	-	2	-	15	12	11	11	5	24	20	2	-	1	-	-	-	-	-
Service-producing industries	110	39.7	474	453	404 - 550	-	-	-	-	-	2	-	17	13	13	5	11	24	2	-	1	-	-	-	-	-	-
State and local government	264	40.0	486	493	459 - 536	-	-	-	-	1	7	1	3	3	3	23	15	33	13	-	-	-	-	-	-	-	-
Level III	69	39.4	545	-	-	-	-	-	-	-	-	1	4	1	3	3	13	41	4	23	1	1	3	-	-	-	
State and local government	42	40.0	498	515	486 - 531	-	-	-	-	-	-	2	7	2	2	5	17	64	-	-	-	-	-	-	-	-	-

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to

compute means, medians, and middle ranges.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-4. All establishments: Hourly pay of maintenance and toolroom occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Hourly pay (in dollars) ¹			Percent of workers receiving straight-time hourly pay (in dollars) of—																						
		Mean	Median	Middle range	Under 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00	20.00 - 21.00	21.00 - 22.00	22.00 - 23.00	23.00 - 24.00	24.00 and over
Tool and Die Makers	2,438	\$17.11	\$15.60	\$15.13 - \$18.92	-	-	-	-	-	-	-	-	-	1	1	1	8	44	13	5	1	1	(²)	-	23	-	-
Private industry	2,438	17.11	15.60	15.13 - 18.92	-	-	-	-	-	-	-	-	-	1	1	1	8	44	13	5	1	1	(²)	-	23	-	-
Goods-producing industries	2,438	17.11	15.60	15.13 - 18.92	-	-	-	-	-	-	-	-	-	1	1	1	8	44	13	5	1	1	(²)	-	23	-	-
Manufacturing	2,438	17.11	15.60	15.13 - 18.92	-	-	-	-	-	-	-	-	-	1	1	1	8	44	13	5	1	1	(²)	-	23	-	-

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to compute means, medians, and middle ranges.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-7. Establishments employing 500 workers or more: Weekly hours and pay of technical and protective service occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																					
			Mean	Median	Middle range	325 and under 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 525	525 - 550	550 - 575	575 - 600	600 - 625	625 - 650	650 - 675	675 - 700	700 - 725	725 - 750	750 - 800	800 - 850	850 - 900	900 - 950	
Engineering Technicians, Civil																											
Level I	17	40.0	\$490	\$492	\$490 - \$497	-	-	-	-	-	12	76	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State and local government	17	40.0	490	492	490 - 497	-	-	-	-	-	12	76	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Level II	15	40.0	529	518	497 - 578	-	-	-	7	-	-	27	20	7	13	27	-	-	-	-	-	-	-	-	-	-	-
State and local government	15	40.0	529	518	497 - 578	-	-	-	7	-	-	27	20	7	13	27	-	-	-	-	-	-	-	-	-	-	-
Level III	189	40.0	630	641	631 - 653	-	-	-	-	-	-	1	1	3	7	11	1	44	32	-	1	-	-	-	-	-	
State and local government	188	40.0	630	641	631 - 655	-	-	-	-	-	-	1	1	3	7	11	1	44	32	-	1	-	-	-	-	-	
Level IV:																											
State and local government	16	39.4	713	734	659 - 772	-	-	-	-	-	-	-	-	-	-	6	13	-	19	-	6	13	38	6	-	-	
PROTECTIVE SERVICE OCCUPATIONS																											
Corrections Officers	1,423	40.0	444	459	373 - 497	-	42	2	1	2	14	20	6	11	3	1	(³)	-	(³)	-	-	-	-	-	-	-	-
State and local government	1,423	40.0	444	459	373 - 497	-	42	2	1	2	14	20	6	11	3	1	(³)	-	(³)	-	-	-	-	-	-	-	-
Firefighters	1,085	49.5	706	717	669 - 738	-	-	-	-	-	-	-	-	-	-	-	2	14	16	-	22	46	-	-	-	-	
State and local government	1,085	49.5	706	717	669 - 738	-	-	-	-	-	-	-	-	-	-	-	2	14	16	-	22	46	-	-	-	-	
Police Officers																											
Level I	2,594	40.0	673	702	637 - 702	-	-	-	(³)	(³)	(³)	2	1	1	2	1	4	24	(³)	11	48	2	2	1	-	-	
State and local government	2,500	40.0	674	702	643 - 702	-	-	-	(³)	(³)	(³)	2	1	1	2	(³)	3	25	(³)	11	50	1	2	1	-	-	

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to

compute means, medians, and middle ranges.

³ Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-8. Establishments employing 500 workers or more: Weekly hours and pay of clerical occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																					
			Mean	Median	Middle range	200 and under 225	225 - 250	250 - 275	275 - 300	300 - 325	325 - 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 850	850 - 900	900 and over	
Personnel Assistants (Employment)																											
Level III:																											
State and local government	19	39.9	\$523	\$511	\$486 - \$571	-	-	-	-	-	-	-	-	-	5	5	5	26	16	42	-	-	-	-	-	-	-
Level IV:																											
State and local government	17	40.0	662	683	630 - 699	-	-	-	-	-	-	-	-	-	-	-	-	6	12	12	47	24	-	-	-	-	
Secretaries																											
Level I																											
Private industry	85	38.9	378	365	338 - 406	-	-	-	6	12	16	26	12	8	7	2	8	2	-	-	-	-	-	-	-	-	
Private industry	83	38.9	378	365	336 - 406	-	-	-	6	12	17	24	12	8	7	2	8	2	-	-	-	-	-	-	-	-	
Service-producing industries	74	38.7	378	-	- - -	-	-	-	7	14	19	19	14	5	8	3	9	3	-	-	-	-	-	-	-	-	
Level II																											
Private industry	811	39.8	504	499	440 - 554	-	-	-	-	-	2	5	6	8	6	9	16	20	17	2	5	4	(³)	-	-	-	
Private industry	259	39.9	546	538	448 - 686	-	-	-	-	-	(³)	3	4	10	7	8	6	12	20	3	14	10	1	-	-	-	
Service-producing industries	153	39.8	495	499	423 - 570	-	-	-	-	-	1	5	7	13	10	8	7	14	29	2	3	-	-	-	-	-	
State and local government	552	39.8	484	492	440 - 541	-	-	-	-	-	3	6	7	7	6	9	21	24	15	1	(³)	1	(³)	-	-	-	
Level III																											
Private industry	860	39.6	552	540	497 - 606	-	-	-	-	-	(³)	(³)	3	2	3	7	11	28	18	18	5	3	1	(³)	1	-	
Private industry	632	39.8	550	541	488 - 609	-	-	-	-	-	(³)	(³)	3	2	4	7	13	24	16	22	4	2	2	-	1	-	
Goods-producing industries	246	40.0	560	540	498 - 621	-	-	-	-	-	-	-	7	1	4	5	9	28	12	22	2	2	4	-	2	-	
Manufacturing	245	40.0	560	540	498 - 621	-	-	-	-	-	-	1	7	1	4	5	9	28	12	21	2	2	4	-	2	-	
Service-producing industries	386	39.6	544	544	484 - 606	-	-	-	-	-	1	(³)	1	2	4	9	15	21	18	23	4	2	-	-	-	-	
State and local government	228	39.2	557	528	502 - 596	-	-	-	-	-	-	-	1	2	1	7	6	38	23	6	9	7	-	(³)	(³)	-	
Level IV																											
Private industry	491	39.8	617	615	558 - 674	-	-	-	-	-	-	-	-	(³)	3	4	4	12	22	18	20	10	6	2	-	(³)	
Private industry	401	39.8	625	624	569 - 682	-	-	-	-	-	-	-	-	(³)	3	2	3	12	20	18	21	11	7	3	-	(³)	
Goods-producing industries	203	40.0	605	603	570 - 658	-	-	-	-	-	-	-	-	-	4	1	3	13	26	21	22	5	3	2	-	-	
Manufacturing	203	40.0	605	603	570 - 658	-	-	-	-	-	-	-	-	-	4	1	3	13	26	21	22	5	3	2	-	-	
Service-producing industries	198	39.5	646	660	568 - 715	-	-	-	-	-	-	-	-	1	2	4	3	11	13	14	21	17	12	4	-	1	
State and local government	90	39.7	582	595	520 - 647	-	-	-	-	-	-	-	-	-	1	10	9	13	31	18	12	6	-	-	-	-	
Level V																											
Private industry	106	39.8	744	729	668 - 817	-	-	-	-	-	-	-	-	-	-	-	1	2	1	16	16	16	18	15	5	10	
Private industry	101	39.8	751	759	668 - 825	-	-	-	-	-	-	-	-	-	-	-	-	1	1	17	14	17	19	16	5	11	
Goods-producing industries	64	40.0	751	-	- - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	17	17	13	13	2	17	
Manufacturing	64	40.0	751	-	- - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	17	17	13	13	2	4 ¹⁷	
Switchboard Operator-Receptionists																											
Private industry	181	39.6	347	353	310 - 390	6	8	3	7	7	19	20	10	4	14	1	1	-	-	-	-	-	-	-	-	-	
Private industry	159	39.8	341	350	294 - 386	6	9	3	8	4	20	23	9	4	13	1	1	-	-	-	-	-	-	-	-	-	
Goods-producing industries	57	40.0	373	-	- - -	-	-	-	16	2	19	14	11	7	32	-	-	-	-	-	-	-	-	-	-	-	
Manufacturing	57	40.0	373	-	- - -	-	-	-	16	2	19	14	11	7	32	-	-	-	-	-	-	-	-	-	-	-	
Service-producing industries	102	39.6	323	343	262 - 365	10	14	5	3	6	21	27	9	2	2	1	1	-	-	-	-	-	-	-	-	-	
State and local government	22	38.8	388	397	310 - 448	-	-	-	-	27	9	5	14	9	27	5	5	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.

Table A-8. Establishments employing 500 workers or more: Weekly hours and pay of clerical occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Average weekly hours ¹ (standard)	Weekly pay (in dollars) ²			Percent of workers receiving straight-time weekly pay (in dollars) of—																				
			Mean	Median	Middle range	200 and under 225	225 - 250	250 - 275	275 - 300	300 - 325	325 - 350	350 - 375	375 - 400	400 - 425	425 - 450	450 - 475	475 - 500	500 - 550	550 - 600	600 - 650	650 - 700	700 - 750	750 - 800	800 - 850	850 - 900	900 and over
Word Processors																										
Level I:																										
State and local government	33	40.0	\$451	\$444	\$433 - \$490	-	-	-	-	-	-	3	3	18	36	6	21	12	-	-	-	-	-	-	-	-
Level II	317	39.9	487	494	457 - 538	-	-	-	1	6	(³)	3	7	3	20	14	30	15	1	-	(³)	-	-	-	-	-
Private industry	55	39.6	486	-	- - -	-	-	-	-	4	-	5	25	5	5	11	16	22	4	-	2	-	-	-	-	-
Service-producing industries	53	39.6	489	-	- - -	-	-	-	-	4	-	6	23	6	6	11	17	23	4	-	2	-	-	-	-	-
State and local government	262	40.0	487	494	459 - 536	-	-	-	1	7	(³)	3	3	3	23	15	33	13	-	-	-	-	-	-	-	
Level III	53	39.6	526	-	- - -	-	-	-	-	-	2	6	2	4	4	13	51	6	6	2	2	4	-	-	-	
State and local government	42	40.0	498	515	486 - 531	-	-	-	-	-	2	7	2	2	5	17	64	-	-	-	-	-	-	-	-	

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to compute means, medians, and middle ranges.

³ Less than 0.5 percent.

⁴ Workers were distributed as follows: 8 percent at \$900 and under \$950; 8 percent at \$950 and under \$1,000; and 2 percent at \$1,000 and under \$1,050.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-9. Establishments employing 500 workers or more: Hourly pay of maintenance and toolroom occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Hourly pay (in dollars) ¹			Percent of workers receiving straight-time hourly pay (in dollars) of—																						
		Mean	Median	Middle range	Under 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00	20.00 - 21.00	21.00 - 22.00	22.00 - 23.00	23.00 - 24.00	24.00 - 25.00
Tool and Die Makers	842	\$20.38	\$22.18	\$17.44 - \$22.18	-	-	-	-	-	-	-	-	-	-	-	-	(²)	14	7	4	3	3	-	-	68	-	-
Private industry	842	20.38	22.18	17.44 - 22.18	-	-	-	-	-	-	-	-	-	-	-	-	(²)	14	7	4	3	3	-	-	68	-	-
Goods-producing industries	842	20.38	22.18	17.44 - 22.18	-	-	-	-	-	-	-	-	-	-	-	-	(²)	14	7	4	3	3	-	-	68	-	-
Manufacturing	842	20.38	22.18	17.44 - 22.18	-	-	-	-	-	-	-	-	-	-	-	-	(²)	14	7	4	3	3	-	-	68	-	-

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to compute means, medians, and middle ranges.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Table A-10. Establishments employing 500 workers or more: Hourly pay of material movement and custodial occupations, Cleveland-Akron, OH, August 1996 — Continued

Occupation and level	Number of workers	Hourly pay (in dollars) ¹			Percent of workers receiving straight-time hourly pay (in dollars) of—																						
		Mean	Median	Middle range	4.50 and under 5.00	5.00 - 5.50	5.50 - 6.00	6.00 - 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00 - 10.50	10.50 - 11.00	11.00 - 12.00	12.00 - 13.00	13.00 - 14.00	14.00 - 15.00	15.00 - 16.00	16.00 - 17.00	17.00 - 18.00	18.00 - 19.00	19.00 - 20.00	20.00 - 21.00
Warehouse Specialists	1,801	\$14.31	\$14.70	\$12.20 - \$18.11	-	-	-	(²)	1	3	2	2	1	2	1	2	2	7	6	18	10	1	12	(²)	29	-	-
Private industry	1,698	14.43	14.70	12.71 - 18.11	-	-	-	(²)	1	3	3	3	1	1	1	1	7	5	19	10	1	12	(²)	31	-	-	
Goods-producing industries	530	14.01	13.55	13.55 - 16.47	-	-	-	-	2	3	-	-	-	1	1	3	11	1	42	-	-	37	(²)	(²)	-	-	
Manufacturing	530	14.01	13.55	13.55 - 16.47	-	-	-	-	2	3	-	-	-	1	1	3	11	1	42	-	-	37	(²)	(²)	-	-	
Service-producing industries	1,168	14.61	14.83	12.27 - 18.11	-	-	-	1	(²)	3	4	4	2	2	1	2	1	5	7	8	15	2	-	-	45	-	
State and local government	103	12.46	11.99	10.46 - 16.48	-	-	-	-	-	-	-	-	-	12	9	5	15	12	16	4	4	-	25	-	-	-	

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are performance bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases, but not bonuses, under cost-of-living clauses, and incentive payments, however, are included. See Appendix A for definitions and methods used to compute means, medians, and middle ranges.

² Less than 0.5 percent.

NOTE: Because of rounding, sums of individual intervals may not equal 100 percent. Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupation or occupational levels may include data for categories not shown separately.

Appendix A.

Scope and Method of 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.¹ Private households, agriculture, the Federal Government, and the self-employed were excluded from the survey. Table 1 in this appendix shows the estimated number of establishments and workers within scope of the survey and the number actually included in the survey sample.

Sampling frame

The list of establishments from which the survey sample was selected (the sampling frame) was developed from the State unemployment insurance reports for the Cleveland–Akron, OH Consolidated Metropolitan Statistical Area (July 1994). Establishments with 50 workers or more during the sampling frame's reference period were included in the survey sample even if they employed fewer than 50 workers at the time of the survey.

The sampling frame was reviewed for completeness and accuracy prior to the survey and, when necessary, corrections were made: 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.

Survey design

The survey design includes classifying individual establishments into groups (strata) based on industry and employment size, determining the size of the sample for each group (stratum), and selecting an establishment sample from each stratum. The establishment sample size in a stratum was determined by expected number of

employees to be found (based on previous occupational pay surveys) in professional, administrative, technical, protective service, and clerical occupations. In other words, the larger the number of employees expected to be found in designated occupations, the larger the establishment sample in that stratum. An upward adjustment to the establishment sample size also was made in strata expected to have relatively high sampling error for certain occupations, based on previous survey experiences. (See section on "Reliability of estimates" below for discussion of sampling error.)

Data collection and payroll reference

Data for the survey were obtained primarily by personal visits of the Bureau's field economists to a sample of establishments within the Cleveland–Akron, OH Consolidated Metropolitan Statistical Area. Collection for the survey was from May 1996 through October 1996 and reflects an average payroll reference month of August 1996. Data obtained for a payroll period prior to the end of July 1996 were updated to include general wage changes, if granted, scheduled to be effective through that date.

Occupational pay

Occupational pay data are shown for full-time workers, i.e., those hired to work a regular weekly schedule. Pay data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Also excluded are bonuses and lump-sum payments of the type negotiated in the auto and aerospace industries, as well as profit-sharing payments, attendance bonuses, Christmas or year-end bonuses, and other nonproduction bonuses. Pay increases—but not bonuses—under cost-of-living allowance clauses and incentive payments, however, are included in the pay data.

Unless otherwise indicated, the pay data following the job titles are for all industries combined. Pay data for some of the occupations for all industries

combined (or for some industry divisions within the scope of the survey) are not presented in the A-series tables because either (1) data did not provide statistically reliable results, or (2) there was the possibility of disclosure of individual establishment data. Pay data not shown separately for industry divisions are included in data for all industries combined.

Average pay reflect areawide estimates. Industries and establishments differ in pay levels and job staffing, and thus contribute differently to the estimates for each job. Therefore, average pay may not reflect the pay differential among jobs within individual establishments. A-series tables provide distributions of workers by pay intervals.

The *mean* is computed for each job by totaling the pay of all workers and dividing by the number of workers. 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. The *middle range* is defined by two rates of pay; one-fourth of the workers earn the same as or less than the lower of these rates and one-fourth earn the same as or more than the higher rate. Medians and middle ranges are not provided when they do not meet reliability criteria.

Occupations surveyed are common to a variety of public and private industries, and were selected from the following employment groups: (1) Professional and administrative; (2) technical and protective service; (3) clerical; (4) maintenance and toolroom; and (5) material movement and custodial. Occupational classification was based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B, along with corresponding occupational codes and titles from the 1980 edition of the *Standard Occupational Classification Manual*. Job descriptions used to classify employees in this survey usually are more generalized than those used in individual establishments to allow for minor differences among establishments in specific duties performed.

Average weekly hours for professional, administrative, technical, protective service, and clerical occupations refer to the standard workweek (rounded to the nearest tenth of an hour) for which employees receive regular straight-time pay. Average weekly pay for these occupations are rounded to the nearest dollar.

Occupational employment 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 occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the jobs studied.

Survey nonresponse

Data were not available from 14.5 percent of the sample establishments (representing 115,316 employees covered by the survey). An additional 4.6 percent of the sample establishments (representing 39,385 employees) were either out of business or outside the scope of the survey.

If data were not provided by a sample member, the weights (based on the probability of selection in the sample) of responding sample establishments were adjusted to account for the missing data. The weights for establishments which were out of business or outside the scope of the survey were changed to zero.

Some sampled establishments had a policy of not disclosing salary data for certain employees. No adjustments were made to pay estimates for the survey as a result of these missing data. In all but two of the occupational work levels published in this bulletin, the proportion of employees for whom pay data were not available was less than 5 percent. The two jobs were Personnel Specialists II (5.0 percent) and Personnel Specialists III (7.5 percent).

Reliability of estimates

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, not the entire population. The particular sample used in this survey is one of a number of all 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. For example, if the estimated average weekly salary of Secretaries Level IV is \$500 and the standard error is \$8, the RSE is 1.6 percent, or $\$8/\$500 \times 100 = 1.6\%$.

Estimates of relative standard errors for this survey vary among the occupational work levels depending on such factors as the frequency with which the job occurs, the dispersion of salaries for the job, and the survey design. The distribution of published work levels for one relative standard error was as follows:

<i>Relative standard error</i>	<i>Percent of published occupational work levels</i>
Less than 1 percent	5.2
1 and under 3 percent	38.9
3 and under 5 percent	48.5
5 percent and over	7.4

The standard error can be used to calculate a "confidence interval" around a sample estimate. For example, a 95 percent confidence interval is centered at the sample estimate and includes all values within 2 times the estimate's standard error.

If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 95 percent of the time.

Using the RSE example above, there is 95 percent confidence that the true population value for Secretaries Level IV is between \$484 and \$516 (i.e., \$500 plus or minus 2 x \$8).

Nonsampling errors can stem from many sources, such as inability to obtain information from some establishments; difficulties with survey definitions; inability of respondents to provide correct information; mistakes in recording or coding the data obtained; and other errors of collection, response, coverage, and estimation of missing data. Although not specifically measured, the survey's nonsampling errors are expected to be minimal due to the high response rate, the extensive and continuous training of field economists who gather survey data by personal visit, careful screening of data at several levels of review, annual evaluation of the suitability of job definitions, and thorough field testing of new or revised job definitions.

To measure and better control nonsampling errors that occur during data collection, a quality control procedure was applied to the survey design. The procedure, job match validation (JMV), is designed to identify the frequency, reasons for, and sources of incorrect decisions made by Bureau field economists in matching company jobs to survey occupations. Once identified, the problems are discussed promptly with the field economists while the data are still being collected. Subsequently, the JMV results are tallied, reported to BLS staff, and become the basis for remedial action for future surveys.

¹ For this survey, an establishment is an economic unit which produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. In manufacturing industries, the establishment is usually at a single physical location. In service-producing industries, all locations of an individual company in a Metropolitan Statistical Area are usually considered an establishment. In government, an establishment is defined as all locations of a government entity.

Appendix table 1. Establishments and workers within scope of survey and number studied, Cleveland-Akron, OH¹, August 1996

Industry division ²	Number of establishments		Workers in establishments		
	Within scope of survey ³	Studied	Within scope of survey ⁴		Studied
			Number	Percent	
ALL ESTABLISHMENTS					
All divisions	3,388	433	819,692	100	309,585
Private industry	3,129	380	681,874	83	223,161
Goods producing	1,005	106	229,205	28	62,066
Manufacturing	875	91	215,075	26	59,592
Construction ⁵	127	13	13,462	2	2,006
Service producing	2,124	274	452,669	55	161,095
Transportation, communication, electric, gas, and sanitary services ⁶	197	33	46,007	6	17,875
Wholesale trade ⁷	178	11	24,828	3	2,488
Retail trade ⁷	519	26	125,794	15	26,489
Finance, insurance, and real estate ⁷	175	28	42,712	5	24,464
Services ⁷	1,055	176	213,328	26	89,779
State and local government	259	53	137,818	17	86,424
ESTABLISHMENTS EMPLOYING 500 WORKERS OR MORE					
All divisions	317	134	421,992	100	260,592
Private industry	263	108	320,644	76	179,026
Goods producing	85	30	101,197	24	49,392
Manufacturing	84	29	100,697	24	48,892
Service producing	178	78	219,447	52	129,634
Transportation, communication, electric, gas, and sanitary services ⁶	15	6	19,477	5	13,251
Retail trade ⁷	67	13	76,195	18	24,742
Finance, insurance, and real estate ⁷	24	11	29,595	7	22,222
Services ⁷	69	47	90,748	22	68,275
State and local government	54	26	101,348	24	81,566

¹ The Cleveland-Akron Consolidated Metropolitan Statistical Area, as defined by the Office of Management and Budget through June 1994, consists of Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, and Summit Counties. The "workers within scope of survey" estimates provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) establishments employing fewer than 50 workers are excluded from the scope of the survey.

² The *Standard Industrial Classification Manual* was used in classifying establishments by industry.

³ Includes all establishments with at least 50 total employees. In goods producing, an establishment is defined as a single physical location where industrial operations are performed. In service producing industries, an establishment is defined as all locations of a company in the area within the

same industry division. In government, an establishment is generally defined as all locations of a government entity.

⁴ Includes all workers in all establishments with total employment (within an area) at or above the minimum limitations.

⁵ Separate data for this division are not shown in the A-series tables, but the division is represented in the "all industries" and "goods producing" estimates.

⁶ Abbreviated to "Transportation and utilities" in the A-series tables. This division is represented in the "all industries" and "service producing" estimates.

⁷ Separate data for this division are not shown in the A-series tables, but the division is represented in the "all industries" and "service producing" estimates.

Note: Overall industries may include data for industry divisions not shown separately.