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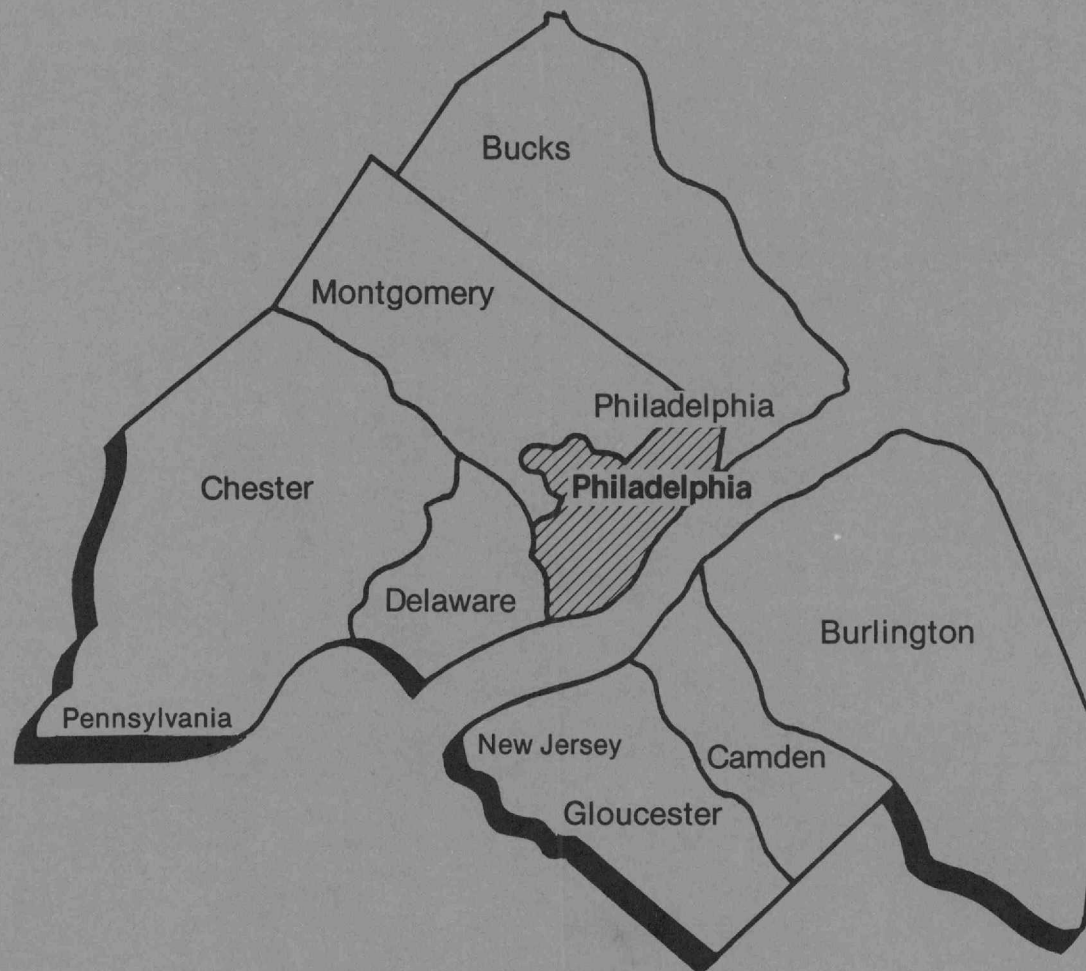
Area Wage Survey

Philadelphia, Pennsylvania-New Jersey, Metropolitan Area November 1980



U.S. Department of Labor
Bureau of Labor Statistics

Bulletin 3000-53



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Preface

This bulletin provides results of a November 1980 survey of occupational earnings in the Philadelphia, Pennsylvania-New Jersey, Standard Metropolitan Statistical Area. The survey was made as part of the Bureau of Labor Statistics' annual area wage survey program. It was conducted by the Bureau's regional office in Philadelphia, Pa., under the general direction of Irwin L. Feigenbaum, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

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Note:

Reports on occupational earnings and supplementary wage provisions in the Philadelphia area are available for the miscellaneous plastic products (November 1979), men's and boy's suits and coats (April 1979), electrical appliance repair (November 1978), nursing homes and related facilities (September 1978), hospitals (September 1978), and drug manufacturing (September 1978) industries. Listings of union wage rates for building trades, printing trades, local-transit operating employees, local truckdrivers and helpers, and grocery store employees are available. A report on occupational earnings and supplementary wage benefits for municipal government employees of the city of Philadelphia is also available. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

Area Wage Survey

Philadelphia, Pennsylvania-New Jersey, Metropolitan Area November 1980



U.S. Department of Labor
Ray Marshall, Secretary

Bureau of Labor Statistics
Janet L. Norwood,
Commissioner

December 1980

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Introduction

This area is 1 of 71 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits. (See list of areas on inside back cover.) In each area, earnings data for selected occupations (A-series tables) are collected annually. Information on establishment practices and supplementary wage benefits (B-series tables) is obtained every third year. This report has no B-series tables.

Each year after all individual area wage surveys have been completed, two summary bulletins are issued. The first brings together data for each metropolitan area surveyed; the second presents national and regional estimates, projected from individual metropolitan area data, for all Standard Metropolitan Statistical Areas in the United States, excluding Alaska and Hawaii.

A major consideration in the area wage survey program is the need to describe the level and movement of wages in a variety of labor markets, through the analysis of (1) the level and distribution of wages by occupation, and (2) the movement of wages by occupational category and skill level. The program develops information that may be used for many purposes, including wage and salary administration, collective bargaining, and assistance in determining plant location. Survey results also are used by the U.S. Department of Labor to make wage determinations under the Service Contract Act of 1965.

A-series tables

Tables A-1 through A-6 provide estimates of straight-time weekly or hourly earnings for workers in occupations common to a variety of manufacturing and

nonmanufacturing industries. The occupations are defined in appendix B. For the 31 largest survey areas, tables A-12 through A-17 provide similar data for establishments employing 500 workers or more.

Table A-7 provides indexes and percent changes in average hourly earnings for office clerical workers, electronic data processing workers, industrial nurses, skilled maintenance trades workers, and unskilled plant workers. Where possible, data are presented for all industries and for manufacturing and nonmanufacturing separately. Data are not presented for skilled maintenance workers in nonmanufacturing because the number of workers employed in this occupational group in nonmanufacturing is too small to warrant separate presentation. This table provides a measure of wage trends after elimination of changes in average earnings caused by employment shifts among establishments as well as turnover of establishments included in survey samples. For further details, see appendix A.

Tables A-8 through A-11 provide measures of average pay relationships within establishments. These measures may differ considerably from the pay relationships of overall area averages published in tables A-1 through A-6. See appendix A for details.

Appendixes

Appendix A describes the methods and concepts used in the area wage survey program and provides information on the scope of the survey.

Appendix B provides job descriptions used by Bureau field representatives to classify workers by occupation.

Table A-1. Weekly earnings of office workers in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																									
			Mean ²	Median ²	Middle range ³	105 and under 115	115-125	125-135	135-145	145-165	165-185	185-205	205-225	225-245	245-265	265-285	285-305	305-325	325-345	345-365	365-405	405-445	445-485	485-525	525-565	565-605					
Secretaries.....	10,544	38.0	263.00	248.50	215.00- 299.00	-	-	-	87	167	710	1175	1248	1593	1249	998	819	732	395	311	623	262	105	62	6	2					
Manufacturing.....	5,386	39.0	271.50	259.50	223.00- 311.00	-	-	-	-	46	229	534	576	854	567	504	578	458	280	172	427	104	44	5	6	2					
Nonmanufacturing.....	5,158	37.5	254.00	240.00	203.50- 282.00	-	-	-	87	121	481	641	672	739	682	494	241	274	115	139	196	158	61	57	-	-					
Public utilities.....	471	39.0	375.00	384.00	309.00- 430.00	-	-	-	-	-	7	-	13	12	28	11	26	34	12	57	102	67	46	56	-	-					
Secretaries, class A.....	708	39.0	331.50	325.00	278.50- 380.00	-	-	-	-	-	-	14	28	44	62	43	81	69	84	52	121	53	32	19	4	2					
Manufacturing.....	412	39.5	316.00	315.00	262.00- 366.50	-	-	-	-	-	-	11	26	35	34	16	61	54	43	23	82	16	2	3	4	2					
Nonmanufacturing.....	296	38.0	354.00	345.50	291.50- 421.50	-	-	-	-	-	-	3	2	9	28	27	20	15	41	29	39	37	30	16	-	-					
Public utilities.....	89	39.0	429.00	428.00	387.50- 466.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	23	21	22	15	-	-					
Secretaries, class B.....	2,642	38.0	279.50	264.00	236.00- 318.50	-	-	-	-	27	112	138	234	412	416	319	194	211	155	118	115	122	26	43	-	-					
Manufacturing.....	1,373	39.0	279.50	275.00	243.00- 318.50	-	-	-	-	3	45	70	125	196	165	160	144	176	137	69	28	38	15	2	-	-					
Nonmanufacturing.....	1,269	37.5	279.50	254.50	232.00- 310.00	-	-	-	-	24	67	68	109	216	251	159	50	35	18	49	87	84	11	41	-	-					
Public utilities.....	183	39.0	409.50	393.50	360.50- 445.00	-	-	-	-	-	-	-	-	-	-	-	4	6	2	1	37	53	34	5	41	-	-				
Secretaries, class C.....	3,252	38.0	258.50	246.00	219.50- 291.00	-	-	-	-	31	181	300	460	630	433	297	349	193	69	78	165	32	32	-	2	-					
Manufacturing.....	1,556	38.5	276.00	258.00	231.00- 300.00	-	-	-	-	-	47	94	157	310	207	121	246	109	36	45	134	21	27	-	2	-					
Nonmanufacturing.....	1,696	37.5	243.00	234.50	208.00- 270.50	-	-	-	-	31	134	206	303	320	226	176	103	84	33	33	31	11	5	-	-	-					
Public utilities.....	108	38.5	322.00	314.00	267.00- 373.00	-	-	-	-	-	-	-	-	12	15	2	17	15	9	8	22	4	4	-	-	-					
Secretaries, class D.....	2,705	38.0	252.50	236.00	201.50- 286.50	-	-	-	-	41	214	485	379	379	248	245	152	200	66	44	189	48	15	-	-	-					
Manufacturing.....	1,803	39.0	256.00	240.00	205.50- 291.00	-	-	-	-	27	102	315	232	292	146	194	113	98	58	31	168	27	-	-	-	-					
Nonmanufacturing.....	902	37.0	246.00	226.00	199.00- 283.50	-	-	-	-	14	112	170	147	87	102	51	39	102	8	13	21	21	15	-	-	-					
Public utilities.....	86	39.5	321.50	309.00	249.50- 424.00	-	-	-	-	-	7	-	11	-	10	5	3	17	2	4	4	8	15	-	-	-					
Secretaries, class E.....	993	37.5	209.50	200.00	175.00- 239.00	-	-	-	87	64	187	214	124	102	69	73	19	28	6	9	11	-	-	-	-	-					
Manufacturing.....	226	39.0	230.00	210.50	185.00- 276.00	-	-	-	-	16	35	44	34	21	15	13	14	21	6	4	3	-	-	-	-	-					
Nonmanufacturing.....	767	37.5	203.50	195.00	170.00- 231.50	-	-	-	87	48	152	170	90	81	54	60	5	7	-	5	8	-	-	-	-	-					
Stenographers.....	1,375	38.5	262.00	239.50	195.00- 343.50	-	-	12	15	72	89	268	146	112	94	67	41	95	27	43	248	38	8	-	-	-					
Manufacturing.....	643	39.0	284.50	275.00	214.50- 369.50	-	-	-	-	27	20	84	59	53	44	51	28	43	7	21	193	7	6	-	-	-					
Nonmanufacturing.....	732	38.0	242.50	214.50	187.00- 298.00	-	-	12	15	45	69	184	87	59	50	16	13	52	20	22	55	31	2	-	-	-					
Public utilities.....	308	38.5	302.50	316.50	217.00- 368.50	-	-	-	-	-	12	41	28	12	20	10	10	50	18	19	55	31	2	-	-	-					
Stenographers, senior.....	370	39.5	275.50	258.00	215.00- 310.50	-	-	-	6	2	14	46	43	47	42	26	20	41	7	5	28	37	6	-	-	-					
Manufacturing.....	213	40.0	280.00	277.50	218.00- 308.00	-	-	-	-	-	8	34	13	17	17	22	19	41	7	3	19	7	6	-	-	-					
Nonmanufacturing.....	157	39.5	269.50	237.00	215.00- 359.00	-	-	-	6	2	6	12	30	30	25	4	1	-	-	2	9	30	-	-	-	-					
Stenographers, general.....	1,005	38.0	257.00	233.00	190.00- 359.00	-	-	12	9	70	75	222	103	65	52	41	21	54	20	38	220	1	2	-	-	-					
Manufacturing.....	430	38.5	286.50	273.50	213.50- 369.50	-	-	-	-	27	12	50	46	36	27	29	9	2	-	18	174	-	-	-	-	-					
Nonmanufacturing.....	575	38.0	235.50	204.00	185.00- 295.00	-	-	12	9	43	63	172	57	29	25	12	12	52	20	20	46	1	2	-	-	-					
Public utilities.....	264	38.5	287.50	316.50	216.00- 347.50	-	-	-	-	-	11	40	27	11	20	10	10	50	18	18	46	1	2	-	-	-					
Transcribing-machine typists.....	493	36.5	194.00	189.50	170.00- 207.00	-	-	-	17	77	119	134	78	32	13	6	5	1	2	6	3	-	-	-	-	-					
Manufacturing.....	93	38.5	204.00	190.00	169.00- 234.00	-	-	-	-	18	25	9	14	16	2	2	1	-	-	6	-	-	-	-	-	-					
Nonmanufacturing.....	400	36.0	192.00	189.50	171.00- 207.00	-	-	-	17	59	94	125	64	16	11	4	4	1	2	-	3	-	-	-	-	-					
Typists.....	3,202	37.5	184.50	168.50	151.00- 200.00	-	55	127	377	918	589	416	190	145	120	72	92	25	9	46	21	-	-	-	-	-					
Manufacturing.....	807	39.5	206.00	195.00	162.00- 238.50	-	14	27	28	157	143	118	66	55	58	27	82	16	2	1	13	-	-	-	-	-					
Nonmanufacturing.....	2,395	37.0	177.00	163.00	150.00- 192.50	-	41	100	349	761	446	298	124	90	62	45	10	9	7	45	8	-	-	-	-	-					
Public utilities.....	137	39.5	291.00	307.50	232.00- 359.50	-	-	-	-	-	11	8	15	13	14	7	-	9	7	45	8	-	-	-	-	-					
Typists, class A.....	1,240	38.0	209.00	197.00	164.50- 245.50	-	1	19	56	243	219	181	116	94	94	68	72	20	9	40	8	-	-	-	-	-					
Manufacturing.....	305	39.5	244.50	248.50	207.00- 286.50	-	-	-	2	9	28	37	47	21	48	27	66	16	2	-	2	-	-	-	-	-					
Nonmanufacturing.....	935	37.5	197.50	179.50	160.00- 224.50	-	1	19	54	234	191	144	69	73	46	41	6	4	7	40	6	-	-	-	-	-					
Public utilities.....	90	39.5	304.00	351.50	233.50- 361.00	-	-	-	-	-	9	2	11	6	2	3	-	4	7	40	6	-	-	-	-	-					

See footnotes at end of tables.

Table A-1. Weekly earnings of office workers in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean ²	Median ²	Middle range ²	105 and under 115	115 — 125	125 — 135	135 — 145	145 — 165	165 — 185	185 — 205	205 — 225	225 — 245	245 — 265	265 — 285	285 — 305	305 — 325	325 — 345	345 — 365	365 — 405	405 — 445	445 — 485	485 — 525	525 — 565	565 — 605
Typists, class B.....	1,962	37.5	169.00	160.50	145.00— 180.00	—	54	108	321	675	370	235	74	51	26	4	20	5	—	6	13	—	—	—	—	—
Manufacturing.....	502	39.5	182.50	172.50	153.00— 199.50	—	14	27	26	148	115	81	19	34	10	—	16	—	—	1	11	—	—	—	—	—
Nonmanufacturing.....	1,460	36.5	164.00	160.00	144.00— 175.50	—	40	81	295	527	255	154	55	17	16	4	4	5	—	5	2	—	—	—	—	—
Public utilities.....	47	39.5	266.50	261.50	228.00— 300.50	—	—	—	—	—	2	6	4	7	12	4	—	5	—	5	2	—	—	—	—	—
File clerks.....	1,578	37.0	160.00	147.00	134.00— 176.50	44	189	193	238	408	163	204	48	27	5	6	14	15	6	7	11	—	—	—	—	—
Manufacturing.....	372	38.5	192.00	176.50	150.00— 205.00	17	2	19	8	88	85	58	20	17	5	6	10	15	6	7	9	—	—	—	—	—
Nonmanufacturing.....	1,206	37.0	150.00	144.00	131.00— 159.00	27	187	174	230	320	78	146	28	10	—	—	4	—	—	—	2	—	—	—	—	—
File clerks, class A.....	91	38.0	215.00	200.00	149.00— 263.50	—	2	—	18	14	8	7	6	11	3	4	8	—	—	—	10	—	—	—	—	—
Nonmanufacturing.....	53	37.0	172.00	151.00	144.00— 200.00	—	2	—	18	14	4	5	5	3	—	—	—	—	—	—	2	—	—	—	—	—
File clerks, class B.....	457	37.0	176.00	163.00	147.00— 191.00	—	15	24	40	156	79	96	10	5	2	—	6	12	6	6	—	—	—	—	—	—
Manufacturing.....	186	38.0	198.50	184.00	169.00— 195.00	—	2	2	2	32	66	43	6	5	2	—	2	12	6	6	—	—	—	—	—	—
Nonmanufacturing.....	271	36.5	160.50	155.00	141.50— 169.00	—	13	22	38	124	13	53	4	—	—	—	4	—	—	—	—	—	—	—	—	—
File clerks, class C.....	992	37.0	149.00	142.00	130.00— 159.00	44	146	169	176	230	76	101	32	11	—	2	—	3	—	1	1	—	—	—	—	—
Manufacturing.....	148	38.5	163.00	150.00	141.50— 177.50	17	—	17	6	56	15	13	13	4	—	2	—	3	—	1	1	—	—	—	—	—
Nonmanufacturing.....	844	37.0	146.50	140.00	130.00— 155.00	27	146	152	170	174	61	88	19	7	—	—	—	—	—	—	—	—	—	—	—	—
Messengers.....	617	38.0	191.00	165.00	146.00— 208.50	—	11	54	85	156	102	45	36	26	19	13	—	15	13	20	22	—	—	—	—	—
Manufacturing.....	270	38.5	190.00	176.00	150.00— 220.00	—	—	22	20	76	55	13	25	11	19	13	—	14	—	—	2	—	—	—	—	—
Nonmanufacturing.....	347	38.0	192.00	160.00	142.00— 204.00	—	11	32	65	80	47	32	11	15	—	—	—	1	13	20	20	—	—	—	—	—
Switchboard operators.....	476	38.5	211.00	181.50	162.00— 260.00	—	—	23	14	95	120	39	25	34	19	24	16	18	22	22	5	—	—	—	—	—
Manufacturing.....	171	39.0	239.50	232.50	189.00— 286.00	—	—	4	—	31	4	18	9	24	16	21	14	17	—	9	4	—	—	—	—	—
Nonmanufacturing.....	305	38.5	195.00	176.00	160.00— 201.00	—	—	19	14	64	116	21	16	10	3	3	2	1	22	13	1	—	—	—	—	—
Switchboard operator-receptionists.....	1,152	38.0	188.50	180.00	163.00— 207.00	—	—	22	77	235	280	210	189	73	14	20	20	—	5	6	1	—	—	—	—	—
Manufacturing.....	548	39.0	195.50	189.00	170.00— 212.00	—	—	11	—	81	169	114	94	36	10	7	15	—	5	6	—	—	—	—	—	—
Nonmanufacturing.....	604	37.0	182.00	175.00	157.50— 205.00	—	—	11	77	154	111	96	95	37	4	13	5	—	—	—	1	—	—	—	—	—
Public utilities.....	35	38.0	220.50	244.50	160.00— 270.00	—	—	6	—	8	—	—	—	8	—	9	3	—	—	—	1	—	—	—	—	—
Order clerks.....	1,344	38.5	239.00	222.00	185.00— 291.50	—	—	8	7	138	150	242	132	77	125	65	140	101	100	19	16	24	—	—	—	—
Manufacturing.....	1,125	38.5	242.00	225.00	185.00— 298.50	—	—	—	6	104	103	235	113	47	105	55	138	98	64	17	16	24	—	—	—	—
Nonmanufacturing.....	219	38.5	225.50	216.00	165.00— 262.50	—	—	8	1	34	47	7	19	30	20	10	2	3	36	2	—	—	—	—	—	—
Order clerks, class A.....	650	38.5	289.00	291.50	250.00— 321.00	—	—	2	—	4	1	21	32	59	105	52	135	90	90	19	16	24	—	—	—	—
Manufacturing.....	566	38.5	290.00	291.50	257.00— 320.00	—	—	—	—	—	—	17	28	45	103	42	133	87	54	17	16	24	—	—	—	—
Nonmanufacturing.....	84	37.5	280.00	289.50	235.00— 335.00	—	—	2	—	4	1	4	4	14	2	10	2	3	36	2	—	—	—	—	—	—
Order clerks, class B.....	694	39.0	193.00	185.00	165.00— 208.00	—	—	6	7	134	149	221	100	18	20	13	5	11	10	—	—	—	—	—	—	—
Manufacturing.....	559	39.0	193.00	185.00	171.50— 200.00	—	—	—	6	104	103	218	85	2	2	13	5	11	10	—	—	—	—	—	—	—
Nonmanufacturing.....	135	39.0	191.50	175.00	155.00— 227.50	—	—	6	1	30	46	3	15	16	18	—	—	—	—	—	—	—	—	—	—	—
Accounting clerks.....	5,568	38.0	221.00	200.00	170.00— 244.00	—	6	99	231	836	1000	770	742	509	338	150	184	91	57	40	377	85	35	18	—	—
Manufacturing.....	2,301	39.0	240.50	218.00	180.00— 275.00	—	—	4	21	331	298	304	323	310	101	67	100	64	23	29	231	53	24	18	—	—
Nonmanufacturing.....	3,267	37.5	207.00	190.00	165.00— 227.50	—	6	95	210	505	702	466	419	199	237	83	84	27	34	11	146	32	11	—	—	—
Public utilities.....	299	39.5	344.00	381.50	290.50— 395.50	—	—	—	—	—	—	16	20	15	13	10	12	2	22	9	144	30	6	—	—	—
Accounting clerks, class A.....	2,380	38.0	241.00	225.00	190.00— 268.50	—	—	—	22	166	319	401	304	306	250	102	142	86	32	36	107	54	35	18	—	—
Manufacturing.....	921	39.0	263.00	235.00	201.50— 305.50	—	—	—	—	41	67	135	116	182	54	27	65	59	20	29	35	49	24	18	—	—
Nonmanufacturing.....	1,459	37.5	227.00	215.00	182.00— 255.50	—	—	—	22	125	252	266	188	124	196	75	77	27	12	7	72	5	11	—	—	—
Public utilities.....	111	39.5	361.50	395.50	345.00— 402.50	—	—	—	—	—	—	7	—	—	10	2	5	2	—	5	70	3	6	—	—	—

See footnotes at end of tables.

Table A-1. Weekly earnings of office workers in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																					
			Mean ²	Median ²	Middle range ²	105 and under 115	115 — 125	125 — 135	135 — 145	145 — 165	165 — 185	185 — 205	205 — 225	225 — 245	245 — 265	265 — 285	285 — 305	305 — 325	325 — 345	345 — 365	365 — 405	405 — 445	445 — 485	485 — 525	525 — 565	565 — 605	
Accounting clerks, class B	3,188	38.0	205.50	182.50	159.00— 220.00	—	6	99	209	670	681	369	438	203	88	48	42	5	25	4	270	31	—	—	—	—	
Manufacturing	1,380	38.5	225.50	200.00	170.00— 244.00	—	—	4	21	290	231	169	207	128	47	40	35	5	3	—	196	4	—	—	—	—	
Nonmanufacturing	1,808	37.5	190.50	173.00	152.00— 209.00	—	6	95	188	380	450	200	231	75	41	8	7	—	22	4	74	27	—	—	—	—	
Public utilities	188	40.0	334.00	381.50	267.00— 389.50	—	—	—	—	—	—	9	20	5	12	8	7	—	22	4	74	27	—	—	—	—	
Payroll clerks	1,022	38.0	231.50	215.00	189.00— 259.00	—	2	5	34	94	88	145	194	142	95	67	25	21	42	10	21	21	11	2	2	1	
Manufacturing	595	38.5	241.50	225.00	199.00— 265.00	—	—	—	6	45	51	71	106	87	77	60	19	12	9	4	18	19	6	2	2	1	
Nonmanufacturing	427	37.5	209.00	209.00	180.00— 234.00	—	2	5	28	49	37	74	88	55	18	7	6	9	33	6	3	2	5	—	—	—	
Public utilities	84	38.5	295.00	316.50	230.00— 325.00	—	—	—	—	—	1	1	14	16	2	—	1	9	30	—	3	2	5	—	—	—	
Key entry operators	4,066	38.0	207.00	194.00	169.00— 225.00	—	31	60	82	661	810	857	529	360	188	86	86	78	7	69	157	3	2	—	—	—	
Manufacturing	1,407	39.0	217.00	202.00	180.00— 239.50	—	—	2	19	108	291	302	238	133	108	43	64	11	6	48	31	3	—	—	—	—	
Nonmanufacturing	2,659	37.5	201.50	189.50	163.50— 219.00	—	31	58	63	553	519	555	291	227	80	43	22	67	1	21	126	—	2	—	—	—	
Public utilities	313	39.0	296.00	300.00	219.50— 366.00	—	—	—	—	3	20	41	29	14	10	20	22	9	—	17	126	—	2	—	—	—	
Key entry operators, class A	1,834	38.5	232.00	215.00	191.00— 247.50	—	—	—	4	82	276	415	288	282	93	56	61	68	7	40	157	3	2	—	—	—	
Manufacturing	668	39.5	238.00	223.00	191.00— 265.50	—	—	—	—	10	115	116	112	96	48	27	58	10	6	36	31	3	—	—	—	—	
Nonmanufacturing	1,166	38.0	229.00	210.00	191.50— 244.00	—	—	—	4	72	161	299	176	186	45	29	3	58	1	4	126	—	2	—	—	—	
Key entry operators, class B	2,232	38.0	186.00	176.50	160.00— 200.50	—	31	60	78	579	534	442	241	78	95	30	25	10	—	29	—	—	—	—	—	—	
Manufacturing	739	38.5	198.50	193.50	173.00— 215.50	—	—	2	19	98	176	186	126	37	60	16	6	1	—	12	—	—	—	—	—	—	
Nonmanufacturing	1,493	37.5	180.00	170.00	156.50— 193.50	—	31	58	59	481	358	256	115	41	35	14	19	9	—	17	—	—	—	—	—	—	
Public utilities	145	38.5	246.50	223.50	190.50— 299.50	—	—	—	—	3	20	24	29	2	8	14	19	9	—	17	—	—	—	—	—	—	
See footnotes at end of table.																											

See footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean ²	Median ²	Middle range ²	125 and under 135	135 — 145	145 — 155	155 — 165	165 — 185	185 — 205	205 — 225	225 — 245	245 — 265	265 — 285	285 — 325	325 — 365	365 — 405	405 — 445	445 — 485	485 — 525	525 — 565	565 — 605	605 — 645	645 — 685	685 — 725
Computer systems analysts (business).....	2,168	38.0	449.50	441.50	383.50— 512.50	-	-	-	-	-	-	8	17	15	21	112	199	386	382	332	213	229	87	127	27	13
Manufacturing.....	668	39.0	456.50	448.50	392.00— 518.00	-	-	-	-	-	-	-	-	-	-	8	66	118	134	108	87	95	34	14	4	-
Nonmanufacturing.....	1,500	37.5	446.00	434.00	376.50— 511.50	-	-	-	-	-	-	8	17	15	21	104	133	268	248	224	126	134	53	113	23	13
Computer systems analysts (business), class A.....	1,119	37.5	501.00	495.00	441.50— 559.50	-	-	-	-	-	-	-	-	-	10	14	39	81	166	204	151	207	80	127	27	13
Manufacturing.....	329	39.0	498.50	494.00	442.00— 555.00	-	-	-	-	-	-	-	-	-	-	-	2	23	69	56	52	77	32	14	4	-
Nonmanufacturing.....	790	37.0	501.50	499.00	439.50— 565.00	-	-	-	-	-	-	-	-	-	10	14	37	58	97	148	99	130	48	113	23	13
Computer systems analysts (business), class B.....	837	38.5	408.00	404.50	368.50— 445.50	-	-	-	-	-	-	5	5	3	1	37	132	237	201	126	61	22	7	-	-	-
Manufacturing.....	271	39.0	425.50	423.00	375.00— 470.00	-	-	-	-	-	-	-	-	-	-	2	47	60	55	52	35	18	2	-	-	-
Nonmanufacturing.....	566	38.0	399.50	398.50	368.50— 440.00	-	-	-	-	-	-	5	5	3	1	35	85	177	146	74	26	4	5	-	-	-
Public utilities.....	46	39.0	458.00	450.50	441.00— 478.00	-	-	-	-	-	-	-	-	-	-	-	6	3	11	15	2	4	5	-	-	-
Computer systems analysts (business), class C.....	202	37.5	339.50	345.50	292.00— 391.50	-	-	-	-	-	-	3	12	12	10	59	21	67	15	2	1	-	-	-	-	-
Manufacturing.....	63	39.0	377.50	386.00	358.50— 394.00	-	-	-	-	-	-	-	-	-	-	6	12	35	10	-	-	-	-	-	-	-
Nonmanufacturing.....	139	37.0	322.00	321.00	279.50— 384.00	-	-	-	-	-	-	3	12	12	10	53	9	32	5	2	1	-	-	-	-	-
Computer programmers (business).....	3,164	38.5	352.50	336.00	290.50— 403.00	-	-	-	-	-	16	92	97	124	357	668	626	418	342	175	122	82	15	5	5	20
Manufacturing.....	828	38.5	357.50	356.00	287.00— 416.00	-	-	-	-	-	-	31	30	43	102	96	132	133	143	76	23	13	4	1	1	-
Nonmanufacturing.....	2,336	38.5	350.50	329.50	292.00— 390.00	-	-	-	-	-	16	61	67	81	255	572	494	285	199	99	99	69	11	4	4	20
Public utilities.....	268	39.0	471.50	459.00	401.50— 526.00	-	-	-	-	-	-	-	-	-	-	18	20	33	45	35	40	40	10	4	4	19
Computer programmers (business), class A.....	884	38.0	430.50	416.00	383.00— 466.00	-	-	-	-	-	-	-	-	-	-	41	87	233	233	125	85	44	6	5	5	20
Manufacturing.....	272	38.5	427.50	424.00	385.00— 457.50	-	-	-	-	-	-	-	-	-	-	9	25	60	91	49	19	13	4	1	1	-
Nonmanufacturing.....	612	38.0	431.50	413.50	381.00— 471.00	-	-	-	-	-	-	-	-	-	-	32	62	173	142	76	66	31	2	4	4	20
Public utilities.....	52	40.0	583.00	613.50	477.00— 695.50	-	-	-	-	-	-	-	-	-	-	-	-	1	2	12	7	2	1	4	4	19
Computer programmers (business), class B.....	1,529	38.5	337.00	326.50	295.50— 361.00	-	-	-	-	-	14	-	38	46	188	443	456	151	70	41	35	38	9	-	-	-
Manufacturing.....	439	38.5	330.00	327.00	279.00— 371.00	-	-	-	-	-	-	-	24	34	77	83	93	58	42	26	2	-	-	-	-	-
Nonmanufacturing.....	1,090	38.5	340.00	326.50	300.00— 356.00	-	-	-	-	-	14	-	14	12	111	360	363	93	28	15	33	38	9	-	-	-
Public utilities.....	148	38.0	461.50	492.50	403.00— 526.00	-	-	-	-	-	-	-	-	-	-	15	11	13	14	15	33	38	9	-	-	-
Computer programmers (business), class C.....	751	39.0	291.50	280.50	258.00— 317.00	-	-	-	-	-	2	92	59	78	169	184	83	34	39	9	2	-	-	-	-	-
Manufacturing.....	117	39.0	297.50	269.00	222.00— 362.50	-	-	-	-	-	-	31	6	9	25	4	14	15	10	1	2	-	-	-	-	-
Nonmanufacturing.....	634	39.0	290.50	282.00	259.00— 317.00	-	-	-	-	-	2	61	53	69	144	180	69	19	29	8	-	-	-	-	-	-
Public utilities.....	68	40.0	407.50	420.00	395.00— 441.50	-	-	-	-	-	-	-	-	-	-	3	9	19	29	8	-	-	-	-	-	-
Computer operators.....	2,413	38.0	260.50	249.00	203.00— 312.00	-	17	26	65	197	315	278	236	328	188	253	311	114	35	22	27	1	-	-	-	-
Manufacturing.....	866	38.5	280.00	275.00	222.00— 334.00	-	10	-	21	41	63	86	77	92	91	136	144	75	9	10	11	-	-	-	-	-
Nonmanufacturing.....	1,547	37.5	249.50	237.00	200.00— 280.00	-	7	26	44	156	252	192	159	236	97	117	167	39	26	12	16	1	-	-	-	-
Public utilities.....	209	39.0	360.50	349.50	325.00— 405.00	-	-	-	-	-	1	3	4	17	3	6	101	31	19	8	15	1	-	-	-	-
Computer operators, class A.....	643	38.0	312.00	309.00	258.00— 341.00	-	-	-	-	-	6	24	47	119	46	140	159	44	28	12	18	-	-	-	-	-
Manufacturing.....	279	38.5	327.00	318.50	294.00— 362.00	-	-	-	-	-	-	19	14	8	10	98	68	39	8	4	11	-	-	-	-	-
Nonmanufacturing.....	364	37.5	300.50	276.50	250.00— 336.00	-	-	-	-	-	6	5	33	111	36	42	91	5	20	8	7	-	-	-	-	-
Computer operators, class B.....	1,195	37.5	258.00	245.00	208.50— 289.50	-	7	-	3	73	185	165	142	188	123	107	107	68	7	10	9	1	-	-	-	-
Manufacturing.....	394	38.0	283.00	272.50	241.00— 336.50	-	-	-	2	-	37	26	39	69	67	35	76	36	1	6	-	-	-	-	-	-
Nonmanufacturing.....	801	37.0	246.00	230.00	201.50— 266.00	-	7	-	1	73	148	139	103	119	56	72	31	32	6	4	9	1	-	-	-	-
Public utilities.....	93	39.0	373.50	395.00	339.00— 405.00	-	-	-	-	-	-	-	-	-	15	1	4	25	28	6	4	9	1	-	-	-

See footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																											
			Mean ²	Median ²	Middle range ²	125 and under 135	135 — 145	145 — 155	155 — 165	165 — 185	185 — 205	205 — 225	225 — 245	245 — 265	265 — 285	285 — 325	325 — 365	365 — 405	405 — 445	445 — 485	485 — 525	525 — 565	565 — 605	605 — 645	645 — 685	685 — 725							
Computer operators, class C.....	575	38.5	207.00	190.00	173.50– 222.50	–	10	26	62	124	124	89	47	21	19	6	45	2	–	–	–	–	–	–	–	–	–	–					
Manufacturing.....	193	39.0	206.00	205.00	180.00– 230.50	–	10	–	19	41	26	41	24	15	14	3	–	–	–	–	–	–	–	–	–	–	–						
Nonmanufacturing.....	382	38.0	208.00	185.50	171.00– 219.50	–	–	26	43	83	98	48	23	6	5	3	45	2	–	–	–	–	–	–	–	–	–						
Peripheral equipment operators.....	200	37.5	180.50	169.50	148.00– 204.50	20	22	36	16	33	24	21	15	7	1	–	1	4	–	–	–	–	–	–	–	–	–						
Nonmanufacturing.....	180	38.0	173.00	160.50	146.50– 189.50	20	22	36	16	33	24	12	6	7	1	–	1	2	–	–	–	–	–	–	–	–	–						
Computer data librarians.....	158	37.0	218.00	207.50	170.00– 255.00	7	4	12	8	25	22	12	19	14	6	24	4	1	–	–	–	–	–	–	–	–	–						
Nonmanufacturing.....	128	37.0	217.50	206.00	167.00– 255.00	7	4	12	8	22	11	3	18	14	6	20	2	1	–	–	–	–	–	–	–	–	–						
Drafters.....	2,683	40.0	317.50	307.00	245.00– 384.00	–	–	–	32	77	100	235	220	202	247	386	350	342	219	236	30	2	5	–	–	–	–						
Manufacturing.....	1,805	40.0	326.50	323.50	240.50– 402.00	–	–	–	22	53	84	183	139	97	121	211	184	295	180	208	21	2	5	–	–	–	–						
Nonmanufacturing.....	878	39.5	299.00	290.00	250.00– 340.00	–	–	–	10	24	16	52	81	105	126	175	166	47	39	28	9	–	–	–	–	–	–						
Drafters, class A.....	930	40.0	388.00	387.00	331.00– 447.00	–	–	–	–	–	–	–	–	21	59	127	119	208	160	210	19	2	5	–	–	–	–						
Manufacturing.....	708	40.0	400.00	407.50	365.00– 465.50	–	–	–	–	–	–	–	–	21	33	81	29	189	145	192	11	2	5	–	–	–	–						
Nonmanufacturing.....	222	40.0	351.00	347.50	304.50– 376.50	–	–	–	–	–	–	–	–	–	26	46	90	19	15	18	8	–	–	–	–	–	–						
Drafters, class B.....	719	39.5	331.00	327.00	275.00– 372.00	–	–	–	–	–	–	26	30	68	74	155	166	111	52	26	11	–	–	–	–	–	–						
Manufacturing.....	428	40.0	342.00	337.50	297.50– 390.00	–	–	–	–	–	–	16	10	34	42	64	110	96	30	16	10	–	–	–	–	–	–						
Nonmanufacturing.....	291	39.0	314.50	300.00	270.00– 345.00	–	–	–	–	–	–	10	20	34	32	91	56	15	22	10	1	–	–	–	–	–	–						
Drafters, class C.....	711	39.5	256.00	243.00	220.00– 280.00	–	–	–	10	41	20	134	156	92	94	74	61	23	6	–	–	–	–	–	–	–	–						
Manufacturing.....	423	40.0	255.00	236.00	217.50– 270.00	–	–	–	–	25	4	106	116	32	37	46	43	10	4	–	–	–	–	–	–	–	–						
Nonmanufacturing.....	288	39.5	258.00	250.00	226.00– 280.00	–	–	–	10	16	16	28	40	60	57	28	18	13	2	–	–	–	–	–	–	–	–						
Drafters, class D.....	297	40.0	217.50	209.50	188.50– 242.00	–	–	–	22	36	75	63	33	18	16	30	4	–	–	–	–	–	–	–	–	–	–						
Manufacturing.....	233	40.0	209.00	196.00	188.50– 223.00	–	–	–	22	28	75	61	13	7	5	20	2	–	–	–	–	–	–	–	–	–	–						
Nonmanufacturing.....	64	39.5	247.50	245.00	234.00– 273.00	–	–	–	–	8	–	2	20	11	11	10	2	–	–	–	–	–	–	–	–	–	–						
Electronics technicians.....	1,672	40.0	332.50	327.00	263.00– 390.50	–	–	–	–	31	42	80	114	156	133	264	318	160	101	259	14	–	–	–	–	–	–						
Manufacturing.....	1,351	40.0	304.50	307.00	255.00– 360.00	–	–	–	–	31	36	80	107	156	133	264	315	159	44	12	14	–	–	–	–	–	–						
Electronics technicians, class A ...	784	40.0	371.50	360.00	327.00– 421.50	–	–	–	–	–	14	–	–	–	–	160	311	76	33	176	14	–	–	–	–	–	–						
Manufacturing.....	612	40.0	346.00	345.00	317.00– 360.00	–	–	–	–	–	14	–	–	–	–	160	308	75	32	9	14	–	–	–	–	–	–						
Electronics technicians, class B ...	664	40.0	322.50	288.50	260.00– 399.00	–	–	–	–	7	14	–	55	129	114	103	7	84	68	83	–	–	–	–	–	–	–						
Manufacturing.....	521	40.0	289.50	270.00	255.00– 307.50	–	–	–	–	7	14	–	48	129	114	103	7	84	12	3	–	–	–	–	–	–	–						
Registered industrial nurses.....	272	39.0	341.50	328.00	294.00– 396.00	–	–	–	–	–	–	4	1	21	34	68	49	39	51	1	4	–	–	–	–	–	–						
Manufacturing.....	217	39.5	340.50	329.50	299.00– 391.50	–	–	–	–	–	–	3	1	16	23	59	42	30	42	1	–	–	–	–	–	–	–						
Nonmanufacturing.....	55	38.0	343.50	327.00	274.50– 396.00	–	–	–	–	–	–	1	–	5	11	9	7	9	9	–	4	–	–	–	–	–	–						

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Philadelphia, Pa.-N.J., November 1980

Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)	
		Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹
Office occupations - men				Stenographers.....	1,351	38.5	261.00	Order clerks.....	928	38.5	215.50
File clerks.....	72	36.5	155.00	Manufacturing.....	639	39.0	284.50	Manufacturing.....	789	38.5	218.00
Nonmanufacturing.....	69	36.0	148.00	Nonmanufacturing.....	712	38.0	240.00	Nonmanufacturing.....	139	38.5	200.00
Messengers.....	343	38.0	189.50	Public utilities.....	294	38.5	299.00	Order clerks, class A.....	317	38.0	270.50
Manufacturing.....	130	38.0	191.50	Stenographers, senior.....	370	39.5	275.50	Manufacturing.....	279	38.0	275.00
Nonmanufacturing.....	213	37.5	188.50	Manufacturing.....	213	40.0	280.00	Order clerks, class B.....	611	39.0	187.00
Order clerks.....	413	38.5	293.00	Nonmanufacturing.....	157	39.5	269.50	Manufacturing.....	510	39.0	187.00
Manufacturing.....	336	38.5	297.50	Stenographers, general.....	981	38.0	255.50	Nonmanufacturing.....	101	39.0	185.50
Nonmanufacturing.....	77	38.0	273.00	Manufacturing.....	426	38.5	286.50	Accounting clerks.....	4,596	38.0	206.00
Order clerks, class A.....	333	38.5	306.50	Nonmanufacturing.....	555	38.0	231.50	Manufacturing.....	1,915	38.5	215.50
Manufacturing.....	287	39.0	305.00	Public utilities.....	250	38.5	283.00	Nonmanufacturing.....	2,681	37.0	199.00
Order clerks, class B.....	80	38.5	237.50	Transcribing-machine typists.....	488	36.5	193.50	Public utilities.....	186	40.0	334.50
Accounting clerks:				Manufacturing.....	91	38.5	203.50	Accounting clerks, class A.....	1,899	38.0	230.50
Manufacturing.....	386	40.0	363.50	Nonmanufacturing.....	397	36.0	191.50	Manufacturing.....	749	39.0	241.50
Accounting clerks, class A:				Typists.....	3,149	37.5	183.50	Nonmanufacturing.....	1,150	37.0	223.50
Manufacturing.....	172	40.0	356.50	Manufacturing.....	806	39.5	206.00	Public utilities.....	73	40.0	375.00
Nonmanufacturing:				Nonmanufacturing.....	2,343	37.0	176.00	Accounting clerks, class B.....	2,697	38.0	188.50
Public utilities.....	38	39.0	335.50	Public utilities.....	122	39.5	282.50	Manufacturing.....	1,166	38.5	199.00
Payroll clerks.....	109	39.0	280.50	Typists, class A.....	1,223	38.0	207.50	Nonmanufacturing.....	1,531	37.0	180.50
Manufacturing.....	73	39.5	299.00	Manufacturing.....	304	39.5	244.50	Public utilities.....	113	39.5	308.50
Office occupations - women				Nonmanufacturing.....	919	37.5	195.50	Payroll clerks.....	893	38.0	225.50
Secretaries.....	10,269	38.0	263.00	Public utilities.....	80	39.5	297.00	Manufacturing.....	522	38.5	233.50
Manufacturing.....	5,380	39.0	271.50	Typists, class B.....	1,926	37.5	168.00	Nonmanufacturing.....	371	37.0	214.00
Nonmanufacturing.....	4,889	37.5	253.50	Manufacturing.....	502	39.5	182.50	Public utilities.....	76	38.0	287.50
Public utilities.....	458	39.0	374.00	Nonmanufacturing.....	1,424	36.5	163.00	Key entry operators.....	3,778	38.0	205.00
Secretaries, class A.....	698	39.0	330.50	Public utilities.....	42	39.5	255.50	Manufacturing.....	1,407	39.0	217.00
Manufacturing.....	412	39.5	316.00	File clerks.....	1,506	37.0	160.50	Nonmanufacturing.....	2,371	37.5	197.50
Nonmanufacturing.....	286	38.0	351.00	Manufacturing.....	369	38.5	191.00	Public utilities.....	304	39.0	296.00
Public utilities.....	82	39.0	428.50	Nonmanufacturing.....	1,137	37.0	150.00	Key entry operators, class A.....	1,613	38.5	230.00
Secretaries, class B.....	2,631	38.0	279.50	File clerks, class A.....	83	38.0	213.50	Manufacturing.....	668	39.5	238.00
Manufacturing.....	1,373	39.0	279.50	File clerks, class B.....	450	37.0	176.50	Nonmanufacturing.....	945	37.5	224.50
Nonmanufacturing.....	1,258	37.5	279.50	Manufacturing.....	186	38.0	198.50	Key entry operators, class B.....	2,165	38.0	186.00
Public utilities.....	178	39.0	410.00	Nonmanufacturing.....	264	36.5	161.50	Manufacturing.....	739	38.5	198.50
Secretaries, class C.....	3,239	38.0	258.50	File clerks, class C.....	952	37.0	148.50	Nonmanufacturing.....	1,426	37.5	179.50
Manufacturing.....	1,553	38.5	275.50	Manufacturing.....	148	38.5	163.00	Public utilities.....	142	38.5	248.00
Nonmanufacturing.....	1,686	37.5	243.00	Nonmanufacturing.....	804	37.0	146.00	Professional and technical occupations - men			
Public utilities.....	107	38.5	321.00	Messengers.....	265	38.5	194.00	Computer systems analysts (business).....	1,633	38.0	456.50
Secretaries, class D.....	2,660	38.5	253.50	Manufacturing.....	140	39.0	189.00	Manufacturing.....	485	39.0	470.50
Manufacturing.....	1,800	39.0	255.50	Nonmanufacturing.....	125	38.0	200.00	Nonmanufacturing.....	1,148	37.5	450.50
Nonmanufacturing.....	860	37.0	248.50	Switchboard operators.....	446	38.5	209.50	Computer systems analysts (business), class A.....	898	37.5	501.00
Public utilities.....	86	39.5	321.50	Manufacturing.....	168	39.0	238.00	Manufacturing.....	273	39.0	501.50
Secretaries, class E.....	993	37.5	209.50	Nonmanufacturing.....	278	38.5	192.50	Nonmanufacturing.....	625	37.0	500.50
Manufacturing.....	226	39.0	230.00	Switchboard operator-receptionists.....	1,144	38.0	188.50	Computer systems analysts (business), class B.....	596	38.0	413.50
Nonmanufacturing.....	767	37.5	203.50	Manufacturing.....	548	39.0	195.50	Manufacturing.....	173	39.0	442.50
				Nonmanufacturing.....	596	37.0	182.00	Nonmanufacturing.....	423	38.0	401.50
				Public utilities.....	27	39.0	238.50	Public utilities.....	37	39.0	468.00

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Philadelphia, Pa.-N.J., November 1980 —Continued

Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)	
		Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹
Computer systems analysts (business), class C.....	136	37.0	352.50	Drafters, class A	870	40.0	391.00	Computer programmers (business), class A.....	157	38.0	415.50
Nonmanufacturing.....	97	36.5	341.50	Manufacturing.....	671	40.0	402.50	Manufacturing.....	92	38.0	414.50
				Nonmanufacturing.....	199	40.0	351.50	Nonmanufacturing.....	65	37.5	416.50
Computer programmers (business).....	2,103	38.5	365.00	Drafters, class B	641	39.5	335.00	Computer programmers (business), class B.....	617	38.5	328.00
Manufacturing.....	476	38.5	375.50	Manufacturing.....	388	40.0	345.50	Manufacturing.....	217	38.0	308.50
Nonmanufacturing.....	1,627	38.5	362.00	Nonmanufacturing.....	253	39.0	318.50	Nonmanufacturing.....	400	38.5	338.50
Public utilities.....	196	39.5	481.00								
Computer programmers (business), class A.....	727	38.0	433.50	Drafters, class C	561	39.5	264.00	Computer programmers (business), class C.....	287	39.0	279.00
Manufacturing.....	180	38.5	434.00	Manufacturing.....	339	40.0	262.50	Nonmanufacturing.....	244	38.5	277.50
Nonmanufacturing.....	547	38.0	433.50	Nonmanufacturing.....	222	39.5	265.50				
Public utilities.....	48	40.0	587.00	Drafters, class D	232	40.0	222.00	Computer operators	661	37.5	232.00
Computer programmers (business), class B.....	912	38.5	343.50	Manufacturing.....	177	40.0	214.00	Manufacturing.....	264	38.5	234.50
Manufacturing.....	222	39.0	351.50	Nonmanufacturing.....	55	39.5	248.00	Nonmanufacturing.....	397	37.0	230.50
Nonmanufacturing.....	690	38.5	341.00	Electronics technicians	1,559	40.0	337.50	Public utilities.....	54	37.5	328.50
Public utilities.....	85	38.5	473.00	Manufacturing.....	1,243	40.0	309.50				
Computer programmers (business), class C.....	464	39.0	299.50	Electronics technicians, class A.....	770	40.0	371.50	Computer operators, class B.....	313	37.0	250.50
Manufacturing.....	74	39.0	303.00	Manufacturing.....	602	40.0	346.50	Manufacturing.....	124	37.5	259.00
Nonmanufacturing.....	390	39.0	298.50	Electronics technicians, class B.....	590	40.0	331.00	Nonmanufacturing.....	189	36.5	244.50
Computer operators	1,684	38.0	270.00	Manufacturing.....	448	40.0	296.00	Public utilities.....	29	37.5	336.00
Manufacturing.....	602	38.5	300.00					Computer operators, class C.....	293	38.0	206.00
Nonmanufacturing.....	1,082	37.5	253.50	Professional and technical occupations - women				Manufacturing.....	126	39.0	202.50
Public utilities.....	155	39.5	372.00	Computer systems analysts (business)	523	38.0	428.50	Nonmanufacturing.....	167	37.0	208.50
Computer operators, class A.....	559	38.0	315.00	Manufacturing.....	183	39.0	419.50	Computer data librarians.....	87	37.0	235.50
Manufacturing.....	265	38.5	328.00	Nonmanufacturing.....	340	37.5	433.00	Nonmanufacturing.....	58	37.0	243.50
Nonmanufacturing.....	294	37.5	303.50	Computer systems analysts (business), class A.....	221	37.5	501.00	Drafters.....	336	40.0	255.00
Computer operators, class B.....	859	37.5	260.00	Manufacturing.....	56	38.5	485.50	Manufacturing.....	218	40.0	253.00
Manufacturing.....	270	38.5	294.00	Nonmanufacturing.....	165	37.0	506.50	Nonmanufacturing.....	118	40.0	259.00
Nonmanufacturing.....	589	37.0	245.00	Computer systems analysts (business), class B.....	232	38.5	393.50	Drafters, class A	50	40.0	344.00
Computer operators, class C.....	266	38.5	207.50	Manufacturing.....	98	39.5	396.50	Drafters, class B	78	40.0	298.50
Manufacturing.....	67	39.0	212.50	Nonmanufacturing.....	134	38.0	391.00	Drafters, class C	142	40.0	224.50
Nonmanufacturing.....	199	38.5	205.50	Computer systems analysts (business), class C.....	63	38.0	313.00	Manufacturing.....	84	40.0	222.50
Public utilities.....	36	39.0	311.50	Computer programmers (business)	1,061	38.5	327.50	Nonmanufacturing.....	58	40.0	226.50
Peripheral equipment operators.....	169	37.5	185.50	Manufacturing.....	352	38.5	333.50	Drafters, class D	65	40.0	201.00
Nonmanufacturing.....	149	38.0	177.00	Nonmanufacturing.....	709	38.5	325.00	Manufacturing.....	56	40.0	194.00
Computer data librarians.....	71	37.0	196.00	Public utilities.....	72	38.0	446.00	Registered industrial nurses.....	264	39.0	341.50
Nonmanufacturing.....	70	37.0	196.00					Manufacturing.....	213	39.5	340.00
Drafters	2,329	40.0	326.50					Nonmanufacturing.....	51	38.0	346.50
Manufacturing.....	1,587	40.0	336.50								
Nonmanufacturing.....	742	39.5	304.50								

See footnotes at end of tables.

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Hourly earnings (in dollars)*			Number of workers receiving straight-time hourly earnings (in dollars) of —																						
		Mean²	Median²	Middle range²	3.40 and under 3.50	3.50 - 3.60	3.60 - 3.80	3.80 - 4.00	4.00 - 4.50	4.50 - 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 - 11.50	11.50 - 12.00	12.00 - 12.50	12.50 - 13.00	13.00 and over
Maintenance carpenters.....	571	9.83	10.78	8.68-11.27	-	-	-	-	-	-	-	-	8	20	53	24	16	61	43	23	31	58	209	25	-	-	-
Manufacturing.....	305	9.85	10.11	8.84-11.01	-	-	-	-	-	-	-	-	-	-	19	11	11	61	20	20	23	49	73	18	-	-	-
Nonmanufacturing.....	266	9.81	11.27	7.69-11.27	-	-	-	-	-	-	-	-	8	20	34	13	5	-	23	3	8	9	136	7	-	-	-
Maintenance electricians.....	1,717	9.81	9.81	8.55-11.19	-	-	-	-	-	-	2	-	14	25	67	103	161	242	41	257	222	54	157	307	63	1	1
Manufacturing.....	1,452	9.73	9.81	8.54-11.01	-	-	-	-	-	-	-	-	-	10	65	88	147	240	31	234	192	54	155	175	61	-	-
Nonmanufacturing.....	265	10.29	11.63	9.06-11.95	-	-	-	-	-	-	2	-	14	15	2	15	14	2	10	23	30	-	2	132	2	1	1
Maintenance painters.....	249	9.55	9.42	8.84-11.11	-	-	-	-	-	4	2	6	2	13	3	6	17	23	64	11	2	11	74	10	-	1	-
Manufacturing.....	186	9.99	9.44	9.15-11.11	-	-	-	-	-	-	-	-	-	-	5	10	23	56	9	-	11	72	-	-	-	-	
Nonmanufacturing.....	63	8.24	8.13	6.53- 9.69	-	-	-	-	-	4	2	6	2	13	3	1	7	-	8	2	2	-	2	10	-	1	-
Maintenance machinists.....	1,540	9.91	10.08	8.74-11.16	-	-	-	-	-	-	-	11	11	30	72	159	33	110	14	294	231	53	241	235	12	-	34
Manufacturing.....	1,402	9.72	9.86	8.51-11.11	-	-	-	-	-	-	-	11	11	30	72	159	33	110	14	286	217	47	240	160	12	-	-
Nonmanufacturing: Public utilities.....	138	11.84	11.95	11.95-11.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	14	6	1	75	-	-	-	* 34
Maintenance mechanics (machinery).....	2,238	9.21	9.53	8.32-10.11	-	-	-	-	-	8	24	51	69	59	182	71	179	172	302	346	324	227	118	44	-	62	-
Manufacturing.....	2,160	9.31	9.53	8.38-10.11	-	-	-	-	-	-	-	51	61	38	180	71	177	168	302	346	324	218	118	44	-	62	-
Maintenance mechanics (motor vehicles).....	1,264	10.33	10.54	9.63-11.51	-	-	-	-	-	-	8	24	24	3	-	20	75	93	30	246	78	97	243	137	140	46	-
Manufacturing.....	349	9.84	9.99	8.92-11.37	-	-	-	-	-	-	-	-	17	-	-	10	12	93	18	30	35	30	36	68	-	-	-
Nonmanufacturing.....	915	10.51	11.13	9.63-11.65	-	-	-	-	-	-	8	24	7	3	-	10	63	-	12	216	43	67	207	69	140	46	-
Public utilities.....	561	11.21	11.24	11.13-12.27	-	-	-	-	-	-	-	24	-	-	-	-	7	-	12	8	33	39	207	45	140	46	-
Maintenance pipefitters.....	899	10.06	10.28	8.92-11.11	-	-	-	-	-	-	-	-	-	8	54	12	48	109	18	100	160	78	176	134	-	-	2
Manufacturing.....	832	9.97	10.28	8.84-11.11	-	-	-	-	-	-	-	-	-	8	54	12	48	104	13	96	151	78	176	90	-	-	2
Maintenance sheet-metal workers.....	167	9.38	8.75	8.36-11.01	-	-	-	-	-	-	-	-	-	8	11	11	23	33	9	2	20	1	40	9	-	-	-
Manufacturing.....	154	9.31	8.65	8.08-11.01	-	-	-	-	-	-	-	-	-	8	11	11	23	33	-	2	20	1	39	6	-	-	-
Millwrights.....	544	10.01	10.98	8.49-11.24	-	-	-	-	-	-	-	-	-	-	90	6	41	21	20	18	8	70	270	-	-	-	-
Manufacturing.....	544	10.01	10.98	8.49-11.24	-	-	-	-	-	-	-	-	-	-	90	6	41	21	20	18	8	70	270	-	-	-	-
Maintenance trades helpers.....	621	8.15	8.46	7.32- 9.63	4	-	2	28	-	-	27	30	14	13	49	81	68	32	66	188	19	-	-	-	-	-	-
Manufacturing.....	417	8.20	8.46	7.10- 9.63	4	-	-	28	-	-	24	1	14	7	40	59	34	6	-	181	19	-	-	-	-	-	-
Machine-tool operators (toolroom).....	326	9.25	9.18	8.21-10.01	-	-	-	-	-	-	-	-	-	12	29	17	45	53	20	67	30	12	28	13	-	-	-
Manufacturing.....	326	9.25	9.18	8.21-10.01	-	-	-	-	-	-	-	-	-	12	29	17	45	53	20	67	30	12	28	13	-	-	-
Tool and die makers.....	1,205	10.20	9.89	9.18-11.77	-	-	-	-	-	-	-	-	-	-	-	14	55	86	348	130	67	120	40	325	20	-	-
Manufacturing.....	1,195	10.20	9.89	9.17-11.77	-	-	-	-	-	-	-	-	-	-	-	14	55	86	348	125	67	115	40	325	20	-	-
Stationary engineers.....	799	9.14	9.17	7.87-10.64	-	-	-	-	-	-	24	-	53	31	64	49	100	57	60	50	63	64	123	59	-	-	2
Manufacturing.....	509	9.12	9.17	7.81-10.64	-	-	-	-	-	-	-	-	51	24	47	12	41	54	58	36	31	64	45	44	-	-	2
Nonmanufacturing.....	290	9.16	8.38	7.87-11.45	-	-	-	-	-	-	24	-	2	7	17	37	59	3	2	14	32	-	78	15	-	-	-
Public utilities.....	137	10.86	11.45	10.23-11.45	-	-	-	-	-	-	-	-	-	-	-	-	15	1	-	-	28	-	78	15	-	-	-
Boiler tenders.....	259	8.12	7.98	6.64-10.09	-	-	-	-	-	1	1	51	2	27	25	37	-	26	12	6	66	4	-	1	-	-	-
Manufacturing.....	243	8.03	7.98	6.64-10.09	-	-	-	-	-	-	-	51	2	27	25	37	-	26	7	6	58	4	-	-	-	-	-

* All workers were at \$13.00 to \$13.50.
Also see footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Hourly earnings (in dollars)*			Number of workers receiving straight-time hourly earnings (in dollars) of —																							
		Mean²	Median²	Middle range²	3.10 and under 3.60	3.60 4.10	4.10 4.60	4.60 5.10	5.10 5.60	5.60 6.10	6.10 6.60	6.60 7.10	7.10 7.60	7.60 8.10	8.10 8.60	8.60 9.10	9.10 9.60	9.60 10.10	10.10 10.60	10.60 11.10	11.10 11.60	11.60 12.10	12.10 12.60	12.60 13.10	13.10 13.60	13.60 14.10	14.10 and over	
Truckdrivers	9,215	10.16	11.40	8.91–11.55	4	108	393	58	59	57	73	240	180	233	40	934	946	212	257	576	2738	2077	—	—	—	—	—	30
Manufacturing	2,227	9.53	9.34	9.34–10.97	—	7	21	45	40	21	39	75	33	55	17	94	888	108	109	357	181	137	—	—	—	—	—	—
Nonmanufacturing	6,988	10.36	11.45	8.81–12.04	4	101	372	13	19	36	34	165	147	178	23	840	58	104	148	219	2557	1940	—	—	—	—	—	30
Public utilities	3,606	11.60	12.04	11.45–12.04	—	—	—	—	1	2	3	2	2	3	22	73	9	53	—	219	1372	1845	—	—	—	—	—	—
Truckdrivers, light truck	813	5.42	4.50	4.25– 7.00	4	107	393	9	27	2	10	171	13	7	22	30	—	—	—	18	—	—	—	—	—	—	—	—
Manufacturing	129	6.38	6.97	5.46– 7.10	—	7	21	2	19	—	9	37	12	6	6	10	—	—	—	—	18	—	—	—	—	—	—	—
Nonmanufacturing:																												
Public utilities	59	9.14	8.74	8.19–11.41	—	—	—	—	1	2	—	2	1	1	16	18	—	—	—	18	—	—	—	—	—	—	—	—
Truckdrivers, medium truck	1,689	8.96	9.34	7.64– 9.34	—	—	—	33	29	52	39	34	149	195	7	9	856	46	3	32	155	20	—	—	—	—	—	30
Truckdrivers, heavy truck	600	10.76	11.55	9.63–11.55	—	1	—	—	—	—	19	2	—	4	2	30	48	75	7	—	412	—	—	—	—	—	—	—
Manufacturing	151	9.82	9.63	9.63–11.55	—	—	—	—	—	—	19	—	—	4	2	—	75	—	75	—	51	—	—	—	—	—	—	—
Nonmanufacturing	449	11.07	11.55	11.49–11.55	—	1	—	—	—	—	—	2	—	—	—	30	48	—	7	—	361	—	—	—	—	—	—	—
Truckdrivers, tractor-trailer	4,470	10.98	11.45	10.61–11.55	—	—	—	—	3	3	—	17	—	4	4	787	42	65	176	219	2104	1046	—	—	—	—	—	—
Manufacturing	405	10.67	11.55	9.54–12.04	—	—	—	—	3	3	—	17	—	3	4	52	42	7	38	—	119	117	—	—	—	—	—	—
Nonmanufacturing	4,065	11.01	11.45	10.61–11.55	—	—	—	—	—	—	—	—	—	1	—	735	—	58	138	219	1985	929	—	—	—	—	—	—
Public utilities	2,473	11.61	11.55	11.45–12.04	—	—	—	—	—	—	—	—	—	—	—	—	—	13	—	219	1312	929	—	—	—	—	—	—
Shippers	412	6.74	6.41	5.62– 7.32	7	—	20	12	63	46	63	71	35	12	39	1	3	25	8	7	—	—	—	—	—	—	—	—
Manufacturing	331	6.69	6.41	5.90– 7.32	7	—	20	12	29	46	63	46	35	12	34	—	—	25	2	—	—	—	—	—	—	—	—	—
Nonmanufacturing	81	6.94	6.61	5.35– 8.10	—	—	—	—	34	—	—	25	—	—	5	1	3	—	6	7	—	—	—	—	—	—	—	—
Receivers	668	7.42	7.39	5.85– 9.03	7	29	12	68	38	47	16	95	64	33	45	69	14	60	7	64	—	—	—	—	—	—	—	—
Manufacturing	348	6.98	6.81	5.52– 8.20	7	17	—	53	20	9	6	80	45	21	26	—	4	59	1	—	—	—	—	—	—	—	—	—
Nonmanufacturing	320	7.89	8.48	5.85– 9.22	—	12	12	15	18	38	10	15	19	12	19	69	10	1	6	64	—	—	—	—	—	—	—	—
Shippers and receivers	507	6.98	6.74	5.80– 7.96	—	—	2	67	36	107	25	74	33	44	49	22	1	—	9	38	—	—	—	—	—	—	—	—
Manufacturing	309	6.37	5.94	5.38– 7.27	—	—	2	51	34	105	7	30	18	18	34	1	—	—	9	—	—	—	—	—	—	—	—	—
Nonmanufacturing	198	7.93	7.73	6.98– 8.80	—	—	—	16	2	2	18	44	15	26	15	21	1	—	—	38	—	—	—	—	—	—	—	—
Warehousemen	3,716	7.21	7.21	6.00– 7.96	28	19	142	248	209	291	445	104	945	539	179	130	2	53	223	128	—	31	—	—	—	—	—	—
Manufacturing	1,425	6.97	6.94	5.67– 8.02	—	15	78	90	95	198	171	100	59	329	102	92	2	51	43	—	—	—	—	—	—	—	—	—
Nonmanufacturing	2,291	7.36	7.21	6.55– 7.96	28	4	64	158	114	93	274	4	886	210	77	38	—	2	180	128	—	31	—	—	—	—	—	—
Order fillers	1,826	7.94	8.31	5.49–10.52	—	—	238	120	125	188	41	68	46	83	260	36	45	—	298	122	3	27	42	21	15	30	18	
Manufacturing	590	6.57	6.09	5.20– 8.00	—	—	143	—	49	104	36	54	20	83	—	36	45	—	20	—	—	—	—	—	—	—	—	—
Nonmanufacturing	1,236	8.60	8.31	5.93–10.52	—	—	95	120	76	84	5	14	26	—	260	—	—	—	278	122	3	27	42	21	15	30	18	
Shipping packers	1,046	6.10	6.15	4.84– 6.91	79	35	111	108	57	96	181	122	27	87	38	56	18	31	—	—	—	—	—	—	—	—	—	—
Manufacturing	739	6.55	6.15	5.12– 7.89	8	23	71	78	22	40	143	120	13	80	36	56	18	31	—	—	—	—	—	—	—	—	—	—
Nonmanufacturing	307	5.03	5.26	3.86– 5.95	71	12	40	30	35	56	38	2	14	7	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Material handling laborers	5,334	7.18	6.45	5.99– 8.96	319	306	264	244	58	1376	135	616	75	168	116	577	176	70	—	32	265	537	—	—	—	—	—	—
Manufacturing	2,946	6.22	6.00	5.85– 6.97	54	144	228	225	34	1354	58	313	49	49	82	194	95	67	—	—	—	—	—	—	—	—	—	—
Nonmanufacturing	2,388	8.36	8.96	6.48–11.23	265	162	36	19	24	22	77	303	26	119	34	383	81	3	—	32	265	537	—	—	—	—	—	—
Public utilities	905	11.24	11.72	11.13–12.04	—	—	—	—	—	—	—	—	—	86	—	28	—	—	4	250	537	—	—	—	—	—	—	—
Forklift operators	3,861	8.17	8.08	7.25– 9.13	—	—	22	8	9	142	562	164	738	295	607	125	418	136	372	162	4	97	—	—	—	—	—	—
Manufacturing	2,626	7.78	7.65	6.82– 8.40	—	—	2	4	2	142	435	164	498	232	606	117	119	134	171	—	—	—	—	—	—	—	—	—
Nonmanufacturing	1,235	8.99	9.13	7.25–10.42	—	—	20	4	7	—	127	—	240	63	1	8	299	2	201	162	4	97	—	—	—	—	—	—
Guards	7,935	4.00	3.20	3.10– 3.85	5491	642	209	190	141	402	95	127	202	46	58	108	116	80	24	3	1	—	—	—	—	—	—	—
Manufacturing	1,022	7.25	7.44	5.83– 8.74	—	2	71	105	63	127	29	58	155	31	49	108	116	80	24	3	1	—	—	—	—	—	—	—
Nonmanufacturing	6,913	3.52	3.17	3.10– 3.40	5491	640	138	85	78	275	66	69	47	15	9	—	—	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Hourly earnings (in dollars) ¹			Number of workers receiving straight-time hourly earnings (in dollars) of —																							
		Mean ²	Median ²	Middle range ²	3.10 and under 3.60	3.60 — 4.10	4.10 — 4.60	4.60 — 5.10	5.10 — 5.60	5.60 — 6.10	6.10 — 6.60	6.60 — 7.10	7.10 — 7.60	7.60 — 8.10	8.10 — 8.60	8.60 — 9.10	9.10 — 9.60	9.60 — 10.10	10.10 — 10.60	10.60 — 11.10	11.10 — 11.60	11.60 — 12.10	12.10 — 12.60	12.60 — 13.10	13.10 — 13.60	13.60 — 14.10	14.10 and over	
Guards, class A	557	7.03	7.31	5.56– 8.74	14	44	11	53	20	27	34	53	107	11	30	65	10	75	—	3	—	—	—	—	—	—	—	—
Manufacturing	298	8.19	8.74	7.44– 9.68	—	—	—	38	—	—	4	—	72	1	30	65	10	75	—	3	—	—	—	—	—	—	—	—
Nonmanufacturing	259	5.70	6.00	4.50– 6.63	14	44	11	15	20	27	30	53	35	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
Guards, class B	7,376	3.77	3.17	3.10– 3.65	5477	598	198	137	121	375	61	74	95	35	26	43	106	5	24	—	1	—	—	—	—	—	—	—
Manufacturing	724	6.87	6.77	5.55– 8.22	—	2	71	67	63	127	25	58	83	30	19	43	106	5	24	—	1	—	—	—	—	—	—	—
Nonmanufacturing	6,652	3.43	3.15	3.10– 3.35	5477	596	127	70	58	248	36	16	12	5	7	—	—	—	—	—	—	—	—	—	—	—	—	—
Janitors, porters, and cleaners	10,262	5.46	5.13	4.35– 6.66	915	668	2277	1262	1562	453	553	556	729	146	576	317	171	76	—	1	—	—	—	—	—	—	—	—
Manufacturing	3,614	6.77	7.01	5.76– 8.12	37	164	359	75	174	289	477	368	547	68	519	298	171	68	—	—	—	—	—	—	—	—	—	—
Nonmanufacturing	6,648	4.75	4.60	4.20– 5.19	878	504	1918	1187	1388	164	76	188	182	78	57	19	—	8	—	1	—	—	—	—	—	—	—	—
Public utilities	455	7.27	7.33	6.95– 7.75	6	4	15	8	5	15	5	73	181	78	37	19	—	8	—	1	—	—	—	—	—	—	—	—

See footnotes at end of tables.

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Philadelphia, Pa.-N.J., November 1980

Sex, ² occupation, and industry division	Number of workers	Average (mean) ³ hourly earnings (in dollars) ⁴	Sex, ² occupation, and industry division	Number of workers	Average (mean) ³ hourly earnings (in dollars) ⁴	Sex, ² occupation, and industry division	Number of workers	Average (mean) ³ hourly earnings (in dollars) ⁴
Maintenance, toolroom, and powerplant occupations - men			Stationary engineers.....	781	9.09	Shipping packers.....	769	6.41
Maintenance carpenters	546	9.81	Manufacturing.....	498	9.08	Manufacturing.....	645	6.65
Manufacturing.....	301	9.84	Nonmanufacturing.....	283	9.12	Material handling laborers.....	4,434	7.14
Nonmanufacturing.....	245	9.78	Public utilities	134	10.85	Manufacturing.....	2,902	6.22
Maintenance electricians	1,681	9.80	Boiler tenders.....	254	8.09	Nonmanufacturing:		
Manufacturing.....	1,438	9.71	Manufacturing.....	243	8.03	Public utilities	905	11.24
Nonmanufacturing.....	243	10.32	Material movement and custodial occupations - men			Forklift operators.....	3,436	7.99
Maintenance painters.....	241	9.56	Truckdrivers.....	9,018	10.13	Manufacturing.....	2,572	7.77
Manufacturing.....	183	9.97	Manufacturing.....	2,227	9.53	Guards.....	7,104	4.04
Nonmanufacturing.....	58	8.27	Nonmanufacturing.....	6,791	10.32	Manufacturing.....	997	7.26
Maintenance machinists.....	1,540	9.91	Public utilities	3,574	11.61	Nonmanufacturing.....	6,107	3.52
Manufacturing.....	1,402	9.72	Truckdrivers, light truck	805	5.40	Guards, class A	509	7.08
Nonmanufacturing:			Manufacturing.....	129	6.38	Manufacturing.....	293	8.19
Public utilities	138	11.84	Nonmanufacturing:			Nonmanufacturing.....	216	5.57
Maintenance mechanics (machinery)	2,192	9.17	Public utilities	51	9.45	Guards, class B	6,593	3.81
Manufacturing.....	2,114	9.27	Truckdrivers, medium truck.....	1,647	8.85	Manufacturing.....	704	6.87
Maintenance mechanics (motor vehicles).....	1,240	10.32	Truckdrivers, heavy truck	600	10.76	Nonmanufacturing.....	5,889	3.44
Manufacturing.....	349	9.84	Manufacturing.....	151	9.82	Janitors, porters, and cleaners.....	6,821	5.67
Nonmanufacturing.....	891	10.51	Nonmanufacturing.....	449	11.07	Manufacturing.....	3,004	6.73
Public utilities	561	11.21	Truckdrivers, tractor-trailer.....	4,377	10.97	Nonmanufacturing.....	3,817	4.84
Maintenance pipefitters.....	876	10.03	Manufacturing.....	405	10.67	Public utilities	291	7.23
Manufacturing.....	809	9.94	Nonmanufacturing.....	3,972	11.01	Material movement and custodial occupations - women		
Maintenance sheet-metal workers.....	166	9.37	Public utilities	2,473	11.61	Truckdrivers:		
Manufacturing.....	153	9.30	Shippers.....	354	6.77	Nonmanufacturing:		
Millwrights	544	10.01	Manufacturing.....	312	6.68	Public utilities	32	10.37
Manufacturing.....	544	10.01	Receivers:			Shipping packers:		
Maintenance trades helpers	617	8.15	Manufacturing.....	309	7.27	Manufacturing.....	94	5.80
Manufacturing.....	417	8.20	Shippers and receivers.....	440	6.87	Janitors, porters, and cleaners:		
Machine-tool operators (toolroom)	326	9.25	Manufacturing.....	302	6.35	Manufacturing.....	601	6.94
Manufacturing.....	326	9.25	Warehousemen.....	3,530	7.23	Nonmanufacturing:		
Tool and die makers.....	1,205	10.20	Manufacturing.....	1,390	6.94	Public utilities	164	7.35
Manufacturing.....	1,195	10.20	Nonmanufacturing.....	2,140	7.41			
			Order fillers:					
			Manufacturing.....	564	6.61			

See footnotes at end of tables.

Table A-7. Indexes of earnings and percent increases for selected occupational groups, Philadelphia, Pa.-N.J., selected periods

Period*	All industries					Manufacturing					Nonmanufacturing			
	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Unskilled plant
Indexes (November 1977 = 100):														
November 1979.....	115.1	114.8	118.7	117.6	119.6	116.0	114.9	119.8	118.6	120.6	114.4	115.5	114.6	118.9
November 1980.....	125.8	125.6	129.5	129.5	131.3	126.9	124.3	130.1	130.8	133.7	124.9	126.9	127.1	129.5
Percent increases:														
November 1972 to November 1973.....	5.9	(*)	7.2	7.1	9.3	6.5	(*)	7.1	7.0	8.2	5.4	(*)	6.1	10.5
November 1973 to November 1974.....	9.0	9.1	10.7	9.5	10.1	9.8	10.5	10.8	9.9	10.8	8.4	8.4	10.5	9.4
November 1974 to November 1975.....	7.9	8.1	8.6	9.5	9.2	8.3	6.8	8.5	10.3	10.2	7.6	8.8	8.6	8.3
November 1975 to November 1976.....	7.1	6.7	8.3	8.8	6.8	7.4	8.0	8.5	8.7	8.7	6.9	6.0	7.5	5.5
November 1976 to November 1977.....	7.1	7.4	8.7	8.1	7.2	8.7	8.1	8.5	8.4	7.5	5.7	6.6	9.5	6.9
November 1977 to November 1978.....	6.7	6.2	8.5	8.1	8.7	7.0	6.7	9.0	8.5	9.6	6.5	5.7	6.7	7.9
November 1978 to November 1979.....	7.9	8.1	9.4	8.8	10.0	8.4	7.7	9.9	9.3	10.0	7.4	9.3	7.4	10.2
November 1979 to November 1980.....	9.3	9.4	9.1	10.1	9.8	9.4	8.2	8.6	10.3	10.9	9.2	9.9	10.9	8.9

See footnotes at end of tables.

Table A-8. Average pay relationships within establishments for office clerical occupations, Philadelphia, Pa.-N.J., November 1980

Occupation which equals 100	Office clerical occupation being compared																						
	Secretaries					Stenographers		Transcribing-machine typists	Typists		File clerks			Messengers	Switchboard operators	Switchboard operator-receptionists	Order clerks		Accounting clerks		Payroll clerks	Key entry operators	
	Class A	Class B	Class C	Class D	Class E	Senior	General		Class A	Class B	Class A	Class B	Class C				Class A	Class B	Class A	Class B		Class A	Class B
Secretaries, class A.....	100																						
Secretaries, class B.....	122	100																					
Secretaries, class C.....	138	115	100																				
Secretaries, class D.....	141	123	113	100																			
Secretaries, class E.....	173	145	125	119	100																		
Stenographers, senior.....	151	130	114	117	(*)	100																	
Stenographers, general.....	155	139	127	118	113	122	100																
Transcribing-machine typists.....	166	134	128	114	98	121	103	100															
Typists, class A.....	170	141	124	118	121	109	107	95	100														
Typists, class B.....	191	165	146	140	127	126	113	118	117	100													
File clerks, class A.....	153	147	123	122	(*)	108	(*)	102	113	93	100												
File clerks, class B.....	182	151	136	125	126	120	105	123	113	99	123	100											
File clerks, class C.....	220	192	161	150	(*)	125	119	133	129	111	118	121	100										
Messengers.....	187	164	145	137	135	131	111	114	111	104	118	106	89	100									
Switchboard operators.....	145	127	122	110	112	106	99	95	94	85	102	84	80	86	100								
Switchboard operator-receptionists.....	158	138	125	114	109	130	109	96	99	87	97	84	77	82	96	100							
Order clerks, class A.....	105	94	86	76	(*)	(*)	73	63	82	69	(*)	(*)	67	(*)	88	69	100						
Order clerks, class B.....	158	138	124	114	114	(*)	97	(*)	(*)	89	(*)	95	77	89	94	102	147	100					
Accounting clerks, class A.....	145	124	110	101	103	92	89	86	88	74	85	74	72	78	93	84	118	85	100				
Accounting clerks, class B.....	167	139	128	118	116	105	106	97	104	91	100	91	84	86	104	102	151	101	122	100			
Payroll clerks.....	150	125	111	104	109	97	90	88	91	80	91	83	71	79	97	92	113	87	106	90	100		
Key entry operators, class A.....	149	126	113	109	98	101	98	94	97	82	90	86	74	83	99	95	124	89	107	93	106	100	
Key entry operators, class B.....	168	148	133	128	117	117	109	100	114	92	107	93	83	86	107	106	152	108	121	106	119	122	100

NOTE: This matrix table shows the average (mean) relationship of earnings within establishments between any two occupations compared. Earnings for an occupation in the column heading are expressed as a percent of the earnings for an occupation in the table stub at the point where the data lines for the two intersect. For example, a value of 122 indicates that earnings for the occupation directly above in the heading are 22 percent greater than earnings for the occupation directly to

the left in the stub. Similarly, a value of 85 indicates earnings for the occupation in the heading are 15 percent below earnings for the occupation in the stub.

See appendix A for method of computation.

Also see footnotes at end of tables.

Table A-9. Average pay relationships within establishments for professional and technical occupations, Philadelphia, Pa.-N.J., November 1980

Occupation which equals 100	Professional and technical occupation being compared																	
	Computer systems analysts (business)			Computer programmers (business)			Computer operators			Peripheral equipment operators	Computer data librarians	Drafters				Electronics technicians		Registered industrial nurses
	Class A	Class B	Class C	Class A	Class B	Class C	Class A	Class B	Class C			Class A	Class B	Class C	Class D	Class A	Class B	
Computer systems analysts (business), class A.....	100																	
Computer systems analysts (business), class B.....	121	100																
Computer systems analysts (business), class C.....	142	120	100															
Computer programmers (business), class A.....	120	102	84	100														
Computer programmers (business), class B.....	147	127	105	130	100													
Computer programmers (business), class C.....	167	142	(*)	152	120	100												
Computer operators, class A.....	165	141	115	146	121	107	100											
Computer operators, class B.....	186	171	140	176	139	128	121	100										
Computer operators, class C.....	230	213	180	214	171	149	144	125	100									
Peripheral equipment operators.....	283	225	(*)	203	177	(*)	153	121	124	100								
Computer data librarians.....	229	227	160	232	189	(*)	143	117	99	98	100							
Drafters, class A.....	120	101	97	107	85	(*)	84	74	59	(*)	73	100						
Drafters, class B.....	146	123	(*)	126	108	93	99	89	73	(*)	84	118	100					
Drafters, class C.....	185	148	(*)	161	124	103	115	99	80	92	(*)	139	121	100				
Drafters, class D.....	(*)	173	(*)	(*)	168	(*)	(*)	125	117	(*)	(*)	166	145	122	100			
Electronics technicians, class A.....	133	107	108	117	107	86	84	87	75	(*)	69	112	96	81	65	100		
Electronics technicians, class B.....	149	121	112	147	133	(*)	96	90	(*)	(*)	(*)	135	114	88	74	115	100	
Registered industrial nurses.....	150	126	106	134	109	94	102	87	71	(*)	78	122	108	83	70	113	112	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-10. Average pay relationships within establishments for maintenance, toolroom, and powerplant occupations, Philadelphia, Pa.-N.J., November 1980

Occupation which equals 100	Maintenance, toolroom, and powerplant occupation being compared													
	Carpenters	Electricians	Painters	Machinists	Mechanics		Pipefitters	Sheet-metal workers	Millwrights	Trades helpers	Machine-tool operators (toolroom)	Tool and die makers	Stationary engineers	Boiler tenders
					Machinery	Motor vehicles								
Maintenance carpenters	100													
Maintenance electricians	98	100												
Maintenance painters	103	106	100											
Maintenance machinists	96	100	94	100										
Maintenance mechanics (machinery)	100	102	94	100	100									
Maintenance mechanics (motor vehicles)	101	101	97	100	101	100								
Maintenance pipefitters	99	101	96	102	100	100	100							
Maintenance sheet-metal workers	99	101	98	101	102	102	100	100						
Millwrights	99	102	98	102	(*)	(*)	100	101	100					
Maintenance trades helpers	129	128	124	128	123	121	122	130	(*)	100				
Machine-tool operators (toolroom)	100	101	97	105	102	105	101	99	105	86	100			
Tool and die makers	93	95	93	93	94	(*)	94	88	95	68	94	100		
Stationary engineers	103	102	97	101	102	101	101	100	101	76	103	108	100	
Boiler tenders	109	108	106	109	106	103	108	109	(*)	(*)	(*)	112	105	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-11. Average pay relationships within establishments for material movement and custodial occupations, Philadelphia, Pa.-N.J., November 1980

Occupation which equals 100	Material movement and custodial occupation being compared														
	Truckdrivers				Shippers	Receivers	Shippers and receivers	Warehousemen	Order fillers	Shipping packers	Material handling laborers	Forklift operators	Guards		Janitors, porters, and cleaners
	Light truck	Medium truck	Heavy truck	Tractor-trailer									Class A	Class B	
Truckdrivers, light truck.....	100														
Truckdrivers, medium truck	(*)	100													
Truckdrivers, heavy truck.....	(*)	(*)	100												
Truckdrivers, tractor-trailer	(*)	109	98	100											
Shippers.....	115	132	115	(*)	100										
Receivers.....	102	127	110	(*)	106	100									
Shippers and receivers	(*)	114	(*)	167	(*)	(*)	100								
Warehousemen.....	103	(*)	163	140	104	103	105	100							
Order fillers.....	114	(*)	(*)	105	101	117	(*)	104	100						
Shipping packers.....	113	120	(*)	114	114	111	126	111	101	100					
Material handling laborers.....	106	137	117	106	133	118	115	102	91	92	100				
Forklift operators	104	118	166	133	103	99	99	100	99	90	97	100			
Guards, class A.....	(*)	109	(*)	109	113	120	(*)	115	96	94	106	112	100		
Guards, class B.....	116	(*)	(*)	156	124	118	98	136	109	105	119	126	116	100	
Janitors, porters, and cleaners.....	126	149	156	167	121	116	119	119	107	107	108	115	108	105	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-12. Weekly earnings of office workers—large establishments in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean ²	Median ²	Middle range ²	115 and under 125	125 - 135	135 - 145	145 - 155	155 - 165	165 - 185	185 - 205	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305	305 - 325	325 - 345	345 - 365	365 - 405	405 - 445	445 - 485	485 - 525	525 - 565	565 - 605
Secretaries.....	6,514	38.5	278.50	267.00	220.00- 324.50	-	-	-	26	61	372	660	701	739	630	551	600	573	350	288	590	203	100	62	6	2
Manufacturing	3,688	39.0	289.00	287.00	235.00- 332.00	-	-	-	8	14	118	280	302	367	349	346	449	415	280	172	427	104	44	5	6	2
Nonmanufacturing	2,826	38.0	264.50	242.00	205.00- 307.50	-	-	-	18	47	254	380	399	372	281	205	151	158	70	116	163	99	56	57	-	-
Public utilities	386	39.0	398.00	388.00	358.00- 450.00	-	-	-	-	-	-	-	4	5	7	8	7	26	11	50	101	65	46	56	-	-
Secretaries, class A	488	39.0	344.50	344.50	294.50- 388.50	-	-	-	-	-	-	14	28	21	23	25	28	50	57	37	110	43	27	19	4	2
Manufacturing	312	39.5	328.00	336.00	276.00- 369.50	-	-	-	-	-	-	11	26	16	17	16	16	35	43	23	82	16	2	3	4	2
Nonmanufacturing	176	38.5	374.00	381.50	312.00- 435.00	-	-	-	-	-	-	3	2	5	6	9	12	15	14	14	28	27	25	16	-	-
Public utilities	86	39.0	431.50	428.00	388.00- 466.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	23	21	22	15	-	-
Secretaries, class B	1,605	38.5	296.00	284.00	241.00- 337.00	-	-	-	-	3	38	88	127	191	199	163	108	175	154	114	96	80	26	43	-	-
Manufacturing	853	39.5	299.00	307.00	257.00- 337.00	-	-	-	-	3	27	35	41	62	91	72	78	155	137	69	28	38	15	2	-	-
Nonmanufacturing	752	38.0	293.00	260.50	233.00- 354.50	-	-	-	-	-	11	53	86	129	108	91	30	20	17	45	68	42	11	41	-	-
Public utilities	170	39.0	417.00	397.00	371.50- 450.00	-	-	-	-	-	-	-	-	-	-	1	1	2	-	33	53	34	5	41	-	-
Secretaries, class C	1,846	38.5	271.00	258.50	217.00- 310.50	-	-	-	4	19	123	197	236	228	158	124	271	130	54	78	162	28	32	-	2	-
Manufacturing	1,060	39.0	293.50	296.50	240.00- 325.00	-	-	-	-	-	30	67	79	114	93	75	228	109	36	45	134	21	27	-	2	-
Nonmanufacturing	786	37.5	240.50	223.50	197.50- 270.00	-	-	4	19	93	130	157	114	65	49	43	21	18	33	28	7	5	-	-	-	-
Public utilities	63	39.0	351.00	355.50	319.50- 384.00	-	-	-	-	-	-	-	-	5	1	2	3	8	9	8	21	2	4	-	-	-
Secretaries, class D	1,705	39.0	274.50	267.00	221.00- 314.50	-	-	-	2	11	68	196	186	192	181	198	150	159	66	44	189	48	15	-	-	-
Manufacturing	1,224	39.0	278.00	270.00	227.00- 318.50	-	-	-	2	1	26	123	123	154	133	170	113	95	58	31	168	27	-	-	-	-
Nonmanufacturing	481	38.0	266.00	249.00	204.50- 309.50	-	-	-	10	42	73	63	38	48	28	37	64	8	13	21	21	15	-	-	-	-
Public utilities	62	40.0	360.50	342.00	307.50- 436.50	-	-	-	-	-	-	-	2	-	3	5	3	16	2	4	4	8	15	-	-	-
Secretaries, class E	645	38.0	218.00	205.00	183.00- 240.00	-	-	-	20	24	127	145	103	83	48	22	19	28	6	9	11	-	-	-	-	-
Manufacturing	223	39.0	230.50	211.50	185.00- 277.00	-	-	-	6	10	35	44	31	21	15	13	14	21	6	4	3	-	-	-	-	-
Stenographers	1,070	39.0	280.00	271.50	208.00- 369.50	-	12	6	6	19	85	122	118	71	77	56	39	95	27	43	248	38	8	-	-	-
Manufacturing	538	39.5	299.00	308.00	234.00- 369.50	-	-	-	2	7	20	46	48	35	33	42	28	43	7	21	193	7	6	-	-	-
Nonmanufacturing	532	38.5	260.50	233.00	195.00- 317.00	-	12	6	4	12	65	76	70	36	44	14	11	52	20	22	55	31	2	-	-	-
Public utilities	302	38.5	303.00	316.50	216.50- 368.50	-	-	-	-	-	12	41	28	12	14	10	10	50	18	19	55	31	2	-	-	-
Stenographers, senior	360	40.0	277.00	261.00	215.00- 310.50	-	-	6	-	2	14	46	43	37	42	26	20	41	7	5	28	37	6	-	-	-
Manufacturing	213	40.0	280.00	277.50	218.00- 308.00	-	-	-	-	-	8	34	13	17	17	22	19	41	7	3	19	7	6	-	-	-
Nonmanufacturing	147	39.5	272.50	240.00	212.00- 370.00	-	-	6	-	2	6	12	30	20	25	4	1	-	-	2	9	30	-	-	-	-
Stenographers, general	710	38.5	281.00	280.00	203.00- 369.50	-	12	-	6	17	71	76	75	34	35	30	19	54	20	38	220	1	2	-	-	-
Manufacturing	325	39.0	311.00	369.50	244.50- 369.50	-	-	-	2	7	12	12	35	18	16	20	9	2	-	18	174	-	-	-	-	-
Nonmanufacturing	385	38.5	256.00	229.00	188.00- 316.50	-	12	-	4	10	59	64	40	16	19	10	10	52	20	20	46	1	2	-	-	-
Public utilities	258	38.5	288.50	316.50	216.00- 347.50	-	-	-	-	-	11	40	27	11	14	10	10	50	18	18	46	1	2	-	-	-
Transcribing-machine typists	167	37.5	210.00	201.00	175.00- 234.00	-	-	4	20	1	31	32	24	29	11	5	1	-	-	6	3	-	-	-	-	-
Manufacturing	50	38.5	239.50	234.00	218.00- 238.00	-	-	-	-	-	-	9	14	16	2	2	1	-	-	6	-	-	-	-	-	-
Nonmanufacturing	117	37.0	197.50	185.00	166.00- 219.00	-	-	4	20	1	31	23	10	13	9	3	-	-	-	-	3	-	-	-	-	-
Typists	1,789	38.5	191.00	172.00	151.00- 205.00	32	53	176	250	258	314	258	80	78	73	31	87	25	9	46	19	-	-	-	-	-
Manufacturing	617	39.5	214.50	200.00	165.00- 260.00	14	16	28	30	63	96	92	27	55	55	27	82	16	2	1	13	-	-	-	-	-
Nonmanufacturing	1,172	37.5	179.00	163.00	150.00- 189.00	18	37	148	220	195	218	166	53	23	18	4	5	9	7	45	6	-	-	-	-	-
Public utilities	120	40.0	298.00	323.50	233.50- 359.50	-	-	-	-	-	4	7	15	12	11	4	-	9	7	45	6	-	-	-	-	-
Typists, class A	734	38.5	215.50	194.00	164.50- 261.00	1	1	47	67	68	143	97	49	37	50	30	67	20	9	40	8	-	-	-	-	-
Manufacturing	262	40.0	250.50	257.50	203.00- 294.00	-	-	2	3	6	19	37	16	21	45	27	66	16	2	-	2	-	-	-	-	-
Nonmanufacturing	472	38.0	196.00	172.00	155.00- 203.50	1	1	45	64	62	124	60	33	16	5	3	1	4	7	40	6	-	-	-	-	-
Public utilities	82	40.0	315.50	359.50	259.50- 361.50	-	-	-	-	-	2	2	11	5	2	3	-	4	7	40	6	-	-	-	-	-

See footnotes at end of tables.

Table A-12. Weekly earnings of office workers—large establishments in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours¹ (stand-ard)	Weekly earnings (in dollars)¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																									
			Mean²	Median²	Middle range²	115 and under 125	125 – 135	135 – 145	145 – 155	155 – 165	165 – 185	185 – 205	205 – 225	225 – 245	245 – 265	265 – 285	285 – 305	305 – 325	325 – 345	345 – 365	365 – 405	405 – 445	445 – 485	485 – 525	525 – 565	565 – 605					
Typists, class B.....	1,055	38.0	174.00	161.00	149.00– 188.50	31	52	129	183	190	171	161	31	41	23	1	20	5	–	6	11	–	–	–	–	–	–				
Manufacturing.....	355	39.5	187.50	174.00	159.00– 200.00	14	16	26	27	57	77	55	11	34	10	–	16	–	–	1	11	–	–	–	–	–	–				
Nonmanufacturing.....	700	37.5	167.50	159.00	148.00– 179.00	17	36	103	156	133	94	106	20	7	13	1	4	5	–	5	–	–	–	–	–	–	–				
Public utilities.....	38	39.5	261.00	258.50	217.50– 312.00	–	–	–	–	–	2	5	4	7	9	1	–	5	–	5	–	–	–	–	–	–	–				
File clerks.....	696	37.5	176.00	159.00	138.00– 195.00	29	104	96	105	41	82	128	28	19	5	6	14	15	6	7	11	–	–	–	–	–	–				
Manufacturing.....	132	39.0	240.00	227.00	170.00– 310.00	2	2	8	4	10	22	7	9	10	5	6	10	15	6	7	9	–	–	–	–	–	–				
Nonmanufacturing.....	564	37.5	161.00	149.50	137.00– 186.50	27	102	88	101	31	60	121	19	9	–	–	4	–	–	–	2	–	–	–	–	–	–				
File clerks, class A.....	75	38.0	215.00	169.00	145.00– 284.00	2	–	18	12	2	8	3	1	4	3	4	8	–	–	–	10	–	–	–	–	–	–				
File clerks, class B.....	243	37.0	182.50	158.00	147.00– 199.50	6	24	22	60	24	25	35	10	5	2	–	6	12	6	6	–	–	–	–	–	–	–				
Manufacturing.....	66	39.0	239.50	225.50	170.00– 310.00	2	2	2	–	6	12	3	6	5	2	–	2	12	6	6	–	–	–	–	–	–	–				
Nonmanufacturing.....	177	36.5	161.50	150.00	145.00– 172.00	4	22	20	60	18	13	32	4	–	–	–	4	–	–	–	–	–	–	–	–	–	–				
File clerks, class C.....	366	38.0	165.00	161.00	134.00– 187.00	21	80	52	25	15	49	90	17	10	–	2	–	3	–	1	1	–	–	–	–	–	–				
Nonmanufacturing.....	331	37.5	161.00	148.00	134.00– 186.50	21	80	46	21	11	43	88	15	6	–	–	–	–	–	–	–	–	–	–	–	–	–				
Messengers.....	466	38.5	198.50	167.00	146.00– 233.00	7	44	62	74	38	56	35	27	21	19	13	–	15	13	20	22	–	–	–	–	–	–				
Manufacturing.....	193	39.0	196.00	175.00	147.50– 242.00	–	22	20	25	14	24	13	16	11	19	13	–	14	–	–	2	–	–	–	–	–	–				
Nonmanufacturing.....	273	38.0	200.50	161.00	144.00– 213.00	7	22	42	49	24	32	22	11	10	–	–	–	1	13	20	20	–	–	–	–	–	–				
Switchboard operators.....	312	39.0	230.00	211.50	166.00– 286.00	–	23	9	23	23	40	31	22	15	19	24	16	18	22	22	5	–	–	–	–	–	–				
Manufacturing.....	126	39.5	259.00	267.50	210.50– 296.50	–	4	–	–	7	4	15	9	6	16	21	14	17	–	9	4	–	–	–	–	–	–				
Nonmanufacturing.....	186	39.0	210.00	179.00	152.00– 238.00	–	19	9	23	16	36	16	13	9	3	3	2	1	22	13	1	–	–	–	–	–	–				
Switchboard operator-receptionists.....	156	39.5	221.50	209.00	180.00– 250.00	–	–	–	7	14	24	23	23	21	14	11	8	–	5	6	–	–	–	–	–	–	–				
Manufacturing.....	107	40.0	233.50	225.50	192.50– 260.00	–	–	–	–	9	16	8	20	18	10	7	8	–	5	6	–	–	–	–	–	–	–				
Order clerks.....	255	39.5	231.00	200.00	164.00– 290.50	–	8	7	28	26	40	35	8	2	–	13	31	16	14	6	16	5	–	–	–	–	–				
Manufacturing.....	234	39.5	235.00	200.00	165.00– 293.50	–	–	6	26	24	39	32	8	2	–	13	31	14	12	6	16	5	–	–	–	–	–				
Order clerks, class A.....	80	39.0	315.50	309.50	288.00– 369.50	–	2	–	2	2	1	–	–	–	–	–	26	16	4	6	16	5	–	–	–	–	–				
Manufacturing.....	69	39.5	331.50	314.00	288.00– 375.50	–	–	–	–	–	–	–	–	–	–	–	26	14	2	6	16	5	–	–	–	–	–				
Order clerks, class B.....	175	39.5	192.50	175.00	159.00– 200.00	–	6	7	26	24	39	35	8	2	–	13	5	–	10	–	–	–	–	–	–	–	–				
Manufacturing.....	165	39.5	194.50	175.00	163.00– 200.00	–	–	6	26	24	39	32	8	2	–	13	5	–	10	–	–	–	–	–	–	–	–				
Accounting clerks.....	2,372	39.0	248.50	215.00	175.00– 313.00	6	41	107	136	148	315	322	216	171	116	92	76	57	39	37	355	85	35	18	–	–	–				
Manufacturing.....	1,030	39.5	285.00	269.50	197.00– 397.00	–	4	11	30	47	100	107	52	86	52	64	63	55	23	29	212	53	24	18	–	–	–				
Nonmanufacturing.....	1,342	38.5	220.50	195.00	162.50– 238.00	6	37	96	106	101	215	215	164	85	64	28	13	2	16	8	143	32	11	–	–	–	–				
Public utilities.....	253	40.0	358.00	381.50	332.50– 402.50	–	–	–	–	–	–	5	20	6	4	10	9	2	14	6	141	30	6	–	–	–	–				
Accounting clerks, class A.....	1,097	39.0	258.00	222.50	190.00– 312.00	–	–	2	34	39	164	198	130	72	78	47	34	52	22	33	85	54	35	18	–	–	–				
Manufacturing.....	470	39.5	292.00	279.50	202.00– 357.00	–	–	–	10	14	33	66	33	30	23	27	28	50	20	29	16	49	24	18	–	–	–				
Nonmanufacturing.....	627	38.5	232.50	205.00	181.50– 255.00	–	–	2	24	25	131	132	97	42	55	20	6	2	2	4	69	5	11	–	–	–	–				
Public utilities.....	85	40.0	391.50	402.50	393.50– 402.50	–	–	–	–	–	–	–	–	–	1	–	2	2	2	2	67	3	6	–	–	–	–				
Accounting clerks, class B.....	1,275	39.0	240.50	204.50	160.00– 326.50	6	41	105	102	109	151	124	86	99	38	45	42	5	17	4	270	31	–	–	–	–	–				
Manufacturing.....	560	39.5	279.50	263.00	190.00– 397.00	–	4	11	20	33	67	41	19	56	29	37	35	5	3	–	196	4	–	–	–	–	–				
Nonmanufacturing.....	715	38.5	210.00	177.00	150.00– 225.00	6	37	94	82	76	84	83	67	43	9	8	7	–	14	4	74	27	–	–	–	–	–				
Public utilities.....	168	40.0	341.00	381.50	286.50– 389.50	–	–	–	–	–	–	5	20	5	4	8	7	–	14	4	74	27	–	–	–	–	–				
Payroll clerks.....	504	38.5	253.00	232.00	189.00– 312.00	2	5	20	12	19	58	70	46	32	56	31	23	21	42	10	20	21	11	2	2	1	1				
Manufacturing.....	286	39.5	268.00	249.00	200.00– 310.50	–	–	6	2	9	27	41	22	21	39	29	17	12	9	4	18	19	6	2	2	1	1				
Nonmanufacturing.....	218	38.0	233.50	211.50	174.50– 316.50	2	5	14	10	10	31	29	24	11	17	2	6	9	33	6	2	2	5	–	–	–	–				
Public utilities.....	60	38.5	320.00	325.00	316.50– 325.00	–	–	–	–	–	1	1	6	1	2	–	1	9	30	–	2	2	5	–	–	–	–				

See footnotes at end of tables.

Table A-12. Weekly earnings of office workers—large establishments in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ²			Number of workers receiving straight-time weekly earnings (in dollars) of —																					
			Mean ³	Median ³	Middle range ³	115 and under 125	125	135	145	155	165	185	205	225	245	265	285	305	325	345	365	405	445	485	525	565	605
							135	145	155	165	185	205	225	245	265	285	305	325	345	365	405	445	485	525	565	605	
Key entry operators	2,063	38.5	223.50	205.00	179.50– 247.50	2	7	59	119	95	365	355	264	265	121	77	80	16	7	69	157	3	2	—	—	—	—
Manufacturing	719	39.5	236.00	218.00	187.00– 275.00	—	2	8	12	13	132	120	99	71	59	43	61	11	6	48	31	3	—	—	—	—	—
Nonmanufacturing	1,344	38.5	217.00	198.50	172.50– 240.50	2	5	51	107	82	233	235	165	194	62	34	19	5	1	21	126	—	2	—	—	—	—
Public utilities	223	39.5	326.00	366.00	287.00– 366.00	—	—	—	—	3	4	10	15	6	7	11	19	3	—	17	126	—	2	—	—	—	—
Key entry operators, class A.....	1,205	39.0	241.00	225.00	190.00– 274.50	—	—	4	44	38	172	187	156	211	58	56	58	12	7	40	157	3	2	—	—	—	—
Manufacturing	404	39.5	254.00	237.50	193.00– 296.00	—	—	—	4	6	61	61	49	37	18	27	55	10	6	36	31	3	—	—	—	—	—
Nonmanufacturing	801	38.5	235.00	221.00	187.00– 247.00	—	—	4	40	32	111	126	107	174	40	29	3	2	1	4	126	—	2	—	—	—	—
Key entry operators, class B.....	858	38.5	199.00	190.50	166.00– 221.00	2	7	55	75	57	193	168	108	54	63	21	22	4	—	29	—	—	—	—	—	—	—
Manufacturing	315	39.0	213.00	205.00	180.00– 242.00	—	2	8	8	7	71	59	50	34	41	16	6	1	—	12	—	—	—	—	—	—	—
Nonmanufacturing	543	38.0	191.00	180.50	157.50– 206.50	2	5	47	67	50	122	109	58	20	22	5	16	3	—	17	—	—	—	—	—	—	—
Public utilities	78	39.0	266.00	268.50	207.50– 306.50	—	—	—	—	3	4	9	15	1	5	5	16	3	—	17	—	—	—	—	—	—	—

See footnotes at end of tables.

Table A-13. Weekly earnings of professional and technical workers—large establishments in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																											
			Mean ²	Median ²	Middle range ²	135 and under 145	145 — 155	155 — 165	165 — 175	175 — 185	185 — 205	205 — 225	225 — 245	245 — 265	265 — 285	285 — 325	325 — 365	365 — 405	405 — 445	445 — 485	485 — 525	525 — 565	565 — 605	605 — 645	645 — 685	685 — 725							
Computer systems analysts (business).....	1,550	38.0	466.00	457.00	399.50– 535.00	–	–	–	–	–	–	3	5	15	11	54	98	245	257	256	173	195	75	123	27	13							
Manufacturing.....	487	39.0	461.50	452.00	405.00– 519.00	–	–	–	–	–	–	–	–	–	–	8	30	83	108	76	66	76	22	14	4	–							
Nonmanufacturing.....	1,063	37.5	468.00	460.00	394.50– 539.00	–	–	–	–	–	–	3	5	15	11	46	68	162	149	180	107	119	53	109	23	13							
Computer systems analysts (business), class A.....	829	37.5	523.50	523.00	461.00– 575.50	–	–	–	–	–	–	–	–	–	–	–	4	24	111	150	133	176	68	123	27	13							
Manufacturing.....	244	39.0	503.50	502.50	447.00– 552.00	–	–	–	–	–	–	–	–	–	–	–	2	6	52	36	49	61	20	14	4	–							
Nonmanufacturing.....	585	37.0	532.00	527.50	466.50– 601.50	–	–	–	–	–	–	–	–	–	–	–	2	18	59	114	84	115	48	109	23	13							
Computer systems analysts (business), class B.....	583	38.5	415.50	407.00	374.50– 453.00	–	–	–	–	–	–	–	–	3	1	22	71	182	135	104	39	19	7	–	–	–							
Manufacturing.....	183	39.0	433.50	433.00	386.00– 462.00	–	–	–	–	–	–	–	–	–	–	2	16	45	46	40	17	15	2	–	–	–							
Nonmanufacturing.....	400	38.5	407.00	401.50	371.00– 441.50	–	–	–	–	–	–	–	–	3	1	20	55	137	89	64	22	4	5	–	–	–							
Computer systems analysts (business), class C.....	133	38.5	335.50	350.00	288.00– 388.00	–	–	–	–	–	–	3	5	12	10	30	21	38	11	2	1	–	–	–	–	–							
Manufacturing.....	60	39.0	377.50	387.00	353.00– 396.50	–	–	–	–	–	–	–	–	–	–	6	12	32	10	–	–	–	–	–	–	–							
Nonmanufacturing.....	73	37.5	301.00	288.00	260.00– 345.50	–	–	–	–	–	–	3	5	12	10	24	9	6	1	2	1	–	–	–	–	–							
Computer programmers (business).....	2,167	39.0	361.50	342.00	300.00– 407.00	–	–	–	–	–	2	25	43	87	178	503	519	257	189	146	93	80	15	5	5	20							
Manufacturing.....	425	39.0	375.50	372.50	300.50– 441.00	–	–	–	–	–	–	6	12	19	24	84	63	53	65	57	23	13	4	1	1	–							
Nonmanufacturing.....	1,742	39.0	358.50	336.50	300.00– 395.00	–	–	–	–	–	2	19	31	68	154	419	456	204	124	89	70	67	11	4	4	20							
Public utilities.....	246	39.0	485.00	473.50	423.50– 527.00	–	–	–	–	–	–	–	–	–	–	3	13	33	45	35	40	40	10	4	4	19							
Computer programmers (business), class A.....	582	38.5	441.50	428.50	384.00– 478.00	–	–	–	–	–	–	–	–	–	–	15	76	140	111	106	56	42	6	5	5	20							
Manufacturing.....	181	39.0	436.00	435.50	387.50– 475.50	–	–	–	–	–	–	–	–	–	–	9	22	34	38	40	19	13	4	1	1	–							
Nonmanufacturing.....	401	38.0	444.00	423.50	384.00– 481.00	–	–	–	–	–	–	–	–	–	–	6	54	106	73	66	37	29	2	4	4	20							
Public utilities.....	52	40.0	583.00	613.50	477.00– 695.50	–	–	–	–	–	–	–	–	–	–	–	–	1	2	12	7	2	1	4	4	19							
Computer programmers (business), class B.....	1,001	39.0	350.00	334.00	307.00– 365.00	–	–	–	–	–	–	–	12	22	50	304	364	90	46	31	35	38	9	–	–	–							
Manufacturing.....	177	39.5	338.50	316.00	297.50– 379.00	–	–	–	–	–	–	–	6	10	10	71	27	11	24	16	2	–	–	–	–	–							
Nonmanufacturing.....	824	39.0	352.50	336.00	311.00– 365.00	–	–	–	–	–	–	–	6	12	40	233	337	79	22	15	33	38	9	–	–	–							
Computer programmers (business), class C.....	584	39.5	302.00	289.50	269.00– 326.50	–	–	–	–	–	2	25	31	65	128	184	79	27	32	9	2	–	–	–	–	–							
Manufacturing.....	67	39.0	309.00	275.00	250.50– 352.00	–	–	–	–	–	–	6	6	9	14	4	14	8	3	1	2	–	–	–	–	–							
Nonmanufacturing: Public utilities.....	68	40.0	407.50	420.00	395.00– 441.50	–	–	–	–	–	–	–	–	–	–	3	9	19	29	8	–	–	–	–	–	–							
Computer operators.....	1,393	38.5	273.50	261.00	208.00– 333.00	7	7	40	77	58	135	151	118	132	123	143	219	98	35	22	27	1	–	–	–	–							
Manufacturing.....	485	39.5	290.00	285.00	219.00– 343.00	–	–	4	10	22	42	56	31	37	40	64	88	61	9	10	11	–	–	–	–	–							
Nonmanufacturing.....	908	38.0	264.50	249.00	201.50– 323.50	7	7	36	67	36	93	95	87	95	83	79	131	37	26	12	16	1	–	–	–	–							
Public utilities.....	184	39.0	371.00	349.50	325.00– 405.00	–	–	–	–	–	1	3	4	2	2	3	95	31	19	8	15	1	–	–	–	–							
Computer operators, class A.....	432	39.0	325.50	323.00	271.00– 355.00	–	–	–	–	–	6	5	31	53	46	77	114	42	28	12	18	–	–	–	–	–							
Manufacturing.....	181	39.5	347.50	334.50	301.00– 387.00	–	–	–	–	–	–	–	4	8	10	44	53	39	8	4	11	–	–	–	–	–							
Nonmanufacturing.....	251	38.5	310.00	297.00	256.50– 349.50	–	–	–	–	–	6	5	27	45	36	33	61	3	20	8	7	–	–	–	–	–							
Computer operators, class B.....	586	38.5	269.50	249.50	207.00– 320.00	7	–	3	29	18	73	83	56	58	58	60	60	54	7	10	9	1	–	–	–	–							
Manufacturing.....	169	39.5	289.50	279.50	230.00– 343.00	–	–	2	–	–	16	21	19	14	16	17	35	22	1	6	–	–	–	–	–	–							
Nonmanufacturing.....	417	38.0	261.50	243.50	201.50– 308.00	7	–	1	29	18	57	62	37	44	42	43	25	32	6	4	9	1	–	–	–	–							
Public utilities.....	68	39.5	406.00	405.00	342.00– 431.50	–	–	–	–	–	–	–	–	–	–	1	19	28	6	4	9	1	–	–	–	–							
Computer operators, class C.....	375	39.0	219.00	204.00	178.00– 243.00	–	7	37	48	40	56	63	31	21	19	6	45	2	–	–	–	–	–	–	–	–							
Manufacturing.....	135	39.5	214.50	208.00	182.50– 238.50	–	–	2	10	22	26	35	8	15	14	3	–	–	–	–	–	–	–	–	–	–							
Nonmanufacturing.....	240	38.5	221.50	203.50	168.50– 254.00	–	7	35	38	18	30	28	23	6	5	3	45	2	–	–	–	–	–	–	–	–							

See footnotes at end of tables.

Table A-13. Weekly earnings of professional and technical workers—large establishments in Philadelphia, Pa.-N.J., November 1980 —Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																				
			Mean ²	Median ²	Middle range ²	135 and under 145	145 – 155	155 – 165	165 – 175	175 – 185	185 – 205	205 – 225	225 – 245	245 – 265	265 – 285	285 – 325	325 – 365	365 – 405	405 – 445	445 – 485	485 – 525	525 – 565	565 – 605	605 – 645	645 – 685	685 – 725
Computer data librarians	90	38.0	232.50	207.50	173.00– 292.00	4	5	4	14	4	13	3	5	3	6	24	4	1	–	–	–	–	–	–	–	–
Nonmanufacturing	78	37.5	229.50	206.00	167.00– 290.00	4	5	4	12	3	11	3	4	3	6	20	2	1	–	–	–	–	–	–	–	–
Drafters.....	1,324	40.0	364.00	365.50	305.50– 428.00	–	–	–	–	9	6	24	71	68	63	197	220	235	190	212	22	2	5	–	–	–
Manufacturing	938	40.0	391.50	401.00	342.50– 447.00	–	–	–	–	8	–	4	26	9	20	103	144	208	180	208	21	2	5	–	–	–
Nonmanufacturing	386	39.5	297.00	290.00	250.00– 335.00	–	–	–	–	1	6	20	45	59	43	94	76	27	10	4	1	–	–	–	–	–
Drafters, class A	584	40.0	419.00	428.00	384.00– 468.00	–	–	–	–	–	–	–	–	–	1	32	69	123	147	194	11	2	5	–	–	–
Manufacturing	506	40.0	431.50	428.00	402.00– 468.00	–	–	–	–	–	–	–	–	–	–	6	29	116	145	192	11	2	5	–	–	–
Drafters, class B	407	40.0	353.50	346.00	310.00– 401.00	–	–	–	–	–	–	2	10	4	38	86	113	89	36	18	11	–	–	–	–	–
Manufacturing	270	40.0	370.00	370.00	330.00– 402.50	–	–	–	–	–	–	2	10	–	8	31	81	82	30	16	10	–	–	–	–	–
Nonmanufacturing	137	39.5	320.00	312.50	285.00– 340.00	–	–	–	–	–	–	–	–	4	30	55	32	7	6	2	1	–	–	–	–	–
Drafters, class C	249	40.0	287.00	271.00	240.00– 327.50	–	–	–	–	9	6	9	43	50	12	57	34	23	6	–	–	–	–	–	–	–
Manufacturing	109	40.5	316.50	323.00	304.50– 350.50	–	–	–	–	8	–	1	3	2	3	46	32	10	4	–	–	–	–	–	–	–
Drafters, class D	66	39.5	271.50	265.50	242.00– 293.00	–	–	–	–	–	–	1	17	14	8	22	4	–	–	–	–	–	–	–	–	–
Electronics technicians.....	1,215	40.0	351.00	360.00	280.00– 438.00	–	–	–	–	24	14	80	56	105	48	119	250	157	98	250	14	–	–	–	–	–
Manufacturing	901	40.0	315.50	327.00	250.00– 360.00	–	–	–	–	24	8	80	56	105	48	119	247	156	41	3	14	–	–	–	–	–
Electronics technicians, class A ...	628	40.0	386.00	360.00	337.50– 466.00	–	–	–	–	–	–	–	–	–	–	92	243	76	33	170	14	–	–	–	–	–
Manufacturing	456	40.0	357.00	360.00	327.00– 369.50	–	–	–	–	–	–	–	–	–	–	92	240	75	32	3	14	–	–	–	–	–
Electronics technicians, class B ...	448	40.0	346.00	366.50	255.00– 438.00	–	–	–	–	–	–	–	48	95	46	26	7	81	65	80	–	–	–	–	–	–
Registered industrial nurses	228	39.0	350.00	348.00	300.00– 404.00	–	–	–	–	–	–	4	1	21	18	43	46	39	51	1	4	–	–	–	–	–
Manufacturing	178	39.5	349.50	350.00	300.50– 403.50	–	–	–	–	–	–	3	1	16	12	34	39	30	42	1	–	–	–	–	–	–
Nonmanufacturing	50	38.5	350.50	329.50	296.50– 408.00	–	–	–	–	–	–	1	–	5	6	9	7	9	9	–	4	–	–	–	–	–

See footnotes at end of tables.

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex—large establishments in Philadelphia, Pa.-N.J., November 1980

Sex, ² occupation, and industry division	Number of workers	Average (mean ²)		Sex, ² occupation, and industry division	Number of workers	Average (mean ²)		Sex, ² occupation, and industry division	Number of workers	Average (mean ²)	
		Weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (standard)	Weekly earnings (in dollars) ¹
Office occupations - men				Typists, class A	721	38.5	213.00	Key entry operators	1,831	38.5	225.00
Messengers	266	38.5	197.00	Manufacturing	261	40.0	250.50	Manufacturing	719	39.5	236.00
Manufacturing	108	38.5	192.50	Nonmanufacturing	460	38.0	192.00	Nonmanufacturing	1,112	38.0	217.50
Nonmanufacturing	158	38.0	200.00	Public utilities	72	40.0	308.50	Public utilities	214	39.5	327.50
Accounting clerks:				Typists, class B	1,019	38.0	173.00	Key entry operators, class A	1,040	38.5	243.50
Accounting clerks, class A:				Manufacturing	355	39.5	187.50	Manufacturing	404	39.5	254.00
Manufacturing	119	40.0	394.50	Nonmanufacturing	664	37.5	165.50	Key entry operators, class B	791	38.0	200.00
Public utilities				Public utilities	33	39.5	246.00	Manufacturing	315	39.0	213.00
Office occupations - women				File clerks	664	37.5	176.00	Nonmanufacturing	476	37.5	191.50
Secretaries	6,239	38.5	279.00	Manufacturing	129	39.0	238.50	Public utilities	75	39.0	269.50
Manufacturing	3,682	39.0	289.00	Nonmanufacturing	535	37.5	160.50	Professional and technical occupations - men			
Nonmanufacturing	2,557	38.0	265.00	File clerks, class A	67	38.0	213.00	Computer systems analysts (business)	1,144	38.0	474.00
Public utilities	373	39.0	397.50	File clerks, class B	236	37.0	184.00	Manufacturing	358	39.0	469.50
Secretaries, class A	478	39.0	343.00	Manufacturing	66	39.0	239.50	Nonmanufacturing	786	37.5	476.00
Manufacturing	312	39.5	328.00	Nonmanufacturing	170	36.5	162.50	Computer systems analysts (business), class A	661	37.5	521.00
Nonmanufacturing	166	38.0	370.50	File clerks, class C	353	37.5	164.00	Manufacturing	194	39.0	509.50
Public utilities	79	38.5	431.00	Nonmanufacturing	318	37.5	160.00	Nonmanufacturing	467	37.0	526.00
Secretaries, class B	1,594	38.5	296.00	Messengers	191	38.5	203.00	Computer systems analysts (business), class B	410	38.5	418.50
Manufacturing	853	39.5	299.00	Manufacturing	85	39.0	199.50	Manufacturing	125	39.0	436.00
Nonmanufacturing	741	38.0	293.00	Nonmanufacturing	106	38.0	205.50	Nonmanufacturing	285	38.5	411.00
Public utilities	165	38.5	418.00	Switchboard operators	282	39.0	229.50	Computer systems analysts (business), class C	70	38.5	359.50
Secretaries, class C	1,833	38.5	270.50	Manufacturing	123	39.5	257.50	Computer programmers (business)	1,471	39.0	373.00
Manufacturing	1,057	39.0	293.00	Nonmanufacturing	159	38.5	208.00	Manufacturing	282	39.0	388.50
Nonmanufacturing	776	37.5	240.00	Switchboard operator-receptionists	156	39.5	221.50	Nonmanufacturing	1,189	39.0	369.00
Public utilities	62	39.0	350.00	Manufacturing	107	40.0	233.50	Public utilities	188	39.5	488.50
Secretaries, class D	1,660	39.0	276.50	Order clerks	186	39.5	199.50	Computer programmers (business), class A	482	38.5	444.00
Manufacturing	1,221	39.0	278.00	Manufacturing	172	39.5	204.50	Manufacturing	133	39.0	445.00
Nonmanufacturing	439	38.5	273.00	Order clerks, class B	154	39.5	181.00	Nonmanufacturing	349	38.0	444.00
Public utilities	62	40.0	360.50	Manufacturing	147	39.5	183.50	Public utilities	48	40.0	587.00
Secretaries, class E	645	38.0	218.00	Accounting clerks	1,698	38.5	220.00	Computer programmers (business), class B	628	39.0	353.50
Manufacturing	223	39.0	230.50	Manufacturing	706	39.0	239.50	Manufacturing	114	40.0	342.50
Stenographers	1,046	39.0	279.00	Nonmanufacturing	154	40.0	344.50	Nonmanufacturing	514	39.0	356.00
Manufacturing	534	39.5	299.00	Public utilities	61	40.0	387.50	Public utilities	77	38.5	491.00
Nonmanufacturing	512	38.5	257.50	Accounting clerks, class A	815	38.5	239.00	Computer programmers (business), class C	361	39.5	311.00
Public utilities	288	38.5	300.00	Nonmanufacturing	351	39.5	257.00	Computer operators	1,087	38.5	275.50
Stenographers, senior	360	40.0	277.00	Public utilities	883	38.5	202.00	Manufacturing	358	39.5	304.50
Manufacturing	213	40.0	280.00	Accounting clerks, class B	355	39.0	222.50	Nonmanufacturing	729	38.0	261.50
Nonmanufacturing	147	39.5	272.50	Manufacturing	528	38.0	188.00	Computer operators, class A	385	38.5	326.50
Stenographers, general	686	38.5	279.50	Nonmanufacturing	93	40.0	316.50	Manufacturing	170	39.5	350.50
Manufacturing	321	39.0	311.50	Payroll clerks	436	38.5	239.50	Nonmanufacturing	215	38.0	308.00
Nonmanufacturing	365	38.0	251.50	Manufacturing	248	39.0	248.00				
Transcribing-machine typists	162	37.5	208.50	Nonmanufacturing	188	37.5	228.00				
Nonmanufacturing	114	37.0	195.50	Public utilities							
Typists	1,740	38.5	190.00								
Manufacturing	616	39.5	214.50								
Nonmanufacturing	1,124	37.5	176.50								
Public utilities	105	39.5	289.00								

See footnotes at end of tables.

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex—large establishments in Philadelphia, Pa.-N.J., November 1980 —Continued

Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)		Sex, ^a occupation, and industry division	Number of workers	Average (mean ^a)	
		Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹
Computer operators, class B.....	478	38.0	264.50	Electronics technicians, class A.....	614	40.0	386.00	Computer programmers (business)	696	39.0	338.00
Manufacturing.....	132	39.0	285.50	Manufacturing.....	446	40.0	357.50	Manufacturing.....	143	38.5	349.50
Nonmanufacturing.....	346	38.0	257.00					Nonmanufacturing.....	553	39.0	335.00
Computer operators, class C.....	224	38.5	211.50	Electronics technicians, class B.....	398	40.0	357.50	Computer programmers (business), class A.....	100	38.5	428.00
Manufacturing.....	56	39.0	209.50	Manufacturing.....	263	40.0	308.00	Nonmanufacturing.....	52	38.0	443.50
Nonmanufacturing.....	168	38.5	212.00	Professional and technical occupations - women				Computer programmers (business), class B.....	373	38.5	343.50
Public utilities.....	36	39.0	311.50					Manufacturing.....	63	38.5	331.00
Drafters.....	1,178	40.0	371.00	Computer systems analysts (business)	394	38.0	445.00	Nonmanufacturing.....	310	38.5	346.50
Manufacturing.....	882	40.0	395.50	Manufacturing.....	129	38.5	439.00	Computer operators: Manufacturing.....	127	40.0	250.00
Nonmanufacturing.....	296	39.5	297.50	Nonmanufacturing.....	265	37.5	448.00	Computer operators, class C.....	135	39.0	231.00
Drafters, class A	541	40.0	423.50	Computer systems analysts (business), class A.....	168	37.5	533.00	Manufacturing.....	79	40.5	218.00
Manufacturing.....	486	40.0	433.50	Manufacturing.....	50	38.5	479.50	Drafters.....	128	40.0	306.00
Drafters, class B	362	40.0	359.00	Computer systems analysts (business), class B.....	164	38.5	406.00	Manufacturing.....	56	40.0	331.50
Manufacturing.....	254	40.0	373.00	Manufacturing.....	58	39.0	427.50	Registered industrial nurses	220	39.0	350.50
Nonmanufacturing.....	108	39.0	326.00	Nonmanufacturing.....	106	38.5	394.50	Manufacturing.....	174	39.5	349.50
Drafters, class C	204	40.0	290.00	Computer systems analysts (business), class C.....	60	38.0	310.00				
Manufacturing.....	101	40.5	316.50								
Drafters, class D	54	39.5	274.00								
Electronics technicians	1,126	40.0	358.00								
Manufacturing.....	817	40.0	322.00								

See footnotes at end of tables.

Table A-15. Hourly earnings of maintenance, toolroom, and powerplant workers-large establishments in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Hourly earnings (in dollars)*			Number of workers receiving straight-time hourly earnings (in dollars) of —																											
		Mean²	Median²	Middle range²	3.40 and under 3.50	3.50 – 3.60	3.60 – 3.80	3.80 – 4.00	4.00 – 4.50	4.50 – 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 – 11.50	11.50 – 12.00	12.00 – 12.50	12.50 – 13.00	13.00 and over					
Maintenance carpenters.....	501	10.14	10.81	9.16–11.27	–	–	–	–	–	–	–	–	8	14	26	11	11	42	43	23	31	58	209	25	–	–	–					
Manufacturing.....	274	10.05	10.78	8.85–11.11	–	–	–	–	–	–	–	–	–	–	10	8	11	42	20	20	23	49	73	18	–	–	–					
Nonmanufacturing.....	227	10.25	11.27	9.27–11.27	–	–	–	–	–	–	–	–	8	14	16	3	–	–	23	3	8	9	136	7	–	–	–					
Maintenance electricians.....	1,381	10.18	10.21	9.01–11.55	–	–	–	–	–	–	2	–	14	22	4	33	138	132	36	216	208	54	150	307	63	1	1					
Manufacturing.....	1,153	10.09	10.08	8.88–11.19	–	–	–	–	–	–	–	–	–	10	2	30	136	130	26	198	183	54	148	175	61	–	–					
Nonmanufacturing.....	228	10.61	11.95	9.64–11.95	–	–	–	–	–	–	2	–	14	12	2	3	2	2	10	18	25	–	2	132	2	1	1					
Maintenance painters.....	230	9.80	9.44	9.03–11.11	–	–	–	–	–	4	2	–	2	2	3	6	15	23	64	11	2	11	74	10	–	1	–					
Manufacturing.....	184	10.01	9.63	9.15–11.11	–	–	–	–	–	–	–	–	–	–	–	5	8	23	56	9	–	11	72	–	–	–						
Maintenance machinists.....	1,202	10.45	10.22	9.81–11.34	–	–	–	–	–	–	–	11	11	3	11	11	31	56	4	294	209	39	241	235	12	–	34					
Manufacturing.....	1,064	10.27	10.20	9.81–11.16	–	–	–	–	–	–	–	11	11	3	11	11	31	56	4	286	195	33	240	160	12	–	–					
Nonmanufacturing: Public utilities.....	138	11.84	11.95	11.95–11.95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8	14	6	1	75	–	–	–	* 34					
Maintenance mechanics (machinery).....	1,436	9.92	10.11	9.53–10.90	–	–	–	–	–	–	–	–	–	6	46	63	68	130	17	333	324	225	118	44	–	62	–					
Manufacturing.....	1,415	9.94	10.11	9.53–10.90	–	–	–	–	–	–	–	–	–	–	44	63	66	126	17	333	324	218	118	44	–	62	–					
Maintenance mechanics (motor vehicles).....	506	10.63	10.90	9.99–11.51	–	–	–	–	–	–	–	–	–	–	–	10	5	86	4	28	52	77	112	90	42	–	–					
Manufacturing.....	285	10.19	10.44	8.93–11.37	–	–	–	–	–	–	–	–	–	–	–	10	5	86	–	15	35	30	36	68	–	–	–					
Nonmanufacturing.....	221	11.19	11.24	10.62–11.82	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	13	17	47	76	22	42	–	–					
Public utilities.....	170	11.24	11.24	10.67–11.24	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	8	17	23	76	–	42	–	–					
Maintenance pipefitters.....	789	10.38	10.45	9.67–11.11	–	–	–	–	–	–	–	–	–	8	–	2	48	68	13	100	160	78	176	134	–	–	2					
Manufacturing.....	732	10.29	10.45	9.59–11.11	–	–	–	–	–	–	–	–	–	8	–	2	48	68	13	96	151	78	176	90	–	–	2					
Maintenance sheet-metal workers.....	167	9.38	8.75	8.36–11.01	–	–	–	–	–	–	–	–	–	8	11	11	23	33	9	2	20	1	40	9	–	–	–					
Manufacturing.....	154	9.31	8.65	8.08–11.01	–	–	–	–	–	–	–	–	–	8	11	11	23	33	–	2	20	1	39	6	–	–	–					
Millwrights.....	454	10.59	11.01	10.37–11.24	–	–	–	–	–	–	–	–	–	–	–	6	41	21	20	18	8	70	270	–	–	–	–					
Manufacturing.....	454	10.59	11.01	10.37–11.24	–	–	–	–	–	–	–	–	–	–	–	6	41	21	20	18	8	70	270	–	–	–	–					
Maintenance trades helpers.....	464	8.74	9.07	8.11– 9.63	4	–	2	10	–	–	3	5	–	8	31	43	53	32	66	188	19	–	–	–	–	–	–					
Manufacturing.....	285	8.97	9.63	8.21– 9.78	4	–	–	10	–	–	–	1	–	2	22	21	19	6	–	181	19	–	–	–	–	–	–					
Machine-tool operators (toolroom).....	216	9.62	9.95	8.64–10.18	–	–	–	–	–	–	–	–	–	12	8	–	33	10	20	50	30	12	28	13	–	–	–					
Manufacturing.....	216	9.62	9.95	8.64–10.18	–	–	–	–	–	–	–	–	–	12	8	–	33	10	20	50	30	12	28	13	–	–	–					
Tool and die makers.....	873	10.60	10.66	9.49–11.77	–	–	–	–	–	–	–	–	–	–	–	–	27	33	172	88	67	101	40	325	20	–	–					
Manufacturing.....	873	10.60	10.66	9.49–11.77	–	–	–	–	–	–	–	–	–	–	–	–	27	33	172	88	67	101	40	325	20	–	–					
Stationary engineers.....	547	9.95	10.23	8.66–11.45	–	–	–	–	–	–	–	–	2	26	14	17	57	44	26	50	63	64	123	59	–	–	2					
Manufacturing.....	341	9.93	10.12	8.82–11.01	–	–	–	–	–	–	–	–	–	24	2	9	19	41	24	36	31	64	45	44	–	–	2					
Nonmanufacturing.....	206	9.98	10.23	8.13–11.45	–	–	–	–	–	–	–	–	2	2	12	8	38	3	2	14	32	–	78	15	–	–	–					
Boiler tenders.....	129	9.39	10.09	8.92–10.11	–	–	–	–	–	–	–	–	2	–	14	9	–	15	12	6	66	4	–	1	–	–	–					
Manufacturing.....	115	9.31	10.09	8.52–10.11	–	–	–	–	–	–	–	–	2	–	14	9	–	15	7	6	58	4	–	–	–	–	–					

* All workers were at \$13.00 to \$13.50.
Also see footnotes at end of tables.

Table A-16. Hourly earnings of material movement and custodial workers—large establishments in Philadelphia, Pa.-N.J., November 1980

Occupation and industry division	Number of workers	Hourly earnings (in dollars)*			Number of workers receiving straight-time hourly earnings (in dollars) of —																						
		Mean ²	Median ²	Middle range ²	3.10 and under 3.60	3.60-4.10	4.10-4.60	4.60-5.10	5.10-5.60	5.60-6.10	6.10-6.60	6.60-7.10	7.10-7.60	7.60-8.10	8.10-8.60	8.60-9.10	9.10-9.60	9.60-10.10	10.10-10.60	10.60-11.10	11.10-11.60	11.60-12.10	12.10-12.60	12.60-13.10	13.10-13.60	13.60-14.10	14.10 and over
Truckdrivers.....	2,859	10.48	10.61	9.34-12.04	-	-	2	2	13	5	3	2	23	26	40	118	924	127	137	252	395	760	-	-	-	-	30
Nonmanufacturing.....	1,673	11.27	11.40	10.61-12.04	-	-	-	-	1	2	1	2	2	3	23	75	58	94	28	219	395	740	-	-	-	-	30
Truckdrivers, light truck.....	71	7.68	8.19	6.93- 8.74	-	-	2	2	10	2	-	2	1	7	22	23	-	-	-	-	-	-	-	-	-	-	-
Nonmanufacturing: Public utilities.....	41	8.15	8.34	8.19- 8.74	-	-	-	-	1	2	-	2	1	1	16	18	-	-	-	-	-	-	-	-	-	-	-
Truckdrivers, medium truck: Nonmanufacturing.....	85	11.61	10.09	10.09-14.39	-	-	-	-	-	-	1	-	-	-	2	1	10	38	3	-	-	-	-	-	-	-	* 30
Truckdrivers, tractor-trailer.....	829	10.91	11.17	10.61-11.40	-	-	-	-	3	3	-	-	-	2	4	13	20	61	56	219	358	90	-	-	-	-	-
Manufacturing.....	90	9.50	9.74	8.80-10.53	-	-	-	-	3	3	-	-	-	2	4	13	20	7	38	-	-	-	-	-	-	-	-
Nonmanufacturing.....	739	11.08	11.17	10.61-11.40	-	-	-	-	-	-	-	-	-	-	-	-	-	54	18	219	358	90	-	-	-	-	-
Shippers.....	183	7.88	7.58	6.39- 8.41	-	-	-	-	1	10	36	10	35	12	35	1	3	25	8	7	-	-	-	-	-	-	-
Manufacturing.....	164	7.63	7.32	6.33- 8.12	-	-	-	-	1	10	36	9	35	12	34	-	-	25	2	-	-	-	-	-	-	-	-
Receivers.....	429	8.26	8.48	7.32- 9.79	-	12	6	13	14	10	16	32	53	33	41	69	14	45	7	64	-	-	-	-	-	-	-
Manufacturing.....	155	8.26	8.04	7.39- 9.79	-	-	-	2	-	-	6	17	34	21	26	-	4	44	1	-	-	-	-	-	-	-	-
Nonmanufacturing.....	274	8.26	9.03	6.90-10.45	-	12	6	11	14	10	10	15	19	12	15	69	10	1	6	64	-	-	-	-	-	-	-
Shippers and receivers.....	202	7.94	7.83	6.55- 8.80	-	-	2	16	2	20	12	30	15	18	17	22	1	-	9	38	-	-	-	-	-	-	-
Manufacturing.....	71	7.13	6.85	5.86- 7.96	-	-	2	-	-	18	7	23	-	9	2	1	-	9	-	-	-	-	-	-	-	-	-
Nonmanufacturing.....	131	8.38	8.30	7.13-10.77	-	-	-	16	2	2	5	7	15	9	15	21	1	-	-	38	-	-	-	-	-	-	-
Warehousemen.....	1,327	8.21	8.00	6.55-10.14	-	12	2	17	54	18	256	50	62	272	106	74	2	51	223	128	-	-	-	-	-	-	-
Manufacturing.....	651	7.75	7.83	7.14- 8.02	-	12	2	16	43	14	27	46	58	271	30	36	2	51	43	-	-	-	-	-	-	-	-
Nonmanufacturing.....	676	8.65	8.84	6.55-10.52	-	-	-	1	11	4	229	4	4	1	76	38	-	-	180	128	-	-	-	-	-	-	-
Order fillers.....	967	9.39	10.52	7.37-10.62	-	-	8	-	75	136	5	14	26	83	8	36	-	-	298	122	3	27	42	21	15	30	18
Manufacturing.....	264	7.21	8.00	6.09- 8.00	-	-	8	-	49	68	-	-	-	83	-	36	-	-	20	-	-	-	-	-	-	-	-
Nonmanufacturing.....	703	10.21	10.52	10.52-10.62	-	-	-	-	26	68	5	14	26	-	8	-	-	-	278	122	3	27	42	21	15	30	18
Shipping packers.....	352	6.85	6.33	5.95- 8.96	8	14	28	2	11	89	43	22	9	30	5	42	18	31	-	-	-	-	-	-	-	-	-
Manufacturing.....	239	7.10	6.95	5.96- 8.96	8	14	28	2	4	40	5	20	1	23	3	42	18	31	-	-	-	-	-	-	-	-	-
Material handling laborers.....	3,001	6.65	6.00	6.00- 8.26	238	122	59	30	30	1190	122	207	59	168	116	416	131	70	-	28	15	-	-	-	-	-	-
Nonmanufacturing.....	1,354	6.85	7.43	3.95- 8.96	238	114	32	15	24	22	77	143	26	119	34	383	81	3	-	28	15	-	-	-	-	-	-
Forklift operators.....	2,350	8.53	8.34	7.39- 9.89	-	-	2	4	5	6	379	145	142	128	513	71	285	136	372	162	-	-	-	-	-	-	-
Manufacturing.....	1,678	8.17	8.34	7.32- 9.34	-	-	2	4	2	6	252	145	142	126	512	63	119	134	171	-	-	-	-	-	-	-	-
Nonmanufacturing.....	672	9.41	10.42	9.13-10.42	-	-	-	-	3	-	127	-	-	2	1	8	166	2	201	162	-	-	-	-	-	-	-
Guards.....	3,294	4.73	3.25	3.10- 6.40	1855	88	152	105	83	155	91	127	202	46	58	108	116	80	24	3	1	-	-	-	-	-	-
Manufacturing.....	867	7.60	7.51	6.44- 9.18	-	2	62	42	12	95	29	58	155	31	49	108	116	80	24	3	1	-	-	-	-	-	-
Nonmanufacturing.....	2,427	3.71	3.10	3.10- 3.50	1855	86	90	63	71	60	62	69	47	15	9	-	-	-	-	-	-	-	-	-	-	-	-
Guards, class A.....	470	7.55	7.44	6.63- 8.74	-	9	11	15	20	27	34	53	107	11	30	65	10	75	-	3	-	-	-	-	-	-	-
Manufacturing.....	260	8.66	8.74	7.52- 9.68	-	-	-	-	-	-	4	-	72	1	30	65	10	75	-	3	-	-	-	-	-	-	-
Nonmanufacturing.....	210	6.18	6.40	5.57- 6.63	-	9	11	15	20	27	30	53	35	10	-	-	-	-	-	-	-	-	-	-	-	-	-
Guards, class B.....	2,822	4.26	3.12	3.10- 4.93	1855	79	141	90	63	128	57	74	95	35	26	43	106	5	24	-	1	-	-	-	-	-	-
Manufacturing.....	607	7.15	7.26	5.83- 8.68	-	2	62	42	12	95	25	58	83	30	19	43	106	5	24	-	1	-	-	-	-	-	-
Nonmanufacturing.....	2,215	3.47	3.10	3.10- 3.25	1855	77	79	48	51	33	32	16	12	5	7	-	-	-	-	-	-	-	-	-	-	-	-
Janitors, porters, and cleaners.....	5,562	6.14	5.80	4.72- 7.43	183	178	587	878	764	254	485	489	554	146	502	317	156	68	-	1	-	-	-	-	-	-	-
Manufacturing.....	2,502	7.30	7.27	6.15- 8.19	12	49	77	6	87	106	409	330	372	68	464	298	156	68	-	-	-	-	-	-	-	-	-
Nonmanufacturing.....	3,060	5.19	4.75	4.43- 5.58	171	129	510	872	677	148	76	159	182	78	38	19	-	-	-	1	-	-	-	-	-	-	-
Public utilities.....	440	7.28	7.33	6.95- 7.75	2	4	12	8	5	15	5	73	181	78	37	19	-	-	-	1	-	-	-	-	-	-	-

* Workers were distributed as follows: 15 at \$14.10 to \$14.60; 6 at \$14.60 to \$15.10; 6 at \$15.10 to \$15.60; and 3 at \$16.10 to \$16.60.

Also see footnotes at end of tables.

Table A-17. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers by sex—large establishments in Philadelphia, Pa.-N.J., November 1980

Sex, ^a occupation, and industry division	Number of workers	Average (mean ^b) hourly earnings (in dollars) ^c	Sex, ^a occupation, and industry division	Number of workers	Average (mean ^b) hourly earnings (in dollars) ^c	Sex, ^a occupation, and industry division	Number of workers	Average (mean ^b) hourly earnings (in dollars) ^c
Maintenance, toolroom, and powerplant occupations - men			Machine-tool operators (toolroom)	216	9.62	Order fillers:		
			Manufacturing	216	9.62	Manufacturing	242	7.38
Maintenance carpenters	476	10.13	Tool and die makers	873	10.60	Shipping packers:		
Manufacturing	270	10.03	Manufacturing	873	10.60	Manufacturing	189	7.19
Nonmanufacturing	206	10.25				Forklift operators:		
Maintenance electricians	1,345	10.17	Stationary engineers	529	9.92	Manufacturing	1,631	8.17
Manufacturing	1,139	10.08	Manufacturing	330	9.89			
Nonmanufacturing	206	10.68	Nonmanufacturing	199	9.95	Guards	3,051	4.77
Maintenance painters	222	9.82	Boiler tenders	124	9.39	Manufacturing	842	7.61
Manufacturing	181	9.99	Manufacturing	115	9.31	Nonmanufacturing	2,209	3.69
Maintenance machinists	1,202	10.45	Material movement and custodial occupations - men			Guards, class A	422	7.67
Manufacturing	1,064	10.27				Manufacturing	255	8.66
Nonmanufacturing:			Truckdrivers	2,662	10.40	Guards, class B	2,627	4.30
Public utilities	138	11.84	Nonmanufacturing	1,476	11.23	Manufacturing	587	7.15
Maintenance mechanics (machinery)	1,390	9.88	Truckdrivers, light truck	63	7.74	Nonmanufacturing	2,040	3.48
Manufacturing	1,369	9.89	Nonmanufacturing:			Janitors, porters, and cleaners	3,591	6.38
			Public utilities	33	8.38	Manufacturing	2,019	7.22
Maintenance mechanics (motor vehicles)	482	10.63	Truckdrivers, tractor-trailer	736	10.88	Nonmanufacturing	1,572	5.30
Manufacturing	285	10.19	Manufacturing	90	9.50	Public utilities	276	7.25
Nonmanufacturing	197	11.26	Nonmanufacturing	646	11.07	Material movement and custodial occupations - women		
Public utilities	170	11.24						
Maintenance pipefitters	766	10.35	Shippers	165	7.77	Truckdrivers:		
Manufacturing	709	10.26	Manufacturing	155	7.63	Nonmanufacturing:		
Maintenance sheet-metal workers	166	9.37	Receivers:			Public utilities	32	10.37
Manufacturing	153	9.30	Manufacturing	154	8.25	Guards:		
Millwrights	454	10.59	Shippers and receivers:			Guards, class B	190	3.66
Manufacturing	454	10.59	Manufacturing	64	7.14	Janitors, porters, and cleaners	1,825	5.66
Maintenance trades helpers	460	8.75	Warehousemen	1,227	8.19	Manufacturing	474	7.62
Manufacturing	285	8.97	Manufacturing	622	7.71	Nonmanufacturing:		
			Nonmanufacturing	605	8.68	Public utilities	164	7.35

See footnotes at end of tables.

Footnotes

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 The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the workers receive the same or more and half receive the same or less than the rate shown. The middle range is defined by two rates of pay; one-fourth of the workers earn the same or less than the lower of these rates and one-fourth earn the same or more than the higher rate.

³ Earnings data relate only to workers whose sex identification was provided by the establishment.

⁴ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

⁵ Estimates for periods ending prior to 1976 relate to men only for skilled maintenance and unskilled plant workers. All other estimates relate to men and women.

⁶ Data do not meet publication criteria or data not available.

Appendix A.

Scope and Method of Survey

In each of the 71 areas¹ currently surveyed, the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. Establishments having fewer than a prescribed number of workers are also excluded because of insufficient employment in the occupations studied. Appendix table 1 shows the number of establishments and workers estimated to be within the scope of this survey, as well as the number actually studied.

Bureau field representatives obtain data by personal visits at 3-year intervals. In each of the two intervening years, information on employment and occupational earnings only is collected by a combination of personal visit, mail questionnaire, and telephone interview from establishments participating in the previous survey.

A sample of the establishments in the scope of the survey is selected for study prior to each personal visit survey. This sample, minus establishments which go out of business or are no longer within the industrial scope of the survey, is retained for the following two annual surveys. In most cases, establishments new to the area are not considered in the scope of the survey until the selection of a sample for a personal visit survey.

The sampling procedures involve detailed stratification of all establishments within the scope of an individual area survey by industry and number of employees. From this stratified universe a probability sample is selected, with each establishment having a predetermined chance of selection. To obtain optimum accuracy at minimum cost, a greater proportion of large than small establishments is selected. When data are combined, each establishment is weighted according to its probability of selection so that unbiased estimates are generated. For example, if one out of four establishments is selected, it is given a weight of 4 to represent itself plus three others. An alternate of the same original probability is chosen in the same industry-size classification if data are not available from the original sample member. If no suitable substitute is available, additional weight is assigned to a sample member that is similar to the missing unit.

Occupations and earnings

Occupations selected for study are common to a variety of manufacturing and nonmanufacturing industries, and are of the following types: (1) Office clerical; (2) professional and technical; (3) maintenance, toolroom, and powerplant; and (4) material

movement and custodial. Occupational classification is 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.

Unless otherwise indicated, the earnings data following the job titles are for all industries combined. Earnings data for some of the occupations listed and described, or for some industry divisions within the scope of the survey, are not presented in the A-series tables because either (1) data were insufficient to provide meaningful statistical results, or (2) there is possibility of disclosure of individual establishment data. Separate men's and women's earnings data are not presented when the number of workers not identified by sex is 20 percent or more of the men or women identified in an occupation. Earnings data not shown separately for industry divisions are included in data for all industries combined. Likewise, for occupations with more than one level, data are included in the overall classification when a subclassification is not shown or information to subclassify is not available.

Occupational employment and earnings data are shown for full-time workers, i.e., those hired to work a regular weekly schedule. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Nonproduction bonuses are excluded, but cost-of-living allowances and incentive bonuses are included. Weekly hours for office clerical and professional and technical occupations refer to the standard workweek (rounded to the nearest half hour) for which employees receive regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates). Average weekly earnings for these occupations are rounded to the nearest half dollar. Vertical lines within the distribution of workers on some A-tables indicate a change in the size of the class intervals.

These surveys measure the level of occupational earnings in an area at a particular time. Changes in an occupational average over time reflect, in addition to earnings changes, factors such as changes in proportions of workers employed by high- or low-wage firms, or high-wage workers advancing to better jobs and being replaced by new workers at lower rates. Such shifts in employment could decrease an occupational average even though most establishments in an area increase wages during the year. Changes in earnings of occupational groups, shown in table A-7, are better indicators of wage trends than are earnings changes for individual jobs within the groups.

Average earnings reflect composite, areawide estimates. Industries and establishments differ in pay level and job staffing, and thus contribute differently to the estimates

for each job. Pay averages may fail to reflect accurately the wage differential among jobs in individual establishments.

Average pay levels for men and women in selected occupations should not be assumed to reflect differences in pay of the sexes within individual establishments. Factors which may contribute to differences include progression within established rate ranges (only the rates paid incumbents are collected) and performance of specific duties within the general survey job descriptions. Job descriptions used to classify employees in these surveys usually are more generalized than those used in individual establishments and allow for minor differences among establishments in specific duties performed.

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. These differences in occupational structure do not affect materially the accuracy of the earnings data.

Wage trends for selected occupational groups

Indexes in table A-7 measure wages at a given time, expressed as a percent of wages during the base period. Subtracting 100 from the index yields the percent change in wages from the base period to the date of the index. The percent increases in table A-7 relate to wage changes between the indicated dates. Annual rates of increase, where shown, reflect the amount of increase for 12 months when the time span between surveys was other than 12 months. These computations are based on the assumption that wages increased at a constant rate between surveys.

The indexes and percent increases are based on changes in average hourly earnings of men and women in establishments reporting the trend jobs in both the current and previous year (matched establishments). The data are adjusted to remove the effects on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. Hirings, layoffs, and turnover may affect an establishment average for an occupation when workers are paid under plans providing a range of wage rates for individual jobs. In periods of increased hiring, for example, new employees may enter at the bottom of the range, depressing the average without a change in wage rates.

Occupations used to compute wage trends are:

Office clerical

Secretaries	Switchboard operators
Stenographers, senior	Order clerks, classes A and B
Stenographers, general	Accounting clerks, classes A and B
Typists, classes A and B	Payroll clerks
File clerks, classes A, B, and C	Key entry operators, classes A and B
Messengers	

Electronic data processing

Computer systems analysts, classes A, B, and C	Computer programmers, classes A, B, and C
	Computer operators, classes A, B, C

Industrial nurses

Registered industrial nurses

Skilled maintenance

Carpenters	Mechanics (machinery)
Electricians	Mechanics (motor vehicle)
Painters	Pipefitters
Machinists	Tool and die makers

Unskilled plant

Janitors, porters, and cleaners	Material handling laborers
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Percent changes for individual areas in the program are computed as follows:

1. Average earnings are computed for each occupation for the 2 years being compared. The averages are derived from earnings in those establishments which are in the survey both years; it is assumed that employment remains unchanged.
2. Each occupation is assigned a weight based on its proportionate employment in the occupational group.
3. These weights are used to compute group averages. Each occupation's average earnings (computed in step 1) are multiplied by its weight. The products are totaled to obtain a group average.
4. The ratio of group averages for 2 consecutive years is computed by dividing the average for the current year by the average for the earlier year. The result—expressed as a percent—less 100 is the percent change.

The index is computed by adding 100 to the most recent percent increase, multiplying the total by the previous year's index number, and dividing the product by 100 to obtain the current index value.

For a more detailed description of the method used to compute these wage trends, see 'Improving Area Wage Survey Indexes,' *Monthly Labor Review*, January 1973, pp. 52-57.

Average pay relationships within establishments

Tables A-8 through A-11 present occupational pay relatives derived from comparisons of job averages within individual establishments. The method of computation is as follows:

1. A pay relative for any two occupations is computed for each establishment in which they are found by dividing the average earnings for one occupation by the average for the other and multiplying by 100 (e.g., \$5 divided by \$4 = 1.25 times 100 = 125).

- Each pay relative is weighted by the number of workers in the two occupations compared and by the weight assigned to the establishment to represent establishments not included in the survey sample.
- The weighted pay relatives for all establishments reporting the two occupations are summed and divided by the total of the weights to produce the average pay relatives shown in the tables.

Occupational pay relationships measured in this manner yield considerably different results than those produced by using overall survey averages such as those shown in tables A-1 through A-6. The former measure the average pay relationships found within establishments; the latter measure the relationships among job averages in an area. In

addition, the mix of establishments used in the comparisons may differ between the two methods.

Establishment practices and supplementary wage provisions

Tabulations on selected establishment practices and supplementary wage provisions (B-series tables) are not presented in this bulletin. Information for these tabulations is collected at 3-year intervals. These tabulations on minimum entrance salaries for inexperienced office workers; shift differentials; scheduled weekly hours and days; paid holidays; paid vacations; and health, insurance, and pension plans are presented (in the B-series tables) in previous bulletins for this area.

¹ Includes 70 areas surveyed under the Bureau's regular program plus Poughkeepsie-Kingston-Newburgh, N.Y., which is surveyed under contract. In addition, the Bureau conducts more limited area studies in approximately 100 areas at the request of the Employment Standards Administration of the U.S. Department of Labor.

Appendix table 1. Establishments and workers within scope of survey and number studied in Philadelphia, Pa.-N.J.,¹ November 1980

Industry division ²	Minimum employment in establishments in scope of survey	Number of establishments		Workers in establishments		
		Within scope of survey ³	Studied	Within scope of survey ⁴		Studied
				Number	Percent	
All establishments						
All divisions	-	2,164	306	701,549	100	294,617
Manufacturing	100	842	120	340,537	49	124,909
Nonmanufacturing	-	1,322	186	361,012	51	169,708
Transportation, communication, and other public utilities ⁵	100	87	25	63,481	9	50,004
Wholesale trade ⁶	50	340	30	39,399	6	7,417
Retail trade ⁶	100	193	28	93,942	13	55,703
Finance, insurance, and real estate ⁶	50	278	38	78,860	11	30,802
Services ⁶	50	424	65	85,330	12	25,782
Large establishments						
All divisions	-	265	119	393,241	100	258,617
Manufacturing	500	157	62	195,974	50	111,108
Nonmanufacturing	-	108	57	197,267	50	147,509
Transportation, communication, and other public utilities ⁵	500	13	9	48,799	12	46,499
Wholesale trade ⁶	500	7	4	5,664	1	3,884
Retail trade ⁶	500	28	16	64,934	17	52,931
Finance, insurance, and real estate ⁶	500	33	14	47,980	12	27,275
Services ⁶	500	27	14	29,890	8	16,920

¹The Philadelphia Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; and Burlington, Camden, and Gloucester Counties, N.J. 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) small establishments are excluded from the scope of the survey.

² The 1972 edition of the *Standard Industrial Classification Manual* was used to classify establishments by industry division. All government operations are excluded from the scope of the survey.

³ Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of

nonmanufacturing companies are considered as one establishment when located within the same industry division.

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

⁵ Abbreviated to "public utilities" in the A-series tables. Taxicabs and services incidental to water transportation are excluded. Local-transit in the city of Philadelphia is governmentally operated and excluded by definition from the scope of the study.

⁶ Separate data for this division are not presented in the A-series tables, but the division is represented in the "all industries" and "nonmanufacturing" estimates.

⁷ Hotels and motels; laundries and other personal services; business services; automobile repair, rental, and parking; motion pictures; nonprofit membership organizations (excluding religious and charitable organizations); and engineering and architectural services.

Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field representatives in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits grouping occupational wage rates representing comparable job content. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field representatives are instructed to exclude working supervisors; apprentices; and part-time, temporary, and probationary workers. Handicapped workers whose earnings are reduced because of their handicap are also excluded. Learners, beginners, and trainees, unless specifically included in the job description, are excluded.

Office

SECRETARY

Assigned as a personal secretary, normally to one individual. Maintains a close and highly responsive relationship to the day-to-day activities of the supervisor. Works fairly independently receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties requiring a knowledge of office routine and understanding of the organization, programs, and procedures related to the work of the supervisor.

Exclusions. Not all positions that are titled 'secretary' possess the above characteristics. Examples of positions which are excluded from the definition are as follows:

- a. Positions which do not meet the 'personal' secretary concept described above;
- b. Stenographers not fully trained in secretarial-type duties;
- c. Stenographers serving as office assistants to a group of professional, technical, or managerial persons;

- d. Assistant-type positions which entail more difficult or more responsible technical, administrative, or supervisory duties which are not typical of secretarial work, e.g., Administrative Assistant, or Executive Assistant;
- e. Positions which do not fit any of the situations listed in the sections below titled 'Level of Supervisor,' e.g., secretary to the president of a company that employs, in all, over 5,000 persons;
- f. Trainees.

Classification by Level. Secretary jobs which meet the required characteristics are matched at one of five levels according to (a) the level of the secretary's supervisor within the company's organizational structure and, (b) the level of the secretary's responsibility. The tabulation following the explanations of these two factors indicates the level of the secretary for each combination of the factors.

Level of Secretary's Supervisor (LS)

LS-1

- a. Secretary to the supervisor or head of a small organizational unit (e.g., fewer than about 25 or 30 persons); or
- b. Secretary to a nonsupervisory staff specialist, professional employee, administrative officer or assistant, skilled technician or expert. (NOTE: Many companies assign stenographers, rather than secretaries as described above, to this level of supervisory or nonsupervisory worker.)

LS-2

- a. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for LS-3, but whose organizational unit normally numbers at least several dozen employees and is usually divided into organizational segments which are often, in turn, further subdivided. In some companies, this level includes a wide range of organizational echelons; in others, only one or two; or
- b. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, fewer than 5,000 persons.

LS-3

- a. Secretary to the chairman of the board or president of a company that employs, in all, fewer than 100 persons; or
- b. Secretary to a corporate officer (other than chairman of the board or president) of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- c. Secretary to the head (immediately below the officer level) over either a major corporatewide functional activity (e.g., marketing, research, operations, industrial relations, etc.) or a major geographic or organizational segment (e.g., a regional headquarters; a major division) of a company that employs, in all, over 5,000 but fewer than 25,000 employees; or
- d. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, over 5,000 persons; or
- e. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) of a company that employs, in all, over 25,000 persons.

LS-4

- a. Secretary to the chairman of the board or president of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- b. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 5,000 but fewer than 25,000 persons; or
- c. Secretary to the head, immediately below the corporate officer level, of a major segment or subsidiary of a company that employs, in all, over 25,000 persons.

NOTE: The term 'corporate officer' used in the above LS definition refers to those officials who have a significant corporatewide policy-making role with regard to major company activities. The title 'vice president,' though normally indicative of this role, does not in all cases identify such positions. Vice presidents whose primary responsibility is to act personally on individual cases or transactions (e.g., approve or deny individual loan or credit actions; administer individual trust accounts; directly supervise a clerical staff) are not considered to be 'corporate officers' for purposes of applying the definition.

Level of Secretary's Responsibility (LR)

This factor evaluates the nature of the work relationship between the secretary and the supervisor, and the extent to which the secretary is expected to exercise initiative and judgment. Secretaries should be matched at LR-1 or LR-2 described below according to their level of responsibility.

LR-1

Performs varied secretarial duties including or comparable to most of the following:

- a. Answers telephones, greets personal callers, and opens incoming mail.
- b. Answers telephone requests which have standard answers. May reply to requests by sending a form letter.
- c. Reviews correspondence, memoranda, and reports prepared by others for the supervisor's signature to ensure procedural and typographical accuracy.
- d. Maintains supervisor's calendar and makes appointments as instructed.
- e. Types, takes and transcribes dictation, and files.

LR-2

Performs duties described under LR-1 and, *in addition* performs tasks requiring greater judgment, initiative, and knowledge of office functions including or comparable to most of the following:

- a. Screens telephone and personal callers, determining which can be handled by the supervisor's subordinates or other offices.
- b. Answers requests which require a detailed knowledge of office procedures or collection of information from files or other offices. *May* sign routine correspondence in own or supervisor's name.
- c. Compiles or assists in compiling periodic reports on the basis of general instructions.
- d. Schedules tentative appointments without prior clearance. Assembles necessary background material for scheduled meetings. Makes arrangements for meetings and conferences.
- e. Explains supervisor's requirements to other employees in supervisor's unit. (Also types, takes dictation, and files.)

The following tabulation shows the level of the secretary for each LS and LR combination:

	LR-1	LR-2
LS-1.....	Class E	Class D
LS-2.....	Class D	Class C
LS-3.....	Class C	Class B
LS-4.....	Class B	Class A

STENOGRAPHER

Primary duty is to take dictation using shorthand, and to transcribe the dictation. May also type from written copy. May operate from a stenographic pool. May occasionally transcribe from voice recordings (if primary duty is transcribing from recordings, see Transcribing-Machine Typist). *NOTE:* This job is distinguished from that of a secretary in that a secretary normally works in a confidential relationship with only one manager or executive and performs more responsible and discretionary tasks as described in the secretary job definition.

Stenographer, Senior. Dictation involves a varied technical or specialized vocabulary such as in legal briefs or reports on scientific research. May also set up and maintain files, keep records, etc., *OR*

Performs stenographic duties requiring significantly greater independence and responsibility than stenographer, general, as evidenced by the following: Work requires a high degree of stenographic speed and accuracy; a thorough working knowledge of general business and office procedure and of the specific business operations, organization, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining follow-up files; assembling material for reports, memoranda, and letters; composing simple letters from general instructions; reading and routing incoming mail; and answering routine questions, etc.

Stenographer, General. Dictation involves a normal routine vocabulary. May maintain files, keep simple records, or perform other relatively routine clerical tasks.

TRANSCRIBING-MACHINE TYPIST

Primary duty is to type copy of voice recorded dictation which does *not* involve varied technical or specialized vocabulary such as that used in legal briefs or reports on scientific research. May also type from written copy. May maintain files, keep simple records, or perform other relatively routine clerical tasks. (See Stenographer definition for workers involved with shorthand dictation.)

TYPIST

Uses a typewriter to make copies of various materials or to make out bills after calculations have been made by another person. May include typing of stencils, mats, or similar materials for use in duplicating processes. May do clerical work involving little special training, such as keeping simple records, filing records and reports, or sorting and distributing incoming mail.

Class A. Performs *one or more of the following:* Typing material in final form when it involves combining material from several sources; or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language material; or planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters, varying details to suit circumstances.

Class B. Performs *one or more of the following:* Copy typing from rough or clear drafts; or routine typing of forms, insurance policies, etc.; or setting up simple standard tabulations; or copying more complex tables already set up and spaced properly.

FILE CLERK

Files, classifies, and retrieves material in an established filing system. May perform clerical and manual tasks required to maintain files. Positions are classified into levels on the basis of the following definitions.

Class A. Classifies and indexes file material such as correspondence, reports, technical documents, etc., in an established filing system containing a number of varied subject matter files. May also file this material. May keep records of various types in conjunction with the files. May lead a small group of lower level file clerks.

Class B. Sorts, codes, and files unclassified material by simple (subject matter) headings or partly classified material by finer subheadings. Prepares simple related index and cross-reference aids. As requested, locates clearly identified material in files and forwards material. May perform related clerical tasks required to maintain and service files.

Class C. Performs routine filing of material that has already been classified or which is easily classified in a simple serial classification system (e.g., alphabetical, chronological, or numerical). As requested, locates readily available material in files and forwards material; and may fill out withdrawal charge. May perform simple clerical and manual tasks required to maintain and service files.

MESSENGER

Performs various routine duties such as running errands, operating minor office machines such as sealers or mailers, opening and distributing mail, and other minor clerical work. Exclude positions that require operation of a motor vehicle as a significant duty.

SWITCHBOARD OPERATOR

Operates a telephone switchboard or console used with a private branch exchange (PBX) system to relay incoming, outgoing, and intrasystem calls. May provide information to callers, record and transmit messages, keep record of calls placed and toll charges. Besides operating a telephone switchboard or console, *may* also type or perform routine clerical work (typing or routine clerical work may occupy the major portion of the worker's time, and is usually performed while at the switchboard or console). Chief or lead operators in establishments employing more than one operator are excluded. For an operator who also acts as a receptionist, see Switchboard Operator-Receptionist.

SWITCHBOARD OPERATOR-RECEPTIONIST

At a single-position telephone switchboard or console, acts both as an operator—see Switchboard Operator—and as a receptionist. Receptionist's work involves such duties as greeting visitors; determining nature of visitor's business and providing appropriate information; referring visitor to appropriate person in the organization or contacting that person by telephone and arranging an appointment; keeping a log of visitors.

ORDER CLERK

Receives written or verbal customers' purchase orders for material or merchandise from customers or sales people. Work typically involves some combination of the following duties: Quoting prices; determining availability of ordered items and

suggesting substitutes when necessary; advising expected delivery date and method of delivery; recording order and customer information on order sheets; checking order sheets for accuracy and adequacy of information recorded; ascertaining credit rating of customer; furnishing customer with acknowledgement of receipt of order; following up to see that order is delivered by the specified date or to let customer know of a delay in delivery; maintaining order file; checking shipping invoice against original order. *Exclude workers paid on a commission basis or whose duties include any of the following:* Receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

Positions are classified into levels according to the following definitions:

Class A. Handles orders that involve making judgments such as choosing which specific product or material from the establishment's product lines will satisfy the customer's needs, or determining the price to be quoted when pricing involves more than merely referring to a price list or making some simple mathematical calculations.

Class B. Handles orders involving items which have readily identified uses and applications. May refer to a catalog, manufacturer's manual, or similar document to insure that proper item is supplied or to verify price of ordered item.

ACCOUNTING CLERK

Performs one or more accounting clerical tasks such as posting to registers and ledgers; reconciling bank accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents; assigning prescribed accounting distribution codes; examining and verifying for clerical accuracy various types of reports, lists, calculations, posting, etc.; or preparing simple or assisting in preparing more complicated journal vouchers. May work in either a manual or automated accounting system.

The work requires a knowledge of clerical methods and office practices and procedures which relates to the clerical processing and recording of transactions and accounting information. With experience, the worker typically becomes familiar with the bookkeeping and accounting terms and procedures used in the assigned work, but is not required to have a knowledge of the formal principles of bookkeeping and accounting.

Positions are classified into levels on the basis of the following definitions:

Class A. Under general supervision, performs accounting clerical operations which require the application of experience and judgment, for example, clerically processing complicated or nonrepetitive accounting transactions, selecting among a substantial variety of prescribed accounting codes and classifications, or tracing transactions through previous accounting actions to determine source of discrepancies. May be assisted by one or more class B accounting clerks.

Class B. Under close supervision, following detailed instructions and standardized procedures, performs one or more routine accounting clerical operations, such as posting to ledgers, cards, or worksheets where identification of items and locations of postings are clearly indicated; checking accuracy and completeness of standardized and repetitive records or accounting documents; and coding documents using a few prescribed accounting codes.

PAYROLL CLERK

Performs the clerical tasks necessary to process payrolls and to maintain payroll records. Work involves *most of the following:* Processing workers' time or production records; adjusting workers' records for changes in wage rates, supplementary benefits, or tax deductions; editing payroll listings against source records; tracing and correcting errors in listings; and assisting in preparation of periodic summary payroll reports. In a nonautomated payroll system, computes wages. Work may require a practical knowledge of governmental regulations, company payroll policy, or the computer system for processing payrolls.

KEY ENTRY OPERATOR

Operates keyboard-controlled data entry device such as keypunch machine or key-operated magnetic tape or disk encoder to transcribe data into a form suitable for computer processing. Work requires skill in operating an alphanumeric keyboard and an understanding of transcribing procedures and relevant data entry equipment.

Positions are classified into levels on the basis of the following definitions:

Class A. Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be entered from a variety of source documents. On occasion may also perform routine work as described for class B.

NOTE: Excluded are operators above class A using the key entry controls to access, read, and evaluate the substance of specific records to take substantive actions, or to make entries requiring a similar level of knowledge.

Class B. Work is routine and repetitive. Under close supervision or following specific procedures or detailed instructions, works from various standardized source documents which have been coded and require little or no selecting, coding, or interpreting of data to be entered. Refers to supervisor problems arising from erroneous items, codes, or missing information.

Professional and Technical

COMPUTER SYSTEMS ANALYST, BUSINESS

Analyzes business problems to formulate procedures for solving them by use of electronic data processing equipment. Develops a complete description of all specifications needed to enable programmers to prepare required digital computer programs. Work involves *most of the following:* Analyzes subject-matter operations to be automated and identifies conditions and criteria required to achieve satisfactory results; specifies number and types of records, files, and documents to be used; outlines actions to be performed by personnel and computers in sufficient detail for presentation to management and for programming (typically this involves preparation of work and data flow charts); coordinates the development of test problems and participates in trial runs of new and revised systems; and recommends equipment changes to obtain more effective overall operations. (NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing employees, or systems analysts primarily concerned with scientific or engineering problems.

For wage study purposes, systems analysts are classified as follows:

Class A. Works independently or under only general direction on complex problems involving all phases of systems analysis. Problems are complex because of diverse sources of input data and multiple-use requirements of output data. (For example, develops an integrated production scheduling, inventory control, cost analysis, and sales analysis record in which every item of each type is automatically processed through the full system of records and appropriate followup actions are initiated by the computer.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of new or revised systems of data processing operations. Makes recommendations, if needed, for approval of major systems installations or changes and for obtaining equipment.

May provide functional direction to lower level systems analysts who are assigned to assist.

Class B. Works independently or under only general direction on problems that are relatively uncomplicated to analyze, plan, program, and operate. Problems are of limited complexity because sources of input data are homogeneous and the output data are closely related. (For example, develops systems for maintaining depositor accounts in a bank, maintaining accounts receivable in a retail establishment, or maintaining inventory accounts in a manufacturing or wholesale establishment.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of the data processing systems to be applied, *OR*

Works on a segment of a complex data processing scheme or system, as described for class A. Works independently on routine assignments and receives instruction and guidance on complex assignments. Work is reviewed for accuracy of judgment, compliance with instructions, and to insure proper alignment with the overall system.

Class C. Works under immediate supervision, carrying out analyses as assigned, usually of a single activity. Assignments are designed to develop and expand practical experience in the application of procedures and skills required for systems analysis work. For example, may assist a higher level systems analyst by preparing the detailed specifications required by programmers from information developed by the higher level analyst.

COMPUTER PROGRAMMER, BUSINESS

Converts statements of business problems, typically prepared by a systems analyst, into a sequence of detailed instructions which are required to solve the problems by automatic data processing equipment. Working from charts or diagrams, the programmer develops the precise instructions which, when entered into the computer system in coded language, cause the manipulation of data to achieve desired results. Work involves *most of the following*: Applies knowledge of computer capabilities, mathematics, logic employed by computers, and particular subject matter involved to analyze charts and diagrams of the problem to be programmed; develops sequence of program steps; writes detailed flow charts to show order in which data will be processed; converts these charts to coded instructions for machine to follow; tests and corrects

programs; prepares instructions for operating personnel during production run; analyzes, reviews, and alters programs to increase operating efficiency or adapt to new requirements; maintains records of program development and revisions. (NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing employees, or programmers primarily concerned with scientific and/or engineering problems.

For wage study purposes, programmers are classified as follows:

Class A. Works independently or under only general direction on complex problems which require competence in all phases of programming concepts and practices. Working from diagrams and charts which identify the nature of desired results, major processing steps to be accomplished, and the relationships between various steps of the problem solving routine; plans the full range of programming actions needed to efficiently utilize the computer system in achieving desired end products.

At this level, programming is difficult because computer equipment must be organized to produce several interrelated but diverse products from numerous and diverse data elements. A wide variety and extensive number of internal processing actions must occur. This requires such actions as development of common operations which can be reused, establishment of linkage points between operations, adjustments to data when program requirements exceed computer storage capacity, and substantial manipulation and resequencing of data elements to form a highly integrated program.

May provide functional direction to lower level programmers who are assigned to assist.

Class B. Works independently or under only general direction on relatively simple programs, or on simple segments of complex programs. Programs (or segments) usually process information to produce data in two or three varied sequences or formats. Reports and listings are produced by refining, adapting, arraying, or making minor additions to or deletions from input data which are readily available. While numerous records may be processed, the data have been refined in prior actions so that the accuracy and sequencing of data can be tested by using a few routine checks. Typically, the program deals with routine recordkeeping operations, *OR*

Works on complex programs (as described for class A) under close direction of a higher level programmer or supervisor. May assist higher level programmer by independently performing less difficult tasks assigned, and performing more difficult tasks under fairly close direction.

May guide or instruct lower level programmers.

Class C. Makes practical applications of programming practices and concepts usually learned in formal training courses. Assignments are designed to develop competence in the application of standard procedures to routine problems. Receives close supervision on new aspects of assignments; and work is reviewed to verify its accuracy and conformance with required procedures.

COMPUTER OPERATOR

In accordance with operating instructions, monitors and operates the control console of a digital computer to process data. Executes runs by either serial processing

(processes one program at a time) or multiprocessing (processes two or more programs simultaneously). The following duties characterize the work of a computer operator:

- Studies operating instructions to determine equipment setup needed.
- Loads equipment with required items (tapes, cards, disks, paper, etc.).
- Switches necessary auxiliary equipment into system.
- Starts and operates computer.
- Responds to operating and computer output instructions.
- Reviews error messages and makes corrections during operation or refers problems.
- Maintains operating record.

May test-run new or modified programs. May assist in modifying systems or programs. The scope of this definition includes trainees working to become fully qualified computer operators, fully qualified computer operators, and lead operators providing technical assistance to lower level operators. It excludes workers who monitor and operate remote terminals.

Class A. In addition to work assignments described for a class B operator (see below) the work of a class A operator involves at least one of the following:

- Deviates from standard procedures to avoid the loss of information or to conserve computer time even though the procedures applied materially alter the computer unit's production plans.
- Tests new programs, applications, and procedures.
- Advises programmers and subject-matter experts on setup techniques.
- Assists in (1) maintaining, modifying, and developing operating systems or programs; (2) developing operating instructions and techniques to cover problem situations; and/or (3) switching to emergency backup procedures (such assistance requires a working knowledge of program language, computer features, and software systems).

An operator at this level typically guides lower level operators.

Class B. In addition to established production runs, work assignments include runs involving new programs, applications, and procedures (i.e., situations which require the operator to adapt to a variety of problems). At this level, the operator has the training and experience to work fairly independently in carrying out most assignments. Assignments may require the operator to select from a variety of standard setup and operating procedures. In responding to computer output instructions or error conditions, applies standard operating or corrective procedures, but may deviate from standard procedures when standard procedures fail if deviation does not materially alter the computer unit's production plans. Refers the problem or aborts the program when procedures applied do not provide a solution. May guide lower level operators.

Class C. Work assignments are limited to established production runs (i.e., programs which present few operating problems). Assignments may consist primarily of on-the-job training (sometimes augmented by classroom instruction). When learning to run programs, the supervisor or a higher level operator provides detailed written or oral

guidance to the operator before and during the run. After the operator has gained experience with a program, however, the operator works fairly independently in applying standard operating or corrective procedures in responding to computer output instructions or error conditions, but refers problems to a higher level operator or the supervisor when standard procedures fail.

PERIPHERAL EQUIPMENT OPERATOR

Operates peripheral equipment which directly supports digital computer operations. Such equipment is uniquely and specifically designed for computer applications, but need not be physically or electronically connected to a computer. Printers, plotters, card read/punches, tape readers, tape units or drives, disk units or drives, and data display units are examples of such equipment.

The following duties characterize the work of a peripheral equipment operator:

- Loading printers and plotters with correct paper; adjusting controls for forms, thickness, tension, printing density, and location; and unloading hard copy.
- Labelling tape reels, disks, or card decks.
- Checking labels and mounting and dismounting designated tape reels or disks on specified units or drives.
- Setting controls which regulate operation of the equipment.
- Observing panel lights for warnings and error indications and taking appropriate action.
- Examining tapes, cards, or other material for creases, tears, or other defects which could cause processing problems.

This classification excludes workers (1) who monitor and operate a control console (see computer operator) or a remote terminal, or (2) whose duties are limited to operating decollaters, bursters, separators, or similar equipment.

COMPUTER DATA LIBRARIAN

Maintains library of media (tapes, disks, cards, cassettes) used for automatic data processing applications. The following or similar duties characterize the work of a computer data librarian: Classifying, cataloging, and storing media in accordance with a standardized system; upon proper requests, releasing media for processing; maintaining records of releases and returns; inspecting returned media for damage or excessive wear to determine whether or not they need replacing. May perform minor repairs to damaged tapes.

DRAFTER

Performs drafting work requiring knowledge and skill in drafting methods, procedures, and techniques. Prepares drawings of structures, mechanical and electrical equipment, piping and duct systems and other similar equipment, systems, and assemblies. Uses recognized systems of symbols, legends, shadings, and lines having specific meanings in drawings. Drawings are used to communicate engineering ideas, designs, and information in support of engineering functions.

The following are excluded when they constitute the primary purpose of the job:

- Design work requiring the technical knowledge, skill, and ability to conceive or originate designs;

- Illustrating work requiring artistic ability;
- Work involving the preparation of charts, diagrams, room arrangements, floor plans, etc.;
- Cartographic work involving the preparation of maps or plats and related materials, and drawings of geological structures; and
- Supervisory work involving the management of a drafting program or the supervision of drafters.

Positions are classified into levels on the basis of the following definitions.

Class A. Works closely with design originators, preparing drawings of unusual, complex or original designs which require a high degree of precision. Performs unusually difficult assignments requiring considerable initiative, resourcefulness, and drafting expertise. Assures that anticipated problems in manufacture, assembly, installation, and operation are resolved by the drawings produced. Exercises independent judgment in selecting and interpreting data based on a knowledge of the design intent. Although working primarily as a drafter, may occasionally perform engineering design work in interpreting general designs prepared by others or in completing missing design details. May provide advice and guidance to lower level drafters or serve as coordinator and planner for large and complex drafting projects.

Class B. Prepares complete sets of complex drawings which include multiple views, detail drawings, and assembly drawings. Drawings include complex design features that require considerable drafting skill to visualize and portray. Assignments regularly require the use of mathematical formulas to compute weights, load capacities, dimensions, quantities of materials, etc. Working from sketches and verbal information supplied by an engineer or designer, determines the most appropriate views, detail drawings, and supplementary information needed to complete assignments. Selects required information from precedents, manufacturers' catalogs, and technical guides. Independently resolves most of the problems encountered. Supervisor or designer may suggest methods of approach or provide advice on unusually difficult problems.

NOTE: Exclude drafters performing work of similar difficulty to that described at this level but who provide support for a variety of organizations which have widely differing functions or requirements.

Class C. Prepares various drawings of parts and assemblies, including sectional profiles, irregular or reverse curves, hidden lines, and small or intricate details. Work requires use of most of the conventional drafting techniques and a working knowledge of the terms and procedures of the industry. Familiar or recurring work is assigned in general terms; unfamiliar assignments include information on methods, procedures, sources of information, and precedents to be followed. Simple revisions to existing drawings may be assigned with a verbal explanation of the desired results; more complex revisions are produced from sketches which clearly depict the desired product.

Class D. Prepares drawings of simple, easily visualized parts or equipment from sketches or marked-up prints. Selects appropriate templates and other equipment needed to complete assignments. Drawings fit familiar patterns and present few technical problems. Supervisor provides detailed instructions on new assignments, gives guidance when questions arise, and reviews completed work for accuracy.

Class E. Working under close supervision, traces or copies finished drawings, making clearly indicated revisions. Uses appropriate templates to draw curved lines. Assignments are designed to develop increasing skill in various drafting techniques. Work is spot-checked during progress and reviewed upon completion.

NOTE: Exclude drafters performing elementary tasks while receiving training in the most basic drafting methods.

ELECTRONICS TECHNICIAN

Works on various types of electronic equipment and related devices by performing one or a combination of the following: Installing, maintaining, repairing, overhauling, troubleshooting, modifying, constructing, and testing. Work requires practical application of technical knowledge of electronics principles, ability to determine malfunctions, and skill to put equipment in required operating condition.

The equipment—consisting of either many different kinds of circuits or multiple repetition of the same kind of circuit—includes, but is not limited to, the following: (a) electronic transmitting and receiving equipment (e.g., radar, radio, television, telephone, sonar, navigational aids), (b) digital and analog computers, and (c) industrial and medical measuring and controlling equipment.

This classification excludes repairers of such standard electronic equipment as common office machines and household radio and television sets; production assemblers and testers; workers whose primary duty is servicing electronic test instruments; technicians who have administrative or supervisory responsibility; and drafters, designers, and professional engineers.

Positions are classified into levels on the basis of the following definitions:

Class A. Applies advanced technical knowledge to solve unusually complex problems (i.e., those that typically *cannot* be solved solely by reference to manufacturers' manuals or similar documents) in working on electronic equipment. Examples of such problems include location and density of circuitry, electromagnetic radiation, isolating malfunctions, and frequent engineering changes. Work involves: A detailed understanding of the interrelationships of circuits; exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, tracing relationships in signal flow; and regularly using complex text instruments (e.g., dual trace oscilloscopes, Q-meters, deviation meters, pulse generators).

Work may be reviewed by supervisor (frequently an engineer or designer) for general compliance with accepted practices. May provide technical guidance to lower level technicians.

Class B. Applies comprehensive technical knowledge to solve complex problems (i.e., those that typically *can* be solved solely by properly interpreting manufacturers' manuals or similar documents) in working on electronic equipment. Work involves: A familiarity with the interrelationships of circuits; and judgment in determining work sequence and in selecting tools and testing instructions, usually less complex than those used by the class A technician.

Receives technical guidance, as required, from supervisor or higher level technician, and work is reviewed for specific compliance with accepted practices and work assignments. May provide technical guidance to lower level technicians.

Class C. Applies working technical knowledge to perform simple or routine tasks in working on electronic equipment, following detailed instructions which cover virtually all procedures. Work typically involves such tasks as: Assisting higher level technicians by performing such activities as replacing components, wiring circuits, and taking test readings; repairing simple electronic equipment; and using tools and common test instruments (e.g., multimeters, audio signal generators, tube testers, oscilloscopes). Is not required to be familiar with the interrelationships of circuits. This knowledge, however, may be acquired through assignments designed to increase competence (including classroom training) so that worker can advance to higher level technician.

Receives technical guidance, as required, from supervisor or higher level technician. Work is typically spot-checked, but is given detailed review when new or advanced assignments are involved.

REGISTERED INDUSTRIAL NURSE

A registered nurse gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises of a factory or other establishment. Duties involve a *combination of the following*: Giving first aid to the ill or injured; attending to subsequent dressing of employees' injuries; keeping records of patients treated; preparing accident reports for compensation or other purposes; assisting in physical examinations and health evaluations of applicants and employees; and planning and carrying out programs involving health education, accident prevention, evaluation of plant environment, or other activities affecting the health, welfare, and safety of all personnel. Nursing supervisors or head nurses in establishments employing more than one nurse are excluded.

Maintenance, Toolroom, and Powerplant

MAINTENANCE CARPENTER

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves *most of the following*: Planning and laying out of work from blueprints, drawings, models, or verbal instructions; using a variety of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE ELECTRICIAN

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy in an establishment. Work involves *most of the following*: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's handtools and measuring and testing instruments. In general,

the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE PAINTER

Paints and redecorates walls, woodwork, and fixtures of an establishment. Work involves *the following*: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead, and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MACHINIST

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment operated in an establishment. Work involves *most of the following*: Interpreting written instructions and specifications; planning and laying out of work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment required for this work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MECHANIC (MACHINERY)

Repairs machinery or mechanical equipment of an establishment. Work involves *most of the following*: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines; and making all necessary adjustments for operation. In general, the work of a machinery maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose *primary duties* involve setting up or adjusting machines.

MAINTENANCE MECHANIC (MOTOR VEHICLE)

Repairs automobiles, buses, motortrucks, and tractors of an establishment. Work involves *most of the following*: Examining automotive equipment to diagnose source of trouble; disassembling equipment and performing repairs that involve the use of such handtools as wrenches, gauges, drills, or specialized equipment in disassembling or fitting parts; replacing broken or defective parts from stock; grinding and adjusting valves; reassembling and installing the various assemblies in the vehicle and making necessary adjustments; and aligning wheels, adjusting brakes and lights, or tightening body bolts. In general, the work of the motor vehicle maintenance mechanic requires

rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

This classification does not include mechanics who repair customers' vehicles in automobile repair shops.

MAINTENANCE PIPEFITTER

Installs or repairs water, steam, gas, or other types of pipe and pipefittings in an establishment. Work involves *most of the following*: Laying out work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machines; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. *Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.*

MAINTENANCE SHEET-METAL WORKER

Fabricates, installs, and maintains in good repair the sheet-metal equipment and fixtures (such as machine guards, grease pans, shelves, lockers, tanks, ventilators, chutes, ducts, metal roofing) of an establishment. Work involves *most of the following*: Planning and laying out all types of sheet-metal maintenance work from blueprints, models, or other specifications; setting up and operating all available types of sheet-metal working machines; using a variety of handtools in cutting, bending, forming, shaping, fitting, and assembling; and installing sheet-metal articles as required. In general, the work of the maintenance sheet-metal worker requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MILLWRIGHT

Installs new machines or heavy equipment, and dismantles and installs machines or heavy equipment when changes in the plant layout are required. Work involves *most of the following*: Planning and laying out work; interpreting blueprints or other specifications; using a variety of handtools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity; aligning and balancing equipment; selecting standard tools, equipment, and parts to be used; and installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the millwright's work normally requires a rounded training and experience in the trade acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE TRADES HELPER

Assists one or more workers in the skilled maintenance trades, by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade: In some

trades the helper is confined to supplying, lifting, and holding materials and tools, and cleaning working areas; and in others he is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

MACHINE-TOOL OPERATOR (TOOLROOM)

Specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). *Work typically involves*: Planning and performing difficult machining operations which require complicated setups or a high degree of accuracy; setting up machine tool or tools (e.g., install cutting tools and adjust guides, stops, working tables, and other controls to handle the size of stock to be machined; determine proper feeds, speeds, tooling, and operation sequence or select those prescribed in drawings, blueprints, or layouts); using a variety of precision measuring instruments; making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. May be required to select proper coolants and cutting and lubricating oils, to recognize when tools need dressing, and to dress tools. In general, the work of a machine-tool operator (toolroom) at the skill level called for in this classification requires extensive knowledge of machine-shop and toolroom practice usually acquired through considerable on-the-job training and experience.

For cross-industry wage study purposes, this classification does not include machine-tool operators (toolroom) employed in tool and die jobbing shops.

TOOL AND DIE MAKER

Constructs and repairs jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). *Work typically involves*: Planning and laying out work according to models, blueprints, drawings, or other written or oral specifications; understanding the working properties of common metals and alloys; selecting appropriate materials, tools, and processes required to complete task; making necessary shop computations; setting up and operating various machine tools and related equipment; using various tool and die maker's handtools and precision measuring instruments; working to very close tolerances; heat-treating metal parts and finished tools and dies to achieve required qualities; fitting and assembling parts to prescribed tolerances and allowances. In general, the tool and die maker's work requires rounded training in machine-shop and toolroom practice usually acquired through formal apprenticeship or equivalent training and experience.

For cross-industry wage study purposes, this classification does *not* include tool and die makers who (1) are employed in tool and die jobbing shops or (2) produce forging dies (die sinkers).

STATIONARY ENGINEER

Operates and maintains one or more systems which provide an establishment with such services as heat, air-conditioning (cool, humidify, dehumidify, filter, and circulate air), refrigeration, steam or high-temperature water, or electricity. Duties involve: Observing and interpreting readings on gauges, meters, and charts which register various aspects of the system's operation; adjusting controls to insure safe and efficient operation of the system and to meet demands for the service provided; recording in logs

various aspects of the system's operation; keeping the engines, machinery, and equipment of the system in good working order. May direct and coordinate activities of other workers (not stationary engineers) in performing tasks directly related to operating and maintaining the system or systems.

The classification excludes head or chief engineers in establishments employing more than one engineer; workers required to be skilled in the repair of electronic control equipment; and workers in establishments producing electricity, steam, or heated or cooled air primarily for sale.

BOILER TENDER

Tends one or more boilers to produce steam or high-temperature water for use in an establishment. Fires boiler. Observes and interprets readings on gauges, meters, and charts which register various aspects of boiler operation. Adjusts controls to insure safe and efficient boiler operation and to meet demands for steam or high-temperature water. May also do one or more of the following: Maintain a log in which various aspects of boiler operation are recorded; clean, oil, make minor repairs or assist in repairs to boilerroom equipment; and, following prescribed methods, treat boiler water with chemicals and analyze boiler water for such things as acidity, causticity, and alkalinity.

The classification excludes workers in establishments producing electricity, steam, or heated or cooled air primarily for sale.

Material Movement and Custodial

TRUCKDRIVER

Drives a truck within a city or industrial area to transport materials, merchandise, equipment, or workers between various types of establishments such as: Manufacturing plants, freight depots, warehouses, wholesale and retail establishments, or between retail establishments and customers' houses or places of business. May also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order. *Salesroute and over-the-road drivers are excluded.*

For wage study purposes, truckdrivers are classified by type and rated capacity of truck, as follows:

Truckdriver, light truck

(straight truck, under 1 1/2 tons, usually 4 wheels)

Truckdriver, medium truck

(straight truck, 1 1/2 to 4 tons inclusive, usually 6 wheels)

Truckdriver, heavy truck

(straight truck, over 4 tons, usually 10 wheels)

Truckdriver, tractor-trailer

SHIPPER AND RECEIVER

Performs *clerical and physical* tasks in connection with shipping goods of the establishment in which employed and receiving incoming shipments. In performing day-to-day, routine tasks, follows established guidelines. In handling unusual nonroutine problems, receives specific guidance from supervisor or other officials. May direct and coordinate the activities of other workers engaged in handling goods to be shipped or being received.

Shippers typically are responsible for most of the following: Verifying that orders are accurately filled by comparing items and quantities of goods gathered for shipment against documents; insuring that shipments are properly packaged, identified with shipping information, and loaded into transporting vehicles; preparing and keeping records of goods shipped, e.g., manifests, bills of lading.

Receivers typically are responsible for most of the following: Verifying the correctness of incoming shipments by comparing items and quantities unloaded against bills of lading, invoices, manifests, storage receipts, or other records; checking for damaged goods; insuring that goods are appropriately identified for routing to departments within the establishment; preparing and keeping records of goods received.

For wage study purposes, workers are classified as follows:

Shipper

Receiver

Shipper and receiver

WAREHOUSEMAN

As directed, performs a *variety of warehousing duties* which require an *understanding of the establishment's storage plan*. Work involves *most of the following*: Verifying materials (or merchandise) against receiving documents, noting and reporting discrepancies and obvious damages; routing materials to prescribed storage locations; storing, stacking, or palletizing materials in accordance with prescribed storage methods; rearranging and taking inventory of stored materials; examining stored materials and reporting deterioration and damage; removing material from storage and preparing it for shipment. May operate hand or power trucks in performing warehousing duties.

Exclude workers whose *primary* duties involve shipping and receiving work (see Shipper and Receiver and Shipping Packer), order filling (see Order Filler), or operating power trucks (see Power-Truck Operator).

ORDER FILLER

Fills shipping or transfer orders for finished goods from stored merchandise in accordance with specifications on sales slips, customers' orders, or other instructions. May, in addition to filling orders and indicating items filled or omitted, keep records of outgoing orders, requisition additional stock or report short supplies to supervisor, and perform other related duties.

SHIPPING PACKER

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers and *may involve one or more of the following*: Knowledge of various items of stock in order to verify content; selection of appropriate type and size of container; inserting enclosures in container; using excelsior or other material to prevent breakage or damage; closing and sealing container; and applying labels or entering identifying data on container. *Packers who also make wooden boxes or crates are excluded.*

MATERIAL HANDLING LABORER

A worker employed in a warehouse, manufacturing plant, store, or other establishment whose duties involve *one or more of the following*: Loading and unloading various materials and merchandise on or from freight cars, trucks, or other transporting devices; unpacking, shelving, or placing materials or merchandise in proper storage location; and transporting materials or merchandise by handtruck, car, or wheelbarrow. *Longshore workers, who load and unload ships, are excluded.*

POWER-TRUCK OPERATOR

Operates a manually controlled gasoline- or electric-powered truck or tractor to transport goods and materials of all kinds about a warehouse, manufacturing plant, or other establishment.

For wage study purposes, workers are classified by type of powertruck, as follows:

Forklift operator

Power-truck operator (other than forklift)

GUARD

Protects property from theft or damage, or persons from hazards or interference. Duties involve serving at a fixed post, making rounds on foot or by motor vehicle, or escorting persons or property. May be deputized to make arrests. May also help visitors and customers by answering questions and giving directions.

Guards employed by establishments which provide protective services on a contract basis are included in this occupation.

For wage study purposes, guards are classified as follows:

Class A. Enforces regulations designed to prevent breaches of security. Exercises judgment and uses discretion in dealing with emergencies and security violations encountered. Determines whether first response should be to intervene directly (asking for assistance when deemed necessary and time allows), to keep situation under surveillance, or to report situation so that it can be handled by appropriate authority. Duties require specialized training in methods and techniques of protecting security areas. Commonly, the guard is required to demonstrate continuing physical fitness and proficiency with firearms or other special weapons.

Class B. Carries out instructions primarily oriented toward insuring that emergencies and security violations are readily discovered and reported to appropriate authority. Intervenes directly only in situations which require minimal action to safeguard property or persons. Duties require minimal training. Commonly, the guard is not required to demonstrate physical fitness. May be armed, but generally is not required to demonstrate proficiency in the use of firearms or special weapons.

JANITOR, PORTER, OR CLEANER

Cleans and keeps in an orderly condition factory working areas and washrooms, or premises of an office, apartment house, or commercial or other establishment. Duties involve *a combination of the following*: Sweeping, mopping or scrubbing, and polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers, and restrooms. *Workers who specialize in window washing are excluded.*

Service Contract Act Surveys

The following areas are surveyed periodically for use in administering the Service Contract Act of 1965. Survey results are published in releases which are available, at no cost, while supplies last from any of the BLS regional offices shown on the back cover.

Alaska (statewide)
Albany, Ga.
Albuquerque, N. Mex.
Alexandria-Leesville, La.
Alpena-Standish-Tawas City, Mich.
Ann Arbor, Mich.
Asheville, N.C.
Atlantic City, N.J.
Augusta, Ga.-S.C.
Austin, Tex.
Bakersfield, Calif.
Baton Rouge, La.
Beaumont-Port Arthur-Orange and Lake Charles, Tex.-La.
Biloxi-Gulfport and Pascagoula-Moss Point, Miss.
Binghamton, N. Y.
Birmingham, Ala.
Bremerton-Shelton, Wash.
Brunswick, Ga.
Cedar Rapids, Iowa
Champaign-Urbana-Rantoul, Ill.
Charleston-North Charleston-Walterboro, S.C.
Cheyenne, Wyo.
Clarksville-Hopkinsville, Tenn.-Ky.

Colorado Springs, Colo.
Columbia-Sumter, S.C.
Columbus, Ga.-Ala.
Columbus, Miss.
Connecticut (statewide)
Dothan, Ala.
Duluth-Superior, Minn.-Wis.
El Paso-Alamogordo-Las Cruces, Tex.-N. Mex.
Eugene-Springfield-Medford, Oreg.
Fayetteville, N.C.
Fort Smith, Ark.-Okla.
Fort Wayne, Ind.
Frederick-Hagerstown-Chambersburg, Md.-Pa.
Gadsden and Anniston, Ala.
Goldsboro, N.C.
Guam, Territory of
Knoxville, Tenn.
La Crosse-Sparta, Wis.
Laredo, Tex.
Lexington-Fayette, Ky.
Lima, Ohio
Little Rock-North Little Rock, Ark.
Logansport-Peru, Ind.
Lower Eastern Shore, Md.-Va.-Del.
Macon, Ga.
Madison, Wis.
Maine (statewide)
Mansfield, Ohio
McAllen-Pharr-Edinburg and Brownsville-Harlingen- San Benito, Tex.
Meridian, Miss.

Middlesex, Monmouth, and Ocean Counties, N.J.
Mobile-Pensacola-Panama City, Ala.-Fla.
Montana (statewide)
Montgomery, Ala.
Nashville-Davidson, Tenn.
New Bern-Jacksonville, N.C.
New Hampshire (statewide)
North Dakota (statewide)
Northern New York
Northwest Texas
Orlando, Fla.
Oxnard-Simi Valley-Ventura, Calif.
Peoria, Ill.
Pine Bluff, Ark.
Pueblo, Colo.
Puerto Rico
Raleigh-Durham, N.C.
Reno, Nev.
Riverside-San Bernardino-Ontario, Calif.
Salina, Kans.
Santa Barbara-Santa Maria-Lompoc, Calif.
Savannah, Ga.
Selma, Ala.
Sherman-Denison, Tex.
Shreveport, La.
South Dakota (statewide)
Southeastern Massachusetts
Southern Idaho
Southwest Virginia
Spokane, Wash.

Springfield, Ill.
Stockton, Calif.
Tacoma, Wash.
Topeka, Kans.
Tucson-Douglas, Ariz.
Tulsa, Okla.
Upper Peninsula, Mich.
Vallejo-Fairfield-Napa, Calif.
Vermont (statewide)
Virgin Islands of the U.S.
Waco and Killeen-Temple, Tex.
Waterloo-Cedar Falls, Iowa
West Virginia (statewide)
Western and Northern Massachusetts
Wichita Falls-Lawton-Altus, Tex.-Okla.
Yakima-Richland-Kennewick-Pendleton, Wash.-Oreg.

ALSO AVAILABLE—

An annual report on salaries for accountants, auditors, chief accountants, attorneys, job analysts, directors of personnel, buyers, chemists, engineers, engineering technicians, drafters, and clerical employees is available. Order as BLS Bulletin 2045, *National Survey of Professional, Administrative, Technical and Clerical Pay, March 1979*, \$3.00 a copy, from any of the BLS regional sales offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Area Wage Surveys

A list of the latest bulletins available is presented below. Bulletins may be purchased from any of the BLS regional offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. Make checks payable to Superintendent of Documents. A directory of occupational wage surveys, covering the years 1970 through 1977, is available on request.

<i>Area</i>	<i>Bulletin number and price*</i>
Akron, Ohio, Dec. 1978	2025-63 \$1.00
Albany-Schenectady-Troy, N.Y., Sept. 1980 ¹	3000-45 \$2.25
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1979	2050-48 \$1.50
Atlanta, Ga., May 1980	3000-21 \$2.25
Baltimore, Md., Aug. 1980	3000-38 \$2.25
Billings, Mont., July 1980 ¹	3000-31 \$2.00
Birmingham, Ala., Mar. 1978	2025-15 \$0.80
Boston, Mass., Aug. 1980	3000-40 \$2.25
Buffalo, N.Y., Oct. 1980	3000-52 \$2.25
Canton, Ohio, May 1978	2025-22 \$0.70
Chattanooga, Tenn.—Ga., Sept. 1980	3000-44 \$1.75
Chicago, Ill., May 1980 ¹	3000-26 \$3.25
Cincinnati, Ohio—Ky.—Ind., July 1980	3000-32 \$2.25
Cleveland, Ohio, Sept. 1980 ¹	3000-46 \$3.25
Columbus, Ohio, Oct. 1980	3000-48 \$2.00
Corpus Christi, Tex., July 1980	3000-28 \$1.75
Dallas—Fort Worth, Tex., Dec. 1979	2050-67 \$2.25
Davenport—Rock Island—Moline, Iowa—Ill., Feb. 1980 ¹	3000- 5 \$2.25
Dayton, Ohio, Dec. 1979	2050-64 \$2.00
Daytona Beach, Fla., Aug. 1980 ¹	3000-33 \$1.75
Denver—Boulder, Colo., Dec. 1979	2050-72 \$2.25
Detroit, Mich., Mar. 1980	3000- 7 \$2.25
Fresno, Calif., June 1980 ¹	3000-30 \$2.00
Gainesville, Fla., Sept. 1979	2050-45 \$1.50
Gary—Hammond—East Chicago, Ind., Oct. 1979 ¹	2050-60 \$2.25
Green Bay, Wis., July 1980	3000-22 \$1.75
Greensboro—Winston-Salem—High Point, N.C., Aug. 1980 ¹	3000-50 \$2.25
Greenville—Spartanburg, S.C., June 1980	3000-16 \$1.75
Hartford, Conn., Mar. 1980 ¹	3000-19 \$2.25
Houston, Tex., Apr. 1980 ¹	3000-18 \$3.25
Huntsville, Ala., Feb. 1980 ¹	3000-14 \$2.25
Indianapolis, Ind., Oct. 1980	3000-47 \$2.25
Jackson, Miss., Jan. 1980	3000- 2 \$1.75
Jacksonville, Fla., Dec. 1979 ¹	2050-69 \$2.25
Kansas City, Mo.—Kans., Sept. 1980	3000-42 \$2.25
Los Angeles—Long Beach, Calif., Oct. 1979	2050-59 \$2.25
Louisville, Ky.—Ind., Nov. 1979	2050-66 \$2.00

<i>Area</i>	<i>Bulletin number and price*</i>
Memphis, Tenn.—Ark.—Miss., Nov. 1979 ¹	2050-56 \$2.25
Miami, Fla., Oct. 1980	3000-51 \$2.25
Milwaukee, Wis., Apr. 1980	3000-10 \$2.25
Minneapolis—St. Paul, Minn.—Wis., Jan. 1980	3000- 1 \$2.25
Nassau—Suffolk, N.Y., June 1980	3000-29 \$2.00
Newark, N.J., Jan. 1980 ¹	3000- 8 \$3.25
New Orleans, La., Oct. 1979	2050-53 \$2.25
New York, N.Y.—N.J., May 1980	3000-24 \$2.25
Norfolk—Virginia Beach—Portsmouth, Va.—N.C., May 1980	3000-20 \$1.75
Hampton, Va.—N.C., May 1978	2025-21 \$0.80
Northeast Pennsylvania, Aug. 1980	3000-37 \$1.75
Oklahoma City, Okla., Aug. 1980 ¹	3000-41 \$2.25
Omaha, Nebr.—Iowa, Oct. 1979	2050-51 \$1.50
Paterson—Clifton—Passaic, N.J., June 1980 ¹	3000-34 \$2.25
Philadelphia, Pa.—N.J., Nov. 1980	3000-53 \$2.25
Pittsburgh, Pa., Jan. 1980	3000- 3 \$2.25
Portland, Maine, Dec. 1979	2050-63 \$1.75
Portland, Oreg.—Wash., June 1980 ¹	3000-49 \$2.50
Poughkeepsie, N.Y., June 1980 ¹	3000-35 \$2.00
Poughkeepsie—Kingston—Newburgh, N.Y., June 1980 ¹	3000-39 \$2.00
Providence—Warwick—Pawtucket, R.I.—Mass., June 1980	3000-27 \$2.00
Richmond, Va., June 1980 ¹	3000-23 \$2.25
St. Louis, Mo.—Ill., Mar. 1980	3000-12 \$2.25
Sacramento, Calif., Dec. 1979	2050-71 \$1.75
Saginaw, Mich., Nov. 1979 ¹	2050-52 \$1.75
Salt Lake City—Ogden, Utah, Nov. 1979	2050-62 \$2.00
San Antonio, Tex., May 1980 ¹	3000-17 \$2.00
San Diego, Calif., Nov. 1979	2050-70 \$2.00
San Francisco—Oakland, Calif., Mar. 1980	3000- 9 \$2.25
San Jose, Calif., Mar. 1980	3000- 6 \$2.00
Seattle—Everett, Wash., Dec. 1979 ¹	2050-68 \$2.25
South Bend, Ind., Aug. 1980	3000-36 \$1.75
Toledo, Ohio—Mich., May 1980	3000-13 \$1.75
Trenton, N.J., Sept. 1980	3000-43 \$1.75
Utica—Rome, N.Y., July 1978	2025-34 \$1.00
Washington, D.C.—Md.—Va., Mar. 1980	3000- 4 \$2.25
Wichita, Kans., Apr. 1980 ¹	3000-15 \$2.25
Worcester, Mass., Apr. 1980 ¹	3000-25 \$2.00
York, Pa., Feb. 1980	3000-11 \$1.75

* Prices are determined by the Government Printing Office and are subject to change.

¹ Data on establishment practices and supplementary wage provisions are also presented.

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