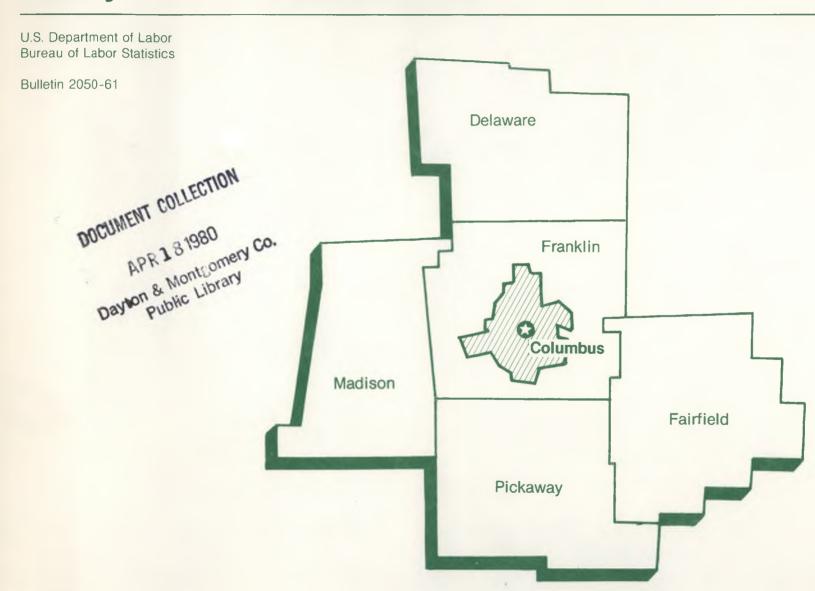
12.3:

Area 2050-61 Wage Survey

## Columbus, Ohio, Metropolitan Area October 1979





## **Preface**

This bulletin provides results of an October 1979 survey of occupational earnings in the Columbus, Ohio, 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 Chicago, Ill., under the general direction of Lois L. Orr, 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:

Also available for the Columbus area are listings of union wage rates for building trades, printing trades, local-transit operating employees, local truckdrivers and helpers, and grocery store employees. A report on occupational earnings and supplementary benefits for municipal government workers is available for the city of Columbus. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

## Area Wage Survey

## Columbus, Ohio, Metropolitan Area October 1979



**Page** 

U.S. Department of Labor Ray Marshall, Secretary Bureau of Labor Statistics Janet L. Norwood, Commissioner April 1980

Bulletin 2050-61

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## Introduction

This area is 1 of 72 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-10 through A-15 provide similar data for establishments employing 500 workers or more.

Table A-7 provides percent changes in average hourly earnings of 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 and A-9 provide for the first time measures of average pay relationships within establishments. These measures may differ considerably from the pay relationships of overall 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.

## Earnings: All establishments

Table A-1. Weekly earnings of office workers, Columbus, Ohio, October 1979

				Weekly e		NUMPER	OF W	ORKER	S REC	EIVIN	G STR	AIGHT	-TIME	WEE K	Y EA	RNING	S (TN	DOLL	ARS)	0F						
Occupation and industry division	Number of workers	Average weekly hours 1 (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	UNDER 110 U	AND NDER	-	130 - 140	-	150 - 160	-	-	180 - 190	-	-	227	-	-	-	300	320 - 340	-	360 - 380	-	400 AND OVER
SECRETARIES	865	40.C	229.30	219.50		-	1 - 1	3 - 3	15 1 14	34 10 24	78 32 46	140 37 103	184 59 125	62	270 81 189	454 153 301	360 118 242	340 109 231	196 74 122	106 39 67	104 43 61	37 25 12	14 6 8	13 3 10	2 -	14 11 3
SECRETARIES, CLASS A	136 92		269.50 278.00			-	-	_	-	-	_	_	_	7	2	6 3	16 6	38 26	7	30 25	20 19	2	2	4 2	-	2
SECRETARIES CLASS R	410 172 238	45.0	241.50 240.30 243.30	232.00		-	3	=	-	-	8 2 6	-	7 3 4	15 7 8	33 24 9	93 27 66	53 34 19	90 28 52	52 19 33	24 12 12	16 4 12	13 6 7	8 4	6 - 6	=	2
SECRETARIES CLASS C	722 300 422	40.0	225.50 233.50 220.00	223.50		=	-	-	9 - 9	5 2 3	25 16 9	25 14 11	42 19 23	67 19 48	80 17 63	118 48 70	1 05 50 55	86 33 53	82 41 41	25 6 19	27 11 16	13 12 1	=	2 1 1	2 -	9
SECRETARIES CLASS D	818 272 546	40.0	215.50 223.50 211.50	210.00	186-00- 260-00	3	1	3 - 3	6 1 5	20 8 12	23 11 12	54 20 34	71 24 47	64 13 51	99 27 72	138 54 84	128 16 112	131 36 65	39 14 25	21 16 5	37 27 13	8 5 3	# -	1 - 1	=	-
SECRETARIES+ CLASS E	427 378		194.50 195.00			-	-	_	_	9	22 19	61 58	56 51	63 51	4 A 39	89 75	45 42	32	-	1	1	_	_	-	-	-
STENOGRAPHERS	325 190 135	43.0	220.00 211.10 232.50	214.00	173.30- 242.30	-	-	-	10 10 -	2 8 1 4 1 4	4 3 1	16 10 6	25 25 -	31 19 12	9 6 3	35 10 25	56 26 30	51 46 5	10 6 4	18 8 10	10 4 6	18 - 18	4 3 1	-	-	-
STENOGRAPHERS: SENIOP	228 142		230.50 226.50			-	-	-	1	14	2	6	16 16	16 16	6	19	54 25	45 45	10 6	17	10	9	3	-	-	
STENOGRAPHERS, GENERAL	97	39.5	195.50	184.)0	159.00- 212.50	-	-	-	9	14	2	10	9	15	3	16	2	6	-	1	-	9	1	-	-	-
TRANSCRIBING-MACHINE TYPISTS	53	37.5	155.30	153.50	142.70- 167.00	-	-	-	12	7	13	9	7	4	1	-	-	-	-	-	-	-	_	-	-	-
TYPISTS	775 161 614	39.5	173.50 177.50 172.50	168-10	138.30- 192.00 140.50- 209.30 138.30- 190.03		51 - 51	57 35 22	106 4 102	85 8 77	102 22 80	76 19 57	45 5 40	32 11 21	44 40	50 31 19	12 5 7	34 5 29	27 8 19	52 4 48	2 - 2	-	-	-	=	-
TYPISTS CLASS A	412 57 355	40.0	189.30 208.50 186.30	216.50	148.37- 224.53 167.37- 247.33 148.30- 219.90	=	=	11 7 4	33 - 33	65 3 62	56 4 52	48 2 46	25 2 23	19 1 18	14 1 13	31 16 15	11 4 7	32 5 27	13 8 5	52 4 48	2 - 2	=	-	=	-	-
TYPISTS+ CLASS R	363 104 259	39.5	156.30 161.30 154.30	144.39 155.50 138.30	126.50- 178.50 126.50- 183.00 122.50- 175.00	1	51 - 51	46 28 18	73 4 69	20 5 15	46 18 28	28 17 11	20 3 17	13 19 3	30 3 27	19 15 4	1	2 - 2	14	-	=	=	-	1	=	-
FILE CLERKS  MANUFACTURING  NON MANUFACTURING  PURLIC UTILITIES	413 91 322 45	40.0	142.50 157.00 138.50 214.00	156.50 126.50	119.50- 140.30	36 *36	65 - 65	115 20 95	57 15 42	19 1 18	28 15 13	18 10 8	15 8 7 5	18 8 10 7	23 12 11	2 2 - -	3 - 3 3	-	7 - 7 7	7 - 7 7	11111	-	-	-	1	
FILE CLERKS+ CLASS B	121 85		153.50 157.30			-	_	20 11	46 33	p p	19 11	7	4	3 2	2 2	2	3	_	7	-	-	-	_	_	_	-
FILE CLERKS, CLASS C	271 223		132.30 125.50			*36 36	65 65	95 84	11 9	10	8 1	10	9	13	14	-	1	2	-	-	1.1	ē	-	-	-	-

<sup>\*</sup> Workers were at \$100 to \$110.

Table A-1. Weekly earnings of office workers, Columbus, Ohio, October 1979—Continued

				Weekly e		NUMBER	OF L	ORKER	S REC	EIVIN	G STR	AIGHT	-TIME	MEE KL	Y EA	RNING	S (TN	DOLL	ARS 1	0F						
Occupation and industry division	Number of workers	Average weekly hours I (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	UNDER 110 U	AND	-	-	-	-	-	-	180 - 190	-	-	2 20 -	-	-	-	-	320 - 340	-	-	-	AND OVER
MESSENGERS	241 225				\$116.50-\$143.00 116.50- 140.00		78 76	59 57	15 15	25 23	7	15 13	5 3	4 2	=	2	11 11	-	-	1	1	7	- 1	-	ž	-
SWITCHROARD OPERATORS	187 163		169.00 166.50		140.00- 192.00 140.00- 186.50	-	_	7	18 17	32 31	31 29	18 16	7	23 21	18 13	21 17	7	2	_	Ξ	1	_	-	ā	_	J
SWITCHPOARD OPERATOR- RECEPTIONISTS	280 114 166	40.0	173.50 177.50 166.50	172.50	150.00- 184.00 149.00- 198.00 150.00- 169.50	111	1	14 14 -	39 11 28	7 4 3	78 16 62	40 7 33	21 12 9	26 14 12	19 12 7	12 12	3 - 3	10 9 1		6 3 3	5 - 5	-	-	111	- 1	1
ORDER CLERKS	588 337 251	39.0	178.00		148.00- 221.00 147.50- 206.00 166.50- 223.00	-	=	27 24 3	46	79 40 39	52 35 17	34 22 12	43 16 27	42 35 7	42 27 15	75 22 53	119 53 66	2 2 -	9	3	- 1	3	6 3 3	9	=	-
ORDER CLERKS+ CLASS A	119 83		213.50 204.50		167.00- 230.00 156.00- 221.00	-	-	_	-	10	12 12	14	20	9	4	2	28 28	_	7	3	-	-	6	9	-	1
ORDER CLERKS CLASS B	319 104 215	40.0	184.00 165.50 193.00	154.00	147.59- 219.00 130.39- 188.00 154.09- 223.30	1.4.1	9	24 21 3	7 7	60 21 39	25 8 17	7 3 4	13 2 11	29 22 7	17 2 15	63 10 53	70 4 66	2	2 2 -	=	-	=	-	=	=	-
ACCOUNTING CLERKS	1:421 586 835 97	39.5 40.0 39.5 40.0	191.00 187.00 193.50 269.00	178.30 178.30	150.00- 215.00 156.00- 211.00 150.00- 227.50 254.00- 289.00	1 -	5 - 5 -	50 16 34	119 52 67	140 45 95	152 58 94	146 90 56 1	116 42 74	84 55 29 6	123 50 73 5	164 75 89 13	91 45 46 1	59 25 38 8	43 7 36 8	73 12 61 43	23 23 19	13 2 11 8	3 2 1 1	15 6 9	=	4
ACCOUNTING CLERKS, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	700 329 371 59	40.0 39.5	211.30 193.00 227.30 291.30	185.00 216.50	167.00- 238.50 160.00- 213.50 190.00- 278.00 288.00- 310.00	-	10.11	2 2 -	15 14 1	32 18 14	64 42 22	78 55 23	47 28 19	37 27 10	82 32 50 -	105 51 54 1	70 29 41 1	28 7 21 4	30 4 26 2	58 8 50 35	19 - 19 q	10 10 7	2 2	15 6 9	1 1 6 6	4
ACCOUNTING CLERKS CLASS R MANUFACTURING NONMANUFACTURING PURLIC UTILITIES	721 257 464 38			169.J0 152.J0	140.39- 190.00 147.59- 200.00 140.00- 183.00 195.50- 280.50	1 - 1 -	5 - 5 -	46 14 32 -	104 38 66	108 27 81	88 16 72	68 35 33	69 14 55	47 28 19 6	41 18 23 5	59 24 35 9	21 16 5	31 18 13	13 3 10 6	15 a 11	1 - 1 1	3 2 1 1	1 - 1 1	-	-	
PAYROLL CLERKS	26,3 146 117		211.00 215.50 205.00	210.50	179.00- 236.50 182.09- 234.50 179.00- 240.50	-	=	-	3 2 1	5 1 4	31 15 16	14 11 3	26 6 20	22 14 8	18 10 8	37 18 19	42 36 6	32 10 22	15 10 5	Р 3 5	7	3	111	-	-	-
KEY ENTRY OPERATORS	1+314 289 1+325 62	39.5	181.30 183.50 180.50 234.10	176.30	152.50- 231.53 154.30- 199.00 152.30- 201.53 182.00- 274.00	-	16 16	22 14 8 -	81 11 70	170 29 141 6	132 34 98 2	24	180 52 128 5	129 34 95	83 26 57 8	162 34 128	97 7 90 3	20 5 15	28 8 20 11	5 - -	15 2 13 13	12	-	-	4 - -	-
KEY ENTRY OPERATORS CLASS A MANUFACTURING	555 139 416		204.00 202.50 204.50	196.50	175.00- 223.00 176.50- 209.00 173.50- 225.50	- - -	-	-	-	я 2 6	30 12 18	50 11 39	87 19 68	75 19 56	54 25 29	103 28 75	86 4 82	10	18 6 12	4 4 —	14 1 13	12	-	-	4 -	-
KEY ENTRY OPERATORS, CLASS R MANUFACTURING NONPANUFACTURING PUBLIC UTILITIES	759 150 639 39	39.5 39.0	164.50	161.00 159.JD	145.30- 178.00 148.00- 176.00 143.50- 178.50 169.00- 252.00	-	16 - 16 -	22 14 8	81 11 70	162 27 135 6	102 22 80 2	108 13 95 3	93 33 60 5	54 15 39	29 1 28 4	59 6 53 1	11 3 8 3	10 1 9 7	10 2 8 8	1 1 -	1 1 -	-	1.69.1	-	-	-

Table A-2. Weekly earnings of professional and technical workers, Columbus, Ohio, October 1979

				Weekly e			NUMBER	OF W	ORKER	RS REC	EIVt	IG STR	AIGHT	-TIME	WEE R	LY E	RNING	S (IN	DOLL	ARSE	0F					_	
Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Mean <sup>2</sup>	Median 2	Middle rar	nge <sup>2</sup>	UNDER 140 UM		-	-	-	-	-	-	-	-	-	320 - 343	-	-	-	-	-	-	-	-	OVE
COMPUTER SYSTEMS ANALYSTS																											
HANUFACTURING	526 131				\$339.00-\$4 345.00- 4			-	-		_	_	19	1	5	20 5	46	49 15	76 26	54 10	71 13	56 13	37 8	40 1.4	23 13	12	1
NON MA NUF A CTURING	395						-	-	-	_	_	_	19	1	4	15	41	34	50	44	58	46	29	26	10	6	1
COMPUTER SYSTEMS ANALYSTS																											
(BUSINESS), CLASS A	201	39.5	422.00	418.50	393.50-	444.50	-	-	-	-	-	-	-	-	-	2	1	11	9	12	26	45	34	25	10	9	1
MANUFACTURING	63						-	-	-	-	-	-	-	-	-	2	-	3	6	3	7	В	6	10	9	ц	
NONMA NUFACTURING	138	39.0	429.50	418.50	397-30- 4	438.90	-	-	-	-	-	-	-	-	-	-	1	А	3	9	19	37	28	15	1	5	1
COMPUTER SYSTEMS ANALYSTS																											
(BUSINESS)+ CLASS B	207						-	-	-	-	_	-	-	-	0	1	13	34	39	32	39	11	3	15	13	3	
MANUFACTURING	50						-	-	-	_	-	_	-	-	_	-	1	8	15	6	-6	5	5	4	4	2	
NONMANUFACTURING	157	39.5	373.00	375.00	340.30- 3	390.00	-	-	-	-	_	-	_	_	4	1	12	26	24	56	33	9	1	11	9	1	
OMPUTER PROGRAMMERS (BUSINESS)	681	39.0	299.50	299.30	264-50- 3	336.00	-	-	-	8	31	11	38	72	1.04	81	86	95	53	42	37	16	4	3	-	-	
MANUFACTURING	121						-	-	-	-	27	2	10	22	44	7	18	3	9	3	9	6	1	-	-	-	
NON#ANUFACTURING	563	38.5	304.50	303.50	269.77- 3	336.00	-	-	-	8	4	9	58	50	100	74	6.8	92	44	39	28	10	3	3	-	-	
COMPUTER PROGRAMMERS (BUSINESS).																											
CLASS A	202	39.0	342.50	336-00	308.00- 3	377.00	-	-	-	-	_	_	1	2	2	37	30	35	24	24	24	16	4	3	-	_	
NONMANUFACTURING	170	38.5	340.00	334.50	308-19- 3	374.10	-	-	-	-	-	-	1	2	2	31	27	35	15	22	19	10	3	3	-	-	
COMPUTER PROGRAMMERS (BUSINESS).																											
CLASS R	339	39.0	297.50	302.30	264.50- 3	332.50	-	-	-	4	6	3	5	57	53	36	53	60	29	18	13	-	_	_	-	_	
NONMANUFACTURING	291	39.0	300.50	303.50	267.00- 3	332.50	-	-	-	4	4	3	3	39	51	35	40	57	29	17	g	-	-	-	-	-	
COMPUTER PROGRAMMERS (AUSINESS).																											
CLASS C	134	38.5	242.00	246.00	223.50- 2	270.90	-	-	-	4	21	6	30	13	49	8	3	-	_	-	-	-	-	-	-	-	
NONMANUFACTURING	99	38.5	253.00	269.30	230.00- 2	274-00	-	-	-	4	-	6	24	9	47	8	1	-	-	-	-	7	-	-	-	-	-
OMPUTER OPERATORS	742	39.0	292.00	236-30	200.00- 2	75.00	11	_	2	68	97	96	105	92	104	45	48	3.8	13	19	1	_	_	1	_	_	
MANUFACTURING	183		242.50				2	-	2	21	1.8	38	31	15	Я	6	18	10	7	3	1	-	-	1	_	-	
NONMANUFACTURING	559		242.00				9	-	-	47	79	56	74	77	96	39	30	28	6	16	-	-	-	-	-	-	
PURLIC UTILITIES	32	40.0	277.50	289-00	270.50- 2	289.00	-	-	-	-	-	-	2	6		18	2	-	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS. CLASS A	182	39.0	301.50	304.50	271.50- 3	326.50	_	_	_	_	3	5	6	19	25	17	43	36	12	17	_	_	_	_	_	_	
NONMANUFACTURING	135		298.50				-	-	-	-	3	5	5	15	19	16	5.6	27	6	16	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS B	369	39.0	232.50	229.50	208.09- 2	263.00	_	_	_	35	38	59	74	61	78	11	8	1	_	2	1	_	_	1	_	_	
MANUFACTURING	116		221.50				_	_	-	19	16	31	24	11	2	5	4	_	-	2	1	-	_	1	_	100	
NONMANUFACTURING	253	39-0	237.50	243.20	210.00- 2	265.00	-	-	-	16	22	28	50	50	76	6	4	1	-	-	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS C	166	39.0	199.50	192.50	176.50- 2	10.50	11	_	2	33	56	32	10	2	1	17	_	1	1	_	_	_	_	_	_	_	
NONMANUFACTURING	146	39.0	198.50	187.50			9	-	-	31	54	25	7	2	1	17	-	_	_	-	-	-	-	~	-	-	
RAFTERS	974	40.0	257.50	255.50	207.00- 2	97.50	11	18	15	91	75	94	76	142	120	127	68	33	52	21	1.6	q	6		2	_	
MANUFACTURING	495		230.60				11	15	13	71	55	68	39	84	46	43	27	9.	10	21	2	-	-	-	-	_	
NONMANUFACTURING	479		285.50					3	2	20	20	26	37	58	63	84	91	24	42	19	14	9	6	6	2	-	
PURLIC UTILITIES	100	47.0	274.00	294.00	253.00- 2	97.50	-	-	1	+	5	6	7	8	10	56	6	1	-	-	-	-	-	-	-	-	

Table A-2. Weekly earnings of professional and technical workers, Columbus, Ohio, October 1979—Continued

				Weekly e		NUMPER	R OF W	IORKE	RS REC	EIVIN	G ST	RAIGH	T-TIME	WEEK	LY EA	RNING	S (IN	DOLL	ARS)	0F						
Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	UNDER 140 U	AND	150 - 160	-	-	200 - 220	~	-	260 - 280	-	-	-	-	-	-	-	-	-	-	_	OVE
RAFTERSCONTINUED																										
DRAFTERS+ CLASS A	266	40.0	\$314.GO	\$396.20	\$270.39-\$344.50	_	_	_	_	_	2	12	31	35	46	40	26	24	12	13	а	6	6	2	1.2	
MANUFACTURING	129				254.50- 310.50	-	_	_	_		2	12	29	14	33	16	9	10	2	2	_	_	_	-	-	-
NONPANUFACTURING						=	-	-	-	-	-	-	2	21	13	24	17	14	10	11	а	6	6	2	-	
ORAFTERS+ CLASS R	395	40.0	264.30	260.00	221.30- 297.50	-	_	_	3	33	55	33	72	48	79	25	6	28	9	3	1	_	_	_	-	
MANUFACTURING	165	40.5	238.00	236.50	210.51- 263.50	-	-	-	_	28	40	16	32	28	10	11	_	_	_	-	-	-	_	-	-	
NONMANUFACTURING	230	47.0	283-30	289.50	248.59- 303.59	-	-	-	3	5	15	17	40	20	69	14	6	28	9	3	1	_	-	_	-	
PUBLIC UTILITIES	73	40.0	287.50	297.50	287.00- 297.50	-	-	-	-	-	1	3	4	6	56	3	-	-	-	-	-	-	-	-	-	
DRAFTERS+ CLASS C	242	40.0	212.50	206.00	178-00- 249-50	-	2	3	72	28	36	30	39	26	2	3	1	-	-	-	-	-	-	-	-	5.0
MANUFACTURING	134	40.0	201.50			-	_	2	57	13	25	10	23		-	_	-	-	-	-	-	-	-	_	-	
NON#ANUFACTURING	108	47.0	226.00	230-00	189-50- 262-50	-	2	1	15	15	11	20	16	22	2	3	1	-	-	-	-	-	-	-	-	-
DRAFTFR-TRACERS				159.00		*11	16	12	16	14	1	1	_	-	_	-	_	_	_	_	_	-	_	-	-	-
MANUFACTURING	67	40.0	161.50	159.00	145.00- 169.50	11	15	11	14	14	1	1	-	-	-	-	-	-	-	-	_	-	-	-	-	
LECTRONICS TECHNICIANS	203	40.0	331.70	351.00	284.00- 376.50	_	-	-	-	_	-	12	17	17	19	19	10	23	71	2	5	8	_	_		
MANUFACTURING	135	40.0	327.00	335.50		-	-	-	-	-	-	8	14	17	7	13	10	_	61	2	2	1	_	_	-	
NONMANUFACTURING	68			351.50		-	-	-	-		-	4	3	-	12	6	-	23	10	_	3	7	_	_	-	
PURLIC UTILITIES	39	43.0	351-50	352.50	314.50- 384.50	-	-	-	-	-	-	1	-	-	6	6	-	14	2	-	3	7	-	-	-	
ELECTRONICS TECHNICIANS. CLASS A.	104	40.0	362.50	376.50	351.00- 376.50	-	-	-	-	-	-	-	-	1	8	12	4	4	63	2	2	8	-	-	-	
ELECTRONICS TECHNICIANS. CLASS P.	87	40.0	306.20	298.00	262.00- 352.50	_	_	_	_	_	_	6	11	16	11	7	6	19	8	_	3	_	_	_	_	
PUBLIC UTILITIES	28				314.50- 355.50	-	_	-	-	-	-	1	_	-	2	6	_	14	2	-	3	-	-	-	-	
EGISTERED INDUSTRIAL NURSES	92	40.0	274.30	270.50	232.50- 297.00	_	_	-	_	_	10	1.4	18	11	17	9	3	à	3	1	_	2	-	-	_	
MANUFACTURING	75	40.0	269.00	254.50	228.50- 297.00	-	-	-	-	-	9	13	18	9	11	5	2	3	2	1	-	2	-	-	-	

<sup>\*</sup> Workers were at \$130 to \$140.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, Columbus, Ohio, October 1979

			ien )				emge				rage an <sup>2</sup> )
Occupation, sex, 3 and industry division	Number of workers	Weekly hours (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex, 3 and industry division	Number of workers	Weekly hours (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex. <sup>3</sup> and industry division	Number of workers	Weekly houm (standard)	Weekly earnings <sup>1</sup> (standard
OFFICE OCCUPATIONS -				OFFICE OCCUPATIONS - WOMENCONTINUED				OFFICE OCCUPATIONS -			
SECRETARIES	2+531	39.0	\$221.50	FILE CLERKSCONTINUED				KEY ENTRY OPERATORSCONTINUED			
MANUFACTURING	865	40.0	229.00	the marks and the	1000	-33.0	CONT.	And the second second second	2.00	200	2/37/2
NONMANUFACTURING	1,666	39.0	218.03	FILE CLERKS CLASS C	263	37.5	125.50		727 150	39.0	165.5
SECRETARIES CLASS A	135	39.0	269.00			3.00		NONMANUFACTURING	577	38.5	
NONMANUFACTURING	91	38.5	277.50	MESSENGERS	155	36.5	128.00				
				NONMANUFACTURING	149	36.5	127.00				
SECRETARIES. CLASS B	409		241.50	Parameter and the Control of the Control				OCCUPATIONS - MEN			
MANUFACTURING	172		243.00	Satisfied and attached	184		169.50				
NONMANUFACTURING	237	38.5	242.50	NONMANUFACTURING	163	39.0	166.50				
SECRETARIES, CLASS C	718	39.0	225.50					(AUSINESS)	431		384.5
MANUFACTURING	300	40.0	233.50	SWITCHBOARD OPERATOR-				MANUFACTURING	95	40.0	
NONMA NUF A CTURING	418	38.5	219.50	RECEPTIONISTS	280		170.50	NONMANUFACTURING	336	39.0	377.
HOME HOL MCINKING ***********	440	.1013	217030	NONMANUFACTURING	114	40.0	177.50	COMPUTER SYSTEMS ANALYSTS			
SECRETARIES CLASS D	817	39.5	215.50	NUMMANUFACIUNING	166	40.0	166-50	(RUSINESS)+ CLASS A	174	39.5	427.0
MANUFACTURING	272	43.0	223.50	OPDER CLERKS	501	39.5	179.00	MANUFACTURING	50		
NONMANUFACTURING	545	39.0	211.50	MANUFACTURING	318		173.50	NONMANUFACTURING	124		
				NONMANUFACTURING	183		188.00		127	37.63	72280
SECRETARIES, CLASS E	424	39.5	194.50			. 340	10000	COMPUTER SYSTEMS ANALYSTS			
NON#ANUFACTURING	375	39.0	195.00	ORDER CLERKS, CLASS A	86	43.0	198.50	(RUSINESS)+ CLASS R	154	39.5	382.6
				MANUFACTURING	64	42.0	193.00	NONMANUFACTURING	123	39.5	377.
STENOGRAPHERS	324		223.03								
MANUFACTURING	190	40.0	211.00	ORDER CLERKS. CLASS R	265	40.0	176.50	COMPUTER PROGRAMMERS (RUSINESS1	463	39.0	304.
NONMANUFACTURING	134	39.5	232.50	MANUFACTURING	104	40.0	165.50	MANUFACTURING	96		
STENOGRAPHERS, SENIOR	228	39.5	233.50	NONMANUFACTURING	161	40.0	183.50	NONMANUFACTURING	367	38.5	311.
MANUFACTURING	142	40.0	226.50	ACCOUNTING CLERKS	1,234	39.5	183.50	COMPUTER PROGRAMMERS (BUSINESS).			
				MANUFACTURING	556	40.0	184.00	CLASS A	147	39.0	348.6
STENOGRAPHERS+ GENERAL	96	39.5	195.00	NONMANUFACTURING	678		183.50	NONMANUFACTURING	122		
TRANSCRIBING-MACHINE TYPISTS	53	37.5	155.00	ACCOUNTING CLERKS. CLASS A	583	39.5	202.50	COMPUTER PROGRAMMERS (AUSINESS).			
				MANUFACTURING	312		189.50		226	39.0	302.1
TYPISTS	654		160.00	NONMANUFACTURING.	271		217.50		185		
MANUFACTURING	161	39.5	177.50		7.14	87,35	227620				
				ACCOUNTING CLERKS+ CLASS 8	651		167.00	COMPUTER PROGRAMMERS (RUSINESS).		20.0	
TYPISTS. CLASS A:				MANUFACTURING	244		177.00	CLASS C	86		
MANUFACTURING	57	40.0	238.50	NONMANUFACTURING	407	39.0	160.50	NONMANUFACTURING	60	38.0	257-1
TYPISTS+ CLASS R	323	38.5	148.00				444.62	COMPUTER OPERATORS.	438	20 -	
MANUFACTURING	104		161.00	PAYROLL CLERKS	144						
NONMA NUFACTURING	219		142.00	NONMANUFACTURING.	199		197.03				
						34.0	141400		- 7	34.5	24341
FILE CLERKS	379		137.00	KEY ENTRY OPERATORS		39.0		COMPUTER OPERATORS+ CLASS A	139	39.0	302.
MANUFACTURING	86	48.0	154.50	MANUFACTURING	288	39.5			1 20-		
NONMANUFACTURING	293	38.0	132.00	NONMANUFACTURING	983	39.0	179.50		195	-	
FILE CLERKS+ CLASS B	103	70.0	146.50	had about taxatalan artes .	600	Lucia		MANUFACTURING	6.8		
NON#ANUFACTURING	69		149.50	KEY ENTRY OPERATORS. CLASS A	544				127	39.0	238.
TUTTER OF A CONTINUE OF A CONT		27.03	147.30	MANUFACTURING	138	40.0	202.50			46.4	
				NONMA NUFACTURING	496	39.0	204.50				
								MANUFACTURING			
								NUNFANUFACIURING	479	40.0	288.5

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, Columbus, Ohio, October 1979—Continued

			em <sup>2</sup> )				ern2)				rerege men 2)
Occupation, sex, <sup>3</sup> and industry division	Number of workers	Weekly hours (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex, 3 and industry division	Number of workers	We ekly hous <sup>I</sup> (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex. <sup>3</sup> and industry division	Number of workers	Weekly houm I (standard)	Weekly earnings (standard
PROFESSIONAL AND TECHNICAL				PROFESSIONAL AND TECHNICAL				PROFESSIONAL AND TECHNICAL			
OCCUPATIONS - MENCONTINUED				OCCUPATIONS - MENCONTINUED				OCCUPATIONS - WOMENCONTINUED			
DRAFTERSCONTINUED				ELECTRONICS TECHNICIANS -				COMPUTER PROGRAMMERS (AUSINESS) -			
DRAFTERS+ CLASS A	262	43.0	\$314.00								
MANUFACTURING	125				102	40.0	\$363.50	COMPUTER PROGRAMMERS (BUSINESS).			
NONMANUFACTURING	137							CLASS R	112	39.0	\$289.0
				ELECTRONICS TECHNICIANS. CLASS P.	85	40.0	306-00	NONPANUFACTURING	196	39.0	289.0
DRAFTERS+ CLASS P	335	43.0	260.00					Charles and the control of the contr	- 4		
MANUFACTURING	157	40.5	237.50	OCCUPATIONS - WOMEN				COMPUTER OPERATORS		39.0	225.5
DRAFTERS+ CLASS C	190	40.0	219.00					HANDI ACTUALING		2.00	
MANUFACTURING	103			COMPUTER SYSTEMS ANALYSTS				COMPUTER OPERATORS. CLASS R	167	39.0	228.0
NONPA NUFACTURING	91			(AUSINESS)	90		356.50	NONMANUFACTURING		2.0	
				NONMA NUFA CTURING	57	38.5	355.00	Section Control of Con			
DRAFTER-TRACERS	54						100000	DRAFTERS:			1
MANUFACTURING	51	4C.0	165.50	COMPUTER PROGRAMMERS (BUSINESS)		39.0	288.00	MANUFACTURING	51	40.0	203.5
LECTRONICS TECHNICIANS		400	221-41	NONMANUFACTURING	193	39.0	293.50				
MANUFACTURING	199	1000		COMPUTER PROGRAMMERS (RUSINESS).				REGISTERED INDUSTRIAL NURSES	8.8		
NON MA NUFACTURING.	133	40.1	327.50			***	202 50	MANUFACTURING	73	40.0	270.0
PURLIC UTILITIES	66 37	40.0			77	34.0	327.50				

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers, Columbus, Ohio, October 1979

			Hourly es	mings 4		NUMBER	OF L	ORKER	S REC	EIVI	IG ST	RAIGHT	T-TIM	E HOU	RLY E	ARNIN	GS (II	BOL	LARS)	0F								
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle ran	ige <sup>2</sup>	UNDER 6.00 U	AND NDER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.201	-
MAINTENANCE CARPENTERS	54	s8.20	\$7.73	\$7.35-	\$9.03	-	-	-	-	9	1	1	6	7	7	-	2	1	3	1	1	4	q	_	-	2	4	
MAINTENANCE ELECTRICIANS	434	8.70	8.81		9.65	13	-	15	12	-	6	26	3	12	3	26	36	28	16	5	65	26	37	55	3	-	53	
MANUFACTURING	357	8.61	8.81	7.82-	9.46	13	-	15	2	-	6	25	1	12	1	26	35	28	14	-	64	19	36	5	2	-	53	
MAINTENANCE MACHINISTS	223	8.55	8.81	7.97-	9.58	14	-	-	-	-	3	-	1	-	12	28	49	-	-	-	6	43	55	1	11	-	-	
MANUFACTURING	212	A.49	8.81	7.97-	9.46	14	-	-	-	-	1	-	1	-	12	28	49	-	-	-	6	43	55	1	2	-	-	
MAINTENANCE MECHANICS (MACHINERY)	647	8.26	8.10	7.96-	9.00	15	5	13	23	8	83	29	31	13	2	85	66	21	13	23	49	35	31	35	10	_	60	
MANUFACTURING	548	8.15	7.92	7.06-		15	4	6	55	8	81	24	30	11	_	85	66	21	12	23	49	13	31	35	10	-	60	
NONMANUFACTURING	99	A-84	9.30	8.67-	9.90	-	1	4	1		2	9	1	2	2	_		_		23	_	22	_	35	_			
AINTENANCE MECHANICS																												
(MOTOR VEHICLES)	5J3 124	9.37 7.57	7.45		10.52	6	7	_	21 21	8	7	4	2	33	3	8	10	55	14	_	3	14	51	108	28	96	13	4
NONMANUFACTURING	379	9.96	9.90		10.52	5	_	_	-	_	-	2	_		-	-	- 10	22	B	-	-	14	47	108	24	96	Я	4
PURLIC UTILITIES	301	13.21	10.25		10.52	1	-	-	-	_	-	2	-	-	-	-	-	1	8	-	-	8	22	92	24	90	8	4
MAINTENANCE PIPEFITTERS	107	9.42	10.10	7.79-	16.90	-	_	_	_	_	-	2	_	21	а	_	14	_	_	-	_	_	_	_	19	_	43	
MANUFACTURING	104	9.48	10.10		10.90	-	-	-	-	-	-	2	-	18	8	-	14	-	-	-	-	-	-	-	19	-	43	
"ILLWRIGHTS	189	9.17	9.11	7.45-	10.22	_	_	_	_	_	_	2	_	51	_	6	_	_	_	_	5	34	24	_	25	_	42	
MANUFACTURING	189	9.17	9.11	7 - 45-	10.22	-	-	-	-	-	-	2	-	51	-	6	-	-	-	-	5	34	24	-	25	-	42	
MACHINE-TOOL OPERATORS (TOOLROOM)	176	10.07	10.10	9.73-	10.99	_	1	1	_	1	_	_	4	4	2	1	1	2	2	2	3	1	2	34	43	11	58	
MANUFACTURING	160	13.25	19.10	9.99-	10.99	-	1	1	-	-	-	-	4	2	-	-	-	1	-	+	2	-	-	34	43	11	58	
TOOL AND DIE MAKERS	699	13.03	10.74	9.72-	11.19	_	_	_	_	10	_	6	_	52	1	23	15	-	33	2	4	2	18	152	26	26	329	
MANUFACTURING	696	10.04	10.74	9.72-	11.19	-	-	-	-	10	-	6	-	52	1	23	15	-	33	2	2	1	18	152	26	26	329	-
STATIONARY ENGINEERS	115	8.44	8.45	7 - 48-	9.40	_	3	-	_	_	9	14	1	13	8	-	1	_	15	15	1	2	14	-	10	3	6	
MANUFACTURING	80	8.69	8.45	7.48-	9.46	-	-	-	-	-	9	-	1	12	8	-	1	-	15	1	-	-	14	-	10	3	6	
BOILER TENDERS	131	6.62	6.63	6-44-	6-69	11	12	4	10	70	4	1	12	-	6	_	_	_	_	1	-	_	-	_	_	-	-	

Table A-5. Hourly earnings of material movement and custodial workers, Columbus, Ohio, October 1979

			Hourly e	amings *		NUMBE	R OF	WORKER	S REC	CEIVIN	is st	RAIGH	T-TIM	E HOU	RLY E	ARNIN	6S (I	N DOL	LARS	0F								
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle ra	nge <sup>2</sup>	UNDER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	***	-	9.20 - 9.601	-	-	-	O.80 AND OVE
TRUCKDRIVERS	2+093	\$8.97	\$9.92	\$7.67-		-	1	24	2	13	73	7	40	47	9	37	36	33	190	106	99	37	131	116	99	372	621	-
MANUFACTURING	540	7.09	7.35	6-61-			-	-	2	13	14 59	7	36	11 36	9				165	102	94	5		3	-	2	-	
NONMANUFACTURING	1+553 1+170	9.63	10.28	9.48-			1	24	- 2	_	24		4	36	1	3	8	9	25 25	4	5	32	131	113	99	370 370	621	
TRUCKDRIVERS. LIGHT TRUCK	109	4.65	4.08	4.08-		_	_	24		_	54	_	1	3		2	я	15	2	_	_			70	- 9	370	621	
	354	8.49	9.30	7.40-		_	١,	_	2	13	19	7	16	_				8.5	_	_	-	_			_	-	_	
TRUCKDRIVERS+ MEDIUM TRUCK	130	6.95	8.39	4.80-		-	-	-	-	13	14	-	15	-	-	4	1	-	25	1	80	3	-	-	12	160	-	
TRUCKORIVERS. HEAVY TRUCK	378 334	7.51 7.23	7.35 7.35	7.35- 7.35-		-	-	÷	-	-	-	-	7	1	=	28 28	26 25	9	163 163	102 102	5	-	-	9	18	-	10	-
TRUCKDRIVERS. TRACTOR-TRAILER	1.044	9.97	10.28	9.48-	10.77	+	-	_	_	_	-	-	14	7	9	1	vie	7	_	3	14	32	131	98	69	212	447	
NONMANUFACTURING	998	10.13	10.28	9.48-		-	-	-	-	-	-	-	-	-	-	1	-	7	-	3	-	32	131	98	69	210	447	-
PUMLIC UTILITIES	763	10.40	10.48	10.28-	10.77	-	_	-	-	-	-	-	-	-		_	-	6	_	2	-	-	-	98	-	210	947	
SHIPPERS	194	6.76	6-87	6.11-	7.30	-	-	-	-	-	-	2	19	1	14	19	8	55	61	2	_	10	3	_	-	_	_	
MANUFACTURING	98	6.54	6-84	5.74-		-	-	-	-	-	-	2	19	-	14	-	7	34	10	2	-	10	-	-	-	-	-	-
NONMANUFACTURING	96	7.00	7.25	6.83-	1.55		_	-		_	-	_	_		_	19	1	21	51	_	-	_	3	_	_	-	-	-
RECEIVERS	337	6.48	6.58	5.50-	7.33	-	-	-to-	4	12	1	21	41	13	7	37	43	23	83	2	32	11	7	-	-	_	-	-
MANUFACTURING	87	6.23	6.26	5.15-	6.84	-	-	-	-	2	_	1	29	-	3	10	0	21	3	2	-	8	-	-	-	-	-	-
NON MANUFACTURING	250	6.57	6.72	5.91-	7.33	-	_	-	4	10	1	20	12	13	4	27	35	2	80	-	32	3	7	-	-	-	-	-
WAREHOUSEMEN	1+533	5.31	5.40	4.25-	6.00	-	-	139	74	97	141	43	256	127	24	916	23	63	13	48	66	-	-	5	2	1	_	-
MANUFACTURING	247	5.82	5.18	4.93-	6.49	-	-	134	74	1 6 81	135	10 33	92 164	46 61	2	-	18	-	7	14	28	-	-	5	2	1	-	-
NONMANUFACTURING	1 • 286 100	7.49	7.83	6.84-	8.14	=	-	-	-	-	-	-	-	1	22	416	5	63 39	5	34 18	38 35	_	_	_	-	-	_	-
ORDER FILLERS	929	6.55	6.38	5.29-	8.03	14	_	29	25	34	64	33	30	118	46	80	29	28	22	21	240	90	6	_	_	5	5	15
MANUFACTURING	353	6.64	6.44	6.38-	8.29	14	-	-	25	12	2	-	-	-	32	80	24	28	22	21	58	34	1	-	_	-		- 12
NONMANUFACTURING	576	6.49	5.49	4.65-	8.03	-	-	29	-	22	62	33	30	118	14	-	-	-	-	~	182	56	5	-	-	5	5	15
SHIPPING PACKERS	618 277	6.98	8.33 7.00	5.73- 4.33-	8.66	-	-	7	17	30 25	58 40	2	-	37	48	41	8	4.8 4.6	9	-	69	245	3	1	-	-	-	-
															• •			40			0,		,					
MATERIAL HANDLING LABORERS	1+334	7.41	6.81	6.34- 5.92-	8.67	=	2	2	20	65 56	1	3	14	38	69	179 129	201 90	106	60	25	159	26	B	75	-	18	220	-
MANUFACTURING	735	6.46	8.12	6.75-		-	2	2	20	9	1	3	27	16	8	50	111	67	56 4	24	82 77	2 4	A	75	_	18	220	_
PUMLIC UTILITIES	327	10.17	10.72	9.23-		-	-	-	-	-	-	-	3	_	-	1	-	7	3	_	-	_	-	75	-	16	220	_
FORKLIFT OPERATORS	1+493	6.80	6-65	5.78-	8.12	14	_	14	_	13	1	q	83	175	173	180	159	104	133	_	263	71	101	_	_	-	-	
MANUFACTURING	884	6.64	6.39	5.57-	7.23	-	-	-	-	13	_	_	77	167	110	107	73	99	52	_	85		191	_	-	_	_	_
NONMANUFACTURING	609	7.04	7.30	6.38-	8.12	14	-	14	-	-	1	g	6	8	63	73	86	5	81	-	178	71	-	-	-	-	-	-
GUARDS	1 + 249	3.68	3.00	2.93-	3.95	543	248	72	44	44	64	4.0	62	23	19	21	3	5	5	5	_	25	2	24	_	-	-	-
MANUFACTURING	138	6.69	5.80	4.84-	8.40	-	-	-	_	-	5		45	8	16	6	-	1	1	5	-	25	2	24	-	-	-	-
NONMANUFACTURING	1.111	3.30	3.00	2.90-	3.25	543	248	72	44	44	59	40	17	15	3	15	3	4	4	-	-	-	-	-	-	-	-	-
GUARDS+ CLASS A	263	4.30	3.63	3.00-	4-60	_	113	_	16	41	19	15	4	6	7	3	2	5		_	_	25	2	1	_	-	_	_
NONMANUFACTURING	218	3.64	3.15	3.00-	3.95	-	113	-	16	41	19	15	ĭ	2	_	1	2	4	4	-	-	-	-	_	-	-	-	-
GUARDS+ CLASS B	986	3.51	2.98	2.90-	3.25	543	135	72	28	3	45	25	58	17	12	10				5		_		23		_	_	
MANUFACTURING	93	6.32	4.84	4.84-	7.93	,43	155		- 20		5	- 25	42	1.7	12	18	_ T	_	1	5	_	_	_	23	_	_	_	_
NONWANUFACTURING	893	3.22	2.90	2.93-	3.10	543	135	72	28	3	40	25	16	13	3	19	1	-	-	-	_	-	-		-	-	-	-
JANITORS. PORTERS. AND CLEANERS	3+094	3.87	3.25	3.00-	4.22	448	941	244	286	350	132	115	102	109	133	26	83	30	2		80	94	_	_	_	_	_	_
MANUFACTURING	591	5.57	5.36	4.35-	6.68	2	9	2	13	101	22	77	34	89	60	20	23	29	_	9	62	42	_	-	_	_	_	_
NONMANUFACTURING	2,503	3.48	3.14	3.00-	3.55	446	932	242		249		38	68	20	73	6	23	1	2	-	18	2	-	-	-	*	-	-
PURLIC UTILITIES	106	5.63	5.76	5.08-	5.76	_	-	-	-	-	6	2	29	-	44	1	21	1	2	-	100	-	-	-	-	-	-	-

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, Columbus, Ohio, October 1979

Occupation, sex, 3 and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>	Occupation, sex, 3 and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>	Occupation, sex, 3 and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings
MAINTENANCE + TOOLROOM + AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MFN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MENCONTINUED		
MAINTENANCE CARPENTERS	51	\$8.06	TRUCKD RIVERS	2+073	\$8.96 7.09	FORKLIFT OPERATORS	1+403	56.7
AINTENANCE ELECTRICIANS	433	8.70	NON MA NUF A CTURI NG.		9.62	NONMANUFACTURING.	528	7.0
MANUFACTURING	357	8.61	PUPLIC UTILITIES		10.19	HOME WALLAND HOLD THE STATE OF	320	7.00
						GUARDS	1.089	3.7
AINTENANCE MACHINISTS	219	8.56	TRUCKORIVERS, LIGHT TRUCK	109	4.65	MANUFACTURING	135	6.6
MANUFACTURING	208	9.50	Annual Control of the			NONMANUFACTURING	954	3.2
			TRUCKORIVERS+ MEDIUM TRUCK	336	8.39			
AINTENANCE MECHANICS (MACHINERY)	641	8.26	MANUFACTURING	130	6.95	GUARDS CLASS A	256	4.2
MANUFACTURING	542	8.15					1.55	
NONMANUFACTURING.	99	8.84	TRUCKORIVERS+ HEAVY TRUCK	378	7.51	OURRUST CLASS B	833	3.5
			MAMUF ACTURING	334	7.23	PARTY ACTIONATION	90	6.2
AINTENANCE MECHANICS					9.97	NONMANUFACTURING	743	3.2
(MOTOR VEHICLES)	481	9.37	TRUCKDRIVERS, TRACTOR-TRAILER	996				
MANUFACTURING	124	7.57	PURLIC UTILITIES	761	10-40	JANITORS . PORTERS . AND CLEANERS		3.9
NON#A NUF ACTURING	357	9.99	NAME IC BLIFT LIF 2000000000000000000000000000000000000	/01	10.40	MANUFACTURING		5.3
PURLIC UTILITIES	301	10.21	SHIPPERS:			MONFANDFACIURING	14431	3.5
AINTENANCE PIPEFITTERS	106	9.41	MANUFACTURING.	87	6.62	MATERIAL MOVEMENT AND CUSTODIAL		
MANUFACTURING	103	9.47	THAT HE I SHE INSTRUMENT			OCCUPATIONS - WOMEN		
	8.73	7.041	RECEIVERS:			000012710113 4011211		
ILLWRIGHTS.	189	9.17	MANUFACTURING.	75	6.42	ORDER FILLERS	311	5.6
MANUFACTURING	189	9.17	(Marie Reconstruction of the control	4				1
			WAREHOUSEMEN	1.175	5.36	SHIPPING PACKERS	149	5.2
ACHINE-TOOL OPERATORS (TOOLROOM)	176	10.07	MANUFACTURING	227	5.93	MANUFACTURING	56	5.2
MANUFACTURING	167	10.25	NONMANUFACTURING	948	5.22			
		1.00				GUARDS	149	3.2
OOL AND DIE MAKERS	699	10.03	ORDER FILLERS	583	7.13		146	3.1
MANUFACTURING	696	19-04	MANUFACTURING		6.51		100	
The state of the s			NONMANUFACTURING	346	7.55	GUARDS+ CLASS R	147	3.2
TATIONARY ENGINEERS	115	8-44				NONMANUFACTURING	144	3.1
MANUFACTURING	80	8.69	SHIPPING PACKERS		7.58			
ATA ED TENDEDO			MANUFACTURING	221	0.11	JANITORS PORTERS AND CLEANERS:		
BOILER TENDERS	131	6.62	MATERIAL HANDLING LABORERS:			MANUFACTURING	124	6-4
			MANUFACTURING	584	6.45			
			PUBLIC UTILITIES	316				
			LOOFIC DISTILLE 30.00000000000000000000000000000000000	210	10031			

Table A-7. Percent increases in average hourly earnings for selected occupational groups, Columbus, Ohio, for selected periods

Industry and occupational group 5	October 1972 to October 1973	to	to	October 1975 to October 1976	to	to	to
All industries:							
Office clerical	6.6	8,6	10.0	6.6	7.1	6.8	7.6
Electronic data processing	(6)	8.4	6.6	6.2	6.5	9.2	7.8
Industrial nurses	6.5	9.5	10.0	7.2	11.0	8.0	8.0
Skilled maintenance trades	8.0	8.7	9.5	7.3	10,4	7.8	9.1
Unskilled plant workers	7.7	9.8	8.9	8.0	7.4	9.2	10.3
Manufacturing:							
Office clerical	6.4	7.9	8.4	7.2	7.1	6,5	7.8
Electronic data processing	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Industrial nurses	6.5	8.3	9.8	6.6	11.5	7.7	8.2
Skilled maintenance trades	7.5	9.2	10.3	7.5	9.4	8.4	9.1
Unskilled plant workers	7.7	9.0	8.4	9.0	9.8	8.5	11.0
Nonmanufacturing:							
Office clerical	6.7	8,9	10.7	6.3	7,1	6.9	7.5
Electronic data processing	(6)	7.7	6.2	6.2	6.4	9.1	7.5
Industrial nurses	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Unskilled plant workers	7.3	10.5	9.2	7.5	6.0	9.4	9.8

**Table A-8.** Average pay relationships within establishments for white-collar occupations, Columbus, Ohio, October 1979

									Jilice (	clerical	оссира	tion be	ing con	par eu-						r —		
Occupation which equals 100			Secretari	es		Stenog	raphes	Tran-	Тур	dsts	File o	lerks	Messep-	Switch-	Switch- board	Order	clerks	Account	ing clerks	Payroll	Key entry	operato
	Class A	Clags B	Cl 295 C	Class D	Class E	Senior	General	machine typists	Class A	Class B	Class B	Class C	gers	board operators	recep- tionists	Class A	Class B	Class A	Class B	clerks	Class A	Class I
ECRETARIES+ CLASS A																						
ECRETARIES CLASS P		100	1																	1		
CRETARIES, CLASS C		119	100																	1		
CRETARIES. CLASS D		129	116	100		1																
CRETARIES: CLASS E		138	129	119	100				1						1							1
ENOGRAPHERS. SENIOR		148	133	112	(6)	100						ł										1
ENOGRAPHERS. GENERAL		150	136	127	(6)	122	100					ĺ								i		1
ANSCRIBING-MACHINE TYPISTS		140	123	(6)	118	(6)	(6)	100									1		1	i		
	177	151	136	128	114	118	95	(6)	100											1		
PISTS+ CLASS R		171	153	139	133	134	127	119	118	100									1	1		ł
LE CLERKS. CLASS R		171	157	(6)	141	(6)	(6)	(6)	114	101	100						-		1		1	ŀ
LE CLERKS. CLASS C		187	157	145	(6)	143	(6)	129	141	110	119	100										
SSENGERS		175	143	139	147	136	123	(6)	120	101	97	8.8	100									
ITCHBOARD OPERATORS	168	144	120	107	98	118	102	89	91	90	81	79	64	100								
ITCHBOARD OPERATOR-			1						l													
RECEPTIONISTS		133	121	128	114	92	97	94	91	95	76	76	(6)	(6)	100 83	100						
DER CLERKS. CLASS A		119	104	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	103	87	(6)	100		1			
DER CLERKS+ CLASS B		129	116	108	(6)	103	87	(6) 86	88	78 79	79	83 67	77	89	92	101	92	100		1	,	
COUNTING CLERKS. CLASS A		120	109	106 128	117	113	81	96	102	94	88	81	90	104	104	(6)	105	119	100	1		
COUNTING CLERKS. CLASS B		151 115	132	115	101	94	74	74	85	82	67	64	67	86	83	87	82	93	92	100		
YROLL CLERKS	137	123	114	112	104	107	(6)	79	90	72	73	63	72	95	98	102	87	109	86	114	100	
Y ENTRY OPERATORS, CLASS B		150	134	130	117	122	102	98	104	87	86	77	87	106	96	(6)	103	121	101	124	129	100

Professional	and	technical.	accumation	haing	compared	

	Computer sys	stems analysts iness)	Comput	er programmers	(business)	Co	mputer operat	cors		Dra	fters		Electronics	technicians	Registered industrial
	Class A	Class B	Cl288 A	Class B	Class C	Class A	Class B	Class C	Class A	Class B	Class C	Drafter- traces	Class A	Class B	nurses
COMPUTER SYSTEMS ANALYSTS															
(BUSINESS), CLASS A	100														
COMPUTER SYSTEMS ANALYSTS			1		1										
(BUSINESS) CLASS R	115	100			1										
COMPUTER PROGRAMMERS				}											
(BUSINESS), CLASS A	125	111	100												
COMPUTER PROGRAMMERS															
(BUSINESS). CLASS B	147	136	124	100											
COMPUTER PROGRAMMERS															
(BUSINESS), CLASS C	190	163	139	128	100										
COMPUTER OPERATORS, CLASS A	142	127	121	102	91	100						İ			
COMPUTER OPERATORS. CLASS B		155	150	125	111	127	100								
COMPUTER OPERATORS, CLASS C	226	208	190	163	136	153	125	100							
DRAFTERS. CLASS 4	128	124	121	87	93	96	72	(6)	100						
DRAFTERS+ CLASS B	146	161	152	113	104	112	88	86	124	100	100				
DRAFTERS+ CLASS C	174	179	180	141	125	133	106	92	153	124	119				
DRAFTER-TRACERS	249	(6)	(6)	(6)	(6)	(6)	126	(6)	175	147	117	100			
ELECTRONICS TECHNICIANS.	100		(6)		(6)	93	68	(6)	93	70	63	(6)	100		
CLASS A	127	108	(6)	(6)	101	43	88	107	93	70	3,5	(0)	100		
CLASS B	(6)	(6)	(6)	108	(6)	(6)	78	(6)	97	78	64	(6)	116	100	
REGISTERED INDUSTRIAL NURSES	145	129	125	102	99	109	91	76	116	91	83	(6)	113	120	100
MEGIZIEMEN THROSININE MOK2E200	147	124	143	102	77	107	/ <sup>7</sup>	l '°	-10	/-	30	107	1 ***	1 .20	

NOTE: Tables A-8 and A-9 present the average pay relationship between pairs of occupations within establishments. 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.

Table A-9. Average pay relationships within establishments for blue-collar occupations, Columbus, Ohio, October 1979

					Mainten	ance, toolr	oom, and p	owerplant o	cupation bein	g compared				
Occupation which equals 100	Carpenters	Flacto	icians	Machinists	М	echanics		Pipefitters	Millwrights	Machine-	10	ol and die	Stationary engineers	Boiler tenders
	Carpencess	27.55			Machinery	Motor v		- apuntaun		operator (toolroom		makes	, vagassa	
MAINTENANCE CARPENTERS	100													
MAINTENANCE ELECTRICIANS	98	16	00											
MAINTENANCE MACHINISTS	95		98	100										
MAINTENANCE MECHANICS														
(MACHINERY)	99	14	02	103	100									
MAINTENANCE MECHANICS														
(MOTOR VEHICLES)	98	10	01	107	101	10	10							
MAINTENANCE PIPEFITTERS	100	10	02	(6)	101	10	10	100						
MILLWRIGHTS	99	10	02	(6)	(6)	10	00	100	100					
MACHINE-TOOL OPERATORS										Ì				
(TOOLROOM)	96		97	(6)	9.8	9	8	(6)	96	100				
TOOL AND DIE MAKERS	91		95	100	95		5	(6)	95	97		100		
STATIONARY ENGINEERS	98		03	102	102	10		100	100	102		(6)	100	
BOILER TENDERS	102	10	06	(6)	104	(6		103	(6)	112		115	(6)	190
					Mate	rial moven	nent and cus	todial occup	ation being co	mpared				
		Truc	kdrivers		Shippem	Receivers	Warehousemen	Onder filler	Shipping packers	Material handling	Forklift		Guarde	Janitom, portem
	Light truck	Medium truck	Heavy truck	Tractor-trailer	311ppen	Veceivei	w alenousemen	order times	Shipping packets	laboress	operators	Cleas A	Class B	and cleaners
TRUCKDRIVERS» LIGHT TRUCK TRUCKDRIVERS» MEDIUM TRUCK TRUCKDRIVERS» HEAVY TRUCK TRUCKDRIVERS» TRACTOR-TRAILER. SMIPPERS	100 103 (6) (6) (6)	100 97 (6) 138 138	100 (6) (6)	100 (6) (6)	100 102	100								

WAREHOUSE ME N......

ORDER FILLERS.....

SHIPPING PACKERS.....

MATERIAL HANDLING LABORERS....

FORKLIFT OPERATORS.....

GUARDS+ CLASS A......

GUARDS+ CLASS R......

CLEANERS

JANITORS. PORTERS. AND

NOTE: Tables A-8 and A-9 present the average pay relationship between pairs of occupations within establishments. 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.

(6)

115

116

108

101

(6)

133

125

190

(6)

(6)

103

88

(6)

111

116

100

96

95

(6)

(6)

105

100

95

93

(6)

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100

97

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116

120

100

101

115

113

100

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124

100

102

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134

109

(6)

(6)

136

(6)

130

111

111

105

(6)

122

132

## **Earnings: Large establishments**

Table A-10. Weekly earnings of office workers, large establishments, Columbus, Ohio, October 1979

			Weekly e (stan		NUMPER	OF W	ORKER	S REC	EIVIN	G STR	AIGHT	-TIME	WEE KL	Y EAI	RNINGS	S (IN	DOLL	RSI	0F						
Number of workers	Average weekly hours <sup>1</sup> (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	UNDER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	AND O VE
1+867	39.5	5223.00	\$214.50	\$186.0N-\$252.00	-	1	3	5	27	57	122	135	158	183	319	261	213	163	75	62	36	13	12	2	1.3
704	49.0				=	-	-	5	10		34 88	56 79	39	55	121	88	129	72	35	36	25	6	3	2	11
					_	_	_	_	_	_	_	_	-	-	3	9	7		19	6	2	2	4	_	
		257 50			_	_	_	_	_	2	_	_		12	,,	27	77			14	17	_		_	
123	40.0	245.50	233.50	206.00- 272.00	-	-	-	-	-	2	-	-	6	11	27	20	14	19	Я	- 4	6	4	-	_	- 1
108	39.0	271.30	264.30	244.09- 303.00	-	-	_	-	-	-	-	-	-	1	15	7	23	27	6	12	7	4	6	-	
611	39.0				-	-	- 5	-	2	19	22	33	49	66	108	88	85	78	17	18	13	-	5	2	
325				195.00- 251.00	=	-	-	-	-	3	8	14	33	49	63	49	52	37	11	7	12	- 2	1	-	
637	39.5	215.50	212.00	185.00- 240.00	_	1	3	5	16	17	43	51	51	74	102	110	82	29	21	21	8	3	_	_	
201	40.0			176.90- 264.90	-	-	- 3	- 6	8	9	18	24	6	14	23	14	32	12	16	20	5	-	-	- 5	
						•	,	,	**	-							50	17	,		,	,	_		
284 245				166.50- 203.50 165.00- 201.50	-	-	_	-	9	19	57 55	43 38	48	27 18	57 44	22 19	2	Ξ	_	_	_	_	_	_	
177				195.00- 242.00	-	_	_	10	6	3	6	8	10	5	22	30	49	6	12	4	3	3	_	_	
136	39.5	223.50	237.50	183.00- 242.00	-	-	-	10	6	3	6	8	4	2	10	20	46	6	8	4	-	3	-	-	
130					-	-	-	1	-	2	2	6	4	2	13	28	45	6	11	4	3	3	-	-	
106	40.0	243.00	242.30	235.59- 252.59	-	-	-		-	2	~	٥	4	2	4	19	45	6	Я		_	3	-	γ -	
427 79					-	9	4	41	55	60 8	45	29	19	19	30	7	32	24	52	1	_	_	_	_	-
348					~	9	4	37	49	52	40	27	15	15	6	2	27	16	48	1	-	-	-	-	
279				152.39- 247.30	-	-	1	18	37	42	31	14	15	8	14	6	30	10	52	1	-	-	-	-	
236	39.0	195.30	166.50	151.00- 247.00	-	-	1	18	34	38	29	12	14	7	5	2	25	2	48	1	_	-	_	-	
148 112					-	9	3	23 19	18 15	18 14	14	15 15	4	11	16 1	1 -	2	14 14	_	_	_	-	-	_	
129	39.5	161-20	143.30	134-00- 179-50	3	2	11	4.3	10	15	5	8	12	7	,	_	_		7	_	_	_	_	_	
					3	2	5	31	9	7	2	7	4	2	-	-	-	4	7	-	-	-	-	-	
85	39.5	153.30	138.00	134.00- 160.00	_	_	4	40	8	14	4	4	3	2	2	_	_	4	_	_	_	-	_	_	
59	39.5	153.50	137.00	134.00- 154.00	-	-	2	30	8	6	1	4	2	2	-	-	-	4	-	-	-	-	-	-	
135	37.0	139.50	116.50	116.50- 148.00	-	75	13	4	10	4	6	5	4	-	5	1.1	-	-	1	-	-	-	-	-	
63	39.0	182.50	185.30	165.00- 202.50	-	-	6	1	1	4	10	7	4	13	10	5	2	-	-	-	-	-	-	-	
613	39.5	192.00	176.00	153.00- 215.00	-	_	22	48	58	88	58	56	33	47	67	23	32	15	4.4	1	9	2	6	_	
334 279		199.50			=	-	14	26 22	25 33	48	34 24	34 22	25 6	27 20	39 28	15 8	14	7	12 32	- 1	2	2	6	-	
	מ אינו	1 179.00	1 1 7 7 5 3 0			-	(1)	~ ~ ~	23	40	6.4	66	PK	211	. 28	25	18	8	52	1	- /	-	_	-	
	1.867 704 1.156 56 231 108 611 286 325 637 201 436 284 245 177 136 437 245 148 112 129 83 85 59 135	1.867 39.5 704 49.0 1.156 39.0 231 39.5 123 39.0 325 38.5 637 39.5 231 40.0 245 39.0 177 39.5 39.5 130 40.0 106 40.0 427 39.0 106 40.0 427 39.5 38.5 39.0 122 39.5 39.0 122 39.5 39.0 122 39.5 39.0 122 39.5 39.0 122 39.5 39.0 122 39.5 39.5 135 37.0 63 39.0 613 39.5 334 40.0	of workers of hours 1 standard) Mean 2  1.867 39.5 \$223.00 1.156 39.0 232.00 1.156 39.0 287.50 231 39.5 257.50 123 49.0 245.50 284 49.0 234.50 325 38.5 223.50 637 39.5 223.50 637 39.5 223.50 637 39.5 223.50 284 39.0 185.50 285 39.0 184.00 177 39.5 224.50 39.0 187.50 130 40.0 240.10 106 40.0 249.00 427 39.0 190.30 79 39.5 233.50 148 39.0 174.00 129 39.5 161.00 39.0 174.00 129 39.5 161.00 85 39.5 153.50 135 37.0 139.50 63 39.0 182.50 63 39.0 182.50	Number of workers (standard)	Number of workers (standard)  Average weekly hous' (standard)  1.867 39.5 \$223.00 \$214.50 \$186.00-\$252.00 1.156 39.0 217.00 210.50 185.00- 243.00 245.50 235.50 206.00- 272.00 1.86 39.0 271.00 210.50 185.00- 272.00 1.86 39.0 271.00 264.30 244.00- 303.00 245.50 235.50 206.00- 272.00 284.40.0 234.50 224.50 195.00- 270.00 325 38.5 223.50 218.50 195.00- 251.00 325 38.5 223.50 218.50 195.00- 251.00 48.4 40.0 234.50 228.60 195.00- 251.00 48.6 39.0 210.50 210.90 176.00- 264.30 245.50 209.00 187.50- 232.00 48.6 39.0 210.50 209.00 187.50- 232.00 188.00 209.00 187.50- 232.00 188.00 209.00 187.50- 232.00 188.00 209.00 187.50- 200.00 200.00 187.50- 200.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 187.50- 200.00 188.00 200.00 188.00 200.00 188.00 200.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189.00 189	Number of workers   Average weekly   (standard)   Median   2   Median   2   Middle range   2   Number of workers   (standard)   Mean   2   Median   2   Middle range   2   Number of workers   (standard)   Mean   2   Median   2   Middle range   2   Number of workers   (standard)   Mean   2   Median   2   Middle range   2   Number of workers   (standard)   Number of workers   (standard)   Number of workers   (standard)   Middle range   2   Number of workers   (standard)   Number of workers   (	Number of workers (standard)  Average weekly hours (standard)  1.867 39.5 \$223.00 \$214.50 \$186.00-\$252.00 - 1  1.968 39.0 \$287.50 \$290.00 \$252.50 305.00 - 1  231 39.5 \$257.50 \$252.00 \$264.50 - 1  123 40.0 \$245.50 \$233.50 \$264.50  231 39.5 \$257.50 \$252.00 \$264.50  108 39.0 \$271.00 \$210.50 \$185.00-\$243.00 - 1  284 40.0 \$245.50 \$233.50 \$264.00 \$272.00  285 38.5 \$223.50 \$21.00 \$185.00 \$272.00  296 40.0 \$245.50 \$21.00 \$185.00 \$272.00  297 40.0 \$265.50 \$21.00 \$185.00 \$210.00 \$180.00	Number of workers (standard)  Average meskly hours (standard)  1.860	Number of workers (standard)  Average of workers (standard)  Mean 2 Median 2 Middle range 2 Midd	Number of workers weekly of trandard)	Number of workers   Number	Number of workers received the workers are controlled to the worke	Number of each professor of transfer of the control of transfer of	Number of Workers Received Seather of Workers Received Seather of Workers (standard)  New Yorkers (standard)  Mean 2 Median 2 Med	Average workern   Average wo	Average winds   Average wind	Author of the property   Author   Aut	Average of worker   Average winds   Average	Worker of weakly worker (translate)  Meditar 2  Meditar 3  Meditar	Number of weekly within the full property of transfer of within the full property of transfer of trans	Number   Average   Avera	Number   Average   Media   A	Number of Service   Serv	Number of Street   Street	Arrange of State   Arrange of

Table A-10. Weekly earnings of office workers, large establishments, Columbus, Ohio, October 1979—Continued

Occupation and industry division work		Average weekly hours (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle r	ange <sup>2</sup>	AND UNDER	-	120	130	140	150	160	170	180	190	200	223	240	260	281	300	320	349	360	380	
	718								1 30	140	150	160	170	180	190	500	220	240	260	280	39:0	329	340	360	383	_	OVE
	314																										
ACCOUNTING CLERKS+ CLASS A	310																										
	757	39.5	\$205.00	\$187.50	\$159.00-\$	237.00	-	_	4	14	17	51	33	25	17	31	36	9	14	11	32	1	7	2	6	-	4
MANUFACTURING	226	40.0	192.50	176.00	157.00-	210.50	-	_	2	13	16	42	28	23	15	23	29	6	5	4	8	-		2	6	100	
NONMANUFACTURING	88	39-0	237.00	240.50	191.50-	289.00	-	-	2	1	1	9	5	2	2	8	7	3	9	7	24	1	7	-	-	-	-
ACCOUNTING CLERKS. CLASS B	299	39.5	179.00	167.00	146.00-	200.90	-	_	18	34	41	37	25	31	16	16	31	14	18	4	12	_	2	_	_	_	-
MANUFACTURING	138	39.5	186.90	179.30	145.50-	219.50	-	-	12	13	9	6	6	11	10	4	10	9	9	3	a	_	2	-	_	_	-
NONMANUFACTURING	191	39.5	175.00	162.00	146.39-	197.50	-	-	6	21	32	31	19	20	6	12	21	5	9	1	8	-	-	-	-	-	+
PAYROLL CLERKS	110	39.5	212.50	210.50	181.00-	240.50	-	-	-	3	4	3	7	9	10	14	9	21	21	3	3	_	3	_	_	_	-
MANUFACTURING	71	39.5	219.00	221.00	188.00-	236.50	-	-	-	2	1	1	4	6	4	9	8	19	8	3	3	_	3	-	-	-	+
		39.0			154.70-		-	-	-	31	68	73	68	84	69	40	74	23	15	14	5	2	_	-	_	ą	1.0
MANUFACTURING	177	39.5	195.00	182.50	165.07-	206.50	-	-	-	4	7	23	17	29	21	17	32	5	5	6	5	2	-	_	_	4	-
NONMANUFACTURING	388	39.0	175.50	170.00	151.50-	190.00	-	-	-	27	61	50	51	55	43	23	42	18	10	8	-	-	-	-	-	-	7
KEY ENTRY OPERATORS. CLASS A	252	39.5	197.50	190.00	175.50-	209.00	-	-	-	-	6	14	24	40	42	34	51	19	7	6	4	1	_	_	_	4	2
MANUFACTURING	102	39.5	211.50	200.00	182.00-	211.50	-	_	_	-	1	9	4	9	12	16	28	4	4	6	4	1	-	-	-	4	-
NONMANUFACTURING	151	39.0	188.00	184.30	174.00-	201.00	-	-	-	-	5	5	20	31	30	18	23	15	3	-	-	-	-	-	-	-	-
		39.0	168.50	160.00	147.50-	179.50	-	-	-	31	62	59	44	44	22	6	23	4	8	8	1	1	-	-	_	-	-
MANUFACTURING	75				155.57-		1.70	-	-	4	- 6	14	13	20	9	1	4	1	1	_	1	1	-	-	-	-	-
NONMANUFACTURING	238	39.0	167.50	157.30	145.00-	179.30	-	-	-	27	56	45	31	24	13	5	19	3	7	8	-	-	-	-	-	-	-

Table A-11. Weekly earnings of professional and technical workers, large establishments, Columbus, Ohio, October 1979

				Weekly e		NUMBER	OF W	ORKER	RS REC	EIVIN	G STR	RAIGHT	F-TIME	WEEK	LY EA	RNING	S CEN	DOLL	ARSI	OF						
Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	130 AND UNDER	140	150	160	180	200	220	240	260	280	300	320	340	360 -	380	400	420	440	460		50 A NO O VE
						140	150	160	180	200	220	240	260	280	300	320	340	360	380	400	423	440	463	480	500	
COMPUTER SYSTEMS ANALYSTS																										
MANUFACTURING	246 127		396.00		\$345.59-\$430.50 344.00- 445.00		3	2	-	2	-	-	1	1	6 5	5	30 15	36 22	32 10	35 13	25 10	13 8	21 14	17	8	1
NONMANUFACTURING.	119		387.50			-	-	-	-	-	-	-	1	1	1	4	15	14	22	22	15	5	7	4	2	1
COMPUTER SYSTEMS ANALYSTS																										
(BUSINESS)+ CLASS A	113		429.50 425.30			-	_	-		-	-		-	-	2	1	5 3	9	9	16	22 8	10	13 10	10	5	
NONMA NUFA CTURING	50		414.50			-	-	-	-	-	-	-	-	-	-	1	2	3	6	9	14	4	3	1	ī	
COMPUTER SYSTEMS ANALYSTS																										
(BUSINESS)+ CLASS R	102		377.00			-	-	-	-	-	-	-	-	1	1	4	21	19	13	19	3	3	8	7	3	
NONMANUFACTURING	56	39.0	370.00	363.00	333.50- 386.00	-	-	-	-	-	-	-	_	1	1	3	13	8	- '	13	1	1	•	3	I	
OMPUTER PROGRAMMERS (BUSINESS)	318		321.00			-	-	-	2	7	2	15	7	31	36	50	55	42	29	22	13	4	3	-	-	
MANUFACTURING	77 241		305.00 326.50			2	-	-	2	6	2	5	3	27	29	13 37	3 52	33	3 26	13	6	3	3	-	-	
COMPUTER PROGRAMMERS (BUSINESS).																										
NON MANUFACTURING	110	38.5 38.0	354.00 354.00		326.50- 392.00 326.50- 389.00	-	-	-	-	-	-	1	2	2	12	6	16	20 11	12 10	16	13	4 3	3	-		
COMPUTER PROGRAMMERS (RUSINESS).																										
CLASS Reconsessessessessessessessessessessessesses	164	38.5	316.50	321.50	299.53- 345.50	-	-	-	1	5	-	2	5	9	20	38	39	22	17	6	-	-	-	4	-	
NONMANUFACTURING	135	38.5	322.50	324.50	302.50- 349.50	-	-	-	1	1	-	-	1	7	19	30	36	22	16	2	-	-	-	-	-	
OMPUTER OPFRATORS	277		256.30		210.50- 289.00	2	-	2	16	24	34	42	29	43	28	11	26	13	3	1	-	-	1	-	-	
MANUFACTURING	102 175		257.90 255.50		210.50- 286.50 218.50- 289.30	2	-	2	2 14	17	21 13	21 21	13 16	8 35	2 26	11	10	7	3	1 -	=	-	1	2	-	
COMPUTER OPERATORS. CLASS A	89	39.0	300.50	307.90	264.00- 325.00	_	_	_	_	_	2	6	12	16	5	9	24	12	1	-	_	-	_	_	_	
NONMANUFACTURING	56		293.50		264.00- 321.00	-	-	-	-	-	2	2	8	19	4	9	15	6	-	-	-	-	-	-	-	
COMPUTER OPERATORS. CLASS B	116		244.00		211.00- 274.50	-	-	-	3	7	23	29	15	26	6	2	1	-	2	1	-	-	1	-	-	
MANUFACTURING	51 65		237.50		208.07- 252.00	-	-	-	1 2	6	14	14 15	9	24	1 5	2	1	-	2	1	_	-	1			
COMPUTER OPERATORS: CLASS C	72	39.0	220.50	206.50	183.00- 289.00	2	_	2	13	17	9	7	2		17	_	1	1		_	_	_	_	_	_	
NONPANUFACTURING.	54		224.90		183.00- 289.00	-	-	-	12	16	2	4	2	1	17	*	-	_	-	-	-		-	-	-	
RAFTERS	450		265.50		214.50- 297.50	11	8	14	25	18	44	38	75	40	78	26	7	20	11	11	7	6	6	2	_	
MANUFACTURING	267 163		237.50 314.30		201.00- 270.00 273.00- 363.00	11	8	13	25	11	37 7	30 8	65 10	28 12	24 54	16	5 2	10	2	5	7	-	_	2	_	
PURLIC UTILITIES	95		274.00		253.00- 297.50	-	-	1	-	5	5	7	8	10	52	6	1	-	-	_	-	-	-	-	-	
DRAFTERS, CLASS A	133	49.0	319.00	301.50	258.00- 355.50	_	_	-	-	_	2	8	25	10	21	17	6	11	2		6	6	6	2	-	
MANUFACTURING	97	40.0	286.00	291.00	253.00- 311.00	-	-	-	-	-	2	8	25	10	21	12	5	10	2	2	-	-	-	-	-	
DRAFTERS+ CLASS R	174	40.0	276.00		237.59- 297.50	-	-	-	-	4	24	16	22	22	55	9	-	9	9	3	1	-	-	-	_	
MANUFACTURING	78		240.00		212.00- 266.50 289.00- 308.50	-	-	=	2	4	23	13	17	14	3 52	4 5	_	- 0	- 9	- 3	-	_	-	-	-	
NONMANUFACTURING	96 69		305.50 287.50		286.53- 297.50	-	-	-	-	-	1	3	4	6	52	3	-	-		-	-	_	_	_	_	
DRAFTERS, CLASS C	110	40.0	217.50	212.00	185.00- 253.00	_	_	2	25	14	17	13	28	8	2	_	1	_	_	_	_	_	_	_	_	
PANUFACTURING	80		211.50	206.50	173.00- 252.50	-	-	2	25	7	11	8	23	А	-	-	-	-	-	-	-	-	-	-	-	
LECTRONICS TECHNICIANS	142		345.00	364.50	316.50- 376.50	-	-	-	-	-	-	8	14	1	3	10	10	19	63	2	4	8	-	-	-	
MANUFACTURING	112	40.0	337.50	370.50	310.50- 376.50	-	_	-	_	-	-	8	14	1	3	10	10	-	61	2	2	1	-	-	-	
EGISTERED INDUSTRIAL NURSES	56	40.0	287.00	282.50	254.50- 317.00	-	-	-	-	-	6	4	7	11	10	5	3	- 8	3	1	_	2	-	_	_	

<sup>\*</sup> Workers were distributed as follows: 4 at \$520 to \$540; and 2 at \$540 to \$560.

Table A-12. Average weekly earnings of office, professional, and technical workers, by sex, large establishments, Columbus, Ohio, October 1979

			an <sup>2</sup> )				enge m <sup>2</sup> )				ern )
Occupation, sex, and industry division	Number of workers	Weekly hours (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex, 3 and industry division	Number of workers	Weekly houm (standard)	Weekly earnings <sup>1</sup> (standard)	Occupation, sex. <sup>3</sup> and industry division	Number of workers	We ekly hours (standard)	Weekli earning (standar
OFFICE OCCUPATIONS - WOMEN				OFFICE OCCUPATIONS - WOMENCONTINUER				PROFESSIONAL AND TECHNICAL OCCUPATIONS - MENCONTINUED			
SECRETARIES	1 • 837		\$222.00	ACCOUNTING CLERKS - CONTINUED				COMPUTER PROGRAMMERS (BUSINESS) -			
NONMANUFACTURING	1+133	39.3	216.00	ACCOUNTING CLERKS+ CLASS R	257	39.5	183.00				
SECRETARIES CLASS A	55	39.0	286.00		159	39.5	166.00	-212 -1	107	38.5 38.5	\$319.
SECRETARIES. CLASS B	230			PAYROLL CLERKS	107	39.5	209.53			3.162	72.00
NONMA NUF A CTURING.	123 197		245.50 273.50		69	39.5		COMPUTER OPERATORS:	65	39.5	275.0
SECRETARIES, CLASS C	607	39.0	228.50	MANUFACTURING	541 176	39.0	180.00		76	39.5	245.
MANUFACTURING	286		234.50	NONMANUFACTURING	365	39.0	173.00		44.5		513
NONMANUFACTURING	321	38.5	223.00	KEY ENTRY OPERATORS, CLASS A	248	39.5	197.50	MANUFACTURING	345 237	40.0	
SECRETARIES, CLASS D	636		215.50		171	39.5	211.50				
NONMANUFACTURING	201 435	39.0	226.50	Manager Control of the Control of th	107	****	187.50	MANUFACTURING	129	40.0	
				KEY ENTRY OPERATORS. CLASS R	293		165.57				
NONWANUFACTURING	281 242	39.0	185.50 184.00	MANUFACTURING	75 218	39.5 39.0	172.50		73	47.0	239.
STENOGRAPHER S	177		224.50					DRAFTERS: CLASS C	79	40.0	
MANUFACTURING	136	39.5	223.50	OCCUPATIONS - MEN				MANUFACTURING	58	40.0	20A.
STENOGRAPHERS+ SENIOR	130	42.0	240.00	COMPUTER SYSTEMS ANALYSTS	1100			ELECTRONICS TECHNICIANS	140	40.0	345.
MANUFACTURING	106	40.D	240.00		178		403.00	T)	110	47.0	338.
TYPISTS:				MANUFACTURING	91 87	40.0 38.5	412.00 394.00				
MANUFACTURING	79	39.5	203.00	COMPUTER SYSTEMS ANALYSTS	"	34.5	374.00	PROFFSSIONAL AND TECHNICAL			
FILE CLERKS:				(BUSINESS)+ CLASS A	94	39.5 39.5	429.53	1			
FILE CLERKS+ CLASS B	67	39.5	142.50		77	3763	443603	(AUSINESS)	63	39.0	361.
SWITCHROARD OPERATORS	60	39.5	184.00		63	39.0	387.50	COMPUTER PROGRAMMERS (BUSINESS)	114	38.5	
ACCOUNTING CLERKS	525	39.5	182,50	COMPUTER PROGRAMMERS (RUSINESS)	223	38.5	328 . 5J		95	38.0	2170
MANUFACTURING	309		186.00		57	47.0	315.00	COMPUTER PROGRAMMERS (BUSINESS).		/	14.5
NON MA NUF & CTURING	216		178.00		146		333.50	NONMANUFACTURING	56	38.5	
ACCOUNTING CLERKS, CLASS A	268		192.50				53.5				
MANUFACTURING	211	40.0	187.00	CLASS A	74	3A.5	362.00	REGISTERED INDUSTRIAL NURSES	52	39.5	286 .

Table A-13. Hourly earnings of maintenance, toolroom, and powerplant workers, large establishments, Columbus, Ohio, October 1979

			Hourly es	rmings 4		NUMBE	R OF	JORKER	S REC	EIVIN	G STR	AIGHT	-TIME	HOUR	LY EA	RNING	S (TN	DOLL	ARS) (	0F								
Occupation and industry division	Number of workers	Mean 2	Median <sup>2</sup>	Middle ras	nge <sup>2</sup>		R AND UNDER	6.20 - 6.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAINTENANCE ELECTRICIANS	334 268	\$9.07 8.98	\$8.81 8.81	\$8.18- 8.18-		-	1	1	1 -	-	6	4 3	3 1	12 12	3	19 19	36 35	28 28	9 7	5	65 64	19 19	13 12	55 5	2 2	·	53 53	-
MAINTENANCE MACHINISTS	143 132	8.61 8.51	8.10 8.10	8.10- 8.10-		1	-	-	-	-	3 1	_	1	Ξ	_	21 21	49	1	_	_	6	43 43	7 7	1	11 2	_	-	-
MAINTENANCE MECHANICS (MACHINERY) MANUFACTURING	396 320	8.94	8.77 8.93	8.10- 8.10-		=	1 -	4	1	8	2	5	1 -	4 2	5	50 50	66	19 19	12 12	23	4 9 4 9	13 13	31 31	35	10 10	_	60 60	-
MAINTENANCE MECHANICS  (MOTOR VEHICLES)	184 152 99	9.45 9.59 9.67	9.74 9.74 9.90				-	=	1.4.1	- 13	11.0	8 2 2	-	1		1	10	1 1 1	14 8 8	2	3 -	4 4 -	25 25 -	84 68	23 19 19	6	5 - -	-
MAINTENANCE PIPEFITTERS	93 90	9.62	10.23 10.26		10.90		) I	-	_	-	-	2	-	21 18	8	-	-	. 9	_	-	-	-	_	_	19 19	-	43 43	_
MILLWRIGHTS	165 165	9.14 9.14	9.11 9.11		10.90	3	1 1	=	Ξ	-	-	2	-	51 51	-	6	-	-	_	_	5 5	34 34	_	_	25 25	-	42 42	-
MACHINE-TOOL OPERATORS (TOOLROOM)		10.15	10.10	9.99-	10.99	-	-	=	_	1 -	_	-	4	2	2	1 -	1 -	2	2 ~	2	3 2	1 -	2	18 18	43	11 11	58 58	3
TOOL AND DIE MAKERS		19.53 10.53	10.96				. :	_	_	-	_	_	=	10 10	1	2	1	-	9	2	2	2	18 18	124 124	26 26	26 26	329 329	_
STATIONARY ENGINEERS	75 71	8.90	8.52 8.52		9.78 10.10	:	. :	ı i	Ē,	1	-	ī.	1	13 12	8	-	1	1	15 15	1	1	2	14	-	10	3	6	-

Table A-14. Hourly earnings of material movement and custodial workers, large establishments, Columbus, Ohio, October 1979

			Hourly es	imings 4		NUMBE	OF W	ORKER	S RE	EIVIN	G STR	RAIGHT	-TIME	HOUR	RLY EA	RNING	S (IN	DOLL	ARS)	0F								
Occupation and industry division	Number of workers		Median	Middle 1	range <sup>2</sup>	UNDER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.401	-
TRUCKORI VERS		\$9.37	59.92		\$10.28	-	1	-	-	-	5	2	5	4	-	2	27	2	27	3	81	5	131	18	99		124	
NONMANUFACTURING	575	9.70	9.92		10.28	_	1	_	-	-	5	2	4	-	-	_	1	-	25	3	5	_	131	15	99	1 60	124	-
TRUCKDRIVERS. MEDIUM TRUCK	298	9.21	8.12		9.65		1			_	-	_	_		-	2	1	~	25	1	76	3	-	6		160	-	-
TRUCKORIVERS+ HEAVY TRUCK	56	8.18				_				_	_	_			-	_	23	_	_	_	5			4	18	-		
TRUCKBRIVERS. TRACTOR-TRAILER	32A 326	9.83	9.92		10.48		_			_	-	_	_	_	_	_	_	-	-	2	_	-	131	-	69	2		
NONMANUFACTURING		10.56	10.48		10.77	-	_	=	-	_	- 3	_	+	-	-	_	_	_	_	2	Ξ	_	131	_	69	-	124	
SHIPPERS	124	7.07	7.25	6.84-		-	-	-	-	-	-	2	3	1	7	2	-	43	54	2	-	10	-	-	-	-	_	-
MANUFACTURING	63	6.99	6.84	6.84-	7.27	-	-	-	_	_	-	2	3	_	7	-	-	29	10	2	-	10	-	-	-	-	-	-
RECEIVERS	197	6.78	7.28	6-26-	7.33	-	_	_	4	7	1	3	13	8	4	10	27	18	71	2	11	11	7	_	_	_	_	
MANUFACTURING	55	6.55	6.84	5.62-		-	-	-	_	2	_	1	11	-	_	10	_	18	3	2		8	-	_	_	_	_	
NONMA NUFA CTURING	142	6.87	7.31	6.50-	7.33	-	-	-	4	5	1	2	2	8	4	-	27	-	68	-	11	3	7	-	-	-	-	-
WAREHOUSEMF%: MANUFACTURING	99	6.36	6.49	4.93-	8.33	-	-	-	_	16	6	_	20	1	2	-	18	-	_	-	28	_	_	5	2	1	_	
ORDER FILLERS	518	6.46	6.38	5.48-		_	-	29	18	18	16	21	23	34	46	80	16	25	22	21	58	90	1	_	-	-	_	-
MANUFACTURING	321	6.87	6.92	6.38-	8.39	-	-	-	18	12	5	-	-	_	32	80	16	25	22	21	58	34	1	-	-	-	-	-
SHIPPING PACKERS	279 189	6.56 7.31	6.35 7.30	5.73- 6.05-		_	_	-	17	9	-	2	_	3 3	47 14	41 41	_	36 36	4	_	69 69	17 17	3	1	_	_	_	-
MATERIAL HAMDLING LABORERS	757	7.61	6.83	6.50-	8.22	-	-	-		-	-	_	17	2	4	135	188	85	57	25	74	26	8	_	-	18	118	-
MANUFACTURING	375 382	7.02 8.20	6.50	6.75-	7.93	-	-	_	-	_	-	_	14	2	4	95 40	78 113	18 67	56 1	24 1	74	2 24	8 -	_	_	18	118	-
FORKLIFT OPERATORS	618	7.26	7.23	6.53-	8.33	_	_	_	_	_	- 1		32	11	17	71	154	20	133	_	45	32	101					
MANUFACTURING	397	7.4G	6.95	6.38-		-	-	-	_	_	-	_	26	3	- 6	71	73	20	52	_	45	-	191	_		_	_	_
NONFA NUF & CTURING	221	7.00	7.28	6.59-		-	-	-	-	-	1	1	6	8	11	-	81	-	81	-	-	32	-	-	-	-	-	-
GUA ROS	327	4.92	4.25	3.03-		46	67	11	16	3	31 5	18	17	20	13	17	3	4	5	5	-	25	2	24	-	-	-	-
MANUFACTURING	86	7.69	8.40	5.83-	9.50	_	_	_	-	-	,	_	3	a	10	2	-	1	1	5	-	25	2	24	-	-	-	_
GUARDS+ CLASS A	59	7.20	7.48	5.83-	8.40	-	-	-	-	-	1	-	4	6	7	3	2	4	4	-	-	25	2	1	-	-	-	-
GUARDS+ CLASS R	268	4.41	3.50	3.00-	5.05	96	67	11	16	3	30	18	13	1.4	6	14	1	-	1	5	-	-	-	23	-	-	-	-
	1 • 239	4.32	3.34	3.14-			450	84	57	47	47	89	65	71	103	22	36	9	1	9	4.9	4.4	_	-	-	_	-	-
MANUFACTURING	257	6.41	5. A5	5.36-		2	2	2	-	4	18	15	5	52	31	16	17	8	_	9	34	42	-	-	-	-	-	-
PURLIC UTILITIES	87	5.71	5.76	5.13-	5.76	0.00	-	-	-	-	2	-	21	-	4.4	1	17	1	1	-	-	-		-	-	-	-	-

Table A-15. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, large establishments, Columbus, Ohio, October 1979

Occupation, sex, 3 and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>	Occupation, sex, 3 and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>
MAINTENANCE + TOOLROOM + AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MENCONTINUED		
MAINTENANCE ELECTRICIANS	334	\$9-07	SHIPPERS:		
MANUFACTURING	268	8.98		61	\$7.07
MAINTENANCE MACHINISTS	139	0.40	WAREHOUSE MFN:		
MANUFACTURING.	-			89	6.56
MANUF ACTURING	128	8.53	HANUF ACTURING	13.4	0.30
MAINTENANCE MECHANICS (MACHINERY)	390	8.95	ORDER FILLERS	322	6.81
MANUFACTURING	314	8.99	MANUFACTURING	226	6.50
MAINTENANCE MECHANICS			SHIPPING PACKERS	168	7.33
(MOTOR VEHICLES)	162	9.44		168	7.33
NONMA NUF & CTURI NG.	130	9.63	MANUFACTURING	100	7.033
PUBLIC UTILITIES	99		MATERIAL HANDLING LARGRERS:		
rustic diffilities	77	7.67	MANUFACTURING	367	7.03
MAINTENANCE PIPEFITTERS	92	9.60			
MANUFACTURING	89	9.68	FORKLIFT OPERATORS	528	7.26
			MANUFACTURING	388	7.42
HILLHRIGHTS	165	9.14			
MANUFACTURING	165	9.14	GUARDS	234	5.36
			MANUFACTURING	83	7.65
MACHINE-TOOL OPERATORS (TOOLROOM)	158	10.15		151	4.11
MANUFACTURING	142	10.36	GUARDS - CLASS A	55	7-19
TOOL AND DIE MAKERS	554	12.53		11	
MANUFACTURING	551	10.53		179	4.83
The state of the s		20033	NONMANUFACTURING	141	3.98
STATIONARY ENGINEERS	75	8.97			
MANUFACTURING	71	8.91	JANITORS. PORTERS. AND CLEANERS	777	4.33
			MANUFACTURING	179	6.26
MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN					
RUCKORIVERS	678	9.34	MATERIAL MOVEMENT AND CUSTODIAL		
NONMANUFACTURING	555	9.67			
TRUCKORIVERS. MEDIUM TRUCK	280	9.14			
TRUCKORIVERS. HEAVY TRUCK	56	8.18	ORDER FILLERS	183	6.14
	, ,		JANITORS. PORTERS. AND CLEANERS:		
TRUCKORIVERS. TRACTOR-TRAILER	326	9.83	MANUFACTURING	87	6.79
NONFARUFACTURING	324	9.82			
PUBLIC UTILITIES	124	19.56			

#### **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.

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: a fourth of the workers earn the same or less than the lower of these rates and a fourth earn the same or more than the higher rate.

<sup>3</sup> 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.

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 72 lareas 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, less 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,

Included in the 72 areas are 2 studies conducted by the Bureau under contract. These areas are Akron, Ohio and Poughkeepsie-Kingston-Newburgh, N.Y. 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. Digitized for the Soft Labor.

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) employment in the occupation is too small to provide enough data to merit presentation, 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. Comparisons of individual occupational averages over time may not reflect expected wage changes. The averages for individual jobs are affected by changes in wages and employment patterns. For example, proportions of workers employed by high- or low-wage firms may change, or high-wage workers may advance to better jobs and be 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

The percent increases presented in table A-7 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.

The percent changes relate to wage changes between the indicated dates. When the time span between surveys is other than 12 months, annual rates are also shown. (It is assumed that wages increase at a constant rate between surveys.)

Occupations used to compute wage trends are:

#### Office clerical

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

#### Electronic data processing

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

## Electronic data processing—

Computer operators, classes A, B, and C

#### Industrial nurses

Registered industrial

#### Skilled maintenance

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

#### Unskilled plant

Janitors, porters, and cleaners Material handling laborers 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.
- Each occupation is assigned a weight based on its proportionate employment in the occupational group in the base year,
- 3. These weights are used to compute group averages. Each occupation's average earnings (computed in step 1) is 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.

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

Relative measures of occupational pay are presented in table A-8 for white-collar occupations and in table A-9 for blue-collar occupations. These relative values reflect differences in pay between occupations within individual establishments. Relative pay values are computed by dividing an establishment's average earnings for an occupation being compared by the average for another occupation (designated as 100) and multiplying the quotient by 100. For example, if janitors in a firm average \$4 an hour and forklift operators \$5, forklift operators have a relative pay value of 125 compared with janitors. (\$5  $\div$  \$4 = 1.25, x 100 = 125.) In combining the relatives of the individual establishments to arrive at an overall average, each establishment is considered to have as many relatives as it has weighted workers in the two jobs being compared.

Pay relationships based on overall averages may differ considerably because of the varying contribution of high- and low-wage establishments to the averages. For example, the overall average hourly earnings for forklift operators may be 50 percent more than the average for janitors because the average for forklift operators may be strongly influenced by earnings in high-wage establishments while the average for janitors may be strongly influenced by earnings in low-wage establishments. In such a case, the intra-establishment relationship will indicate a much smaller difference in earnings.

#### 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.

## Appendix table 1. Establishments and workers within scope of survey and number studied, Columbus, Ohio, October 1979

	Minimum	Number of establishments		Workers in establishments		
Industry division <sup>2</sup>	employment in establish- ments in scope of study	Within scope of study <sup>3</sup>	Studied	Within scope of study 4		
				Number	Percent	Studied
ALL ESTABLISHMENTS						
ALL INDUSTRY DIVISIONS	_	81 7	171	207,561	100	112+871
ANUFACTURING	50	249	58	83+227	40	46+123
ONMANUFACTURING	_	568	113	124+334	60	66,748
OTHER PUBLIC UTILITIES 5	50	49	21	17+356	8	14,349
WHOLESALE TRADE 6	50	103	14	12.008	6	2,528
RETAIL TRADE 6	50	193	25	49,613	24	26+836
FINANCE + INSURANCE + AND REAL ESTATE 6	50	94	18	22.311	11	12:155
SERVICES <sup>6</sup> 7	50	129	35	23.046	11	10,880
LARGE ESTABLISHMENTS						
ALL INDUSTRY DIVISIONS		74	53	102,111	100	87 • 508
ANUFACTURING	500	40	27	49,126	4.8	39,437
ONMANUFACTURING		34	26	52,985	52	48,071
TRANSPORTATION. COMMUNICATION. AND						
OTHER PUBLIC UTILITIES 5	500	6	6	11.838	12	11.838
WHOLESALE TRADE	500	4	2	2.235	2	1.213
RETAIL TRADE 6	500	13	9	22:038	22	19,746
FINANCE . INSURANCE . AND REAL ESTATE 6	5 3 0	7	5	11+345	11	9,745
SERVICES <sup>6</sup> 7	500	4	4	5,529	5	5,529

The Columbus Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Delaware, Fairfield, Franklin, Madison, and Pickaway Counties, The "workers within scope of study" 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.

<sup>2</sup> The 1972 edition of the Standard Industrial Classification Manual was used in classifying establishments by Industry division. All government operations are excluded from the scope of the survey.

Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of companies in industries such as trade, finance, auto repair service, and motion picture theaters are considered as one establishment.

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

<sup>5</sup> Abbreviated to "public utilities" in the A-series tables. Taxicabs and services incidental to water transportation are excluded. The local-transit system for the city of Columbus is municipally operated and is excluded by definition from the scope of the study.

<sup>6</sup> 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.

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 parttime, 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 descriptions, 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;
- 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:

#### SECRETARY-Continued

#### Exclusions-Continued

- 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

#### Classification by Level-Continued

- 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.
- a. Secretary to the chairman of the board of president of a company LS-4 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 policymaking role with regard to major company activities. The title "vice president," though normally indicative of this role, does not in all cases identify such

#### SECRETARY-Continued

#### Classification by Level-Continued

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-l 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 bnowledge 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.

#### SECRETARY-Continued

- 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  ${\tt LS}$  and  ${\tt LR}$  combination.

Level of secretary's supervisor	Level of secretary's responsibility			
	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 through 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 followup 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---Continued

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.

<u>Class A.</u> 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:

<u>Class A.</u> 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:

<u>Class A.</u> 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.

#### BOOKKEEPING-MACHINE OPERATOR

Operates a bookkeeping machine (with or without a typewriter keyboard) to keep a record of business transactions.

Class A. Keeps a set of records requiring a knowledge of and experience in basic bookkeeping principles, and familiarity with the structure of the particular accounting system used. Determines proper records and distribution of debit and credit items to be used in each phase of the work. May prepare consolidated reports, balance sheets, and other records by hand.

Class B. Keeps a record of one or more phases or sections of a set of records usually requiring little knowledge of basic bookkeeping. Phases or sections include accounts payable, payroll, customers' accounts (not including a simple type of billing described under machine biller), cost distribution, expense distribution, inventory control, etc. May check or assist in preparation of trial balances and prepare control sheets for the accounting department.

#### MACHINE BILLER

Prepares statements, bills, and invoices on a machine other than an ordinary or electromatic typewriter. May also keep records as to billings or shipping charges or perform other clerical work incidental to billing operations. For wage study purposes, machine billers are classified by type of machine, as follows:

Billing-machine biller. Uses a special billing machine (combination typing and adding machine) to prepare bills and invoices from customers' purchase orders, internally prepared orders, shipping memoranda, etc. Usually involves application of predetermined discounts and shipping charges and entry of necessary extensions, which may or may not be computed on the billing machine, and totals which are automatically accumulated by machine. The operation usually involves a large number of carbon copies of the bill being prepared and is often done on a fanfold machine.

Bookkeeping-machine biller. Uses a bookkeeping machine (with or without a typewriter keyboard) to prepare customers' bills as part of the accounts receivable operation. Generally involves the simultaneous entry of figures on customers' ledger record. The machine automatically accumulates figures on a number of vertical columns and computes and usually prints automatically the debit or credit balances. Does not involve a knowledge of bookkeeping. Works from uniform and standard types of sales and credit slips.

#### 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 non-automated 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. Works 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,

#### COMPUTER SYSTEMS ANALYST, BUSINESS-Continued

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.

#### COMPUTER PROGRAMMER, BUSINESS-Continued

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 auxilliary 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.

#### COMPUTER OPERATOR-Continued

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 argumented 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.

#### PERIPHERAL EQUIPMENT OPERATOR-Continued

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

Class A. Plans the graphic presentation of complex items having distinctive design features that differ significantly from established drafting precedents. Works in close support with the design originator, and may recommend minor design changes. Analyzes the effect of each change on the details of form, function, and positional relationships of components and parts. Works with a minimum of supervisory assistance. Completed work is reviewed by design originator for consistency with prior engineering determinations. May either prepare drawings or direct their preparation by lower level drafters.

Class B. Performs nonroutine and complex drafting assignments that require the application of most of the standardized drawing techniques regularly used. Duties typically involve such work as: Prepares working drawings of subassemblies with irregular shapes, multiple functions, and precise positional relationships between components; prepares architectural drawings for construction of a building including detail drawings of foundations, wall sections, floor plans, and roof. Uses accepted formulas and manuals in making necessary computations to determine quantities of materials to be used, load capacities, strengths, stresses, etc. Receives initial instructions, requirements, and advice from supervisor. Completed work is checked for technical adequacy.

#### DRAFTER-Continued

Class C. Prepares detail drawings of single units or parts for engineering, construction, manufacturing, or repair purposes. Types of drawings prepared include isometric projections (depicting three dimensions in accurate scale) and sectional views to clarify positioning of components and convey needed information. Consolidates details from a number of sources and adjusts or transposes scale as required. Suggested methods of approach, applicable precedents, and advice on source materials are given with initial assignments. Instructions are less complete when assignments recur. Work may be spot-checked during progress.

#### DRAFTER-TRACER

Copies plans and drawings prepared by others by placing tracing cloth or paper over drawings and tracing with pen or pencil. (Does not include tracing limited to plans primarily consisting of straight lines and a large scale not requiring close delineation.)

#### AND/OR

Prepares simple or repetitive drawings of easily visualized items. Work is closely supervised during progress.

#### 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 test instruments (e.g., dual trace oscilloscopes, Q-meters, deviation meters, pulse generators).

#### ELECTRONICS TECHNICIAN—Continued

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 instruments, 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 who 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

#### MAINTENANCE CARPENTER—Continued

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

#### MAINTENANCE MECHANIC (Machinery)—Continued

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.

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  $\underline{not}$  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 tasks; 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 and may also supervise the operation of stationary engines and equipment (mechanical or electrical) to supply the establishment in which employed with power, heat, refrigeration, or airconditioning. Work involves: Operating and maintaining equipment such as steam engines, air compressors, generators, motors, turbines, ventilating and refrigerating equipment, steam boilers and boiler-fed water pumps; making equipment repairs; and keeping a record of operation of machinery, temperature, and fuel consumption. May also supervise these operations. Head or chief engineers in establishments employing more than one engineer are excluded.

#### BOILER TENDER

Fires stationary boilers to furnish the establishment in which employed with heat, power, or steam. Feeds fuels to fire by hand or operates a mechanical stoker, gas, or oil burner; and checks water and safety valves. May clean, oil, or assist in repairing boilerroom equipment.

#### **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 1½ tons, usually 4 wheels)

Truckdriver, medium truck
(straight truck, 1½ 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 <u>primary</u> 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 power-truck, 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 re-

quire 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.

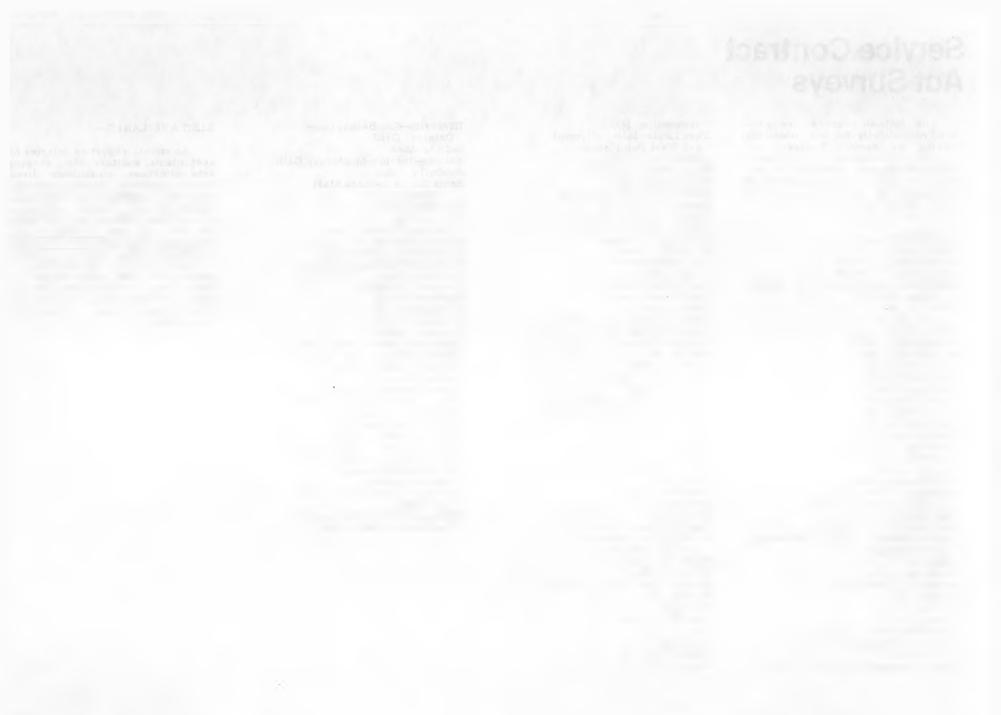
Alaska (statewide) Albany, Ga. Albuquerque, N. Mex. Alexandria-Leesville, La. Alpena-Standish-Tawas City, Mich. Ann Arbor, Mich. Asheville, N.C. Augusta, Ga.-S.C. Austin, Tex. Bakersfield, Calif. Baton Rouge, La. Battle Creek, Mich. Beaumont-Port Arthur-Orange and Lake Charles, Tex.-La. Biloxi-Gulfport and Pascagoula-Moss Point, Miss. Binghamton, N.Y. Birmingham, Ala. Bloomington-Vincennes, Ind. Bremerton-Shelton, Wash, Brunswick, Ga. Cedar Rapids, Iowa Champaign-Urbana-Rantoul, Ill. Charleston-North Charleston-Walterboro, S.C. Charlotte-Gastonia, N.C. Clarksville-Hopkinsville, Tenn-Ky. Columbia-Sumter, S.C. Columbus, Ga.-Ala. Columbus, Miss. Connecticut (statewide) Decatur, Ill. Des Moines, Iowa Dothan, Ala. Duluth-Superior, Minn.-Wis. El Paso-Alamogordo-Las Cruces, Tex.-N. Mex. Eugene-Springfield-Medford, Oreg.

Fayetteville, N.C. Fort Lauderdale-Hollywood and West Palm Beach-Boca Raton, Fla. Fort Smith, Ark.-Okla. Fort Wayne, Ind. Gadsden and Anniston. Ala. Goldsboro, N.C. Grand Island-Hastings, Nebr. Guam, Territory of Harrisburg-Lebanon, Pa. Knoxville, Tenn. La Crosse-Sparta, Wis. Laredo. Tex. Las Vegas-Tonopah, Nev. Lexington-Fayette, Ky. Lima, Ohio Little Rock-North Little Rock, Ark. Lorain-Elyria, Ohio 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) 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. Phoenix, Ariz. Pine Bluff, Ark. Pueblo, Colo. Puerto Rico Raleigh-Durham, N.C. Reno. Nev.

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#### 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 2004. National Survey of Professional, Administrative, Technical and Clerical Pay, March 1978, \$2.40 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.

Area	Bulletin number and price*	
Akron, Ohio, Dec. 1978	2025-63,	¢ 1 00
Albany-Schenectady-Troy, N.Y., Sept. 1979	2050-46,	
Anaheim-Santa Ana-Garden Grove,	2030-40,	\$ 1,50
Calif., Oct. 1979	2050-48,	¢ 1 50
Atlanta, Ga., May 1979	2050-20.	
Baltimore, Md., Aug. 1979	2050-42,	,
Billings, Mont., July 1979	2050-43,	
Birmingham, Ala., Mar. 1978	2025-15.	
Boston, Mass., Aug. 1979	2050-50.	
Buffalo, N.Y., Oct. 1978	2025-71.	T .
Canton, Ohio, May 1978	2025-22.	4
Chattanooga, Tenn. Ga., Sept. 1979	2050-39.	
	2050-39,	4
Chicago, Ill., May 1979Cincinnati, Ohio-KyInd., July 1979 1	2050-21,	
Classiand Ohio Sont 1070	2050-28,	
Cleveland, Ohio, Sept. 1979	2050-47,	
Columbus, Ohio, Oct. 1979Corpus Christi, Tex., July 1979 1		
Dallas—Fort Worth, Tex., Oct. 1978 1	2050-33,	T .
	2025-52,	T .
Davenport-Rock Island-Moline, Iowa-Ill., Feb. 1979	2050-10,	
Dayton, Ohio, Dec. 1978 Daytona Beach, Fla., Aug. 1979 1	2025-66,	
Daytona Beach, Fla., Aug. 1979	2050-41,	7 -
Denver-Boulder, Colo., Dec. 1978	2025-68,	T -
Detroit, Mich., Mar. 1979 1	2050-7,	4
Fresno, Calif., June 1979	2050-25,	
Gainesville, Fla., Sept. 1979	2050-45,	
Gary-Hammond-East Chicago, Ind., Oct. 1979	2050-60,	
Green Bay, Wis., July 1979	2050-31,	\$1.50
Greensboro-Winston-Salem-High Point,		
N.C., Aug. 1979Greenville_Spartanburg, S.C., June 1979 1	2050-49,	
Greenville-Spartanburg, S.C., June 1979	2050-29,	
Hartford, Conn., Mar. 1979	2050-12,	4
Houston, Tex., Apr. 1979	2050-15,	T
Huntsville, Ala., Feb. 1979	2050-3,	\$1.00
Indianapolis, Ind., Oct. 1979	2050-54,	4
Jackson, Miss., Jan. 1979 1	2050-9,	\$1,20
Jacksonville, Fla., Dec. 1978	2025-67,	
Kansas City, MoKans., Sept. 1979 1	2050-58,	
Los Angeles-Long Beach, Calif., Oct. 1979	2050-59,	,
Louisville, KyInd., Nov. 1978	2025-69,	
Memphis, Tenn,-ArkMiss., Nov. 1979 1	2050-56,	\$2.25

Area	Bulletin number and price*	
Miami, Fla., Oct. 1979	2050-55, \$2.25	
Milwaukee, Wis., Apr. 1979	2050-8, \$1.30	
Minneapolis-St. Paul, MinnWis., Jan. 1979	2050-1, \$1,30	
Nassau-Suffolk, N.Y., June 1979	2050-36, \$1.75	
Newark, N.J., Jan. 1979	2050-5, \$1.30	
New Orleans, La., Oct. 1979	2050-53, \$2.25	
New York, N.YN.J., May 1979	2050-30, \$1.75	
Norfolk-Virginia Beach-Portsmouth Va-		
N.C., May 1979 1	2050-22, \$1.75	
Norfolk-Virginia Beach-Portsmouth and		
Newport News-Hampton, VaN.C., May 1978	2025-21, 80 cents	
Northeast Pennsylvania, Aug. 1979 1	2050-32, \$1.75	
Oklahoma City, Okla., Aug. 1979	2050-37, \$1.50	
Omaha, NebrIowa, Oct. 1979	2050-51, \$1.50	
Paterson-Clifton-Passaic, N.J., June 1979	2050-26, \$1.50	
Philadelphia, PaN.J., Nov. 1979	2050-57, \$3.00	
Pittsburgh, Pa., Jan. 1979 1	2050-11, \$1.50	
Portland, Maine, Dec. 1978 1	2025-70, \$1.20	
Portland, OregWash., May 1979	2050-27, \$1.75	
Poughkeepsie, N.Y., June 1979	2050-34, \$1.50	
Poughkeepsie-Kingston-Newburgh, N.Y., June 1979	2050-35, \$1.50	
Providence-Warwick-Pawtucket, R.L.		
Mass., June 1979 1	2050-38, \$1.75	
Richmond, Va., June 1979	2050-24, \$1.50	
St. Louis, MoIll., Mar. 1979 1	2050-13, \$1.50	
Sacramento, Calif., Dec. 1978	2025-75, \$1.00	
Saginaw Mich Nov 1970	2050-52, \$1.75	
Salt Lake City-Ogden, Utah, Nov. 1978 1	2025-72, \$1.30	
San Antonio, Tex., May 1979	2050-17, \$1.00	
San Diego, Calif., Nov. 1978	2025-73, \$1.00	
San Francisco-Oakland, Calif., Mar. 1979	2050-14, \$1.20	
San Jose, Calif., Mar. 1979	2050-19, \$1.10	
Seattle-Everett, Wash., Dec. 1978	2025-74, \$1.00	
South Bend, Ind., Aug. 1979 1	2050-44, \$1.75	
Toledo, Ohio-Mich., May 1979	2050-16, \$1.10	
Trenton, N.J., Sept. 1979	2050-40, \$1.50	
Utica-Rome, N.Y., July 1978		
Washington, D.CMdVa., Mar. 1979		
Wichita, Kans., Apr. 1979		
Worcester, Mass., Apr. 1979		
York, Pa., Feb. 1979		

<sup>\*</sup> Prices are determined by the Government Printing Office and are subject to change.

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

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