1950-13

Area Wage Survey

Detroit, Michigan, Metropolitan Area March 1977



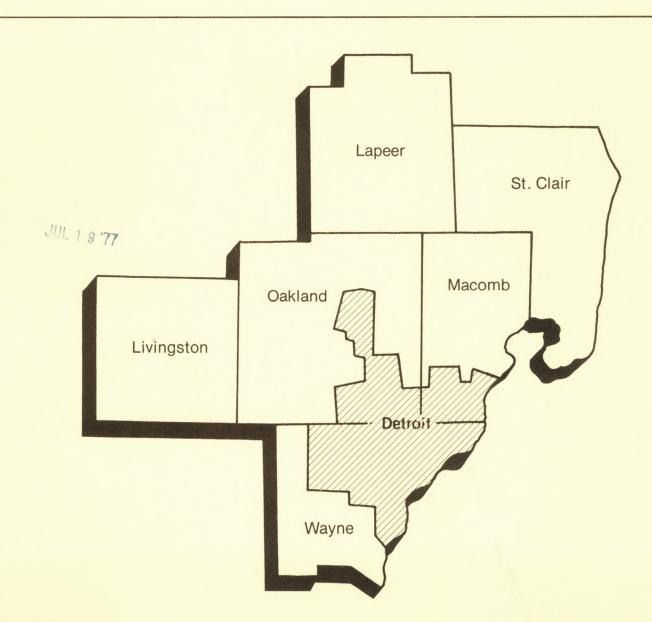
Bulletin 1950-13

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Preface

This bulletin provides results of a March 1977 survey of occupational earnings in the Detroit, Michigan, 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:

Reports on occupational earnings and supplementary benefits in the Detroit area are available for the fabricated structural steel (November 1974), machinery (November 1974), machine tool accessories (November 1974), special dies, tools, jigs, and fixtures (November 1974), nonferrous foundries (May 1975), hospitals (August 1975), nursing homes (May 1976), and paints and varnishes (November 1976) industries. A current report on occupational earnings only is available for the laundry and dry cleaning industry (March 1977). Also available are listings of union wage rates for building trades, printing trades, local-transit operating employees, local truckdrivers and helpers, and grocery store employees. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

Area Wage Survey

Detroit, Michigan, Metropolitan Area March 1977

U.S. Department of Labor Ray Marshall, Secretary **Bureau of Labor Statistics** Julius Shiskin, Commissioner

June 1977

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Introduction

This area is 1 of 74 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, occupational earnings data (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. For the 31 largest survey areas, tables A-8 through A-13 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 elinimation 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.

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 economists to classify workers by occupation.

A. Earnings

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1977

				Weekl (st	y earnings ^l andard)			worke																		
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	and under	-	\$ 100 - 110	-	-	-	-	-	-	-	-	-	260	280	300	320	340	360	380	-	
ALL WORKERS																										
MANUFACTURING	4,975 4,458 708 890 455 1,710	40.0 39.0 38.5 40.0 39.5 38.5	285.00 226.50 252.00 276.00 207.00 200.50	291.50 221.00 249.50 287.00 205.00 195.50	\$ 209.50-306.50 250.50-319.50 184.50-265.00 232.00-283.00 239.00-316.50 186.50-224.50 168.50-226.00 173.50-251.50				3 - 1 2 -	26 2 24 - 2 22	95 22 73 - 10 51 12	10 331 14 - 26 226	24 50 39	188 597 32 27 131 302	913 306 607 42 71 73 303 118	909 359 550 105 76 84 217 68	470 518 202 90 60	717 337	641 359 114	1200 923 277 51 188 2 29	673	355 296 59 8 48	120 107 13 - 13	107 102 5 1 2	29 28 1 - 1	
SECRETARIES, CLASS A MANUFACTURING NOMANUFACTURING RETAIL TRADE FINANCE SERVICES	384 271 74 75	40.0 39.0 40.0 38.5	318.00 261.00 235.50 263.00	320.50 257.00 234.50 255.50	235.50-346.50 260.50-377.50 230.50-293.50 220.00-258.00 225.00-289.50 188.50-286.00	:		:	:	:		1 1 -	11 - 11 - 4 7	32 7 25 15 2 8	42 29 13 3	85 35 50 28 20	65 23 42 11 16 12	72 50 22 13 5	77 24 53 1 16 21	52 23 29 2 2	43 34 9 - 5 1	34 30 4 - 3	46 39 7 -	33 29 4 - 2	28 27 1	
SECRETARIES, CLASS B	1,218 1,139 174 173 125 419	40.0 38.5 38.5 40.0 39.5 38.5	307.00 239.00 270.00 296.50 207.00 223.00	326.00 230.50 267.00 316.00 206.50 224.00	223.50-329.50 263.50-349.00 200.00-268.50 255.50-284.50 235.50-350.00 185.50-230.00 194.50-248.50 177.00-278.00					4	11 	19 19 - - 4 15	123 2 121 - 1 26 45 49	167 37 130 5 1 27 61 36	239 59 180 2 15 28 84 51	249 96 153 12 27 23 78 13	223 95 128 27 11 16 72 2	264 104 160 83 17 4 41 15	134 53 81 20 4 1 7	151 113 38 10 15	318 265 53 7 29 - 10 7	314 260 54 7 47	70 64 6 -	70 69 1 1	1 1	
SECRETARIES, CLASS C	2,475	40.0 39.0 40.0 39.5 38.5	285.50 226.50 281.00 196.50 195.00	297.00 222.00 298.50 186.50 188.00	217.00-308.00 267.50-314.00 186.00-264.50 256.00-318.50 186.50-220.00 163.00-219.50 182.50-233.50	:			1 - 1	10 2 8 - 2 6	33 33 6 25 2	10 143 - 20	16	74	99 268 29 26	380 109 271 26 23 91 39	441 164 277 33 20 27 25	488 385 103 49 7 12 24	658 486 172 72 - 22 11	902 732 170 134 -	451 370 81 76 - 4	1	1 1	4		
SECRETARIES, CLASS D MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES FINANCE SERVICES	898 899 49 520	40.0 39.0 40.0 39.0	241.50 202.00 219.50 180.50	245.00 192.50 173.00 179.00	180.00-260.50 210.50-270.50 162.00-225.50 158.00-284.00 157.00-202.00 159.00-195.00	:			2 - 2 -	12	51 22 29 - 22 3	152 14	11	70 139	119	171 119 52 - 28	247 188 59 - 12	230 178 52 10	130 78 52 12	95 55 40 1	5 4 1 1	6 6	3			
ENOGRAPHERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE FINANCE SERVICES	1,168 1,150 273 123 167 313	40.0 39.0 40.0 40.0 39.0 39.0	227.00 199.50 242.50 236.00 174.50 162.00	230.50 187.00 260.00 236.00 175.50 159.50	175.00-255.50 197.00-256.00 160.00-250.50 210.50-274.00 198.00-274.00 157.50-192.00 143.50-179.50 163.50-261.50			1 - 1 - 1	27	23 23 - 5 1	36 5 31 - 3 26 2	5	102	336 149 187 37 21 49 56 24	229 137 92 28 13 14 10 27	292 231 61 23 19 6 1	63 32	355 142 213 129 12 - 2 70	144 108 36 8 24 - 3 1	1 - 1		3 3				
STENOGRAPHERS, GENERAL MANUFACTURING	214 517 147 122	40.0 39.5 40.0 39.0	197.00 188.50 245.00 146.50	188.50 176.00 260.50 146.00	157.50-226.00 167.50-228.00 152.00-220.50 221.50-274.00 130.00-159.50 150.00-184.00			1 -	27	22 22 1 17	25 25 21 2	144 41 103 5 43 16	148 55 93 5 18 46	108 25 83 18 7	53 23 30 7 5 7	64 41 23 14	40 17 23 15	91 12 79 75	8 8							

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1977—Continued

					y earnings ¹ andard)					_		_		ekly ea	-											
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	and under	90	-	110	120	130	140	160	180	200	- 220	240	260	-	-	-	-	•	-		-
ALL WORKERS CONTINUED						70	100	110	120	130	140	100	100	200	220	240	200	200	300	320	340	300	380	400	420	
STENOGRAPHERS - CONTINUED																										
STENOGRAPHERS, SENIOR MANUFACTURING NONMANUFACTURING WHOLESALE TRADE FINANCE SERVICES	954	40.0 39.0 40.0 39.5	234.00 209.00 252.50 172.00	235.50 199.00 256.50 166.50	\$ 188.50-260.50 207.00-260.00 167.50-261.50 231.00-287.50 155.50-185.00 169.50-261.50	:	:	:	:::::::::::::::::::::::::::::::::::::::	1 -	11 5 6 - 5	114 22 92 61 24	174 47 127 6 64 26	228 124 104 49 15	176 114 62 8 5	228 190 38 14 1	251 211 40 19 1	264 130 134 11 2 67	136 108 28 24 3	1 1 1	:::::	3 3			:	
RANSCRIBING-MACHINE TYPISTS NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE FINANCE	244 26 93	39.0 40.0 39.0	159.50 182.00 162.50	150.50 179.00 152.00	136.00-178.50 136.00-166.50 150.00-201.50 136.00-191.50 135.00-160.00		:	2 - 2	1 - 1	19 19 - 15 4	53 53 - 15 36	89 89 8 37 43	32 27 5 1 21	18 18 6 2 10	21 11 1 9	19 19 5 14	1 1 -	:	5 4 - 4	:		:	:	:	:	
YPISTS	673 1,912 276 138 834	40.0 38.5 40.0 40.0 38.0	200.50 156.50 229.50 193.00 134.00	191.00 138.00 220.50 203.00 129.00	128.00-197.50 148.50-248.50 123.00-167.00 175.50-274.00 155.00-214.50 120.00-161.50	:		91 4 87 - 32 55	277 277 - 9 187 62	382 56 326 1 -	384 61 323 8 3 199 96	447 119 328 27 35 141 91	239 53 186 40 7 62 54	129 67 62 34 10 3	142 50 92 28 47	96 70 26 11 3	113 54 59 10 9 2 38	162 78 84 57 13 9	39 37 2 - 2	74 14 60 60	10	:	:			
TYPISTS, CLASS A	382 752 148 69 134	40.0 38.5 40.0 40.0 38.5	221.00 185.00 271.00 214.50 157.00	234.00 160.00 274.00 210.50 147.00	141.50-255.50 158.00-271.00 137.00-238.00 251.00-314.50 203.00-249.00 136.00-162.50 132.00-169.00	:		28 - 28 - - - 28	47 47 3 8 34	47 47 - 6 24	138 22 116 - 29 86	210 75 135 6 56 69	98 14 84 8 21 49	63 37 26 10 3 3	78 17 61 9 35	65 44 21 7 3	104 51 53 6 7 2 38	142 68 74 48 12 9	30 30 -	74 14 60 60	10				:	
TYPISTS, CLASS B	1,160 128 69 700	40.0 38.5 40.0 39.5 38.0	174.60 138.00 181.50 171.50 129.50	163.50 130.00 178.00 155.00 126.50	121.50-155.50 138.00-202.50 120.00-148.00 150.50-204.50 141.00-133.00 118.00-137.00	:		=	230 230 6 179 28	1 -	246 39 207 8 3 170 10	237 44 193 27 29 85 22	141 39 102 32 7 41 5	66 30 36 24 7	64 33 31 19 12	31 26 5 4	9 3 6 4 2 -	20 10 10 9 1	9 7 2 - 2				:	:	:	
ILE CLERKS	73 1,028 65 136	40.0 39.0 39.5 40.0	215.00 132.00 192.00 137.00	251.00 125.00 168.00 126.50	112.00-144.00 148.50-275.00 112.00-140.00 145.00-265.50 110.00-144.00 112.00-130.00	=	17 17 - 16	4	55	304 4 300 3 15 256	87 1 86 9 7 61	151 10 141 18 42 66	55 2 53 7 3	29 3 26 7 7 5	5 5	6 2 4 - 4 -	16 9 7 4 2 1	53 29 24 14 1	1 1 -	:	:	2 2 2	:::::::::::::::::::::::::::::::::::::::	:	:	
FILE CLERKS, CLASS A NONMANUFACTURING FINANCE	93	38.5	167.50	150.00	129.00-275.00 125.00-171.00 125.00-171.00	-	=	:	:	39 39 39	1 1 1	10 10 9	21 21 21	8 7 5	5	2	7 1 1	40 11 9	1	:	:	2	:	:	:	
FILE CLERKS, CLASS B NONMANUFACTURING FINANCE	359	38.5	134.50	125.00	120.00-145.50 120.00-145.50 121.50-135.00	-	1	22 22 22		150 146 130	33 33 23	76 73 42	21 21 16	9	:	4	7 4	1	Ξ	Ξ	:	:	:	:	=	

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1977—Continued

					y earnings ^I andard)									ekly e												
Occupation and industry division	Number of workers	Average weekly hours 1	Mean ²	Median 2	2	80	90	100	110	120	130	140	160	180	200	220	\$ 240	260	280	300	320	340	360	380	400	42
	workers	(standard)	Mean	Median	Middle range	and under 90		110	120	130	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	44
ALL WORKERS CONTINUED																										
FILE CLERKS - CONTINUED																										
FILE CLERKS, CLASS C NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE FINANCE	592 576 58 101 348	39.5 39.5 40.0	125.00 180.00 125.50	116.00 155.00 113.00	\$ 110.00-131.00 110.00-130.00 145.00-189.50 110.00-143.00 110.00-125.00	=	16 16 -	84 80 - 64	220 220 -55 128	115 115 3 15 87	53 52 9 -	65 58 18 25 15	13 11 7 3 1	12 10 7 3	:	:	2 2 -	12 12 12	:	:	:	:	:	:	:	
MESSENGERS	129 448 73	40.0 38.5 39.5 38.0	174.00 141.50 125.50 127.50	148.00 128.00 116.00 123.00	116.00-173.00 127.00-228.50 115.00-157.50 108.00-144.50 117.00-134.50 115.00-130.50	=	28 3 25	33 8 25 16 9	109 4 105 26 22 57	108 39 69 4 40 16	74 1 73 4 43 23	9	28 3 25 8 8	59 14 45 3 2	6	21 9 12 -	15 4 11 -	31 20 11 -	4	:	:	:		:	:	
WITCHBOARD OPERATORS MANUFACTURING	702 201 501 111 57 95 117	40.0 39.0 40.0 40.0 40.0 38.5	244.50 152.00 155.00 186.00 143.50 151.00	255.00 144.50 126.00 184.50 145.50 144.50	135.00-236.50 214.00-275.00 126.50-168.50 100.00-231.00 153.50-184.50 120.00-158.00 138.00-170.00 128.00-153.00	1 - 1	27 25	45 45 25 6 3 2	7 7 5 1 1	74 74 10 24 7 33	65 65 7 32 26	142 6 136 4 15 34 39 44	73 23 50 7 13 26 4	45 3 42 7 15 9	30 22 8 6 1	25 19 6 5 1	17	7	23 20 3 - 3	21 17 4 - 4					:	
WITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING	929 377 552 32 186 76 104 154	40.0 39.0 40.0 40.0 39.5 36.5	170.00 153.50 222.50 151.50 129.00 147.00	163.50 149.50 233.50 150.00 130.00	134.50-178.50 136.00-189.00 130.00-172.50 174.00-275.50 126.50-175.50 108.00-148.00 135.00-153.50		16 	36 36 30 4	25 25 - 8 10 7	78 18 60 - 29 - 14 17	173 92 81 - 28 17 16 20	186 54 132 6 28 25 45 28	187 91 96 5 30 5 12	104 53 51 2 25 1 4	60 27 33 3 11 -	21 16 5 - 4 1	17 15 2 2	10 10 10	16 11 5 4 1							
ORDER CLERKS MANUFACTURING NONMANUFACTURING WHOLESALE TRADE	371 895	39.5	202.00	192.00	135.00-223.00 169.50-220.00 120.00-223.00 135.00-243.00	:	44 44 30	-	101 101 75	51 2 49 31	62 6 56 56	66	86	135 59 76 76	121 59 62 62	71 5 66 66	125 28 97 97	88 29 59 59	53 20 33 33	9 4 5 5	12 7 5 5	2 2 2	:	:	:	
ORDER CLERKS, CLASS A MANUFACTURING NONMANUFACTURING WHOLESALE TRADE	306 95 211 211	39.5 40.0	228.00	218.50	218.50-274.00 202.50-253.50 243.00-274.00 243.00-274.00	:	:	:	:	:	:		12 12 12	14	57 51 6 6	8 5 3 3	98 5 93 93	67 12 55 55	34 2 32 32	6 2 4 4	8 4 4	2 2	:	:	:	
ORDER CLERKS, CLASS B MANUFACTURING NONMANUFACTURING WHOLESALE TRADE	960 276 684 550	39.5 39.0	193.00 152.50	171.50 146.50	123.00-195.50 159.00-208.50 112.00-195.50 130.00-196.00		44 44 30	70 70	101 101 75	51 2 49 31	62 6 56 56	66	132 86 46 46	121 45 76 76	64 8 56 56	63 63 63	27 23 4 4	21 17 4 4	19 18 1	3 2 1 1	4 3 1 1	:	:	:	:	
MCCOUNTING CLERKS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE FINANCE SERVICES	2,187 3,888 308	40.0 39.0 39.5 40.0 39.5 38.0	230.50 171.00 229.50 207.00 155.00 163.00	213.00 160.00 220.00 192.50 150.00 152.00	147.50-220.50 175.00-288.50 140.00-192.50 202.00-261.00 160.50-229.50 130.00-174.50 138.00-175.00			121 - 54 32	113 113 3 64 30 16	21 250 15 113	51 456 21	241 979 17 93 413 260	269 651 16 116 259	355 511 32 115	84 58 31	36	21	87 56 9 3	62 37	174 149 25 15	111 84 27 1 23 -		147 129 18 - 18	5 5		

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1977—Continued

					y earnings ¹ andard)			worker							W. C. S. C. C. C.					-						
Occupation and industry division	Number of workers	Average weekly hours l (standard)	Mean ²	Median ²	Middle range ²	80 and	90	100	110						200		240	260	280	300		340	360	380	\$ 400 -	42
						under 90	100	110	120	130	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	44
ALL WORKERS CONTINUED																										
CCOUNTING CLERKS - CONTINUED					e e																					
ACCOUNTING CLERKS, CLASS A MANUFACTURING	2,436 1,270 1,166 121 157 339 348 201	40.0 39.0 40.0 40.0 39.5 38.0	263.00 201.50 242.50 284.00 175.50 183.00	255.50 185.00 250.00 304.00 176.50 175.00	178.5c-291.00 205.00-316.00 162.00-222.50 216.00-271.00 204.50-341.50 160.00-190.00 157.00-208.00 160.00-203.50	:		6 - 6 - 6 -	4 - 4 - 4 - 4	24	17 17 - 8 2 7	44 166 3	370 73 297 3 14 119 106 55	10	289 171 118 15 29 16 36 22	226 132 94 16 1 15 52 10	157 90 67 33 10 6 4 14	98 60 38 17 1 2 2 16	156 120 36 23 13	163 145 18 - 15 -	111 84 27 1 23 3	106 77 29 - 27 -	147 129 18 - 18	5		
ACCOUNTING CLERKS, CLASS B MANUFACTURING	3,639 917 2,722 187 431 1,225 440 439	40.0 39.0 39.5 40.0 39.5 38.0	186.00 158.00 221.00 179.00 149.50 147.00	177.00 150.00 219.00 175.00 140.00 142.00	138.00-190.00 156.00-201.00 132.00-175.00 197.00-261.00 152.50-192.50 130.00-160.00 127.00-150.00	:	-	-	109 109 3 64 26 16	21	51	197 813 14 93	196 354 13 102	215 304 22 109	190 57 133 69 29 15 2	126 42 84 4 35 45	117 75 42 12 15 15	90 41 49 39 8 1	18 26 14 1 -	11 4 7 - - 7						
OOKKEEPING-MACHINE OPERATORS MANUFACTURING NONMANUFACTURING FINANCE	267 60 207 57	40.0 38.5	192.00	175.50	150.00-209.50 168.50-211.00 150.00-209.50 129.00-155.50	-	:	:	12	31 31 25	-	59 8 51 26	75 23 52	8 2 6 6	41 13 28	10	3	7 1 6	21	:	:	:	:	:	:	
BOOKKEEPING-MACHINE OPERATORS, CLASS A	84 66		208.50 205.50	209.50 209.50	190.00-216.50 156.50-216.50	:	:	:	:	1	:	17 17	2	8 6	36 28	5	2	1	12	:	:	-:	:	÷		in Type
BOOKKEEPING-MACHINE OPERATORS, CLASS B	183 141				147.00-168.50 129.00-160.00		:	:	12 12	30 30	:	42 34	73 50	:	5	5	1	6	9	:		-			:	
CHINE BILLERS NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE	224 189 70 111	40.0	200.50	183.00 287.50	160.00-252.50 160.00-287.50 287.50-287.50 160.00-183.00	-	:	4 4 - 3	. 6	:	17 17 -	11 6	75 57 57	44 43 14 29	9	1 -	1 -	1 1 1 -	55 55 55	:	:	:	:	:	:	3
BILLING-MACHINE BILLERS NONMANUFACTURING PUBLIC UTILITIES	181 146 70	40.0	207.50	183.00	160.00-287.50 160.00-287.50 287.50-287.50	-	:	3	6	:	17 17	11 6	47 29	30 29 14	9 -	1 -	1 -	1 1	55 55 55	:	:	=	:	:	:	
AYROLL CLERKS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES RETAIL TRADE SERVICES	846 439 407 84 148 77 86	40.0 39.0 40.0 39.0 38.5	221.50 186.00 236.00 158.50 190.50	200.00 179.00 283.00 157.50 190.00	162.00-227.50 176.50-259.50 149.50-211.50 183.50-283.50 132.00-181.50 169.00-224.00 149.50-202.50	:	1 - 1	5 - 5	8 - 8	45 20 25 5 14 4 2	24 20 2 13 2 3	28 78 3 34	78 69 11 31	86 62 8 29 16	65 58 6 10	64 32 32 3 3 19 4	1	19	59 16 43 43	-	13 12 1	18 15 3 2	26		120	9
YPUNCH OPERATORS	934	40.0 39.5 39.5 40.0 40.0 38.5	230.50 167.00 236.50 220.50 158.50 159.00	239.00 156.50 259.50 210.50 158.00 156.50	137.50-209.50 176.00-286.50 134.00-183.50 196.00-265.00 170.00-277.00 140.00-180.50 138.00-172.00 124.00-161.00		48	76 - 76 - 2 16 58	151 - 8 13	491 487 12 21 62 392	47 492 5 13 43 125	78 904 8 76 81 233	114 682 33 70	55 374 37 65 73	85 220 34 21 8 22	3	41	213 109 104 23 62 1 4	184 186 68 100	102 81 21 21	:			0.00		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1977—Continued

					earnings I	Numb	er of	worke	rs rec	eiving	strai	ght-ti	me we	ekly e	arning	s of—										
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²		Middle range ²	\$ and under 90	90	100	110	120	130	140	160	180	200 - 220	- 220	240	260	280	300	320		360 -	\$ 380 - 400	\$ 400 - 420	
ALL WORKERS CONTINUED EYPUNCH OPERATORS - CONTINUED																										
KEYPUNCH OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE SERVICES	367 1,484 145 193	40.0 39.5 40.0 40.0 40.0	252.00 184.50 263.00 230.50 168.00	268.00 170.00 259.50 232.00 180.00	\$ 159.00-240.00 211.00-296.00 156.50-196.00 259.50-283.50 182.00-277.00 152.00-180.50 154.50-174.50	=				24 24 16 8	69 4 65 8 49	:	457 27 430 5 40 20 245	46 56		60 37 23 4 10	133 29 104 79 24	83 45 38 - 23 1	142 66 76 52 24	102 81 21 - 21			:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::		
KEYPUNCH OPERATORS, CLASS B MANUFACTURING	567 2,464 181 315 170 416	40.0 39.5 39.0 40.0 39.5 38.5	217.00 156.50 215.00 214.50 152.00 151.50	226.00 140.00 209.00 210.50 148.00 140.00	130.00-197.00 161.50-269.00 126.00-171.00 183.50-254.00 152.50-277.50 134.50-160.00 133.50-155.50 120.00-144.00	-	48 48 - - - 48	76 -76 -2 16 58	151 151 - 8 13 130	12 5 62	470 43 427 5 13 35 117 257	78 521 8 76 65	87 252 28 30 34 45	19	43 151 29 16 2	85 61 24 4 17 1	102 50 52 31 17 1 1	130 64 66 23 39	118				:::::::::::::::::::::::::::::::::::::::			
MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	118	40.0	299.00	304.50	233.00-319.00 272.50-324.00 122.00-309.50 219.00-293.50	=	:	18 18	18 18	6	:	:	:	3 2 1 1		8 3 5	15 12 3	27 18 9 8	47 17 30 21	40 30 10 3	23 16 7	34 14 20 3	.2	3 2 1	:	
TABULATING-MACHINE OPERATORS, CLASS A	93 50				309.50-348.50 309.00-345.50		:	:	:	:	:	:	:	:	:	2 2	2 2	6	9	14	21 14	34 14	2 2	3 2	:	
TABULATING-MACHINE OPERATORS, CLASS B	59 56	40.0	285.50	299.00	250.50-299.50 273.00-307.00 219.00-293.50 215.00-293.50	=	:	:	:	:	:	:	:	3 2 1 1	18 2 16 16	4 1 3	8 6 2	19 10 9 8	35 13 22 15	26 23 3		:	:	:	:	

Table A-2. Weekly earnings of professional and technical workers in Detroit, Mich., March 1977

					y earnings ¹ andard)			worke										55.5								
Occupation and industry division	Number of	Average weekly hours 1						140														420			\$ 520	\$ 56
	workers	(standard)	Mean ²	Median ²	Middle range ²	and under	-	-	-	-	•	-	-	-	-	-	-	-	-	- "	-	-	-	-	-	-
						120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	480	520	560	60
ALL WORKERS																										
MPUTER SYSTEMS ANALYSTS BUSINESS)	2,260	39.5	\$ 399.50	\$	\$ 333.50-465.00		_	_		6	-	22	23	56	123	209	176	178	196	139	147	183	370	328	92	1
MANUFACTURING	1,159	40.0	414.50	422.50	356.50-476.00	-	-	-	-	-	-	2	13	31	60	60	71	74	78	83	84	112	232	190	57	1
NONMANUFACTURINGFINANCE	1,101				321.50-450.50	-	-	-	-	6	-	20 12	10	25	63	149	105 81	104 54	118 57	56 33	63 28	71	138	138	35	
SERVICES	103				302.00-379.50	-	-	-	-	-	-	-	•	17	5	-31	5	5	15	-	5	15	5	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A	966	39.5	438.00	447-00	386.00-492.50		_	_		_		_	_	8	14	44	30	51	81	61	74	89	185	226	91	1
MANUFACTURING	386	40.0	455.50	464.50	407.00-511.00	-	-	-	-	-	-	-	-	-	6	8	8	20	21	25	27	30	79	94	56	1
NONMANUFACTURINGFINANCE	580 174				375.00-488.50 343.50-405.00	:	-	-	-	-	-	-	-	1	8	36 17	22	31 15	60 37	36 28	47 27	59 12	106	132	35	
SERVICES	71				309.00-425.00	-	-	-	-	-	-	-	-	7	-	19	5	5	10	-	5	15	5	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B	931	39.5	378.50	360.00	320.00-446.50	_		_	_	_		6	8	41	70	110	123	98	74	42	47	54	155	102	1	
MANUFACTURING	563	40.0	396.00	406.50	322.00-467.00		-	-	-	-	-	-	8	28	50	50	52	32	23	23	32	43	125	96	i	
PUBLIC UTILITIES	368 93				317.00-374.50 342.50-383.00	:	-	-	- :	-	-	6	:	13	20	10	71	66	51 22	19	15 5	11	30 11	6	-	
FINANCE	185		333.50	331.00	317.00-349.00	-	-	-	-	-	-	6	-	2	10	34	64	39	20	5	1	2	2	-	-	
COMPUTER SYSTEMS ANALYSTS	363	20 5	251 50	255 00	300.50-404.00					6		16	15	7	39	55	23	29	41	26	2.					
(BUSINESS), CLASS C	153				288.00-316.50		-	-	-	6	-	14	10	4	35	53	12	7	7	36	26	40	30	-	=	
MPUTER PROGRAMMERS (BUSINESS)					273.00-379.00	-	2	2	46	43	84	72		118	163	222		167	173	130	110	101	97	19	3	
MANUFACTURING	881 996				297.50-404.00 258.50-360.00	-	2	2	29 17	18 25	29 55	24 48	40 108	31 87	51 112	124 98	68 107	84	79	71 59	73 37	72	72 25	15	1 2	
PUBLIC UTILITIES	81	40.0	333.00	311.00	277.50-390.00	-	-	-	-	-	3	5	7	6	16	7	6	3	7	7	4	2	2	2	2	
FINANCE	261 332	38.5	296.00	349.50	312.00-394.00 247.50-344.00	-	2	2	13	12	13	19	40	46	23 38	46	36 35	33 35	33 18	27 14	15 11	18	19	2	:	
SERVICES	204	39.0	283.50	260.00	232.00-337.00	-	-	-	-	8	31	14	45	20	17	10	8	7	30	7	7	-		-	-	
COMPUTER PROGRAMMERS (BUSINESS),	752	40-0	377.50	382.54	345.50-424.50	_		_		_	14	16	30	24	21	33	43	67	111	89	91	93	96	19	3	2
MANUFACTURING	396	40.0	396.00	406.00	365.50-436.00	-	-	-	-	-	-	4	8	12	5	22	10	27	45	50	59	67	71	15	1	
NONMANUFACTURING	356 33		357.00	368.00	320.50-400.00 299.50-400.00	:	-	-	:	-	14	12	22	12	16	11	33	40	66	39	32	26	25	2	5	
WHOLESALE TRADE	86	40.0	409.00	412.00	375.00-436.50	-	-	-	-	-	-	-	-	-	-	-	-	8	19	11	10	17	19	2	-	
FINANCE	127 91				312.50-384.50 246.00-378.00	:	-	:	:	-	14	8	14	5	2	8	22	25 7	10 30	14	11	8	4	-	-	:
COMPUTER PROGRAMMERS (BUSINESS),																										
MANUFACTURING	751 316	39.5	308.00	312.00	268.00-345.00 291.50-359.00	-	-		-	12	33	38 17	81 28	69	82 14	112 59	112	85 51	59 33	.40	19	8	1	-	-	
NONMANUFACTURING	435	39.5	298.50	296.00	260.00-333.00	-	-	-	-	8	24	21		56	68	53			26	20	14	3	1	-	-	
WHOLESALE TRADE	110				270.00-359.00		-	-	-	-	:	-	6	3	3 11	19	3 28	3 16	1	4	-	2	-	-	-	
FINANCE	141		285.00	285.00	318.50-368.00 264.50-309.00		-	-	-	8	10	2	12	33	32		13	10	14	16	5	1	:	-	-	
SERVICES	100				232.00-287.50		-	•	-	-	12	14	31	15	15	10	3	-	-	-	-	-	-	-	-	-
COMPUTER PROGRAMMERS (BUSINESS),	374	30.5	258 44	272 00	202.00-307.00	_	2	2	46	31	37	18	37	25	60	77	20	15	3							
MANUFACTURING	169	40.0	259.00	288.00	193.00-309.50	-	-	-	29	14	20	3	4	6	32	43	10	6	1	1	:	-	-	-	-	
NONMANUFACTURINGFINANCE	205	39.5	257.00	258.00	213.50-304.00	-	2	2	17	17	17	15	33 21	19	28	34	10	9	2	-	-	-	-	-	-	-
LINANCE	04	38.5	222.00	234.50	175.00-248.50	-	2	2	13	4	3	,	21	,	2	1	-	-	-	-	-	-	-	-	-	-

Table A-2. Weekly earnings of professional and technical workers in Detroit, Mich., March 1977—Continued

					y earnings ¹ andard)			worke			_															
Occupation and industry division	Number of workers	Average weekly hours 1 (standard)	Mean ²	Median ²	Middle range ²	and under	120	\$ 140 - 160	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	-	-	
ALL WORKERS CONTINUED																										
MPUTER OPERATORS		40.0 39.5 39.5 40.0 39.5 39.0	278.50 228.00 247.00 281.50 216.00 207.50	300.50 216.00 229.00 310.00 222.00 201.50	\$ 190.00-317.00 200.50-342.00 183.00-264.50 215.00-274.50 206.00-350.00 174.50-244.50 179.00-236.00 188.00-253.00	:	19 19 - 1 18	109	216 66 150 7 33 14 58 38	75	230 67 163 46 7 12 54 44	30	142 53 89 8 6 8 35 32	142 58 84 19 3 8 21 33	110 54 56 16 7 7 14	124 33 7 18	137 124 13 1 11 -	138 100 38 2 20 - 1	92 74 18 3 13	87 73 14 1 13	18 15 3 2 1	7	2 2			
COMPUTER OPERATORS, CLASS A MANUFACTURING NOMANUFACTURING PUBLIC UTILITIES FINANCE	256 240	40.0 39.5 40.0 39.0	327.50 277.50 288.00 255.00	348.50 273.50 298.50 253.50	242.50-360.50 272.00-381.00 234.50-309.00 239.00-298.50 234.50-280.00 251.50-293.00	=	:	-	:	27 11 16 - 8 8	43 33 10 - 9	51 2 49 10 10 8	41 12 29 4 16 8	43 7 36 - 11 20	40 3 37 12 11 7	26 17 9 - 4	29 25 4 - 1	69 42 27 - 1 15	48 37 11 3 2	52 43 9 1		-	2		:	
COMPUTER OPERATORS, CLASS B MANUFACTURING	476 546 84	40.0 39.0 39.5 40.0 39.0	284.50 221.00 237.00 257.00 207.50	305.50 213.00 219.00 241.00 201.50	193.50-311.00 221.50-337.50 184.00-245.50 215.00-270.50 160.00-335.00 181.00-226.00 173.00-241.50	:	1	22 22 - 7 15	154 56 98 - 33 31 33	115 39 76 8 - 47 19	153 21 132 46 7 31 41	80 25 55 4 36 5	85 34 51 - 6 14 24	70 26 44 15 10 13	32 18 14 2 1 3 5	88 66 22 6 14 2	88 80 8 1 7		44 37 7 - 7	35 30 5 - 5						
COMPUTER OPERATORS, CLASS C MANUFACTURING NONMANUFACTURING FINANCE	299	40.0	226.50	201.50	152.50-274.50 147.00-300.00 163.50-209.50 155.00-199.00	-	18 18 18	132 109 23 14	62 10 52 27	72 25 47 28	34 13 21 14	17 3 14 9	16 7 9 5	29 25 4	38 33 5	43 41 2	20 19 1	14 14 -	:	:	:		:	:	:	
AFTERS	4,342 3,459 883 125 708	40.0 40.0 40.0	385.50 281.50 292.00	400.50 275.50 273.00	296.00=437.50 332.50=449.50 240.00=314.00 260.00=315.50 240.00=318.00	7 - 7	11	33 20 13 -	43 29 14 -	42 16 26 -	139 54 85 71	10	247 119 128 11 117	253 120 133 45 74	263 155 108 18 90	308 191 117 14 89	236 193 43 6 37	318 282 36 5 31	293 253 40 4 35	275 253 22 12 10	348 321 27 - 27	391 390 1	735 717 18	316 307 9	:	
DRAFTERS, CLASS A		40.0	431.50	436.00	388.00-462.50 405.50-466.00 272.00-376.00 272.00-362.00		:	:	:	:	10 10 10	5 5	46 6 40 40	63 15 48 48	53 3 50 49	62 12 50 50	84 49 35 35	77 73 4 4	167 148 19 17	203 181 22 10	311 284 27 27	350 349 1	718 700 18 18	316 307 9	:	
DRAFTERS, CLASS B	1,040 671 369 88 233	40.0 39.5 40.0	344.50 271.50 278.00	349.00 260.00 267.00	263.00-362.50 312.50-379.50 240.00-312.00 260.00-288.50 240.00-314.00		:	:	2	3 - 1	48 5 43 -	52 12 40 10 28	127 42 85 8 77	99 32 67 37 16	55 35 20 15 5	137 86 51 7 30	86 81 5 3 2	157 125 32 5 27	108 87 21 3 18	71 71 -	37 37	41 41 - -	17	:	:	
DRAFTERS, CLASS C	746 579 167 144	40.0	285.50	294.50	218.50-316.00 256.50-323.00 184.00-290.00 181.00-285.50	-	9 9	23 10 13 13	41 29 12 12	38 15 23 23	78 46 32 32	11 11 2	55 52 3	53	143 105 38 36	108 92 16 9	66 63 3		18 18	1 -	:	:	:	:	:	

Table A-2. Weekly earnings of professional and technical workers in Detroit, Mich., March 1977—Continued

					earnings landard)	Num	ber of	worke	ers rec	eiving	strai	ght-ti	me we	ekly e	arning	s of—	-									
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	\$ 100 and under 120	-	-	-	-	200	-	-			300 - 320	-	-	-		-	\$ 420 - 440	-	-	-	
ALL WORKERS CONTINUED																										
RAFTERS - CONTINUED			\$	\$	\$ \$																					
MANUFACTURING	91 82				159.50-272.50 223.50-272.50		5	10	-	1	3	11	19	20	12	1	-	-	-	:	=	=	=	-	-	
ECTRONICS TECHNICIANS	256 174 82	40.0	341.50	337.00	304.00-381.00 309.00-372.50 264.00-381.00	=	:	:	:	5	15 15 15	:	:	10	31 25 6	42 41 1	50 42 8	26 15 11	12 11 1	40 24 16	11	13 4 9	1 1 -	Ξ	=	
PUBLIC UTILITIES	88	1000			207.50-397.00 356.00-400.50		-	-	-	-	-	-	-		1	1	6	21	7	29	10	12	1	-	-	
ELECTRONICS TECHNICIANS, CLASS B-	138	40.0	306.00	309.00	288.00-325.00	-	-	-	-	-	15	-	-	10	30	40	20	5	5	11	1	1	-	-	-	,
EGISTERED INDUSTRIAL NURSES MANUFACTURING	502 449 53	40.0	314.00	319.50	287.50-343.50 288.00-346.00 238.50-326.50	-	=	:	:	7	1 1	35 28 7	23	45 40 5	64 52 12	91 86 5	100 91 9	78 75 3	58 54 4	:	:	:	=	:	3	

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Detroit, Mich., March 1977

		(m	erage ean ²)			(mea	ın²)			(me	erage an ²)
Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings l (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings l (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weeki earning (standa
OFFICE OCCUPATIONS - MEN				OFFICE OCCUPATIONS -				OFFICE OCCUPATIONS -			
ESSENGERS:			\$	WOMENCONTINUED				WOMENCONTINUED			
MANUFACTURING	63	40.0	156.50	SECRETARIES - CONTINUED			\$	TYPISTS - CONTINUED			4
SERVICES	69	39.0	135.00	SECRETARIES, CLASS C	4,148		261.00	TYPISTS, CLASS B			
RDER CLERKS	428	40-0	237.00	MANUFACTURING	2,462	40.0	285.00	MANUFACTURING	1,072		
MANUFACTURING	76	39.5	254.50	WHOLESALE TRADE	450		281.00	DUDI TO UTTI TTIES	110	40.0	181
NONMANUFACTURING	352	40.0	233.50	FINANCE	638		192.50	WHOLESALE TRADE	69		
WHOLESALE TRADE	352	40.0	233,50	SERVICES	292	37.5	211.00	WHOLESALE TRADEFINANCESERVICES	621 142		
ORDER CLERKS, CLASS A	238		256.50	SECRETARIES, CLASS D	1,653		223.50				
NONMANUFACTURING	191		259.50	MANUFACTURING	895		241.50	FILE CLERKS			
WHOLESALE TRADE	191	40.0	259.50	NONMANUFACTURING	758 49		203.00	MANUFACTURING	72 940		
ORDER CLERKS, CLASS B	190	40.0	213.00	SERVICES	54		219.50	WHOLESALE TRADE	136		
NONMANUFACTURING	161	40.0	202.50			30.5	20000	FINANCE	652		
WHOLESALE TRADE	161	40.0	202.50	STENOGRAPHERS	2,166		216.50				11.
ALCOHOLD STATE OF THE STATE OF				MANUFACTURING	1,168		227.00	FILE CLERKS, CLASS A	134		
MANUFACTURING	684 419		270.50	NONMANUFACTURING	998 260		204.00	NONMANUFACTURINGFINANCE	91 85		
NONMANUFACTURING:	419	40.0	306.00	WHOLESALE TRADE	122		235.50	TINANCE COLLEGE	95	30.0	130
WHOLESALE TRADE	82	40.0	282.00	RETAIL TRADE	141	39.0	177.50	FILE CLERKS, CLASS B	363		
ACCOUNTING CLERKS, CLASS A	503	40-0	299.50	SERVICES	214	31.5	199.00	NONMANUFACTURING	350 262		
MANUFACTURING	381	40.0	313.00	STENOGRAPHERS, GENERAL	675	39.5	193.00	THAILCE	200	0000	
NONMANUFACTURING	122	39.5	257.00	MANUFACTURING	214		197.00	FILE CLERKS, CLASS C	515		
				NONMANUFACTURING	461		191.00	NONMANUFACTURING	499		
MANUFACTURING	93 81		309.00	PUBLIC UTILITIESFINANCE	134 105		249.50	WHOLESALE TRADEFINANCE	101	40.0	
MANOT ACTORING	01	40.0	310.00	SERVICES	109		172.50	FINANCE	343	37.3	****
ABULATING-MACHINE OPERATORS	120	40.0	305.00					MESSENGERS:			
MANUFACTURING	60	40.0	303.00	STENOGRAPHERS, SENIOR	1,491		227.50	MANUFACTURING	66	40.0	191
TABULATING-MACHINE OPERATORS,				NONMANUFACTURING	537			SWITCHBOARD OPERATORS	647	39.5	179
CLASS A	66	40.0	331.50	WHOLESALE TRADE	82	40.0	252.50	MANUFACTURING	194		
				SERVICES	165	37.0	216.50	NONMANUFACTURING	433		
				TRANSCRIBING-MACHINE TYPISTS	233	30.0	162.50	PUBLIC UTILITIES	110		
OFFICE OCCUPATIONS - WOMEN				NONMANUFACTURING	217		160.00		105		
				PUBLIC UTILITIES	26	40.0	182.00	SERVICES	119	38.5	141
				WHOLESALE TRADE	93	39.0	162.50		000		
MANUFACTURING	8,705 4,950		259.50	TYPISTS	2,491	30.0	168.50	SWITCHBOARD OPERATOR-RECEPTIONISTS-	926 376		
NONMANUFACTURING	3,755		225.50	MANUFACTURING	669		200.50	NONMANUFACTURING	550		
WHOLESALE TRADE	887	39.5	276.00	NONMANUFACTURING	1,822	38.5	157.00	PURI IC UTIL ITIES	32		
FINANCE			199.00	PUBLIC UTILITIES	267		231.00	WHOLESALE TRADE	186		151
SERVICES	695	38.0	213.50	FINANCE	136 755		192.50	RETAIL TRADE	104		129
SECRETARIES, CLASS A	587	40-0	297.00	SERVICES	506		132.50	SERVICES	152		
MANUFACTURING	379		318.50	32.11.2029	300	3000	. 47630	SERVICES			
NONMANUFACTURING:				TYPISTS, CLASS A				ORDER CLERKS	838		158
FINANCE	68		260.50	MANUFACTURING	378		220.50	MANUFACTURING			188
SERVICES	56	39.5	247.00	NONMANUFACTURING	750 148	38.5	184.50	NONMANUFACTURING	543		142
SECRETARIES, CLASS 8	2,235	39.5	275.00	WHOLESALE TRADE	67		214.00	WHOLESALE INAUE	705	70.0	1 200
MANUFACTURING	1.214		307.00	FINANCE	134		157.00	ORDER CLERKS, CLASS A	68	40.0	227
NONMANUFACTURING	1.021	39.0	237.50	SERVICES	364		158.00				
WHOLESALE TRADE	173		296.50					ORDER CLERKS, CLASS B	770		152
RETAIL TRADE	113		207.00					MANUFACTURING	523		183
FINANCE									76.	31 30 4	21 LJ/

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Detroit, Mich., March 1977—Continued

			rerage ean ²)			Ave (me	erage an ²)				erage ean ²)
Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings l (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings 1 (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Week earnin (standa
OFFICE OCCUPATIONS - WOMENCONTINUED				OFFICE OCCUPATIONS - WOMENCONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - MENCONTINUED			
COUNTING CLERKS	5,311		182.50 213.00	KEYPUNCH OPERATORS	4,717 933		179.00 230.50	COMPUTER PROGRAMMERS (BUSINESS) -			
NONMANUFACTURING	3,543	39.0	167.00	NONMANUFACTURING	3,784	39.5	166.50	CONTINUED			+
WHOLESALE TRADE	506 1,495		194.50	RETAIL TRADE	505 258		220.00 156.00	COMPUTER PROGRAMMERS (BUSINESS),	643	40.0	\$ 382
FINANCE	724 607	38.0	161.50 159.50	FINANCE	704		159.00	MANUE ACTURENC	362	40.0	39
					1000	1000		NONMANUFACTURING	281 30	39.5	
ACCOUNTING CLERKS, CLASS A	1,929		216.50 241.50	MANUFACTURING	1,800		198.50 252.00	WHOLESALE TRADE	79 90	40.0	
NONMANUFACTURING	1,040	39.0	195.00	NONMANUFACTURING	1,433	39.5	185.00		,,,	3743	32
PUBLIC UTILITIES	113		242.00	PUBLIC UTILITIES	145 192		263.00	COMPUTER PROGRAMMERS (BUSINESS),	525	39.5	31
RETAIL TRADE	335 312	39.5	175.00	SERVICES	686		165.50	MANUFACTURING	240		
SERVICES	186		186.00	KEYPUNCH OPERATORS, CLASS B	2,917		167.00	NONMANUFACTURING: WHOLESALE TRADE	80	40.0	34
ACCOUNTING CLERKS, CLASS B	3,382	39.5	163.00	MANUFACTURING	566 2,351		217.00	FINANCESERVICES	97 73		
MANUFACTURING	879	40.0	183.50	WHOLESALE TRADE	313	40.0	214.00		13	3763	1
NONMANUFACTURING	2,503		155.50 177.50	RETAIL TRADEFINANCE	170 382		152.00		232	39.5	20
RETAIL TRADE	1,160	39.5	148.50	SERVICES	1,380		137.50	MANUFACTURING	112		
SERVICES	412 421		146.00	TABULATING-MACHINE OPERATORS	125 58		233.50	COMPUTER OPERATORS	1,535	39.5	26
OKKEEPING-MACHINE OPERATORS	264		178.00	MANUFACTURING	36	40.0	295.50	MANUFACTURING	718	39.5	23
MANUFACTURING	204		192.00					WHOLESALE TRADE	87		
FINANCE	56		145.50	PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN				FINANCE	262	38.5	20
BOOKKEEPING-MACHINE OPERATORS,				OCCOPATIONS - MEN				SERVICES			
NONMANUFACTURING	83 65		209.50	COMPUTER SYSTEMS ANALYSTS				MANUFACTURING	214		30
				(BUSINESS)	1,711		404.00	NONMANUFACTURING	208	39.5	27
BOOKKEEPING-MACHINE OPERATORS, CLASS B	181	39.0	163.50	NONMANUFACTURING:			419.00	PUBLIC UTILITIES	32		25
NONMANUFACTURING	139	38.5	158.00	SERVICES	96	39.0	345.00	SERVICES	66		
CHINE BILLERS	224 189		197.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS) + CLASS A:				COMPUTER OPERATORS, CLASS B	757		
NONMANUFACTURING	70	40.0	267.00	MANUFACTURING	374	40.0	455.00	MANUFACTURING	375		
WHOLESALE TRADE	111	40.0	163,50	NONMANUFACTURING: SERVICES	64	39-0	366.50	FINANCE	128		
BILLING-MACHINE BILLERS	181	40.0	202.50								
NONMANUFACTURING	146 70	40.0	207.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B	745	40.0	386.00	COMPUTER OPERATORS, CLASS C	228		
		100		MANUFACTURING	510		400.00	NONMANUE ACTURTUS	128	39.0	11
MANUFACTURING	747 358		191.50	COMPUTER PROGRAMMERS (BUSINESS)	1,400	39.5	334.50	FINANCE	74	39.0	1
NONMANUFACTURING	389 80	39.0	184.00		714		349.50	DRAFTERS	4,118		
RETAIL TRADE	148	39.0	158.50	PURLIC UTILITIES	67		347.00	MANUFACTURING	-1 718		
FINANCE	71 80		191.00	WHOLESALE TRADE	205 176		363.00 288.00	PUBLIC UTILITIES	106	40.0	0 2
	1										
								DRAFTERS, CLASS A	2,399	3 40 . 0	0 4:
								NONMANUFACTURING	-1 210	40.0	0 3
								SERVICES	200	40.0	13

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Detroit, Mich., March 1977—Continued

	Number		verage nean ²)			Ave (me	erage an ²)				erage ean ²)
Sex, 3 occupation, and industry division	of workers	Weekly hours 1 (standard)	Weekly earnings 1 (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings l (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings (standard
PROFESSIONAL AND TECHNICAL OCCUPATIONS - MENCONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMEN				PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMENCONTINUED			
DRAFTERS - CONTINUED DRAFTERS - CLASS B	974	40.0	\$ 321.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS): MANUFACTURING	98	40.0	\$ 368.00	COMPUTER OPERATORS: MANUFACTURING	214	40.0	\$ 259.50
MANUFACTURING	655 319 77 196	39.5	344.50 274.00 279.00 275.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B: MANUFACTURING	53	40-0	358.50	WHOLESALE TRADE	101		218.50
DRAFTERS, CLASS C MANUFACTURING	672 558 114	40.0		COMPUTER PROGRAMMERS (BUSINESS): MANUFACTURING: NONMANUFACTURING:	167		312.50	COMPUTER OPERATORS, CLASS C	135 71 64	39.5 40.0	226.5 259.0 190.0
SERVICES	99	40.0	227.00	COMPUTER PROGRAMMERS (BUSINESS),	56	40.0	326,50		59		289.5
MANUFACTURING	64 256	40.0	234.00	CLASS B: MANUFACTURING	76	40.0	303.00	REGISTERED INDUSTRIAL NURSES	441 404	40.0	310.0
MANUFACTURING	174 82 40	40.0	341.50 312.00 319.00	COMPUTER PROGRAMMERS (BUSINESS), CLASS C: MANUFACTURING	57	40.0	281.00				
ELECTRONICS TECHNICIANS, CLASS A-	88	40.0	380.00								
ELECTRONICS TECHNICIANS, CLASS 8-	138	40.0	306.00								

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Detroit, Mich., March 1977

			Hourly ear	mings 4	Numb	er of w																					
Occupation and industry division	Number of workers	Median ²	Mean 2	Middle range ²	Under	5.20 and	5.40	5.60	5.80	\$ 6.00	6.20	\$ 6.40	6.60	6.80	7.00	7.20	7.40 7	-60 7	.80	8.00	- 40	8.80 9	.20 9	.6010 -	-0010	- 4010	an
					5.20	under 5.40		5.80	6.00	6.20	6.40	6,60	6.80	7.00	7.20	7.40	7.60	.80 8	.00	8.40 8	8.80	9.20 9	.6010	.0010	.4010	.80 o	v
ALL WORKERS																											
AINTENANCE CARPENTERS	- 841 - 650 - 191 - 36	8.23	8.56	8.03- 8.60 7.13-10.48	-	:	1	3	:	1	8 2 6 4	12 12 11	17 17 15	41 36 5	17 14 3 3	55 48 7	44 19 25	8 5 3 3	32 29 3	89 89 -	417 400 17	2	2 -	1 -	5 -	85 85	
AINTENANCE ELECTRICIANS	4,071 166 25	8.63 7.98 7.23	8.85 7.74 7.14	7.14- 8.85 7.14- 7.51	:	7 - 7	:	:	:	:	16	9 -	20 4	85 83 2	77 60 17 10	91 91 -	90 71 19 11	90 69 21	94 90 4 - 4		1181 1169 12		2 -	:	10	:	
AINTENANCE PAINTERS		8.20		7.88- 8.55	-	:	1 1	Ξ	Ξ	1	6	6	2	30	19	39 24 15	1	28	106 105 1	24 24	430 417 13	:	=	:	Ξ	48	
AINTENANCE MACHINISTS MANUFACTURING NONMANUFACTURING: PUBLIC UTILITIES	930	8.21	8.68		-	:	:	:	36 36	18 18	=	28 10	23	24 24	61	54 46	:	85 85	22	170 170	332 332	95 95	74 74	1	:	:	
AINTENANCE MECHANICS (MACHINERY) MANUFACTURING MONMANUFACTURING	4,806	8.34 8.36	8.76 8.76	8.54- 8.78 8.56- 8.78	25	:	19 17 2	65 65	18	38	214	143 141 2	34 34	60	24	68 53 15	173 173		21 146 119 27		2497 2494 3	1087 1083 4	11	:	20	=	
AINTENANCE MECHANICS (MOTOR VEHICLES) MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE	1,204	8.35 7.83 7.77	8.60 8.03 8.03	8.20- 8.63 7.50- 8.18 7.45- 8.13	:	1 1 1	24 17 7 7	20 20 6 13	22 22 22	13 1 12 10	29 9 20 20	33 18 15	27 22 5 5	8 6 2 2	78 33 45 17 12	56 6 50 40	135 46 89 80 3	158 35 123 85 15	53 8 45 45	170	1119 984 135	41 1 40 40		:			
AINTENANCE PIPEFITTERS	2,771	8.42 8.43		8.60- 8.63 8.60- 8.63		:	:	:	:	=	19 14	-	:	60	34	55 50	11 11	111 111	119 119		2221 2201	15 15	Ξ	-	5	:	
MANUFACTURING	663	8.42 8.45		8.60- 8.60 8.60- 8.60		:	:	:	-	:	6	6	:	:	12	47 47	:	2	16	34 34	512 512	28 28	=	:	-	:	
ILLWRIGHTS	4,385 4,337	8.42 8.42				:	-	=	:	:	:	:	35 35	64	77	98 98	2	8	406 406		3356 3308	81 81	=	:	-	:	
MINTENANCE TRADES HELPERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	665	6.71	6.75		24	4	:	6	20	16 1 15 15	123	17	273 273	82 44 38 38	51 43 8	40	101 69 32 32	7 7 7	:	1 -	:	:	:	:	:	:	
ACHINE-TOOL OPERATORS (TOOLROOM)				8.68- 8.69 8.68- 8.69	=	:	:	=	:	:	=	2	15 15	:	10 10	10 10	27	3	18 18		1524 1524		11 11	:	20	:	
OL AND DIE MAKERS	6,909	8.61 8.61				:	:	:	:	:	102 102	:	41 41	14	·68 ·68	90	55 55	693 693	76 76			4218 4218	:	:	:	:	
ATIONARY ENGINEERS	733 520 213 104	8.70	8.77 7.40	8.60- 8.85 6.50- 7.67	12	18 18 1	:	7	:	7 7 7	8 8 2	38 8 30 30	19 8 11 8	5 2 3 2	3 2 1	15 9 6 3	25 8 17 12	69 18 51 24	14 8 6	31	225	113	55 52 3	7 7 -	14	16 10 6	
DILER TENDERS	504 457					1	-	-	26 26	:22	8	4	2	8	3	6	12	20	-	13	339 319		-	:	15 15	:	

^{*} Workers were at \$5 to \$5.20.
** Workers were distributed as follows: 2 at \$3.40 to \$3.60; 6 at \$3.60 to \$3.80; 2 at \$4 to \$4.20; and 2 at \$4.20 to \$4.40.

Table A-5. Hourly earnings of material movement and custodial workers in Detroit, Mich., March 1977 ,

			Hourly ea	rnings 4	Numb	er of	worke	rs rec	eiving	straig	ht-tim	ne hou	rly ea	rnings	of												
Occupation and industry division	Number of workers	Mean 2	Median ²	Middle range ²	\$ 2.30 and under	2.40	2.60	2.80	3.00	3.20	3.40	3,60	\$ 3,80 -	4.00	4.20	\$ 4.40 -	\$ 4.60	\$ 4.80 -	5.00 -	5.20	\$ 5.60 -	\$ 6.00	\$ 6,40 -	\$ 6.80	7.20	7.60	8. an
					2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.60	6.00	6.40	6.80	7.20	7,60	8.00	ov
ALL WORKERS																											
TRUCKDRIVERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE FINANCE SERVICES	2,905 8,415 4,407 2,124 1,249 71	7.16 7.13 7.85 6.61 6.41 4.96	7.17 7.53 7.96 7.19 7.03 5.19	6.71- 7.99 6.70- 7.96 7.96- 7.96 5.30- 7.48	:		35 35 - - - 35	5	35 35 - 15 - 20	61 61 	35 35 - 9 26	19 19 - - 2 17	25 4 21 2 - 4 15	12 3 - 4 5	69 2 15 30 2	21 12 9 - - 1 8	197 41 156 1 155	93 36 57 56	392 14 378 30 336 12	704 232 472 1 418 48 5	237 32 205 2 30 144 29	307 97 210 17 3 1 1	821 296 525 17 308 5	721 295 20 163	980	1115 3935 3206 314	2
TRUCKDRIVERS, LIGHT TRUCK MANUFACTURING NOMMANUFACTURING RETAIL TRADE FINANCE SERVICES	897 234 663 173 67 316	6.16 5.40 5.55 5.03	6.32 6.43 7.09 5.25	3.55- 7.09 3.25- 7.09 4.34- 5.75	:	:::::::::::::::::::::::::::::::::::::::	35 35 35	5	35 35 15 20	61 30 1	34 34 9 25	17 17 -	17 17 2 15	9 - 4 5	32 32 30 2	13 4 9 - 1 8	8 8 -	25 24 1 - 1	20 8 12 -	23 18 5 - 5	54 8 46 - 29	60 58 2 1	205 46 159 1 -	153 57 96 96	84	7 3 4	
TRUCKDRIVERS, MEDIUM TRUCK ————————————————————————————————————	443	6.36 6.88 6.36	6.71 7.19 6.75	5.98- 7.96 5.30- 7.48	=	:	:	:	:	:	1 - 1	2	8 4 4	3	37 37 15 20	:	131 10 121 120	63 7 56 56	:::::::::::::::::::::::::::::::::::::::	306 119 187 186	154 10 144	24 19 5 3	384 177 207 168 39	230 61 169 155	190 36 154 154	767	
TRUCKDRIVERS, HEAVY TRUCK (TRAILER)	6,344 1,629 4,715 3,238 619 835	7.55 7.42 7.84 6.58	7.97 7.94 7.96 7.28	7.42- 7.99 7.53- 7.96 7.53- 7.96 5.30- 7.86	:					:	:		:::::::::::::::::::::::::::::::::::::::		:	8 8 -	35 35 35	5	366 366 30 336	369 89 280 - 232 48	14	52 14 38 15	60 56 4	218 22 6	178 1126 980	2623 2081 224	2
TRUCKORIVERS, HEAVY TRUCK (OTHER THAN TRAILER)	965	7.51	7.83	7.28- 7.97	-	-	-	-	_	-	-	-	-	-	-	-	6	-	6	6	-	6	157	24	240	520	
SHIPPING CLERKS MANUFACTURING NONMANUFACTURING WHOLESALE TRADE	507 313 194 181	7.22 6.81	7.16 7.24	7.16- 7.45 5.90- 7.24	-	:	:	:	:	:	:	:	:	:	2	:	7 7 6	3 2 1 -	:	21 7 14 7	27 27 25	26 24 2	1 -	174 158 16 16	169 46 123 123	40	**
RECEIVING CLERKS NONMANUFACTURING WHOLESALE TRADE RETAIL TRADE	1,080 606 151 391	6.48	5.04 7.16	2.90- 6.26 5.61- 7.16	48	-	35 35 -	57 57 57	11 11 -	20	21 21 - 20	11 11 -	15 15 -	7 7 - 6	6	5 5	23 19 12 7	14 14 9 5	47 42 - 42	57 45 12 33	74 37 22 15	107 71 7 2	9	385 68 68	51 21 21	21	
SHIPPING AND RECEIVING CLERKS	671 405					=	:	:	:	:	:	:	:	:	15	:	:	5	14	69 69	23 16	66 32	21 17	402 221	31 28		
WAREHOUSEMEN	3,387 844 2,543 1,050 670	6.42 6.23 6.53	6.60 6.36 7.03	6.01- 6.98 5.34- 7.03 5.20- 7.19	=		:	:	:	48	32 32 32	:	27 20 7 7	64 64 64	:	:	18 18 18	60 18 42 42	252 12 240 186 54	329 66 263 28 235	123 57 66 22 44	994 170 824 8	155		80 34 46 14	150	

^{*} Workers were at \$8 to \$8.40. ** Workers were distributed as follows: 14 at \$8 to \$8.40; 13 at \$8.40 to \$8.80; and 6 at \$8.80 to \$9.20.

Table A-5. Hourly earnings of material movement and custodial workers in Detroit, Mich., March 1977—Continued

			Hourly ea	mings 4		ber of																					
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	and under	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	-	4.60	4.80	5.00	5.20	5.60	6.00	6.40	-	-	-	ar
ALL WORKERS CONTINUED									-		,	3434															
RDER FILLERS	3,618 3,165 2,568 576	\$ 6.55 6.55 6.56 6.59	6.98	5.74- 7.16 5.86- 7.16	:	:	:	:	:	:	7 7 -	:	35 13 13	139 139 96 29	1 1 1	2 2	60 60 60	177 157 150 7	52 52 49 3	286 278 248 30	261 206 91 115	52 42 42	28	2124 1786 1626 160	378 378 178 200	:	
HIPPING PACKERS	957	6.08 6.08 6.07 6.12	6.28	5.45- 7.00 5.44- 6.94	:	:	:	:	:	:	:	:	35 35 -	:	78 78 78	3 3 3	55 55 -	60 60 -	34 10 24 18	296 202 94 85	48 10 38	202	55 55 -	611 328 283 283	:	:	
ATERIAL HANDLING LABORERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES WHOLESALE TRADE RETAIL TRADE	4,298	6.46 6.32 7.79 6.28	6.84 7.00 7.86 6.91	6.84-'7.08 4.59- 7.86 7.76- 7.86 5.30- 7.00	2	77	35 35 -	42 42 - 42	30 - 30 - 30	26 26 -	55 17 38 -	109 66 43 - 43	169 149 20 -	120 93 27 -	96 87 9	263 89 174 - 100 74	64 50 14 - 14	53 5 48 - 30 18	150 144 6 - 6	173 56 117 9 87 21	103 66 37 8 -	81 81		3674 3335 339 - 331 8	100 100 54 46	858 858 858	
ORKLIFT OPERATORS	9,099	6.83 6.89 6.84	7.05 7.07 7.07	6.98- 7.07 6.98- 7.19 6.98- 7.08	=	:	-	=	:	22 20 2	:	10 10 -	2 - 2	14	11 7 4 - 4	57 46 11 7 4	55 52 3 3	100 56 44 44	2 2	653 604 49 22 27	243 155 88 70 18	336 274 62 14 48	468 74 7	7854 7107 747 587 160	149 83 66 66	443 176 267 81 76	
OWER-TRUCK OPERATORS (OTHER THAN FORKLIFT)	794	6.91	7.00	7.00- 7.00	-	-	-	-	-	-	-	-	-	14	-	-	-	-	_	-	41	56	71	481	99	32	
UARDS AND WATCHMEN	4,079 65 118 509	3.60 6.94 3.27 4.93	7.26 3.28 7.03 3.15 4.85	7.08- 7.26 3.28- 3.28 6.61- 7.03 2.95- 3.55 4.00- 5.75	23	418	263 263 7 256	33 33 13 20	83 30 2	2333 2333 10 7 2316	95 5 90 - 19 65 6	90 10 80 14 25 41	37 37 2 15 20	63 63 4 41 18	34 34 2 27 5	41 8 33 -	33 33 1 32	25 25 1 19 5	66 13 53 - 22 31	115 46 69 - 2 62 5	184 47 137 1 - 63 73	157 128 29 5 24	345 248 97 26 71	134	1898 1789 109	11 11 11	
GUARDS: MANUFACTURING	2,327	7.11	7.26	7.25- 7.26	-	-	-	-	_	-	-	-	-	-	-	3	-		3	28	19	110	233	122	1789		
MATCHMEN: MANUFACTURING	121	5.68	5.92	5.21- 6.18	-	-	_	-	-	-	5	10	-		-	5	-		10	18	28	18	15	12	-	_	
MNITORS, PORTERS, AND CLEANERS MANUFACTUR!/NG	5,519 7,437 338 217	6.37 3.89 5.80 6.08 3.46 4.16	6.74 3.80 5.79 6.74 3.31 3.80	6.21- 6.74 3.44- 4.00 5.23- 6.37 5.16- 6.74 2.70- 3.95 3.80- 4.25	96	408	324 324 12 171 141	44	139	413 25 388 - 130 11 247	17 454 - 3 160 20	1182 19 1163 1 - 81 68 1013	28 2214 - 10 98 469	56	449 137 312 20 135 109 48	159 56 103 4 - 19 37 43	85 30 55 1 - 11 31 12	202 36 166 10 6 78 64 8	240 161 79 45 4 12	326 222 104 77 - 8 14 5	525 433 92 55 - 19 8	165	4001 3806 195 56 139	304 274 30 - 23 -	115 45 70 4 - 34 - 32	1	

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Detroit, Mich., March 1977

				-	-
Sex, ³ occupation, and industry division	Number of workers	Average (mean ²) hourly	Sex, 3 occupation, and industry division	Number of workers	Average (mean ² hourly
	womers.	earnings 4		Workers	earnings
MAINTENANCE, TOOLROOM, AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN		
	100	\$			\$
MAINTENANCE CARPENTERS	815 649		MANUFACTURING	2,891	7.14
NONMANUFACTURING	166		NONMANUFACTURING	8,288	7.13
PUBLIC UTILITIES	36		PUBLIC UTILITIES	4.394	7.85
			WHOLESALE TRADE	2,124	6.61
MAINTENANCE ELECTRICIANS	4,216		RETAIL TRADE	1,167	6.31
MANUFACTURING	4,071		SERVICES	564	5.39
NONMANUFACTURING	145		TOWNSON LINE TOWNS	0.50	
PUBLIC UTILITIES	25	7.23	TRUCKDRIVERS, LIGHT TRUCK	859	5.60
WHOLESALE TRADE	51	8.28	MANUFACTURING	230 629	6.18 5.39
MAINTENANCE PAINTERS	732	8.34	RETAIL TRADE	173	5.55
MANUFACTURING	654	8.20	SERVICES	316	4.86
THAT HOTOLING	054	0.20	32001023	3.0	4.00
MAINTENANCE MACHINISTS	1,023	8.12	TRUCKDRIVERS, MEDIUM TRUCK	2.298	6.78
MANUFACTURING	930	8.21	MANUFACTURING	441	6.35
NONMANUFACTURING:	1000		NONMANUFACTURING	1,857	6.88
PUBLIC UTILITIES	93	7.19	WHOLESALE TRADE	950	6.36
			SERVICES	60	5.70
MAINTENANCE MECHANICS (MACHINERY) -	4,804				
MANUFACTURING	4,726	8.36	TRUCKDRIVERS, HEAVY TRUCK		
NONMANUFACTURING	78	7.04	MANUFACTURING		7.46
MAINTENANCE MECHANICS			NONMANUFACTURING	1,623	7.55
(MOTOR VEHICLES)	2.454	8.13	PUBLIC UTILITIES	3.238	7.42
MANUFACTURING	1.338	8.35	WHOLESALE TRADE	619	6.58
NONMANUFACTURING	1.116	7.87	RETAIL TRADE	835	6.50
PUBLIC UTILITIES	807	7.83	NETHER THADE	000	0.50
WHOLESALE TRADE	230			965	7.51
MAINTENANCE PIPEFITTERS	2,771	8.42	101.2.	,	,,,,,
MANUFACTURING	2,737	8.43	SHIPPING CLERKS	471	7.04
		1000	MANUFACTURING	288	7.17
MAINTENANCE SHEET-METAL WORKERS	663		NONMANUFACTURING	183	6.82
MANUFACTURING	641	8.45	WHOLESALE TRADE	174	6.90
MILLWRIGHTS	4,384		RECEIVING CLERKS	812	6.29
MANUFACTURING	4,336	8.42	NONMANUFACTURING	388	5.52
			WHOLESALE TRADE	148	6.52
MAINTENANCE TRADES HELPERS	777 665	6.69	RETAIL TRADE	178	4.45
MANUFACTURING	112	6.69		565	6.63
PUBLIC UTILITIES	92	7.06	MANUFACTURING	351	6.62
MACHINE-TOOL OPERATORS (TOOLROOM) -	2,205	8.66	WAREHOUSEMEN	3.276	6.26
MANUFACTURING	2,205	8.66	MANUFACTURING	810	6.41
			NONMANUFACTURING	2,466	6.20
TOOL AND DIE MAKERS	6,907	8.61	WHOLESALE TRADE	981	6.50
MANUFACTURING	6,907	8.61	RETAIL TRADE	662	5.53
STATIONARY ENGINEERS	712		ORDER FILLERS	2,950	6.70
MANUFACTURING	520	8.70	MANUFACTURING	334	6.55
NONMANUFACTURING	192		NONMANUFACTURING	2,616	6.72
FINANCE	104	7.10	RETAIL TRADE	2,151	6.70
BOILER TENDERS	504	8.03	ACTAL TRADE	751	0.09
MANUFACTURING	457	8.19			

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Detroit, Mich., March 1977—Continued

Sex, 3 occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴	Sex, ³ occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴
MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MENCONTINUED			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - WOMEN		
		\$			\$
SHIPPING PACKERS	943			106	
MANUFACTURING	716		MANUFACTURING	54	6.95
WHOLESALE TRADE	182		WAREHOUSEMEN		
WHOLESALE TRADE	182	5.41	WAREHOUSEMEN	111	6.94
MATERIAL HANDLING LABORERS	5.927	6.45	ORDER FILLERS	668	5.87
MANUFACTURING	4.028		NONMANUFACTURING	549	5.73
NONMANUFACTURING	1,899	6.47	WHOLESALE TRADE	417	5.84
PUBLIC UTILITIES	878	7.79			1
WHOLESALE TRADE	601	6.26	SHIPPING PACKERS	528	5.99
RETAIL TRADE	416		MANUFACTURING	241	5.30
			NONMANUFACTURING	287	6.56
FORKLIFT OPERATORS	10.436	6.84	WHOLESALE TRADE	285	6.57
MANUFACTURING					
NONMANUFACTURING	1,409	6.89		419	6.03
WHOLESALE TRADE	893	6.84	NONMANUFACTURING	149	4.65
RETAIL TRADE	398	6.76			
			FORKLIFT OPERATORS	82	6.52
POWER-TRUCK OPERATORS (OTHER			MANUFACTURING	72	6.46
THAN FORKLIFT)	790	6.91			1
			GUARDS AND WATCHMEN:		
GUARDS AND WATCHMEN:			MANUFACTURING	75	7.14
MANUFACTURING	2,373	7.04			
NONMANUFACTURING:			GUARDS:		
PUBLIC UTILITIES	61	6.96	MANUFACTURING	75	7.14
RETAIL TRADE	75	3.33			
	1		JANITORS, PORTERS, AND CLEANERS:		
GUARDS:			MANUFACTURING	869	6.31
MANUFACTURING	2,252	7.11	NONMANUFACTURING:		
			RETAIL TRADE	440	3.07
WATCHMEN:					
MANUFACTURING	121	5.68			
JANITORS, PORTERS, AND CLEANERS:					
MANUFACTURING	4.650	6.39			
NONMANUFACTURING:	.,,550	0.00			
WHOLESALE TRADE	180	6.06			
RETAIL TRADE					

Table A-7. Percent increases in average hourly earnings, adjusted for employment shifts, for selected occupational groups in Detroit, Mich., for selected periods

	February 1972	to March 1973				
Industry and occupational group 5	13-month increase	Annual rate of increase	to March 1974	to March 1975	to March 1976	to March 1977
All industries:						
Office clerical	5.7	5.3	7.1	10.5	7.7	7.6
Electronic data processing	(6)	(6)	(6)	9.5	7.0	7.0
Industrial nurses	5.7	5.3	8.8	13.0	7.9	8.5
Skilled maintenance trades		4.9	8.6	10.4	7.2	9.3
Unskilled plant workers	6.5	6.0	9.3	11.4	8.6	8.2
Manufacturing:						
Office clerical	4.7	4.3	7.1	12.3	7.4	7.9
Electronic data processing	(6)	(6)	(6)	9.7	6.7	7.8
Industrial nurses	5.5	5.1	8.8	13.0	7.9	8.7
Skilled maintenance trades		4.8	8.7	10.5	7.1	9.4
Unskilled plant workers	6.1	5.6	10.6	12.4	8.3	8.8
Nonmanufacturing:						
Office clerical	6.6	6.1	7.0	8.9	8.0	7.4
Electronic data processing	(6)	(6)	(6) (6)	9.7	7.5	6.3
Industrial nurses	6.5	6.0	(6)	(6)	(6)	(6)
Unskilled plant workers	7.5	6.9	5.6	9.1	9.0	7.4

Table A-8. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1977

					y earnings ¹ andard)	Numb	per of	worker																		
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	Under \$ 100	and under	110	120	130	140	150	-	180	200	220	240	260	280		320	340		380 - 400	-	
ALL WORKERS																										
CRETARIES	4,418	40.0 39.0 39.5 39.5	292.50 242.50 211.50 209.50	298.00 242.50 210.00 205.00	\$ 234.50-314.00 261.50-323.50 201.00-285.50 186.50-238.00 179.00-229.50 233.50-293.00		:	3 3 1 2	18 2 16 2 14	27 27 10 16 1	33 10 19 4	72 4 68 8 40 6	69 209 16	414 88 326 100 191 3	505 174 331 65 208 12	609 248 361 76 146 33	855 434 421 60 71 28	962 688 274 24 37 47	888 605 283 3 37 53	898	779 641 138 - 15 6	355 296 59	120 107 13	107 102 5	29 28 1	
SECRETARIES, CLASS A	289 160 59	40.0 39.5	279.00	352.00	269.00-372.50 278.00-393.50 237.00-300.50 234.50-263.00	:	:	:	:	:	1 1	:	4	1	5 5 3	41 10 31 28	41 22 19 11	62 45 17 13	50 17 33 1	43 18 25 2	26 17 9	34 30 4	46 39 7	33 29 4	28 27 1	
SECRETARIES, CLASS B		40.0 39.0 38.5 40.0 39.0 39.5	315.50 267.00 270.50 336.50 218.00 242.50	329.50 262.00 266.50 342.50 209.00 242.00	254-50-344-00 278-50-351-50 233-00-300-00 256-00-275-50 328-00-355-50 200-00-238-00 224-00-262-50 278-00-298-00				2 - 2 - 2 -	2 - 2 - 2 -	2 - 2 - 2 -	1 1	8 2 6 - 3 2 1	51 15 36 2 1 19 14	74 25 49 2 - 28 17 2	130 53 77 9 1 15 49 3	177 86 91 27 1 16 45 2	231 104 127 80 - 4 28 15		142 108 34 6 15	301 250 51 7 29 -	314 260 54 7 47	70 64 6 - 6	70 69 1 1 -	1 1	
SECRETARIES, CLASS C	3,741 2,303 1,438 349 174 418	40.0 39.0 40.0 39.5	289.50 242.00 298.50 198.00	299.00 238.00 310.00 186.50	238.50-310.50 272.00-315.50 203.50-285.00 287.00-319.50 186.50-223.50 183.50-227.00	:		1 - 1 -	2 2 2	6 - 6 -	12	14 4 10 - 3 5	134 26 108 2 12 80	218 30 188 8 73 84	246 64 182 4 18 112	306 94 212 - 23 73	408 156 252 19 20 22	453 375 78 38 7 6		887 717 170 134 -	447 370 77 76	1	1 1	4		
SECRETARIES CLASS D	1,338 737 601 45 351	40.0 40.0 40.0	249.00 211.00 214.00	250.00 200.00 170.50	194.50-270.50 223.50-275.50 169.00-257.00 158.00-278.00 162.00-201.50	:	:	2 - 2	12	19 19 -	18	56 56 14 35	132 41 91 11 79	139 42 97 93	171 85 86 79		217 170 47	216 164 52 10	124 76 48 8	95 55 40 1	5 4 1 1	6	3	:	:	
ENOGRAPHERS	995	40.0 39.5 40.0 39.0	235.50 210.00 248.00 174.50	237.00 198.00 261.50 175.50	185.50-260.50 212.00-260.50 165.50-261.50 221.50-274.00 157.50-192.00 150.50-181.00	:::::::::::::::::::::::::::::::::::::::	1 - 1	:	5 - 5 -	23 5 18 - 3 15	65 8 57 2 9 44	100 10 90 3 37 50	194 63 131 5 43 82		166 112 54 22 14 10	263 216 47 20 6 1	48	353 142 211 129	144 108 36 8 - 3	1 -		3 3	:		:	
STENOGRAPHERS, GENERAL	168 357 144	40.0 40.0 40.0	205.00 202.00 245.00	203.00 192.00 260.50	164.50-243.50 173.50-233.00 157.50-258.50 220.50-274.00 143.50-166.00	:::	1 -	:::::::::::::::::::::::::::::::::::::::	4 -	15 15 -	41 8 33 2 22	54 5 49 3 14	83 42 41 5	85 25 60 18 7	49 23 26 7 5	59 36 23 14	37 17 20 12	89 12 77 75	8 8 8	:	:	:	: : :	:	:	
STENOGRAPHERS, SENIOR	827	40.0	241.50	243.50	199.00-263.50 223.50-262.00 170.00-263.50 155.50-184.00	:	:	:	1	8 5 3 2	24 24 22	46 5 41 36	111 21 90 64	147 77 70 42	117 89 28 5		209	264 130 134 2		1 -	:	3	:	:	:	

Table A-8. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1977—Continued

					y earnings 1 andard)	Num						-	me we			s of—	-									
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	Unde \$ 100	100 r and under	110	120	130	-	150	\$ 160 - 180	-	200	220	240	260	-	300	320	340	360	380	-	
ALL WORKERS CONTINUED																										
RANSCRIBING-MACHINE TYPISTS NONMANUFACTURING FINANCE	69 68 51	40.0	171.00	158.00	\$ 145.00-186.00 144.00-186.00 138.50-170.50		2 2	=	4 4	8 8 8	9 9 7	13 13 13	10 10 8	11 11 5	1	5	1	:	5 4 4	:	:	:	:	:	:	
YPISTS	427 762 150	40.0 39.5 40.0 39.5	228.50 170.00 219.50 145.00	234.00 149.50 214.50 139.50	139.50-248.00 193.00-271.50 134.50-196.00 181.50-265.50 130.00-151.00 144.00-254.00	:	8 4 4 - 4 -	32 32 13	126 17 109 1 60 7	142 9 133 5 90 21	112 7 105 1 65 15	94 23 71 5 41 15	116 22 94 22 32 17	63 37 26 19 3	88 50 38 28	82 65 17 11	110 54 56 10 2 35	153 78 75 48 9 5	39 37 2 -	14 14 - -	10	:	:			
TYPISTS, CLASS A	607 279 328 88 76	40.0 38.5 40.0	246.00 201.00 241.50	254.00 188.50 265.50	166.00-266.50 225.00-275.00 151.00-258.00 214.00-274.00 145.00-167.50	=	:	4 - 2	11	39 9 30 - 8	37 2 35 -	48 11 37 19	46 6 40 8 9	33 17 16 10 3	36 17 19 9	56 44 12 7	101 51 50 6 2	142 68 74 48 9	30 30 - -	14 14 - -	10	:	:::::::::::::::::::::::::::::::::::::::	:	:	
TYPISTS, CLASS B	582 148 434 62 243	40.0 40.0 39.5	196.00 146.50 188.50	199.50 139.50 183.00	129.00-177.00 157.50-224.50 128.00-156.00 168.00-208.50 128.00-145.00	:	8 4 4 - 4	28 28 -	115 17 98 1 55	103 103 5 82	75 5 70 1 46	46 12 34 5 22	70 16 54 14 23	30 20 10 9	52 33 19 19	26 21 5 4	9 3 6 4	11 10 1	9 7 2 -	:		::::	:	:	:::::::::::::::::::::::::::::::::::::::	
MANUFACTURINGNOMMANUFACTURING	62 489	40.0 39.5 39.0	221.00 135.50 190.00	255.00 124.50 174.50	114.00-150.00 149.50-275.00 112.00-144.00 137.50-217.50 114.00-140.00	5 - 5 - 4	-	122 4 118 - 81	99 4 95 3 84	67 1 66 9 49	50 3 47 -	31 2 29 -	32 2 30 7 18	11 2 9 7 1	:	6 2 4	16 9 7 4	41 29 12 2 9	1 1 1	:	:	2 2 2	:		:::::::::::::::::::::::::::::::::::::::	
FILE CLERKS, CLASS A	67	40.0	244.50	275.00	239.00-275.00	-	-	-	3	1	6	3	1	1	-	2	7	40	1	-	-	2	-	-	-	
FILE CLERKS, CLASS B	137 123	39.5 39.5	151.50	147.00	134.00-158.00	1	2	8	16 12	20	33 30	23	21	1	:	4	7 4	1	-	-	-	:	:	-	-	
FILE CLERKS, CLASS C NONMANUFACTURING PUBLIC UTILITIES FINANCE	347 336 28 241	40.0 39.0	122.50	117.00	110.00-129.00 110.00-128.50 136.00-184.50 110.00-125.00		66 62 - 46	114 114 77	80 80 3 69	46 45 9 30	11 11 -	5 3 - 3	10 8 7 1	9 7 7 -	:	:	2 2 2	:	:	:	::	:	:	:	:	
ESSENGERS	393 97 296 73 87	40.0 39.0 39.5	189.50 149.50 125.50	183.50 131.00 116.00	116.00-180.00 144.00-236.00 115.00-178.00 108.00-144.50 130.00-150.50		25 8 17 16 1	91 87 26 16	24 9 15 4 2	43 1 42 4 33	34 12 22 7 11	21 8 13 2 11	25 3 22 8 8	59 14 45 3 2	5	12 9 3 -	15 4 11 -	31 20 11 -	4 -	:::::::::::::::::::::::::::::::::::::::	:::::	:	:	:	:	
MITCHBOARD OPERATORS MANUFACTURING NOMMANUFACTURING PUBLIC UTILITIES RETAIL TRADE FINANCE	179	40.0 39.5 40.0 39.5	254.00 176.00 235.50 148.50	260.50 158.00 246.50 145.50	156.50-265.50 235.00-275.00 145.50-198.50 237.00-251.50 133.00-163.50 138.50-172.50	3 - 3 -		2 - 1 -	20	19 19 7 12	33 33 28 5	30 6 24 4 6	28 1 27 - 13 14	24 3 21 1 9	27 22 5 3 1	25 19 6 5	58 37 21 17	66 54 12 7	23 20 3 -	21 17 4 -			:::::::::::::::::::::::::::::::::::::::			

Table A-8. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1977—Continued

					earnings t ndard)					-			ne wee													
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean ²	Median ²	Middle range ²	Under	100	110	120	130	140	150					\$ 240 -					340			400	\$ 4
							110	120	130	140	150	160	180	200	220	240	260	280	300	320	340	360	380	400	420	
ALL WORKERS CONTINUED																										
WITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING NONMANUFACTURING	130 71 59	40.0	181.00	168.00	\$ 134.50-190.00 146.50-208.00 118.50-175.50	-	-	10	8 3 5	17 10 7	6 5 1	14 7 7	30 19 11	11 8 3	11 6 5	5 4 1	5 3 2	1 1	7 6 1	:	:	:	:	:	:	
RDER CLERKS: MANUFACTURING	56	39.5	237.00	231.50	191.00-281.50	-	-	-	2	2	2	-	1	13	8	-	5	9	3	4	7	-	-	-	-	
MANUFACTURING	1,471 1,450 215 842	40.0 39.5 39.5 39.5	254.50 178.50 231.00 153.00	246.00 162.00 219.00 148.50	157.50-269.00 200.00-309.00 136.00-203.00 215.00-259.00 128.00-176.00 135.00-190.00	21	-	72 72 64 6	113 4 109 - 90 13	151 19 132 - 99 26	152 21 131 1 95 28	190 44 146 3 91 13	320 105 215 7 139 37	335 171 164 16 122 14	306 181 125 81 31 8	201 152 49 20 27 2	183 133 50 38 6 4	146 96 50 41 3 3	132 111 21 7 -	161 139 22 -	111 84 27 1 - 3	103 77 26 - 2	147 129 18	5 5	:	
ACCOUNTING CLERKS, CLASS A MANUFACTURING NONMANUFACTURING	962 446 91	40.0 39.5 40.0 39.5	282.50 222.50 243.50 177.00	292.00 203.50 247.50 176.50	206.00-321.00 228.00-332.00 170.00-261.00 220.00-260.00 158.00-193.00 157.50-208.00	=	6 - 6	4 - 4	24	10 - 10 - 8 2	5 - 1 4	21 19 13 6	104 20 84 55 28	96 39 57 4 39	174 132 42 15 16 6	151 118 33 16 15 2	113 68 45 33 6 4	84 60 24 17 2	100 93 7 5	150 135 15 -	111 84 27 1 -	103 77 26 -	147 129 18	5 5	:	
ACCOUNTING CLERKS, CLASS B MANUFACTURING	1,004 124 663	39.0 39.0 39.0	159.00 221.50 146.50	150.00 219.00 144.00	139.00-196.50 170.50-238.50 130.00-180.50 200.00-237.00 124.00-162.00 130.00-170.00	21	66	68	89 4 85 - 66 13	19	147 21 126 1 94 24	169 42 127 3 78 7	131 7	132 107 12	83 66 15	12		62 36 26 24 1	32 18 14 2 -	11 4 7 - 7	:::::::::::::::::::::::::::::::::::::::	:			:	
BOOKKEEPING-MACHINE OPERATORS	52	39.0	213,50	211.00	153.50-270.00	-	-	-	1	-	8	7	2	2	8	5	3	7	9	-	-	-	-	-	-	
PAYROLL CLERKS	257	40.0	237.00	224.00	150.00-257.00 177.50-301.00 133.50-191.50 128.50-168.50	1	5		38 20 18 14	21 2 19 13	39 22 17 6	23 4 19 10	59 22 37 15	62 33 29 14		6	18 16 2	19	21 16 5	17 17	13 12 1	13 10 3	26 26	:	:	
KEYPUNCH OPERATORS	734 1,387 262 293	40.0 7 39.5 2 39.5 3 40.0	248.50 196.50 226.50 158.50	260.50 180.50 254.00 158.00	162.50-266.50 215.50-292.00 156.50-256.50 186.50-259.50 140.00-180.50 150.00-215.00		2	14	21	118 5 43	38	161 12 149 5 43	71 240 33 54	200 37 73	8	88 39 8	230 74 156 110 1 3	104	309 184 125 7	102 81 21	:	:	:	:	:	
KEYPUNCH OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING PETAIL TRADE	619	39.5	261.0	272.50	174.00-269.00 224.50-300.00 165.00-259.50 152.00-180.50		-	:	16 16 16	8	4	87 16	13	26	32 28	32 15	29	78 40 38 1	97 66 31	102 81 21	-	:	:	:	:	
KEYPUNCH OPERATORS, CLASS B MANUFACTURING	41: 76: 16: 17:	5 40.6 8 39.5 2 39.6 0 39.5	239.0 190.5 209.5 152.0	0 247.00 0 168.00 0 200.00 0 148.00	152.00-266.50 203.50-286.00 140.00-254.00 183.50-254.00 134.50-160.00		9	14	50	110 5 35	10 74 - 38	74 12 62 5 27 24	58 103 28 34	14 70 37 17	38 40 29 2	56 24 4 1	52 31	64 66 23		:	:	:	:	:		

Table A-8. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1977—Continued

					earnings 1	Numl	per of	worke	rs rec	eiving	straig	ght-ti	me we	ekly e	arning	s of—										
Occupation and industry division	Number of	Average weekly hours l				Under		\$ 110	120	130	140	150	160	180	200	220	\$ 240	\$ 260	\$ 280	300	320	340	\$ 360	380	400	\$ 42
	workers	(standard)	Mean ²	Median 2	Middle range ²	\$	and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•
							110	120	130	140	150	160	180	200	220	240	260	280	300	320	340	360	380	400	420	44
ALL WORKERS CONTINUED																										
ABULATING-MACHINE OPERATORS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	113	40.0	300.50 289.50	305.50	\$ 267.50-325.00 276.00-325.00 267.50-324.50 219.00-293.50	-	:	:	:	:	:	-	::::	3 2 1 1	18 2 16 16	8 3 5	15 12 3	22 13 9 8	47 17 30 21	40 30 10 3	23 16 7	34 14 20 3	2 2 -	3 2 1	:	
TABULATING-MACHINE OPERATORS, CLASS A	88	40.0	328.50	334.50	311.50-349.50	-	-	-	-	_	-	-	-	-	-	2	2	1	9	14	21	34	2	3		
TABULATING-MACHINE OPERATORS, CLASS B	59 56	40.0	285.50	299.00	250.50-299.50 273.00-307.00 219.00-293.50 215.00-293.50	-	=	:	:	:	:		:::::::::::::::::::::::::::::::::::::::	3 2 1 1	18 2 16 16	4 1 3	8 6 2	19 10 9 8	35 13 22 15	26 23 3	2 2	:	:	:	:	

Table A-9. Weekly earnings of professional and technical workers—large establishments in Detroit, Mich., March 1977

					y earnings ¹ andard)									ekly ea												
Occupation and industry division	Number of workers	Average weekly hours 1	Mean ²	Median ²	Middle range ²	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	\$ 520	\$ 56(
		(standard)	Mean	Median	whome range	and under 140		180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	601
ALL WORKERS																										
OMPUTER SYSTEMS ANALYSTS (BUSINESS)	1,153	40.0	415.00	423.00	\$ 348.50-472.50 356.50-476.00 340.00-464.50 327.00-387.50	-	:	:	:	:	10 2 8	17 13 4 2	39 31 8 4	105 60 45 6	152 60 92 29	128 68 60 36	162 74 88 41	167 78 89 43	139 83 56 33	144 81 63 28	160 112 48 6	184 108 76 1	178 124 54 3	328 190 138 2	92 57 35	1
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A MANUFACTURING NONMANUFACTURING FINANCE	865 383 482 130	40.0	456.00	466.50	398.50-492.50 408.50-511.50 395.00-492.50 354.50-404.00	-	:	:	:	:	:::	:	1 1	8 6 2 2	17 8 9	24 8 16 11	48 20 28 15	59 21 38 25	61 25 36 28	71 24 47 27	68 30 38 6	87 34 53 1	92 45 47 3	226 94 132 2	91 56 35	1
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES FINANCE	807 560 247 93 96	40.0 39.5 39.0	396.50 368.00 366.00	408.00 359.00 360.00	326.00-453.00 322.00-467.50 328.50-395.00 342.50-383.00 326.00-359.50	=				:	:	8 -	31 28 3 1 2	58 50 8 4 3	80 50 30 10 16	81 49 32 5 25	85 32 53 26 26	67 23 44 22 18	42 23 19 7 5	15	52 43 9 2	75 54 21 8	78 71 7 3	96 6	1	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C	345 135				307.00-406.00 299.00-317.00		:	:	:	=	10	9	7 4	39	55 53	23 12	29 7	41	36	26	40	22	8 -	=	:	
MPUTER PROGRAMMERS (BUSINESS) MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES FINANCE	1,475 825 650 74 224	40.0 40.0 40.0	348.50 323.00 340.50	351.50 320.00 321.00	291.00-388.50 304.50-407.50 280.50-365.50 282.50-390.00 265.00-346.00	5	2	33 24 9 - 5	29 18 11 -	28 11 17 3 6	43 21 22 1 11	76 32 44 7 16	84 31 53 6 32	123 46 77 13 32	203 116 87 7 22	156 68 88 6 21	137 79 58 3 29	133 79 54 7 11	116 71 45 7 12	93 69 24 4 5	101 72 29 2	56 48 8 -	36 24 12 2 3	4 2		
COMPUTER PROGRAMMERS (BUSINESS), CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES FINANCE	602 392 210 26 93	40.0 40.0 40.0	395.50 379.50 407.50	407.00 377.50 392.50	355.50-430.00 365.00-436.00 338.50-422.00 342.00-470.00 326.50-386.00	=	-	:	:		6 4 2 - 2	10 8 2 -	17 12 5 -	17 5 12 3 4	33 22 11 3 8	32 10 22 1 16	47 27 20 19	78 45 33 4 10	80 50 30 3	74 55 19 4	93 67 26	55 47 8 -	12	15 4 2	2	
COMPUTER PROGRAMMERS (BUSINESS), CLASS B	577 291 286 27 95	40.0 40.0 40.0	323.50 312.50 320.00	330.50 316.50 313.50	285.00-351.50 298.50-360.00 280.50-342.00 270.00-359.00 265.00-302.50	=	-	:	6 4 2 - 2	13 8 5 -	21 14 7 -	47 20 27 6 12	42 13 29 3 21	56 14 42 3 26	51	104 48 56 3 5	80 46 34 3	52 33 19 1	15	5	8 5 3 2	1	:		:::::::::::::::::::::::::::::::::::::::	
COMPUTER PROGRAMMERS (BUSINESS), CLASS C MANUFACTURING NONMANUFACTURING	296 142 154	40.0	268.50	295.00	217.50-310.00 193.00-310.00 227.00-310.00	-	-	33 24 9	23 14 9	15 3 12	16 3 13	19 4 15	25 6 19	50 27 23	77 43 34	20 10 10	10 6 4	3 1 2	1 1 -	:	:	:	:	:	Ξ	
MPUTER OPERATORS	1,467 954 513 126 92 199	40.0 39.5 39.5 39.5	284.50 244.50 250.50 216.00	307.00 228.50 235.50 222.00	207.00-334.00 214.50-346.00 198.00-288.00 215.00-284.00 174.50-244.50 183.50-242.50	7	109	47 45 4	10	153 59 94 46 12 33	92 30 62 7 25 29	83 43 40 8 8 23	99 58 41 19 8 13	54	152 119 .33 .7 .2 .6	124	123 100 23 2	92 74 18 3	1 -	3	-	-	-			

Table A-9. Weekly earnings of professional and technical workers—large establishments in Detroit, Mich., March 1977—Continued

					ly earnings landard)	Num	ber of	worke	ers re	ceiving	g strai	ight-ti	me we	ekly e	arning	gs of-	-									
Occupation and industry division	Number of workers	Average weekly hours 1 (standard	,	Median ²	Middle range ²	and under	140	\$ 160 - 180	180	200	220	240	260	280	300	320	340	360	380	400	420	440	\$ 460 -	\$ 480 -	\$ 520 - 560	
ALL WORKERS CONTINUED						- 1,0	100	200	200	220	2.10	200	200	300	SLV	510	300	300	100	420	770	400	400	320		
COMPUTER OPERATORS - CONTINUED																										
COMPUTER OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	364 250 114 28	40.0	330.50	349.00	\$ 256.50-374.50 301.00-381.00 235.50-348.00 249.00-298.50	:	:	:	16 8 8	33 30 3	24 2 22 6	21 12 9 4	12 7 5	22 3 19 12	26 17 9	29 25 4	54 42 12	48 37 11 3	52 43 9	18 15 3 2	7 7 -	2 -	:	=	:	
COMPUTER OPERATORS, CLASS B MANUFACTURING		40.0 39.5 39.0	291.50 251.00 237.00	310.00 235.50 219.00	218.50-330.50 236.00-340.00 215.00-282.00 215.00-270.50 199.00-251.00	1 -	1 - 1	50 41 9 - 8	52 29 23 8 13	91 70 46 17	54 25 29 1 18	46 24 22 14	58 26 32 15 10	32 18 14 2 3	88 66 22 6 2	88 80 8 1	55 44 11 2	44 37 7	35 30 5	:	:	:	:	-	:	
COMPUTER OPERATORS, CLASS C MANUFACTURING NONMANUFACTURING FINANCE	408 263 145 83	40.0 39.5	229.50 194.50	246.50	152.50-284.50 147.00-301.00 165.00-214.00 166.00-210.50	6 6	109	42 6 36 19	36 3 33 22	29 8 21 14	14 3 11 9	16 7 9 5	29 25 4	38 33 5	38 36 2	20 19 1	14 14 -	:	:	:	=	:	:	:	:	
RAFTERS		40.0	394.50	411.50	328.50-452.50 345.50-455.00 260.00-323.50 260.00-315.50	:	15 15 -	22 19 3	19 11 8	45 39 6	49 29 20 10	84 66 18 11	117 62 55 45	163 138 25 18	205 171 34 14	180 152 28 6	246 237 9 5	219 206 13 4	227 214 13 12	228 228 -	357 356 1	376 376	341 341 -	307 307 -	:	
DRAFTERS, CLASS A	1,953	40.0 40.0	434.00 437.00	442.00	406.00-468.50 410.50-469.00	Ξ	:	:	-	:	:	1	1	6	29 12	52 32	67 63	128 118	155 142	191 191	316 315	359 359	341 341	307 307	:	
DRAFTERS, CLASS B	675 545 130 88	40.0	350.50 269.50	352.00	286.00-379.50 312.00-393.00 246.50-287.50 260.00-288.50	:	:	2	3	2	27 7 20 10	42 27 15 8	72 27 45 37	55 35 20 15	76 66 10 7	62 57 5 3	95 90 5 5	73 70 3 3	71 71 -	37 37 -	41 41 -	17 17 -	:	:	:	
DRAFTERS, CLASS C	500 466				267.50-331.50 275.00-335.00	:	10 10	20 19	15 10	40 36	11 11	22 19	24 15	90	99 92	66 63	84 84	18 18	1	-	:	-	Ξ	-	:	
DRAFTER-TRACERS	72 72				236.00-272.50 236.00-272.50	:	5	Ξ	1	3	11 11	19 19	20	12	1	-	:	:	:	:	:	:	:	:	:	
ECTRONICS TECHNICIANS	167 160				311.00-367.00 309.00-372.50	:	:	-	:	:	:	:	:	26 25	38 37	40 37	16 15	11 10	22	10 10	3	1	:	:	:	
ELECTRONICS TECHNICIANS, CLASS A-	51	40.0	374.00	377.50	351.50-400.50	-	-	-	-	-	-	-	-	1	1	6	11	7	11	10	3	1	-	-	-	
EGISTERED INDUSTRIAL NURSES	448 404				296.00-346.50 298.00-348.00	:	=	:	:	1	30 25	13 13	22 17	64	88 83	94 85	78 75	58 54	-	:	:	=	:	-	:	

Table A-10. Average weekly earnings of office, professional, and technical workers, by sexlarge establishments in Detroit, Mich., March 1977

		Av (me	erage ean ²)		0.51	Ave (me	rage an ²)			Ave (me	erage an ²)
Sex, 3 occupation, and industry division	Number of workers	Weekly hours (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours (standard)	Weekl earning (standar
OFFICE OCCUPATIONS - MEN			4	OFFICE OCCUPATIONS - WOMENCONTINUED				OFFICE OCCUPATIONS -			
CCOUNTING CLERKS	456 382		311.00 316.50	STENOGRAPHERS - CONTINUED				WOMENCONTINUED ACCOUNTING CLERKS - CONTINUED			
ACCOUNTING CLERKS, CLASS A	408 354		321.00 322.50	STENOGRAPHERS, SENIOR	1,203 827		237.00 241.50	MANUFACTURING	1,389	40.0	199.
AYROLL CLERKS	82	40.0	323.50	TYPISTS	1,095	39.5	194.00 228.50	RETAIL TRADE	658	39.0	146
BULATING-MACHINE OPERATORS	115	40.0	306.50	NONMANUFACTURING	672 141	39.5	172.50	PAYROLL CLERKS	361		
TABULATING-MACHINE OPERATORS, CLASS A	61	40.0	336.50	SERVICES	118	37.0	186.00	MANUFACTURING	101	40.0	201
				TYPISTS, CLASS A	601 275	40.0	221.50		1		
OFFICE OCCUPATIONS - WOMEN				NONMANUFACTURING	326 88 76	40.0	201.00 241.50 167.00	KEYPUNCH OPERATORS	733	40.0 39.5	248 198
ECRETARIES	6,532 4,398		277.50 292.50	TYPISTS, CLASS B	494 148		161.00 196.00	RETAIL TRADESERVICES		38.5	179
NONMANUFACTURING: SERVICES	202	37.0	258.00	NONMANUFACTURING: PUBLIC UTILITIES	53	40.0	189.50	KEYPUNCH OPERATORS, CLASS A MANUFACTURING	894 319 575	40.0	261
SECRETARIES, CLASS A	386 289		326.00 340.00	FILE CLERKS	494 433	40.0	144.50	KEYPUNCH OPERATORS, CLASS B	1,075	40.0	210
SECRETARIES, CLASS B	1,568		301.50 315.50	FINANCEFILE CLERKS, CLASS A	321 65		132.00	MANUFACTURING	661 170	39.5 39.5	192
NONMANUFACTURING: WHOLESALE TRADE	102	39.0	336.50 219.50	FILE CLERKS, CLASS B	133 120		151.00 151.50	TABULATING-MACHINE OPERATORS:			
FINANCE	170 74		242.00 283.50	FILE CLERKS, CLASS C	296	40.0	120.00	MANUFACTURING	58	40-0	295
SECRETARIES, CLASS C	3,347		276.00	FINANCE	204	40.0	119.00	PROFESSIONAL AND TECHNICAL			
NONMANUFACTURING: WHOLESALE TRADEFINANCE	348	40.0	298.50	SWITCHBOARD OPERATORS	331 172		219.50 254.00	OCCUPATIONS - MEN			
SECRETARIES, CLASS D			236.00	NONMANUFACTURING: PUBLIC UTILITIES	36	40.0	234.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS):			
MANUFACTURING	734	40.0	249.00	SWITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING	127 70 57	40.0	169.00 179.50 156.50	MANUFACTURING	1,058	40.0	419
TENOGRAPHERS	1,672		228.50 235.50	ACCOUNTING CLERKS	1.089	40.0	199.50	Policia de la composición dela composición de la composición dela composición dela composición dela composición de la composición de la composición de la composición dela composición	371	40.0	455
NONMANUFACTURING: PUBLIC UTILITIES RETAIL TRADE	227		250.50 177.50	NONMANUFACTURING	1,296 833 177	39.5	171.00 152.50 173.00	(BUSINESS), CLASS B	661		
STENOGRAPHERS, GENERAL	469	40.0	207.00	ACCOUNTING CLERKS, CLASS A MANUFACTURINGNONMANUFACTURING	996	40.0	259.50	COMPUTER PROGRAMMERS (BUSINESS)			
PUBLIC UTILITIES	131	40.0	208.00	RETAIL TRADE	179	39.5	211.00 243.00 176.00	PUBLIC UTILITIES	60	1	
				FINANCE	70	40.0	182,50	COMPUTER PROGRAMMERS (BUSINESS), CLASS A	505 358		396

Table A-10. Average weekly earnings of office, professional, and technical workers, by sexlarge establishments in Detroit, Mich., March 1977—Continued

			erage ean ²)				erage an ²)				erage ean ²)
Sex, 3 occupation, and industry division	Number of workers	Weekly hours (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours (standard)	Weekl earning (standar
PROFESSIONAL AND TECHNICAL OCCUPATIONS - MENCONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN-CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMENCONTINUED			
COMPUTER PROGRAMMERS (BUSINESS)- CONTINUED				DRAFTERS	3,031 2,913		392.00 396.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS) - CONTINUED			
COMPUTER PROGRAMMERS (BUSINESS),	392		\$ 323.00	PUBLIC UTILITIES	106		296.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B: MANUFACTURING	50	40.0	\$ 360.0
COMPUTER PROGRAMMERS (BUSINESS),	218	40.0	329.50	DRAFTERS, CLASS A	1,897		437.00	COMPUTER PROGRAMMERS (BUSINESS):			
CLASS C: MANUFACTURING	85	40.0	260.00	DRAFTERS, CLASS B MANUFACTURING NONMANUFACTURING:	614 529		340.50 351.00		164	40.0	314.5
MANUFACTURING	1,109 767		277.50 288.50	PUBLIC UTILITIES	77		279.00	CLASS B: MANUFACTURING	73	40.0	306.5
NONMANUFACTURING:	61	39.5	225.50	DRAFTERS, CLASS C	466 450	40.0	294.50	COMPUTER PROGRAMMERS (BUSINESS) + CLASS C:			
MANUFACTURING	299 211 88	40.0	328.50 339.50 302.00	DRAFTER-TRACERS	54 54		249.50 249.50	MANUFACTURING	57	40.0	281.0
PUBLIC UTILITIES	28	40.0	296.50	ELECTRONICS TECHNICIANS	167 160		340.50 341.00	MANUFACTURING	187	40.0	268.5
MANUFACTURING	510 355		288.00	ELECTRONICS TECHNICIANS, CLASS A-	51	40.0	374.00	COMPUTER OPERATORS, CLASS B: MANUFACTURING	86	40.0	269.0
COMPUTER OPERATORS, CLASS C MANUFACTURING	300 201	40.0	210.00 220.00 190.00	PROFESSIONAL AND TECHNICAL- OCCUPATIONS - WOMEN				COMPUTER OPERATORS, CLASS C	104 62		238.5
FINANCE	56		179.50					DRAFTERS: MANUFACTURING	54	40.0	301.0
				COMPUTER SYSTEMS ANALYSTS (BUSINESS): MANUFACTURING	95	40.0	369.00	REGISTERED INDUSTRIAL NURSES	387 359		317.0

Table A-11. Hourly earnings of maintenance, toolroom, and powerplant workers—large establishments in Detroit, Mich., March 1977

			Hourly ea	rnings 4	Numbe																						
Occupation and industry division	Number of workers	Mean 2	Median ²	Middle range ²	Under	5.80				\$ 6.60								8.20				9.00	9.20	9.40	9.60	\$ 9.801	
					5.80	under	6.20	6.40	6.60	6.80	7.00	7.20	7.40	7.60	7.80	8.00	8,20	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.801	0-00	ov
ALL WORKERS				10.1																							
MAINTENANCE CARPENTERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	677 586 91 36	8.27 7.44	8.56		1	:	:	8 2 6 4	12 12 11	17 17 15	36 36 -	17 14 3 3	33 33 -	27 2 25	8 5 3 3	9 6 3	78 78 -	7 7 -	133 128 5	284 272 12	:::	2	1 -	1 1 -	1 -	:	
MAINTENANCE ELECTRICIANS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	3,815	8.69	8.85 7.74	8.78- 8.85 8.78- 8.85 7.51- 8.85 7.14- 7.51	-	:	:	16 16	2 -	6 4	58 56 2	55 45 10 10	69 69 -	41 30 11 11	53 32 21	24 20 4	72 72 -	204 204 -		1105 1093 12		12	2 -	:	:	:	,,,,
MAINTENANCE PAINTERS	592 557			8.01- 8.56 8.35- 8.56		:	1	1 -	6	2	30 30	19 19	39 24	1	28	13 12	15 15	5	426 415	2	:	:	:	:	-	:	
MAINTENANCE MACHINISTS MANUFACTURING NONMANUFACTURING:	849 756			8.16- 8.68 8.25- 8.68		:	:	:	28 10	:	24 24	56 10	54 46	:	:	21	78 78	92 92	28 28	301 301	92 92	1	72 72	2	:	:	
PUBLIC UTILITIES	93	7.19	7.06	7.06- 7.25	-	-	-	-	18	-	-	46	8	-	-	21	-	-	-	-	-	-	-	-	-	-	
MAINTENANCE MECHANICS (MACHINERY) = MANUFACTURING ====================================	3,998	8.59	8.78	8.69- 8.85	65	=	38 38 -	44	34 34	6	4	=	51 36 15	67 67	37	36 9 27	52 47 5	60 60		2426 2424 2		11 11	10 10	:	Ξ	Ξ	
MAINTENANCE MECHANICS (MOTOR VEHICLES) MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	1,243	8.45 7.95	8.60	8.50- 8.63 7.63- 8.60	4	12	3 1 2 -	24 4 20 20	18 18 18	9 4 5 5	8 6 2 2	37 23 14 14	10 6 4 4	61 20 41 41	69 32 37 29	32 3 29 29	184 18 166 148	184 143 41	80 76 4	1012 907 105	18 18 18	22 22 22	:	:	:	:	
MANUFACTURING						:	-	19 14	Ξ	:	60 60	34 30	50 50	11 11	106 106	6	59 59	62 62		2105 2087	15 15	:	Ξ	:	-	:	
MAINTENANCE SHEET-METAL WORKERS MANUFACTURING				8.60- 8.60 8.60- 8.60		:	-	6	6	:	=	12	47 47	:	5.	16	26 26	8	14 14	489 489	Ξ	28 28	Ξ	-	-	:	
MANUFACTURING				8.60- 8.63 8.60- 8.63		-	:	=	:	-	64 64	77 77	98 98	2	8	406 406	145 145	12		3133 3091	64 64	17 17	Ξ	:	:	:	
MACHINE-TOOL OPERATORS (TOOLROOM) - MANUFACTURING						:	:	:	2	:	-	Ξ	10 10	10 10	3	18 18	17 17	77 77		1293 1293		14 14	11 11	:	:	:	
MANUFACTURING						:	:	:	:	26 26	14 14	:	20 20	2	42	32 32	30 30	84 84		1179 1179		4	:	Ξ	Ξ	:	
STATIONARY ENGINEERS	495	8.73	8.78	8.60- 8.85	-	:	:	8	10 8 2	12 8 4	3 2 1	3 2 1	15 9 6	13 8 5	43 16 27	14 8 6	10 10	1	33 33 -	194 189 5	117 111 6	3 2 1	25 25	30 27 3	7 7	:	2

^{*} Workers were distributed as follows: 1 at \$4.80 to \$5; 5 at \$5 to \$5.20; 1 at \$5.20 to \$5.40; and 2 at \$5.60 to \$5.80.

Table A-12. Hourly earnings of material movement and custodial workers—large establishments in Detroit, Mich., March 1977

			Hourly ea	rnings 4	Numb	er of v	vorker	s rec	eiving	straig	ht-tim	ne hour	rly ear	rnings	of—												
Occupation and industry division	Number of workers	Mean 2	Median ²	Middle range 2	\$ 2.30	\$ 2.40			\$ 3.00						4.20 4				5.00				\$ 6.40		\$ 7.20	\$ 7.60	\$ 8.
					under 2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40 4	+.60	4.80	5.00	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00	0
ALL WORKERS																											
RUCKDRIVERS	2,024 1,744 439	7.42	7.97 7.96 7.87	6.99- 7.99 7.96- 7.96 7.76- 7.94	=	-		: : :	:	1 - 1	4 - 4 - 3	2 -	4 - 2	7 7 - 4	4 - 2	13 12 1 -	19 18 1	1 - 1	20 8 12 -	33 11 22 16 5	48 17 31 -	52 43 9 1	254 231 23 5	671 610 61 16	27	2607 1047 1560 400	
TRUCKDRIVERS, LIGHT TRUCK MANUFACTURING NOMMANUFACTURING FINANCE	55 69	5.76	5.79 5.63	5.03- 6.35 5.00- 5.78	-	:	:	:	:	1 1	3 3 3	2 -	2 2 2	4 4	2 2 2	5 4 1 1	8 8 -	1 1	20 8 12 12	5 5 5	39 8 31 29	17 15 2 1	9 6 3 -	6 6 -	:	:	
TRUCKDRIVERS, MEDIUM TRUCK: MANUFACTURING	262	6.66	6.71	6.71- 6.76	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	7	-	19	172	47	7	-	
TRUCKDRIVERS, HEAVY TRUCK (TRAILER) MANUFACTURING NONMANUFACTURING RETAIL TRADE	1,345	7.72	7.99 7.94	7.97- 7.99 7.87- 7.96	-	:	:	:	:	:	:	:	:	:	:	8 8 -	:	:		20 4 16 16	9	14 9 5	57 53 4 4	218 196 22 16	19	1929 1047 882 318	
HIPPING CLERKS	369	7.24	7.24	7.16- 7.24	-	-	-	-	-	-	-	-	-	-	2	-	1	3	-	9	2	9	1	142	145	20	
ECEIVING CLERKS NONMANUFACTUFING RETAIL TRADE	497	4.42	3.95	2.85- 6.26	48	32 32 32	35 35 35	57 57 57	11 11 11	20 20	20 20 20	11 11 11	15 15 15	6 6	6 6	5 5	11 7 7	5 5	42 42 42	45 33 33	23 15 15	66 64 2	9	361 44	30	23 21 21	
MANUFACTURING						=	:	:	Ξ	-	-	:	:	:	:	:	-	Ξ	-	-	5	47 27	13	401 220	28 28	:	
MANUFACTURING						-	-	Ξ	Ξ	Ξ	:	Ξ	20 20	:	:	:	:	:	7	67 66	19 7	120 107	54 36	657 311	18	150	
RDER FILLERS NONMANUFACTURING RETAIL TRADE	1,809	6.95	7.16	6.91- 7.16	-	=	=	=	=	=	=	:	35 13 13	29 29 29	1 1 1	2 2	:	27 7 7	3 3	38 30 30	125 115 115	10		1553 1215	378 378 200	Ξ	
HIPPING PACKERS	569	6.49	7.00	6.18- 7.02	-	:	Ξ	=	Ξ	=	Ξ	:	Ξ	Ξ	:	:	Ξ	60 60	16 10 6	34 32 2	48 10 38	74 74	55 55	604 328 276	:	:	
MATERIAL HANDLING LABORERS MANUFACTURINGNONMANUFACTURING RETAIL TRADE	3,722	5.45	6.84 5.76	6.84- 7.08 3.62- 7.00	2	77	35 35 35	42 42 42	30 30 30	26 26 26	34 34 34	87 44 43 43	36 16 20 20	103 76 27 27	61 52 9	78 4 74 74	30 16 14 14	18 18 18	14 8 6 6	45 15 30 21	65 28 37 29	71 71 -	57	3633 3335 298	86 86 46	100	
ORKLIFT OPERATORS MANUFACTURING NONMANUFACTURING RETAIL TRADE	8,139 814	6.95	7.07	6.98- 7.07 6.98- 7.08	-	::	:	:	:	:	:	:	2 2	14	4 4	4 4	:	:		347 320 27 27	91 73 18 18	206 158 48 48	378	7492 7005 487	15 15 -	333 176 157 76	
DWER-TRUCK OPERATORS (OTHER THAN FORKLIFT)	794	6.91	7.00	7.00- 7.00	-	-	-	-	-	_	_	_	_	14	-		-			-	41	56	71	481	99	32	

Table A-12. Hourly earnings of material movement and custodial workers—large establishments in Detroit, Mich., March 1977—Continued

			Hourly ea	rnings 4	Num	ber of	worke	rs rec	eiving	strai	ght-tir	ne hou	arly ea	arning	s of—												
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	and	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	\$ 7.60 - 8.00	and
ALL WORKERS CONTINUED																											
GUARDS AND WATCHMEN	4,003 2,336					13	7	13	16	1146	51	30 5	10	10	16	39 8	21	14	51 13	62 26	80 30	155 128	230 203	160 134		11	
PUBLIC UTILITIES RETAIL TRADE FINANCE	65 102 238	3.29	3.24	2.85- 3.5	9 -	13	7	13	14 2	10	19	14 11	2 8	4	2 14	31	1 20	1 13	- 22	2 34	49	22	26 1	21	1 -	11	
GUARDS: MANUFACTURING	2,245	7.13	7.26	7.25- 7.8	6 -	-	-	-	-	-	-	-	-	-	-	3	-	-	3	8	19	110	191	122	1789	-	
WATCHMEN: MANUFACTURING	91	5.84	5.93	5.21- 6.7	6 -	-	-	-	-	-	-	5	-	-	-	5	-	-	10	18	11	18	12	12	-	-	
JANITORS, PORTERS, AND CLEANERS MANUFACTURING NONMANUFACTURING PUBLIC UTLITIES RETAIL TRADE FINANCE	6,413 4,724 1,689 306 907 258	6.57 4.61	6.74 4.33 5.79 3.71	6.74- 6.7 3.51- 5.6 5.23- 6.1 3.30- 4.3	4 - 9 - 7 - 3 -	40 40	68 68 68	35 35 29 6	81 77 -75 2	123 20 103 - 94 9	119 119 105 14	126 4 122 1 65 56	134 6 128 - 94 24	70 8 62 - 40 22	169 169 133 36	25 4 21 4 4 13	33 33 1 7 25	141 2 139 10 78 51	139 79 60 45 12	118 85 77	491 408 83 54 19		52	277 254 23	66 - 34 -	1 -	

Table A-13. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex—large establishments in Detroit, Mich., March 1977

Sex, 3 occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴	Sex, ³ occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴	Sex, 3 occupation, and industry division	Number of workers	Average (mean ²) hourly earnings
MAINTENANCE, TOOLROOM, AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MENCONTINUED		
MAINTENANCE CARPENTERS	651 585		TRUCKDRIVERS	3,627 2,010 1,617	7.42		3,542 2,261	
PUBLIC UTILITIES	36		TRUCKDRIVERS, LIGHT TRUCK:		F 05	PUBLIC UTILITIES	61 59	
MAINTENANCE ELECTRICIANS MANUFACTURING NONMANUFACTURING:			TRUCKDRIVERS, MEDIUM TRUCK:	21	5.85	GUARDS:	2,170	7.13
PUBLIC UTILITIES	25		MANUFACTURING	260	6.66	WATCHMEN:		
MAINTENANCE PAINTERS	582 557			2,269		JANITORS, PORTERS, AND CLEANERS	91 5,041	
MAINTENANCE MACHINISTS	849 756		NONMANUFACTURING	930 355	7.84	MANUFACTURING	3,958	6.58
NONMANUFACTURING: PUBLIC UTILITIES	93	7.19	SHIPPING CLERKS	338	7.22	RETAIL TRADE	598	3.90
MAINTENANCE MECHANICS (MACHINERY) - MANUFACTURING NONMANUFACTURING	4,050 3,996 54	8.59		655 282 178	5.26	MATERIAL MOVEMENT AND CUSTODIAL		
MAINTENANCE MECHANICS (MOTOR VEHICLES)		8.45		388 234		SHIPPING AND RECEIVING CLERKS MANUFACTURING	106 54	
NONMANUFACTURING	456		WAREHOUSEMEN	1,016 514 502	6.46	WAREHOUSEMEN	97	6.9
MAINTENANCE PIPEFITTERS	2,617		ORDER FILLERS	1,760	1000	ORDER FILLERS	457 338	
MAINTENANCE SHEET-METAL WORKERS	654 632			1,471	7.07	SHIPPING PACKERS	361	6.5
MILLWRIGHTS	4,248			524 431		MANUFACTURING	138	1.0
MACHINE-TOOL OPERATORS (TOOLROOM) - MANUFACTURING			NONMANUFACTURING	3,452 840	6.75 5.61	FORKLIFT OPERATORS	146	6.78
TOOL AND DIE MAKERS	5,791 5,791		FORKLIFT OPERATORS	8,888	6.94	GUARDS AND WATCHMEN:	55	
STATIONARY ENGINEERS	558 495		NONMANUFACTURING	8,084 804 238	6.95	GUARDS:		7.1
			POWER-TRUCK OPERATORS (OTHER THAN FORKLIFT)	790	6.91	JANITORS, PORTERS, AND CLEANERS:	75	7.1
						MANUFACTURING	766	6.5

Appendix A. Scope and Method of Survey

Data on area wages and related benefits are obtained by personal visits of Bureau field representatives at 3-year intervals. In each of the intervening years, information on employment and occupational earnings is collected by a combination of personal visit, mail questionnaire, and telephone interview from establishments participating in the previous survey.

In each of the 74 1 areas currently surveyed, data are obtained 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. Major industry groups excluded from these studies are government operations and the construction and extractive industries. Establishments having fewer than a prescribed number of workers are omitted because of insufficient employment in the occupations studied. Separate tabulations are provided for each of the broad industry divisions which meet publication criteria.

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

Occupations and earnings

Occupations selected for study are common to a variety of manufacturing and nonmanufacturing industries, and are of the following types: (1) Office clerical; (2) professional and technical; (3) maintenance, toolroom, and powerplant; and (4) material movement and custodial. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B.

Unless otherwise indicated, the earnings data following the job titles are for all industries combined. Earnings data for some of the occupations listed and described, or for some industry divisions within the scope of the survey, are not presented in the A-series tables because either (1) 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.

¹ Included in the 74 areas are 4 studies conducted by the Bureau under contract. These areas are Akron, Ohio; Birmingham, Ala.; Norfolk—Virginia Beach—Portsmouth and Newport News—Hampton, Va.—N.C.; and Syracuse, 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. Department of Labor.

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 shown. (It is assumed that wages increase at a constant rate between surveys.)

Occupations used to compute wage trends are:

Office clerical

Secretaries
Stenographers, general
Stenographers, senior
Typists, classes
A and B
File clerks, classes A,
B, and C
Messengers
Switchboard operators

Office clerical—Continued

Order clerks, classes A and B Accounting clerks, classes A and B Bookkeeping-machine operators, class B Payroll clerks Keypunch operators, classes A and B

Electronic data processing

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

Industrial nurses

Pipefitters Tool and die makers Unskilled plant

Carpenters

Electricians

Painters

Machinists

Skilled maintenance

Mechanics (machinery)

Mechanics (motor vehicle)

Registered industrial 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.

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 in Detroit, Mich., March 1977

	Minimum	Number of est	ablishments	Wo	rkers in establishme	ents
Industry division ²	employment in establish-	Within scope		Within scop	pe of study 4	
	ments in scope of study	of study 3	Studied	Number	Percent	Studied
ALL ESTABLISHMENTS						
ALL DIVISIONS	-	1,600	313	787,503	100	542,071
ANUFACTURING	100	486	85	456.798	58	352,969
ONMANUFACTURING		1,114	228	330,705	42	189,102
OTHER PUBLIC UTILITIES5	100	100	32	63,398	8	48,279
WHOLESALE TRADE	50	250	41	42,386	5	21,893
RETAIL TRADE	100	222	37	114,132	14	67,338
FINANCE, INSURANCE, AND REAL ESTATE	50	177	44	55,858	7	34,114
SERVICES ⁷	50	365	74	54,931	7	17,478
LARGE ESTABLISHMENTS						
ALL DIVISIONS	-	174	103	566,153	100	502,812
ANUFACTURING	500	79	39	378.417	67	341,693
ONMANUFACTURING		95	64	187,736	33	161,119
TRANSPORTATION, COMMUNICATION, AND						
OTHER PUBLIC UTILITIES5	500	18	14	47,399	8	44,488
WHOLESALE TRADE	500	6	6	17,110	3	17,110
RETAIL TRADE	500	33	19	79,305	14	63,557
FINANCE, INSURANCE, AND REAL ESTATE6	500	20	15	32,609	6	28,907
SERVICES7	500	18	10	11,313	2	7,057

The Detroit Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties. The "workers within scope of study" estimates shown in this table 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 employment indexes 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.

The 1972 edition of the <u>Standard Industrial Classification Manual</u> was used in classifying establishments by industry division. However, all government operations are excluded from the scope of the survey.
3 Includes all establishments with total employment at or above the minimum

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

⁵ Abbreviated to "public utilities" in the A-series tables. Taxicabs and services incidental to water transportation are excluded. Detroit's transit system is municipally operated and is excluded by definition from the scope of the study.

6 Abbreviated to "finance" in the A-series tables.

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 staff 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 the grouping of 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 economists are instructed to exclude working supervisors; apprentices; learners; beginners; and part-time, temporary, and probationary workers. Handicapped workers whose earnings are reduced because of their handicap are also excluded. Trainees are excluded from the survey except for those receiving on-the-job training in some of the lower level professional and technical occupations.

Office

SECRETARY

Assigned as personal secretary, normally to one individual. Maintains a close and highly responsive relationship to the day-to-day work of the supervisor. Works fairly independently receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties, usually including most of the following:

- a. Receives telephone calls, personal callers, and incoming mail, answers routine inquiries, and routes technical inquiries to the proper persons;
 - b. Establishes, maintains, and revises the supervisor's files;
- $\ensuremath{\text{c. Maintains}}$ the supervisor's calendar and makes appointments as instructed:
 - d. Relays messages from supervisor to subordinates;
- Reviews correspondence, memoranda, and reports prepared by others for the supervisor's signature to assure procedural and typographic accuracy;
 - f. Performs stenographic and typing work.

May also perform other clerical and secretarial tasks of comparable nature and difficulty. The work typically requires knowledge of office routine and understanding of the organization, programs, and procedures related to the work of the supervisor.

SECRETARY—Continued

Exclusions

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

- a. Positions which do not meet the "personal" secretary concept described above;
 - b. Stenographers not fully trained in secretarial-type duties;
- c. Stenographers serving as office assistants to a group of professional, technical, or managerial persons;
- d. Secretary positions in which the duties are either substantially more routine or substantially more complex and responsible than those characterized in the definition;
- e. Assistant-type positions which involve more difficult or more responsible technical, administrative, supervisory, or specialized clerical duties which are not typical of secretarial work.
- NOTE: The term "corporate officer," used in the level definitions following, 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

Exclusions-Continued

identify such positions. Vice presidents whose <u>primary</u> 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" <u>for</u> purposes of applying the following level definitions.

Class A

1. Secretary to the chairman of the board or president of a company that employs, in all, over 100 but fewer than 5,000 persons; or

2. 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

3. 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.

Class B

1. Secretary to the chairman of the board or president of a company that employs, in all, fewer than 100 persons; or

2. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 100 but fewer than 5,000 persons; or

3. Secretary to the head, immediately below the officer level, over either a major corporationwide 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

4. 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

5. 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) or a company that employs, in all, over 25,000 persons.

Class C

1. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for class B, 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

2. 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.

Class D

1. Secretary to the supervisor or head of a small organizational unit (e.g., fewer than about 25 or 30 persons); or

2. 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.)

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, General

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

Stenographer, Senior

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

OR

Performs stenographic duties requiring significantly greater independence and responsibility than stenographer, general, as evidenced by the following: Work requires a high degree of stenographic speed and accuracy; a thorough working knowledge of general business and office procedure; and of the specific business operations, organization, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining 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.

TRANSCRIBING-MACHINE TYPIST

Primary duty is to transcribe dictation involving a normal routine vocabulary from transcribing-machine records. May also type from written copy and do simple clerical work. Workers transcribing dictation involving a varied technical or specialized vocabulary such as legal briefs or reports on scientific research are not included. A worker who takes dictation in shorthand or by Stenotype or similar machine is classified as a stenographer.

TY PIST

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

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

TY PIST—Continued

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

Federal Reserve Bank of St. Louis

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

SWITCHBOARD OPERATOR-RECEPTIONIST

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

ORDER CLERK

Receives written or verbal customers' purchase orders for material or merchandise from customers or sales people. Work typically involves some combination of the following duties: Quoting prices; determining availability of ordered items and suggesting substitutes when necessary; advising expected delivery date and method of delivery; recording order and customer information on order sheets; checking order sheets for accuracy and adequacy of information recorded; ascertaining credit rating of customer; furnishing customer with acknowledgement of receipt of order; following-up to see that order is delivered by the specified date or to let customer know of a delay in delivery; maintaining order file; checking shipping invoice against original order.

Exclude workers paid on a commission basis or whose duties include any of the following: Receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

Positions are classified into levels according to the following definitions:

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

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

ACCOUNTING CLERK

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

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

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

Class A. Under general supervision, performs accounting clerical operations which require the application of experience and judgment, for example, clerically processing complicated or nonrepetitive accounting transactions, selecting among a substantial variety of prescribed accounting codes

ACCOUNTING CLERK-Continued

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.

<u>Class B.</u> 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.

<u>Class A.</u> 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

PAYROLL CLERK-Continued

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.

KEYPUNCH OPERATOR

Operates a keypunch machine to record or verify alphabetic and/or numeric data on tabulating cards or on tape.

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

Class A. Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be keypunched from a variety of source documents. On occasion may also perform some routine keypunch work. May train inexperienced keypunch operators.

<u>Class B.</u> Work is routine and repetitive. Under close supervision or following specific procedures or instructions, works from various standardized source documents which have been coded, and follows specified procedures which have been prescribed in detail and require little or no selecting, coding, or interpreting of data to be recorded. Refers to supervisor problems arising from erroneous items or codes or missing information.

TABULATING-MACHINE OPERATOR

Operates one or a variety of machines such as the tabulator, calculator, collator, interpreter, sorter, reproducing punch, etc. Excluded from this definition are working supervisors. Also excluded are operators of electronic digital computers, even though they may also operate electric accounting machine equipment.

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

Class A. Performs complete reporting and tabulating assignments including devising difficult control panel wiring under general supervision. Assignments typically involve a variety of long and complex reports which often are irregular or nonrecurring, requiring some planning of the nature and sequencing of operations, and the use of a variety of machines. Is typically involved in training new operators in machine operations or training lower level operators in wiring from diagrams and in the operating sequences of long and complex reports. Does not include positions in which wiring responsibility is limited to selection and insertion of prewired boards.

Class B. Performs work according to established procedures and under specific instructions. Assignments typically involve complete but routine and recurring reports or parts of larger and more complex reports. Operates more difficult tabulating or electrical accounting machines such as the tabulator and calculator, in addition to the simpler machines used by class C operators. May be required to do some wiring from diagrams.

Class C. Under specific instructions, operates simple tabulating or electrical accounting machines such as the sorter, interpreter, reproducing punch, collator, etc. Assignments typically involve portions of a work unit, for example, individual sorting or collating runs, or repetitive operations. May perform simple wiring from diagrams, and do some filing work.

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

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

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

OR

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

COMPUTER SYSTEMS ANALYST, BUSINESS—Continued

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

COMPUTER PROGRAMMER, BUSINESS

Converts statements of business problems, typically prepared by a systems analyst, into a sequence of detailed instructions which are required to solve the problems by automatic data processing equipment. Working from charts or diagrams, the programmer develops the precise instructions which, when entered into the computer system in coded language, cause the manipulation of data to achieve desired results. Work involves most of the following: Applies knowledge of computer capabilities, mathematics, logic employed by computers, and particular subject matter involved to analyze charts and diagrams of the problem to be programmed; develops sequence of program steps; writes detailed flow charts to show order in which data will be processed; converts these charts to coded instructions for machine to follow; tests and corrects programs; prepares instructions for operating personnel during production run; analyzes, reviews, and alters programs to increase operating efficiency or adapt to new requirements; maintains records of program development and revisions. (NOTE: Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

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

For wage study purposes, programmers are classified as follows:

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

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

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

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

OR

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

May guide or instruct lower level programmers.

<u>Class C.</u> 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

Monitors and operates the control console of a digital computer to process data according to operating instructions, usually prepared by a programmer. Work includes most of the following: Studies instructions to determine equipment setup and operations; loads equipment with required items (tape reels, cards, etc.); switches necessary auxiliary equipment into circuit, and starts and operates computer; makes adjustments to computer to correct operating problems and meet special conditions; reviews errors made during operation and determines cause or refers problem to supervisor or programmer; and maintains operating records. May test and assist in correcting program.

For wage study purposes, computer operators are classified as follows:

Class A. Operates independently, or under only general direction, a computer running programs with most of the following characteristics: New programs are frequently tested and introduced; scheduling requirements are of critical importance to minimize downtime; the programs are of complex design so that identification of error source often requires a working knowledge of the total program, and alternate programs may not be available. May give direction and guidance to lower level operators.

Class B. Operates independently, or under only general direction, a computer running programs with most of the following characteristics: Most of the programs are established production runs, typically run on a regularly recurring basis; there is little or no testing of new programs required; alternate programs are provided in case original program needs

major change or cannot be corrected within a reasonably short time. In common error situations, diagnoses cause and takes corrective action. This usually involves applying previously programmed corrective steps, or using standard correction techniques.

OR

Operates under direct supervision a computer running programs or segments of programs with the characteristics described for class A. May assist a higher level operator by independently performing less difficult tasks assigned, and performing difficult tasks following detailed instructions and with frequent review of operations performed.

Class C. Works on routine programs under close supervision. Is expected to develop working knowledge of the computer equipment used and ability to detect problems involved in running routine programs. Usually has received some formal training in computer operation. May assist higher level operator on complex programs.

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.

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.

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).

Maintenance, Toolroom, and Powerplant

MAINTENANCE CARPENTER

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves most of the following: Planning and laying out of work from blueprints, drawings, models, or verbal instructions;

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 CARPENTER-Continued

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.

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

MAINTENANCE PAINTER

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

MAINTENANCE MACHINIST

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

MAINTENANCE MECHANIC (Machinery)

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

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

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

MAINTENANCE PIPEFITTER

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

MAINTENANCE SHEET-METAL WORKER

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

MILLWRIGHT

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

MAINTENANCE TRADES HELPER

Assists one or more workers in the skilled maintenance trades, by performing specific or general duties of lesser skill, such as keeping a worker supplied with materials and tools; cleaning working area, machine, and equipment; assisting journeyman by holding materials or tools; and performing other unskilled tasks as directed by journeyman. The kind of work the helper is permitted to perform varies from trade to trade: In some trades the helper is confined to supplying, lifting, and holding materials and tools, and cleaning working areas; and in others he is permitted to perform specialized machine operations, or parts of a trade that are also performed by workers on a full-time basis.

MACHINE-TOOL OPERATOR (Toolroom)

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

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

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 size and type of equipment, as follows: (Tractor-trailer should be rated on the basis of trailer capacity.)

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 <u>not</u> 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.

TRUCKDRIVER-Continued

Truckdriver, light truck (under 1 1/2 tons)

Truckdriver, medium truck (11/2 to and including 4 tons)

Truckdriver, heavy truck (trailer) (over 4 tons)

Truckdriver, heavy truck (other than trailer) (over 4 tons)

SHIPPING AND RECEIVING CLERK

Prepares merchandise for shipment, or receives and is responsible for incoming shipments of merchandise or other materials. Shipping work involves: A knowledge of shipping procedures, practices, routes, available means of transportation, and rates; and preparing records of the goods

SHIPPING AND RECEIVING CLERK—Continued

shipped, making up bills of lading, posting weight and shipping charges, and keeping a file of shipping records. May direct or assist in preparing the merchandise for shipment. Receiving work involves: Verifying or directing others in verifying the correctness of shipments against bills of lading, invoices, or other records; checking for shortages and rejecting damaged goods; routing merchandise or materials to proper departments; and maintaining necessary records and files.

For wage study purposes, workers are classified as follows:

Shipping clerk Receiving clerk Shipping and receiving clerk

WAREHOUSEMAN

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

Exclude workers whose primary duties involve shipping and receiving work (see Shipping and Receiving Clerk 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 PACKER—Continued

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 AND WATCHMAN

Guard. Performs routine police duties, either at fixed post or on tour, maintaining order, using arms or force where necessary. <u>Includes</u> guards who are stationed at gate and check on identity of employees and other persons entering.

Watchman. Makes rounds of premises periodically in protecting property against fire, theft, and illegal entry.

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.

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. A directory of occupational wage surveys, covering the years 1950 through 1975, is available on request.

Area	Bulletin number and price *
Akron, Ohio, Dec. 1976 1	1900-76, 85 cents
Albany-Schenectady-Troy, N.Y., Sept. 1976	1900-59, 55 cents
Anaheim-Santa Ana-Garden Grove,	
Calif., Oct. 1976	1900-67, 75 cents
Atlanta, Ga., May 1976	1900-30, 85 cents
Baltimore, Md., Aug. 1976	1900-52, 85 cents
Billings, Mont., July 1976	1900-39, 55 cents
Birmingham, Ala., Mar. 1977	1950-8. 85 cents
Boston, Mass., Aug. 1976	1900-53, 85 cents
Buffalo, N.Y., Oct. 1976	1900-70, 75 cents
Canton, Ohio, May 1976	1900-28, 55 cents
Chattanooga, Tenn.—Ga., Sept. 1976	1900-57, 55 cents
Chicago, Ill., May 1976	1900-32, \$1.05
Chicago, Ill., May 1976 Cincinnati, Ohio-KyInd., Mar. 1976	1900-7, 75 cents
Cleveland, Ohio, Sept. 1976	1900-62, 95 cents
Columbus, Ohio, Oct. 1976	1900-68, 75 cents
Corpus Christi, Tex., July 1976	1900-41, 55 cents
Dallas-Fort Worth, Tex., Oct. 1976	1900-63, 85 cents
Davenport-Rock Island-Moline, Iowa-III., Feb. 1976	1900-25, 55 cents
Dayton, Ohio, Dec. 1976	1900-78, 85 cents
Daytona Beach, Fla., Aug. 1976	1900-45, 45 cents
Denver-Boulder, Colo., Dec. 1976	1900-73, 85 cents
Detroit, Mich., Mar. 1977	1950-13, \$1.20
Fresno, Calif., June 1976	1900-29, 55 cents
Gainesville, Fla., Sept. 1976	1900-54, 45 cents
Green Bay, Wis., July 1976	1900-37, 55 cents
Greensboro-Winston-Salem-High Point,	
N.C., Aug. 1976 Greenville-Spartanburg, S.C., June 1976 1	1900-47, 65 cents
Greenville-Spartanburg, S.C., June 1976	1900-36, 85 cents
Hartford, Conn., Mar. 1977	1950-9, 80 cents
Houston, Tex., Apr. 1976 Huntsville, Ala., Feb. 1977	1900-26, 85 cents
Huntsville, Ala., Feb. 1977	1950-4, \$1.40
Indianapolis, Ind., Oct. 1976	1900-58, 75 cents
Jackson, Miss., Feb. 1977	1950-2, \$1.50
Jacksonville, Fla., Dec. 1976 Lansas City, MoKans., Sept. 1976 Lansas City, MoKans	1900-80, 85 cents
Kansas City, MoKans., Sept. 1976	1900-60, \$1.05
Los Angeles-Long Beach, Calif., Oct. 1976	1900-77, 85 cents
Louisville, Ky-Ind., Nov. 1976	1900-69, 55 cents

Area	Bulletin number and price *
Memphis, TennArkMiss., Nov. 1976 1	1900-75, 85 cents
Miami, Fla., Oct. 1976	1900-66, 75 cents
Milwaukee, Wis., Apr. 1976	1900-22, 85 cents
Minneapolis-St. Paul, MinnWis., Jan. 1977	1950-3. \$1.60
Nassau-Suffolk, N.Y., June 1976	1900-35, 85 cents
Newark, N.J., Jan. 1977	1950-7, \$1.60
New Orleans, La., Jan. 1977	1950-5. \$1.60
New York, N.YN.J., May 1976	1900-48, \$1.05
Norfolk-Virginia Beach-Portsmouth, Va	1,00 10, 41.03
N.C., May 1976 1	1900-27, 85 cents
Norfolk-Virginia Beach-Portsmouth and	
Newport News-Hampton, VaN.C., May 1976 1	
Northeast Pennsylvania, Aug. 1976	1900-43, 65 cents
Oklahoma City, Okla., Aug. 1976	1900-42, 55 cents
Omaha, Nebr.—Iowa, Oct. 1976	1900-61, 55 cents
Paterson-Clifton-Passaic, N.J., June 1976	1900-38, 55 cents
Philadelphia, PaN.J., Nov. 1976 1	1900-64, \$1.10
Pittsburgh, Pa., Jan. 1977	1950-1, \$1.50
Portland, Maine, Dec. 1976 1	1900-72, 85 cents
Portland, OregWash., May 1976	1900-51, 75 cents
Poughkeepsie, N.Y., June 1976	1900-50, 45 cents
Poughkeepsie-Kingston-Newburgh, N.Y., June 1976	1900-55, 55 cents
Providence-Warwick-Pawtucket, R.I	
Mass., June 1976	1900-31, 75 cents
Richmond, Va., June 1976	1900-34, 65 cents
St. Louis, Mo-Ill., Mar. 1977	1950-10, \$1.20
Sacramento, Calif., Dec. 1976	1900-71, 55 cents
Saginaw, Mich., Nov. 1976	1900-74, 75 cents
Salt Lake City-Ogden, Utah, Nov. 1976	1900-65, 55 cents
San Antonio, Tex., May 1976	1900-23, 65 cents
San Diego, Calif., Nov. 1976	1900-79, 55 cents
San Francisco-Oakland, Calif., Mar. 1976	1900-9, 95 cents
San Jose, Calif., Mar. 1976 Seattle-Everett, Wash., Jan. 1977 1	1900-13, 75 cents
Seattle-Everett, Wash., Jan. 1977	1950-12, \$1.20
South Bend, Ind., Mar. 1976	1900-5, 55 cents
Syracuse, N.Y., July 1976	1900-44, 55 cents
Toledo, Ohio-Mich., May 1976	1900-24, 55 cents
Trenton, N.J., Sept. 1976	1900-56, 55 cents
Washington, D.CMdVa., Mar. 1977	1950-11, \$1.20
Wichita, Kans., Apr. 1976	1900-21, 55 cents
Worcester, Mass., Apr. 1976	1900-16, 55 cents
York, Pa., Feb. 1977	1950-6, \$1.10

^{*} 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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