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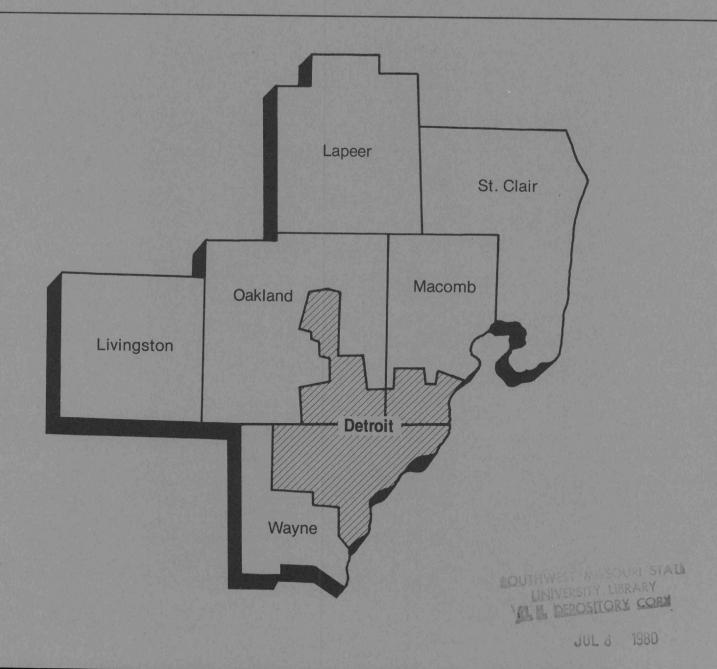
Area Wage Survey

Detroit, Michigan, Metropolitan Area March 1980



U.S. Department of Labor Bureau of Labor Statistics

Bulletin 3000-7



Preface

This bulletin provides results of a March 1980 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 wage provisions in the Detroit area are available for the auto dealer repair shops (June 1978), hospitals (May 1978), and nursing and personal care facilities (June 1978) industries. Occupational earnings and supplementary wage provisions for municipal government workers are available for the city of Detroit. 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 1980



U.S. Department of Labor Ray Marshall, Secretary

Bureau of Labor Statistics Janet L. Norwood, Commissioner

June 1980

Bulletin 3000-7

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Introduction

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

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

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

A-series tables

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

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

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

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

Appendixes

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

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

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1980

Contractive Contractive		Number	Average weekly		Weekly ea (in dollar							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of						
Membridischaring		of	hours ¹ (stand-	Mean ²	Median ²	Middle range ²	and under	-	-	- 1	-	9-71	- 1	-	-	- 1		-	-36	-		-	-		-	-	520 - 560
Marufacturing 4,473 48,2 20,0 390.0 390.0 390.0 390.0 425.0 0 50.0 50.0 50.0 50.0 50.0 50.0 50.	Secretaries	9,108	39.5	337.00	339.00	264.00- 405.50			6	83	345	542	640	554	E41	E01	677	665	600	074	704	201					
Normanufacturing	Manufacturing	4,631	40.0	380.00					_																		86
Public utilities	Nonmanufacturing	4,477	38.5	292.00	278.50			_	6											1250 100							85
Secretaries, class A		762					-	-	-	-		100		7												19	1
Marufachring 980 40.0 433.50 457.00 346.00 - 512.50 14 22 91 48 9 16 15 16 16 16 16 16 16 16 16 17 17 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	Secretaries, class A	611	39.5	389.00	370.00	301.00- 481.50				5	4		21	36	22	50	40	21	70	40	00				100		
Normanufacturing	Manufacturing	360	40.0	433.50					27 H 1						20			100					0.0				86
Public cliffies										5	4		. 836		-									41	12070		85
Manufacturing 84 30 34 0 34 0 0 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Public utilities							-	7	-	_		_	-	-		8	7						1	8	11	1
Manufacturing 984 380 380 3840 3840 2750 2750 28050 4 8 99 33 60 1116 81 44 62 65 45 10 10 10 10 15 15 25 180 180 180 180 181 383 385 585 385 59 387.50 387.5	Secretaries, class B	1,992	39.0	381.50	396.00	312.00- 456.00			40	4	8	44	10	99	155	0.5	04	100	100	447	400						
Nonmarufacturing		1,128	40.0						_	11.42	-																E 10 11 5
Public utilities 181 38.5 51.50 347.50 342.50 693.50 -	Nonmanufacturing	864	38.0							1	ρ															189	Direct -
Secretaries, class C								-		-	-	-	-		100000000000000000000000000000000000000						117	45			DOMESTIC STATES	6	1
Manufacturing	Secretaries, class C	3,840	39.5	341.50	364.50	270.00- 412.50			6	я	134	244	327	176	133	167	164	214	202	005	401	44.5	2/-				
Nommanufacturing		2,301			THE RESERVE AND ADDRESS.		_		_	_															3	8	460
Public utilities	Nonmanufacturing	1,539	38.5	287.50					6	8													LINE KESSIES		3	6	-
Secretaries, class D	Public utilities						212		-	-	-		100	4		4			1			67	109		7	2	-
Manufacturing 767 40.0 315.50 312.00 291.00 348.50 14 87 129 155 145 140 119 137 174 29 34 64 67 5 14 87 129 155 145 140 119 137 174 29 34 64 67 5 14 87 129 155 145 140 119 137 174 29 34 64 67 5	Secretaries, class D	2.126	39.5	296.00	303 50	245 00- 333 00				14	07	160	204	107	474	475	050										104
Nonmanufacturing							200			14	07									15.00 DOLLAR TO TAKE		100000000000000000000000000000000000000	7	1	1	4	200
Normanufacturing 404 39.0 220.50 211.00 188.00 247.00 50 106 82 42 46 88 20 6 2 2 2 2 5 5 5 5 5 5 5 5 5 5 5							-	-	-	14	87													1 -	1 -	4	-
Normanufacturing 404 39.0 220.50 211.00 188.00 247.00 50 106 82 42 46 48 20 6		462	39.0	230.00	214.00	189.00- 259.50		_		52	110	82	44	60	50	20	10	10	20		2				+		
Manufacturing	Nonmanufacturing	404	39.0	220.50	211.00	188.00- 247.00	-	-	-				1.00				100	-	-			Don't J. O. C.					2
Manufacturing 1,02 39.0 391.0 391.50 278.50-330.00 21 58 25 22 109 200 77 88 33 45 8								-	28	38	104	168	74	72	162	258	209	144	405	145	89	10					
Nonmanufacturing 1,022 38.0 294.00 321.50 219.00 356.00 - 28 38 83 110 49 50 53 58 83 37 319 112 44 2 - 2 - 2 - 2 - 4 5 13 15 25 19 17 62 62 10 2 - 2 - 2 - 2 - 4 5 13 15 25 19 17 62 62 10 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2							-	-	-	-	21	58	25	22								100000000000000000000000000000000000000	4 15				
Public utilities	Nonmanufacturing				321.50	219.00- 356.00	-		28	38	83	110	49									Annual Services	17	100			1
Nonmanufacturing	Public utilities	232	40.0	330.50	354.00	296.50- 362.00	-	-	-	-	-	1 2 2 1 7 1 7 1										-		-	-		
Nonmanufacturing	Stenographers, senior	1,298	38.5	315.50	322.50	287.00- 356.00			2		42	54	13	27	02	176	100	107	200	100	75	40		5	100		
Manufacturing		631	37.5	321.50			-	-	-	-												1000	_	1 - 2	_		1
Manufacturing	Stenographers, general			258.00	257.50	202.00- 295.00	_	_	28	38	62	114	31	35	70	82	19	7	69	30	14						
Nonmanufacturing							-	-	-	-	5	36	16					4	TO THE PERSON	Land Localities							
Public utilities						186.00- 349.50	-	-	28	38	57	78	15					10011 - 1000	-	-			Mark D	7 10	100		
Nonmanufacturing	Public utilities	141	40.0	332.50	355.50	295.00- 360.00	-	-	-	-	-						2					-	1 1	7	-	-	1
Nonmanufacturing	Transcribing-machine typists	272	39.0	208 50	200.00	176.00- 217.00			15	70	00	7.				100					DI THE		100		100		
Manufacturing							_												4	1	4	_		- 5	-	-	
Manufacturing	Typists	2 843	39.0	212 00	182 50	160.00- 250.00		150	500	COF	250	104	3.0		00												
Nonmanufacturing 2,433 38.5 198.50 175.00 157.00 215.00 - 152 518 666 349 149 94 137 65 28 4 13 247 10 1								152	022									10.70				7	1		-	-	-
Public utilities 356 39.5 247.50 246.50 218.00 272.00 - 28 30 13 19 41 103 47 20 4 3 46 2	Nonmanufacturing							150	518												23. 115.91	7	9	7	-	-	-
Nonmanufacturing 693 38.0 264.00 255.50 187.50 346.00 - 16 102 88 51 29 76 36 24 4 13 245 9 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	Public utilities						-	-									10				1	_	-	-	-		3
Nonmanufacturing 693 38.0 264.00 255.50 187.50 346.00 - 166 102 88 51 29 76 36 24 4 13 245 9 6 6 12 42 34 16 4 3 44 2 6 6 12 42 34 16 4 3 44 2		922	38.5	279.00	287.00	206.00- 346.00	7		16	104	90	51	33	99	52	65	40	EE	262	0.4							
Public utilities	Nonmanufacturing	693	38.0	264.00			_	-	40								Section 19				14	1	9		-	-	-
Manufacturing 181 39.5 254.50 249.50 208.50 290.00 4 17 8 32 10 35 14 25 17 2 2 6 9	Public utilities							2.0-	-	-							200				-	_		7	10.2	-	-
Manufacturing			39.0	180.00	168.00	150.00- 193.00	354	152	506	581	269	130	75	96	43	29	17	9	4	7	10						
Nonmanufacturing 1740 30.0 173.50 167.00 140.50 196.00 450 500 501 501 501 501 501 501 501 501 5	Manufacturing		39.5	254.50	249.50		_	-	4										4	6			PART		-		-
	Nonmanufacturing	1,740	39.0	172.50	167.00	149.50- 186.00	_	152	502	564	261	98	65	61	29	4	11	-	2	1	1		15	S SUF	-	-	F
Public utilities		187	40.0				_										Part I		2	1			50.5	-	1	-	-

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1980 —Continued

		Average		Weekly ea (in dolla							Nui	mber of	workers	receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of	-					
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	100 and under 120	120 - 140	140 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 520	520 - 560
File clerks	1,469	39.0	164.00	149.00	137.00- 172.00	-	453	494	201	122	21	112	9	7	2	7	7		28	2	-		-	250		
Manufacturing	76 1,393		300.00 157.00		239.00- 373.50 135.00- 166.00	-	453	494	195	120	17	104	5 4	6	2 -	6	6	-	27 1	2			-		-	
File clerks, class B	335 277	39.5 39.0	190.50 161.00		150.00- 185.00 146.00- 173.00	=	63 63	75 75	86 86	41 41	4 4	13 7	1 -	6 -	2 -	6 -	7	4 -	27				-			
File clerks, class C		39.0 39.0	154.50 154.00			-	390 390	419 419	103 97	73 71	11 7	99 97	1	1 1	=	1		-	=				-	=	-	
Messengers	442 105	39.0 40.0	195.50 249.00			-	46	85 5	147 24	35 16	37 14	12 8	26 2	-	1 -	4 4	6	1	25		1		-	-		
Nonmanufacturing	337	38.5	178.50	Control of the Contro		-	46	80	123	19	23	4	24	-	1		1	15								
Switchboard operators Manufacturing Nonmanufacturing	615 142 473	40.0 39.5	223.00 333.00 190.50	356.00 168.00	287.50- 384.00 159.50- 202.50	2 - 2		170 - 170	139 4 135	43 5 38	48 - 48	24 5 19	16 5 11	8				15 18	19 11	3	1 16	3 -				-
Public utilities	46	40.0	279.00	269.00	209.50- 343.00		-	-	•	Ī	12	6	3	3	1			14	-							
Switchboard operator- receptionists Manufacturing	1,021 321	39.5 40.0	205.50	187.50	175.00- 234.00	-	4 -	108 8	279 91	233 96	140 23	99 48	90	27	4	3		3			2 8					-
Nonmanufacturing	700 35					-	4 -	100 7	188	137	117	7	76	6 -	6				3			3				
Order clerks Manufacturing Nonmanufacturing		40.0	276.50	257.50	205.00- 332.50	8	-	-	101	103 30 73	98 72 26	26 - 26	57 57	183 52 131	1304	22	2	1 1	3	4	0 9	10	-	2		-
Order clerks, class A Manufacturing	436	40.0	333.50	320.00			-	-	-	-		-	37 37	51 51	36	96			38					2		1
Nonmanufacturing				354.00	315.00- 374.00			-	-	-		-			36				150	1	0 5			- 2		
Order clerks, class B	708					-	13	29	101	103			20		131	. 9		3 27 - 1	1		1	4				
Accounting clerks Manufacturing		39.5	296.50	270.00	212.00- 378.00		69	22	787 72		177	238		116	84	1112	6	3 70	60	8		2 9	48		13	
Nonmanufacturing Public utilities	4,323						69	492 7	715 34		825 29	506 17	274 18								8 4					-
Accounting clerks, class A Manufacturing	1,101	40.0	340.50	335.00	247.50- 431.50	-		26 18	12	48			75	60	47	85	5 5	3 59	46	7		8 9	7 44		13	
Nonmanufacturing Public utilities	. 1,538 . 251						-	8 7	62 14		11	4	11					2 3			8 2					-
Accounting clerks, class B	. 760	39.5	232.50	220.00	191.50- 255.00	-	69	4	60	193	92		65	56	37	27	1			1	-		2	4		
Nonmanufacturing	. 2,785						5				182			100				2 14	1 19		9 3		9 10		2	
Manufacturing Nonmanufacturing Public utilities	. 342 . 482 . 58	40.0	294.00	264.50	216.00- 364.00 192.00- 252.00		5	14	21	21	62	14	18	31	15	5 4			2 18			6	7 1.2	4 2 1	2	26
Key entry operators Manufacturing Nonmanufacturing	863	40.0	312.50	329.50	240.50- 392.50) .	249	2	27	46	74	65	40	52	5	5 56	6		4 51	1 17	7 7	0 8 2	1	-		-

Table A-1. Weekly earnings of office workers in Detroit, Mich., March 1980 —Continued

	Number	Average		Weekly ea (in dolla							Nu	mber of	workers	receivii	ng strai	ght-time	weekly	earning	s (in dol	lars) of	_					
division Key entry operators, class A Manufacturing	of workers	hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	100 and under 120	120 - 140	140 - 160	160	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 520	520
Key entry operators, class A Manufacturing Nonmanufacturing Public utilities	1,367 367 1,000 153	39.5 40.0 39.5 40.0	272.00 326.50 251.50 331.00	240.00 344.00 225.00 340.00	209.00- 346.00 262.50- 395.00 202.50- 324.50 340.00- 340.00	-		-	88 - 88 -	149 8 141 -	226 14 212 10	180	117 28 89 4	58 36 22 12	20 13 7 4		32 21 11	186 39 147 80		61 39 22	78	1	-			
Key entry operators, class B Manufacturing Nonmanufacturing Public utilities	2,831 496 2,335 173	39.5 40.0 39.0 39.0	208.50 301.50 189.00 264.50	184.00 316.50 174.00 270.00		-	249 - 249	406 2 404 7	652 27 625 21	362 38 324 20	373 60 313	87 25 62	190 12 178 13	74	57 42 15	43 36 7	48 44 4	58 35 23	41 21 20	172 138 34	-]		1		

Table A-2. Weekly earnings of professional and technical workers in Detroit, Mich., March 1980

		Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	llars) of	_	11	3			
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	Under 160	160 and under 180	180 - 200	200	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 400	400 - 440	440 - 480	480 - 520	520 - 560	560 - 600	600 - 640	640 - 680	680 - 720	720 and over
Computer systems analysts			The same							6.7		745	8	56	52	80	233	262	271	274	336	423	334	294	77	64
(business)	2,765	39.5	526.50		439.50- 611.00				2.67	100			8	13			126	138	138	158	213	282	227	217	58	52
Manufacturing	1,681 1,084	40.0 39.0	544.00 500.00		465.00- 625.50 411.00- 593.50						- 1			43			107	124	133	116	123	141	107	77	19	12
Computer systems analysts																r d	04	49	96	97	119	121	93	83	71	6
(business), class A	824	39.0	571.00	576.50	491.00- 647.00	-	-	-	-		-	TO THE	-	100	100	1 3	31	26				14	41		57	* 5
Manufacturing		40.0	603.50	635.00	492.50- 692.00	-	The sta	-	-	-	-	4 18	-	THE STATE OF	-	10.00	27	23				47	52		14	1
Nonmanufacturing	473	38.5	546.50	542.00	487.00- 593.50	-		15.0	110		10-11	-95			-		21	23	49	/3	03	107	JE	-		
Computer systems analysts							135							6	15	25	144	170	93	56	112	197	213	211	6	
(business), class B	1,248	40.0	531.00				10.05			7 - V				5			118						168	161	1	1
Manufacturing	882	40.0	540.00					1	Charles	Maria S			Mark T	1	5		26						45		5	
Nonmanufacturing	366	39.5	509.00				1	1000		1			13.73	100			8						3		-	
Public utilities	142	38.5	460.00	454.00	432.50- 477.00)													00							
Computer systems analysts				100.00	074.00 540.50						- 1		. 8	50	37	55	58	43	82	121	105	105			-	
(business), class C	693						ALC: Y	3.79	SE OF		10.00		. 8	A COUNTY OF THE PARTY OF THE PA		14	4	14	71	110	93	98			-	1. 7
Manufacturing	448							115 145			1			42			54	29	11	1	1 12	7	10	-	-	1
Nonmanufacturing	245	38.5	395.50	366.50	336.00- 429.50	,		1	1			1.0				100	1	18.7				-	00	10	1	
omputer programmers (business).	2,194							- 3		- 4		114					237 137									
Manufacturing	1,260									3												17	4	-	-	100
Nonmanufacturing	934	39.5					100	- 3	18	- 3	00	0-	110	17			1 7	6	5 4 4 2 5 5						-	
Public utilities	63	40.0	358.50	336.00	312.00- 404.50)			-6			16		"				184					1			a second
Computer programmers					550.00						146	-1	- 15	5 27	1	1 15	7	40	76	15	3 154	87	31	12	-	5.70
(business), class A	. 628												- 15				7	21	21	1 3	7 13	15	4	1 -	-	1
Nonmanufacturing	. 180	39.5	429.00	439.50	321.50- 496.50)	Pige				13.4	13.75						1-67								
Computer programmers		20.5	387.50	383.50	320.00- 449.50		150				9 12	6	1 83	3 74	9	7 93	123	168							-	
(business), class B							0.00		100		- 2	1000000		1 34	1 5	1 43	56	112	125				4	1	-	10
Manufacturing	. 554						1375		170.57		9 10				0 4	6 50	67	56	3 24	4 2	6 1	3 2	2	-	-	1
Nonmanufacturing	. 456	39.5	357.50	347.00	291.50- 404.00			1-193			"															100
Computer programmers		00.5	046.50	363.50	268.00- 406.0	0			3	- 3	7 7	5	3 3	4 3	9 1	7 22	107							-	-	
(business), class C											9		0 :	2	4	5 10	8			9 1	6	4 1				
Manufacturing							10839		3	- 2	8 7		3 3	2 3	5 1	2 12	26	3 21	1 8	8	8		-	-	1000	1
Nonmanufacturing	. 298	39.5	303.00	0 281.00	244.00= 340.0			1									000	3 173	3 196	6 19	4 3	1 5		100		
Computer operators	2,080	39.5	328.50	0 307.50			1 4	2 90														A STATE OF THE PARTY OF THE PAR	1		100	11/
Manufacturing			383.50	0 397.50	307.00- 462.5	0	-	- :			3 10											3				161
Nonmanufacturing	9 4 5 5 6			0 253.00			1 4	2 8								5 38				1	1					
Public utilities	. 13				254.50- 380.5	0	-	3	7	2	9 1	5 1	8 4	0	2	3	11	3 10	0		1					
Computer operators, class A	37:	2 39.5	375.0				-	- 1	7	-	2 5		5 2	4 1			4	7 34			0 3		4			
Manufacturing				0 466.50			-	-	The ball	-	2 1		-				4					3		4	-	-
Nonmanufacturing							-	- 1	/	-	- 3		5 2	2000	2 10 2		1 "		6	1	1		100	-	-	-
Public utilities				0 320.50	278.50- 408.0	0	- 3	-	E E	-	-	2	6	4	2	2										
Computer operators, class B	1,03	9 39.5					- 1	6 5	2 7	9 15		C. Land		2 2		8 4					37		1			
Manufacturing	4.77						-	_	_		88					8 2					7	-	1	- 177	-	-
Nonmanufacturing		50 10 10 10 10 10 10 10					- 1	6 5	2 7	75 12	20 5		7 2		8 1	0 2	1 1		7	_	_	-	-	2 100	-	-
Public utilities	-				0 242.50- 388.5	60	-	-	-		8 1	3 1	2	5					In.							
Computer operators, class C	66	9 40.0	324.5	313.0			21 2	26 2			57 3	30 17 6 16		7 9		20 3					57		_	_	_	
Manufacturing	39		370.0	00 363.5			-				13 1				6 1	3		5 1		5	6	_	_	_	_	-
			260.5	0 235.0	0 207.00- 288.5		21 2	26 1	9 3	35	44 2															

Table A-2. Weekly earnings of professional and technical workers in Detroit, Mich., March 1980 —Continued

	Number	Average weekly		Weekly ea (in dolla							Nu	mber of	worker	s receiv	ing strai	ight-time	weekly	earning	s (in do	llars) of	_					
Occupation and industry division	of workers	hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	Under 160	160 and under 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 400	400 - 440	440 - 480	480 - 520	520 - 560	560 - 600	600 - 640	640 - 680	680 - 720	720 and over
Computer data librarians Manufacturing	- 22	39.0 40.0	281.00 320.00	287.00 274.00	230.50- 295.00 254.00- 401.50	-	3 2	11	18	9 2	26 18	10	56 1	-	-	9 8	3	8 8	4 4	3 3		-	-	-	-	
Drafters		40.0 40.0 40.0	424.50 463.50 304.50	440.00 466.50 272.00	330.00- 539.00 380.00- 560.50 190.00- 400.00		168 23 145	169 37 132	126 14 112	170 112 58	108 28 80	151 51 100	188 83 105	159 111 48	231 199 32		451 377 74	613 532 81	696 603 93	638 546 92	495 426 69	619 549 70	626 626	2 2	-	
Drafters, class A	2,846 2,360 486	40.0 40.0 40.0	532.50 547.00 460.00	542.00 557.50 466.00	480.00- 596.00 496.50- 604.00 400.00- 520.00	-	-	-	- - -		-		-	13 - 13	23 9 14	10	54 6 48	140 87 53	380 293 87	503 411 92	446 377 69	609 539 70	626 626	2 2	-	
Drafters, class B	1,232 994 238	40.0 40.0 40.0	403.00 425.00 312.50	404.50 425.00 290.00	350.00- 458.50 380.00- 464.50 270.00- 360.00	-	-	1111	1 - 1	4 - 4	15 - 15	53 - 53	74 14 60	46 20 26	58 52 6	79	141 115 26	301 273 28	262 256 6	126 126	49 49	10 10				
Drafters, class C	1,084 850 234	40.0 40.0 40.0	327.00 352.00 235.00	340.00 362.50 230.00	260.00- 387.50 306.50- 405.00 198.00- 273.50	-	- - -	79 14 65	37 - 37	69 42 27	58 28 30	59 42 17	95 65 30	39 35 4	81 69 12		229 229 -	170 170 -	54 54	9	-	-		-	-	
Drafters, class D	462 289	40.0 40.0	278.00 307.00	286.00 330.00	220.00- 336.00 293.00- 344.50	-	19 9	55 23	29	45 28	35	39 9	19	57 52	65 65		27 27	2			-	-	-	-	-	
Electronics technicians	230 188	40.0 40.0	421.00 438.50	432.50 447.00	381.00- 479.50 399.00- 479.50	-	-	-	-	3 -	-	1	3 -	12	17 14	6	49	30 28	83 83	23 23	4 4		-			
Electronics technicians, class B	121	40.0	393.50	384.50	323.50- 432.50	-	-	-	-		-	-	3	12	17	-	47	14	14	14						
Registered industrial nurses	464 415	40.0 40.0	418.00 422.50	430.00 436.00	381.50- 476.00 387.50- 477.50	=	-	-	· -	4 4	6 2	2 2	19 17	33 29	7 7	20 15	56 46	111 93	116 113	90 87	-	-	-	-		
Public utilities	25	39.0	380.00	382.00	357.00- 423.50		1	_	-	_	-			4		A	8	0					100	1		A SECTION

^{*} Workers were distributed as follows: 46 at \$720.00 to \$760.00; and 6 at \$760.00 to \$800.00 See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Detroit, Mich., March 1980

			erage lean²)				rerage nean²)		Number		verage nean²)
Sex, ^a occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars)
Office occupations -	Course.			Typists, class B	1,822	39.0	181.00	Key entry operators, class A	1,315	39.5	272.50 326.00
men				Manufacturing	181	39.5	254.50	Manufacturing	361 954	40.0 39.5	252.50
	65	40.0	183.50	Nonmanufacturing		39.0 40.0	172.50 214.00	Nonmanufacturing	153	40.0	331.00
File clerks	05	40.0	163.50	Public utilities	182	40.0	214.00	Public dulides	155	40.0	331.00
Order clerks	588	40.0	314.50	File clerks	1,392	39.0	163.50	Key entry operators, class B	2,731	39.5	208.00
Manufacturing	123	40.0	320.00	Manufacturing	62	40.0	302.00	Manufacturing	491	40.0	301.00
				Nonmanufacturing		39.0	157.00	Nonmanufacturing	2,240	39.0	187.50
Order clerks, class A	320	40.0	346.50			1 1 1 1 1 1		Professional and technical			1
Manufacturing	89	40.0	345.00	File clerks, class B	. 322	39.5	186.50	occupations – men			1
Assessment alone of				Nonmanufacturing	. 274	39.0	161.50	occupations - men			
Accounting clerks: Manufacturing	337	40.0	415.50					Computer systems analysts		100	
Manufacturing		70.0	110.00	File clerks, class C	1,035	39.0	154.50	(business)	. 2,045	40.0	544.50
Payroll clerks	80	40.0	413.50	Nonmanufacturing	. 1,025	39.0	154.00	Manufacturing	. 1,476	40.0	551.00
		Diff						Computer systems analysts			
Office occupations -				Messengers:	. 64	40.0	261.50	(husiness) class A.		1 - E // E	100
women				Manufacturing	. 04	40.0	201.50	Manufacturing	311	40.0	616.00
Secretaries	8,335	39.5	340.00	O thebbased assessable	. 588	39.5	222.50	Manufacturing		10.0	0.0.00
Manufacturing		40.0	380.00	Switchboard operators	139	40.0	332.50	Computer systems analysts			
Manufacturing	1,02		6 3 6 6	Nonmanufacturing	449	39.5	188.00	(business), class B	. 1,031	40.0	547.00
Secretaries, class A	577 39.5 389.00 Nonmanufacturing						278.50	Manufacturing	. 798	40.0	546.00
Manufacturing	360			Tubic duides	. 44	40.0		Computer systems analysts			
Nonmanufacturing	217	39.0	315.50	Switchboard operator-			The state of	(business), class C:		19	
				receptionists	1,009	39.5	196.50	Manufacturing	. 367	40.0	507.00
Secretaries, class B	1,823	39.5	386.00	Manufacturing		40.0	204.00	the second second second second second			
Manufacturing	1,126	40.0	417.50	Nonmanufacturing		39.0	193.00	Computer programmers (business)		39.5	430.50
Secretaries, class C	3,692	39.5	344.50	Public utilities	. 27	40.0	230.50	Manufacturing	922	40.0	463.50
Manufacturing		40.0	377.00					Nonmanufacturing:		10.0	075.00
Nonmanufacturing		38.5	290.00	Order clerks		39.5	223.50	Public utilities	. 41	40.0	375.00
Public utilities		40.0	308.50	Manufacturing		40.0	249.00	Computer programmers			
				Nonmanufacturing	361	39.5	209.50	(business), class A	501	40.0	508.00
Secretaries, class D:			- X		116	40.0	298.00				
Manufacturing	767	40.0	315.50	Order clerks, class A	88	40.0	286.00	Computer programmers (business), class B			100
Oto-i elece F	461	39.0	230.00	Manufacturing	. 00	40.0	200.00	(business), class B	. 621	39.5	395.50
Secretaries, class E		39.0	220.50	Order clerks, class B	440	39.5	204.00	Manufacturing	376	40.0	420.00
Norimanulacturing	400	00.0	220.00	Manufacturing	107	40.0	218.50	Computer programmers		174.16	
Stenographers	1,857	39.0	299.50	Nonmanufacturing		39.5	199.00	(business), class C:	1		
Manufacturing	882	40.0	301.00				19-56	Manufacturing	154	40.0	406.00
Nonmanufacturing	975	38.0	298.00	Accounting clerks	5,235	39.5	222.00		100000		250 50
Public utilities	223	40.0	334.00	Manufacturing	1,524	39.5	270.00	Computer operators		39.5	350.50
	4 007	20.5	315.50	Nonmanufacturing	3,711	39.0	202.50	Manufacturing		40.0	404.50 285.00
Stenographers, senior	1,297	38.5	315.50					Nonmanufacturing	563	39.5	205.00
Nonmanufacturing	631	37.5	321.50	Accounting clerks, class A		39.5	265.00	Computer operators, class A	316	39.5	381.00
Stenographers, general	560	39.5	261.50	Manufacturing	799	40.0	307.50	Manufacturing		40.0	459.00
Manufacturing		40.0	272.50	Nonmanufacturing	1,242	39.0	237.50	Nonmanufacturing		39.0	315.00
Nonmanufacturing		39.5	254.50		0.404	39.0	194.50		1		
Public utilities		40.0	339.00	Accounting clerks, class B		39.0	194.50	Computer operators, class B		39.5	347.50
				Manufacturing		39.5	184.50	Manufacturing	294	40.0	401.50
Transcribing-machine typists	272	39.0	208.50	Nonmanufacturing	2,409	39.0	104.50	Nonmanufacturing	258	39.0	286.00
Nonmanufacturing	249	39.0	198.50	Pavroll clerks	742	39.5	241.00	Communitary and and a state of	428	40.0	332.00
	0.70	00.0	040.50	Manufacturing		40.0	259.00	Computer operators, class C	428	40.0	378.00
Typists	2,701	39.0	213.50	Nonmanufacturing		39.0	230.00	Manufacturing	214	40.0	370.00
Manufacturing		40.0 38.5	292.50 199.00	Public utilities	53	38.5	340.50	Peripheral equipment operators	63	40.0	361.00
Nonmanufacturing		40.0	248.50								
Public utilities	310	40.0	240.00	Key entry operators	4,046	39.5	229.00	Drafters	5,780	40.0	431.00
Typists, class A	879	38.5	280.50	Manufacturing	852	40.0	311.50	Manufacturing	4,440	40.0	466.00
Nonmanufacturing		38.0	266.00	Nonmanufacturing	3,194	39.5	207.00	Nonmanufacturing	1,340	40.0	315.50

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Detroit, Mich., March 1980 —Continued

	Workers Hours' (standard) Weekly earnings Gardings Gardi						verage nean²)				verage nean²)
Sex,3 occupation, and industry division	The second second	hours ¹ (stand-	earnings	Sex, ³ occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars)
Drafters, class A				Professional and technical		S. Lill		Computer operators			
Manufacturing				occupations - women		A PARTE I SE		Computer operators	720	39.5	292.50
Nonmanufacturing	483	40.0	460.50					Manufacturing	322	39.5	337.50
Drofters alone B				Computer systems analysts				Nonmanufacturing	398	39.5	256.50
Drafters, class B			405.50	(business):							The second
Manufacturing		40.0	424.50	Manufacturing	205	40.0	492.00	Computer operators, class A	56	39.5	339.50
Nonmanufacturing	214	40.0	317.50		200	40.0	492.00				
				Computer systems analysts		100 mg		Computer operators, class B	460	39.5	275.50
Drafters, class C			325.00					Manufacturing	176	39.5	324.00
Manufacturing		40.0	350.00		84	400		Nonmanufacturing	284	39.0	245.00
Nonmanufacturing	223	40.0	236.00		04	40.0	484.00				
				Computer programmers (business):		ACTIVIES.		Computer operators, class C	204	40.0	318.50
Drafters, class D	404	40.0	273.50	Manufacturing				Manufacturing	116	40.0	351.00
Manufacturing	246	40.0	301.50	Manufacturing	338	40.0	409.50		ALC: NO.		001.00
				Committee				Drafters	274	40.0	290.00
Electronics technicians	230	40.0	421.00	Computer programmers				Manufacturing	131	40.0	382.00
Manufacturing	188	40.0	438.50	(business), class B:					22.27	40.0	302.00
Floring to the total of the second of the se	1000			Manufacturing	178	40.0	395.50	Drafters, class C	65	40.0	353.50
Electronics technicians, class B	121	40.0	393.50					Manufacturing	54	40.0	380.00
Registered industrial nurses:	10 13			Computer programmers					34	40.0	360.00
	00			(business), class C:		Parket La		Registered industrial nurses	385	40.0	440.50
Manufacturing	62	40.0	431.50	Manufacturing	104	40.0	382.00	Manufacturing	353	40.0	419.50 420.50

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Detroit, Mich., March 1980

		Н	lourly earni (in dollars								Nu	imber of	worker	s receiv	ing strai	ght-time	hourly	earning	s (in doll	lars) of	- 8						
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	Under 5.60	5.60 and under 5.80	5.80 - 6.00	6.00	6.20 - 6.40	6.40 - 6.60	6.60 - 6.80	6.80 - 7.20	7.20 - 7.60	7.60 - 8.00	8.00 - 8.40	8.40 - 8.80	8.80 - 9.20	9.20 - 9.60	9.60 - 10.00	10.00	10.40	10.80	11.20 - 11.60	11.60 - 12.00	12.00	12.40 - 12.80	12.80 and over
Maintenance carpenters	- 743	10.91	11.28	11.15-11.32	_	_			-				4	18 T -	9	13	69		45	29				4	-	28	
Manufacturing	623	10.97		11.15-11.32			_	_	-	-	-	- 188	4	-	8	-	47	-	15	29		82		4	-	-	
	120	10.58		9.13-11.36					_		-	-	-	-	1	13	22	-	30	-	2	-	24	-	-	28	1
Nonmanufacturing	37	9.11		8.73- 9.13		-	-	-		-	-	-	-	-	-	13	18	_	6	-	-		-	-	-		
	4,053	11.36	11.60	11.53-11.60							108			8	32	34	83	60	115	58	54	178	1214	2050	116	-	
aintenance electricians				11.53-11.60							14000	-	_	1	32	34	81	37	112	29	50	173	1204	2013	114	-	
Manufacturing	3,927	11.38												7		10.72	2	23	3	29	4	5	10	37	2	_	100
Nonmanufacturing	126	10.60		9.61-11.60		1000	V V		91.		1000	100					2	23				6.0	A Bridge	_	19 19 1	_	1
Public utilities	34	9.60	9.55	9.21- 9.72	-	-			-		100				17,416		-	23	-								
aintenance painters	640	10.95	11.28	11.09-11.28	3 -		-		-	3	-	-	-	4	-	6	30	-	43 18				440 411	9	16		
Manufacturing	560	11.00	11.28	11.25-11.28	3 -	-	-		-		-	-	-	3	-	-	30	1 - 1			13	41		70.1		THE PARTY OF	1000
Nonmanufacturing	80	10.59	11.28	9.65-11.52	2 -		-		-	3	-		-	1	-	6	-		25				29	1000	16		
aintenance machinists	783	11.00	11.42	10.90-11.55	5 -	_	-		_			-	_	-	12		25					- 83		67	62		
				10.99-11.55			100		-			-	-	-	12	14	25	12	18	15	-	- 83	387	67	62	-	1
Manufacturing	P. P. Strategie and P. Strategie			9.55- 9.79								-	-	-	-	18	-	23	29	18	3	-	-	-	-	-	157
Nonmanufacturing Public utilities	KIND OF THE REAL PROPERTY.			9.55- 9.79			-		-		-	-	-	-	-	18	-	23	29	18	3			-	1	-	
aintenance mechanics																				40	87	7 37	2530	1022	131		
(machinery)	4,567	10.98	11.53	11.43-11.60) -	19 GE	-	-	-	1	Jan Cont	28				155	23			12							18
Manufacturing	4,519			11.43-11.60) -	-		West.			-	28	104	205	91	155	17	109	1	10	87	7 37	2526	1018	131		156
laintenance mechanics																						- 11					
	2,504	10.75	11 32	10.78-11.36	6 -				-	8	3 15	10	15	35	8	66									18		
				11.32-11.36							- 10	10	15	5	8	39	37	9	23	12	2	1 37	1174		-	19	17.5
Manufacturing	1,399							1		1 5	2 5	100		30	_	27	122	57	103	63	80	370	196	26	18	-	1870
Nonmanufacturing				9.66-11.09		White I	10.50	6 4				100	5 6		1	27	22		- 80				69	26	18	-	138
Public utilities	713	10.72	11.04	10.48-11.09	9					100						-											
laintenance pipefitters	2,702	11.19		11.32-11.30					-		-	-	-	-	42		60			N. C. C.						PATE .	
Manufacturing	2,674	11.20	11.33	11.32-11.30	6										38	A too	60	13	31	10	3.	+ 221	2120	133			
aintenance sheet-metal workers	609	11.15	11.32	11.32-11.3	3								-		16		, 2		1	15							
Manufacturing	586			11.32-11.3	3				-			-	-		16	-	2			4	4 16	6 21	507	20	100		
190	4,487	11.27	11 33	3 11.32-11.3	6										20	-	54		- 91						170		
lillwrights Manufacturing	4,467			3 11.32-11.3				1000	-		-		-	-	20		54		- 91	10	0 20	0 94	3970	-	170	-	
faintenance trades helpers	597	9.49	9.71	9.27- 9.7	1	- 16	3		-	1	4 -				. 4	8	61	10	298	3 4	4 8	5					
tti tltore (teeksem)	2,152	11.29	11.41	1 11.41-11.4	3											- 80	-		2 4	94	4	- 10					136
Achine-tool operators (toolroom) Manufacturing	2,152			11.41-11.4		-		-	-		-	-				- 80	-	1	2 4	94	4	- 10	1567	395			
	F 070	11.33	11.60	11.55-11.6	2			10.40			The same				135	14	70	13	364	58	8 1	0 213	1167				
ool and die makers				11.55-11.6								-			135		70	13	364	56	8	9 21:	1167	3820	-		
stationary engineers	665	11.2	7 115	1 11.22-11.6	0			12.00			8			5 10		3 2	12	1	36								
				3 11.32-11.6			-		-	17.				5 10	3 (3 1		5	-		8 3		The second second			1	100
Manufacturing				8 9.50-11.7				1			8 .					1	7	1 1	4 36	5 :	3	9	- (5 28	3	-	
Nonmanufacturing	. 117	10.2	9.90	9.50-11.7	-									0 466	1.689	1/19	1.00		Tales?					LA.	1	Parado	1
	. 654	9.3		9 6.67-11.3	6 2	3 4					- 12	7			6	1 24	1 10)	-	- 15	5	3	9 32	8 .		-	-

Table A-5. Hourly earnings of material movement and custodial workers in Detroit, Mich., March 1980

		Н	ourly earnii (in dollars)								Nu	umber of	worke	rs receiv	ing strai	ight-time	hourly	earning	s (in doll	lars) of -	! —						
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	3.00 and under 3.20	3.20 - 3.40	3.40 - 3.60	3.60 - 4.00	4.00 - 4.40	4.40 - 4.80	4.80 - 5.20	5.20 - 5.60	5.60 - 6.00	6.00 - 6.40	6.40 - 6.80	6.80 - 7.20	7.20 - 7.60	7.60 - 8.00	8.00 - 8.40	8.40 - 8.80	8.80 - 9.20	-	9.60	10.00	-	10.80	11.20 and over
Fruckdrivers	8,851	9.39	10.31	8.28-10.87	3		53	61	42		54	27	37	175		155		651	247	550							92
Manufacturing	2,598	9.22	9.31	8.52-10.53		-	-	-	-	9	-	-	9	-					245	527							31
Nonmanufacturing	6,253	9.46	10.50		3	-	53	61	42	37	54		28	147				651	2	23		0 18	4 49 B	54 43			
Public utilities	3,253	10.70	10.87	10.87-10.87	-			a de	Ī		He.	2	1	4	3	2	12	35		23	3 4	8		43	0 3/	2375	01
Truckdrivers, light truck	626	7.27	7.74		3	1	27	8	38	11	3	25	28	101	3			36		32		1 17		2	-	1	
Manufacturing	128	8.32	8.36			770	-	-	-	-	1	7		1.7	1	14		-	63	32	2	4 1		-		1	Section .
Nonmanufacturing	498	7.00	7.00	5.78- 9.44	3		27	8	38	11	3	25	28	101	3	7	41	36	2			7 15	6	2			
Truckdrivers, medium truck	2,720	8.37	7.66	6.70-10.87			- 26	53	4	35	51	2		- 60		134		615				00	4 2		6 2	829	
Manufacturing	376		8.69	7.13- 8.95	_		-	-	-	9		- 250	-	- 14					12			90	4 1	6	-		- 31
Nonmanufacturing	2,344	8.36	7.66	6.70-10.87	-		- 26	53	4	26	51	2		46	525	102	-	615	-	8	8	-	-	4 2	6 2	829	-
Truckdrivers, heavy truck	816	9.82	9.73	8.65-10.89	-			-		-		1000		-	-	-	-		-	206	06	- 11	0 20	4	-	- 296	3 -
Truckdrivers, tractor-trailer	3.752	10.28	10.55	10.33-10.87	194			255	Page 1	F 14			9	14	90	-	37	_	170	30	80	57 8	0 28	2 52	6 108	4 131:	2 61
Manufacturing	1,309			8.40-10.55	-		-	-/-	-	-	l de			14	90	-	- 37	0.00	170	30			-		9 74		
Nonmanufacturing	2,443	10.62	10.87	10.33-10.87	-		- 180	- 20	-			-		-		-	-	-	13005	-	-	22	8 27				
Public utilities	1,697	10.74	10.87	10.33-10.87	-			-	-												-		8	- 43	6	119	2 61
Shippers	596	9.32	9.73	9.64- 9.73	3 -			-	1				48	3 -	- 26		2 12 3 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1		. 1	14		5	2 43		4 1		
Manufacturing	245	9.84	9.64	9.64- 9.73	3		-	-		0,51					1.50	- 8	-	1		14	14	-	2 16	3	4	8 2	6 19
Receivers	872	8.49	9.64	7.37- 9.64	1		-	11	28	1		7 69	2	1 26	30	17	7 26	14	1 1	77	77	16 5	6 4	2	-	-	-
Nonmanufacturing				5.55- 9.56			-	11	28			7 69	2	1 24	29	9 5	5 17	4	1 1	54	54	7 5	1 10)7	-	-	
Shippers and receivers	616	8.55	8.65	7.44- 9.55	5 -			4		1 9		- 66-	7 7551	9 4	1	1 43						10 18				2	-
Manufacturing	. 537						-	-	-		9	-		9 4	1	1 43	3 84		- 83		41			00	11	2	
Nonmanufacturing	. 79	8.42	9.35	7.88- 9.56	-			4	4		100						- 4	12	2 7	4	4	3	11				
Warehousemen	2,192							1		7	1 19	9 60)	6 66				404					18 1	79	-	- 2	0
Manufacturing	. 1,021						-	1		7	1 1	9 60		6 33										79		- 2	0
Nonmanufacturing	. 1,171	8.02	8.82	6.70- 9.55								9 00		0 3	230	0 70	4.			1	10	00					
Order fillers	3,008	8.54	9.47	6.65- 9.64	4 -		-	4			- 19	1 20	28				- 98		- 11		-	- 11			78 2	1	-
Manufacturing	. 360						-			-				- 20			- 72		- 10		-			55	78 2	-	
Nonmanufacturing	. 2,648	8.51	9.48	6.65- 9.64	4			4		Page 1	- 19	1 20	28	4 21	6 26	0	- 26)				- 9	211 0	16 2	10		
Shipping packers	. 858						-			4	10	8	- 1					- 41			-		08	-	-	-	-
Manufacturing	. 489					9.00	-		148		-	-	- 1	4 1	5 4	8 2	2	- 40	99	9		- 2					
Nonmanufacturing	. 369	8.06	9.34	5.00- 9.4	1		-			4	10	8											"				
Material handling laborers	3,805	9.08	9.47	9.34- 9.5	6 .		1 2	79	1	3	7 10	0 3	3 3	2 3	8 3						2	12 21			61 46	66	-
Manufacturing	2,449			9.34- 9.5			- 10		1000	-	-	-	-	- 2		5 5	6 2				-	12 17		04	-	-	-
Nonmanufacturing				9.37-10.6		1	1 2	79	1	В	7 10	0 3	3 3	2	9 1	6	1		8		2	- 4	14	87	61 46		-
Public utilities	. 476			10.67-10.7				1				-		-		-			8		2	-		-	- 46	06	
Forklift operators	9,285					-	-		-	-	-	-	- 13		- 13							82 53			51 56 99 2	59 25	-
Manufacturing	. 7,589			9.48- 9.5		-	-		1	-	- 1980	-	- 13	8	- 13	2 16	0 14		3 23		65	29 46 53 6			52 54		
Nonmanufacturing	1,696	9.8	9 9.55	9.51–10.7	7	1	-						1	-					0	0	03	33 6	30 1		J. J.		
Power-truck operators				-V														1		8			40	42 1	72		
(other than forklift)	793	9.5	9.50	9.50- 9.6	4												- 3			0		- 5	40	72		1	
Guards	5,85					8 29	2 4	1 14	0 141			3		9 12						3 57			94 20		25	4	-
Manufacturing	2,503						-			9 1					7 8	- 9	4 4 2		9 2		50	46 36		68 22	25	4	
Nonmanufacturing						8 29	4	4 14	0 140	5 3	9 1	6 2	0	86 9	- 8	3		2 4	The Later Contracts		21	36	-	11		_	- 30
Public utilities	8	5 8.4	5 8.93	8.64- 8.9	3		-		-	-	-	- 1	U	-	- 1			-	1	7 6	21	00					

Table A-5. Hourly earnings of material movement and custodial workers in Detroit, Mich., March 1980 —Continued

	Number		lourly earn (in dollars				1				N	umber o	worker	s receiv	ring strai	ight-time	hourly	earning	s (in dol	lars) of	_						
Occupation and industry division	of workers	Mean ²	Median ²	Middle range ²	3.00 and under 3.20	3.20 - 3.40	3.40 - 3.60	3.60 - 4.00	4.00 - 4.40	4.40 - 4.80	4.80 - 5.20	5.20 - 5.60	5.60 - 6.00	6.00 - 6.40	6.40 - 6.80	6.80 - 7.20	7.20 - 7.60	7.60 - 8.00	8.00 - 8.40	8.40 - 8.80	8.80 - 9.20	9.20 - 9.60	9.60	10.00	-	-	and
Guards, class A Nonmanufacturing	1,054 951	7.62 7.54		1.00 F C 10 F C		#	-	-	42 42	31 31	10 10	11 11	23 23		86 86	82 34	24 24	30		503 503	3	39	11	25	-		
Guards, class B	4,803 2,400 2,403	6.86 9.47 4.26	9.88	9.75- 9.9	7 -	292 292	44 - 44	140 - 140	9	26 18 8		20 9 11	26 13 13	23	1 - 1	46 46 -	42 41 1	79 69 10	26	68 50 18		55			4 - 4		
Janitors, porters, and cleaners	12,368 5,085 7,283 364	6.41 8.59 4.89 7.23	4.98	8.56- 9.23	977	450 - 450 -	190 - 190 1	653 653 2	-	544 45 499 2	2104 51 2053 3	795 48 747 8	349 161 188 63	332 194 138 73	92	184 124 60 12	344 281 63 22	142 107 35 34	84 18	281	2058 1895 163 28			-	-	-	

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Detroit, Mich., March 1980

Sex,3 occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)	Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)
Maintenance, toolroom, and			Boiler tenders	642	9.31	Forklift operators		
powerplant occupations - men					0.01	Manufacturing	8,711	9.40
Maintenance carpenters	607	40.00	Material movement and custodial		2	Nonmanufacturing	7,107	9.28
		10.92	occupations - men		1	Nonmandiacturing	1,604	9.95
Manufacturing Nonmanufacturing:	541	10.95			100	Cuarda		
Public utilities	07		Truckdrivers	8,466	9.42	Guards	5,078	7.08
1 dono dantes	37	9.11	Manufacturing	2 478	9.19	Manufacturing	2,215	9.40
Maintenance electricians	3,879	44.00	Nonmanufacturing	5,988	9.52	Nonmanufacturing	2,863	5.28
		11.36	Public utilities	3,158	10.75	Public utilities	68	8.54
Manufacturing Nonmanufacturing:	3,775	11.38		3,100	10.75			
Public utilities	34	0.00	Truckdrivers, light truck	550	7.24	Guards, class A	955	7.64
, deno dandos	34	9.60	Manufacturing	127		Nonmanufacturing	858	7.56
Maintenance painters	601	10.97	Nonmanufacturing	127	8.32			
Manufacturing			The state of the s	423	6.91	Guards, class B	4,123	6.95
Nonmanufacturing	533	11.00	Truckdrivers, medium truck			Manufacturing	2118	9.44
reormanuactoring	68	10.75	Manufacturing	2,611	8.42	Nonmanufacturing	2,005	4.31
Maintenance machinists	672	10.00	Nonmanufacturing	376	8.38		2,005	4.01
Manufacturing	6/2	10.92	Nonmanufacturing	2,235	8.43	Janitors, porters, and cleaners	7.987	0.07
Nonmanufacturing	584	11.12				Manufacturing	7,987	6.67
Nonmanufacturing	88	9.56	Truckdrivers, heavy truck	816	9.82	Nonmanufacturing	3,635	8.70
Public utilities	88	9.56			0 5 5	140/mandracturing	4,352	4.97
Maintenance mechanics			Truckdrivers, tractor-trailer	3,634	10.29	Material movement and custodial		
			Manufacturing	1,193	9.61			
(machinery)	4,532	10.98	Nonmanufacturing	2,441	10.62	occupations - women	1000	No. of the last
Manufacturing	4,484	11.00	Public utilities	1,695	10.74	Chinage		
Maintenance mechanics				283	10.74	Shippers	75	9.91
(motor vehicles)	2.240	40.74	Shippers	519	9.24	OL:		A THE REAL PROPERTY.
Manufacturing	2,240	10.74			5.24	Shippers and receivers	105	9.30
Nonmanufacturing		10.98	Receivers	721	8.82	Manufacturing	61	9.30
Public utilities		10.45			0.02			- P. W. A. S. F.
r done dundes	633	10.85	Shippers and receivers	511	8.39	Order fillers	709	8.28
Maintenance pipefitters	2,553	11.00	Manufacturing	476	8.47	Nonmanufacturing	615	8.16
Manufacturing		11.20		THE RESERVE THE PARTY OF THE PA	0.41			
	2,525	11.21	Warehousemen	2,102	8.10	Shipping packers	389	7.72
Maintenance sheet-metal workers	603	11.16	Manufacturing	1,000	8.26	Manufacturing	115	8.01
Manufacturing	580		Nonmanufacturing	1,102	7.97	Nonmanufacturing	274	7.60
		11.22		1,102	7.97			7.00
Millwrights	3,913	11.27	Order fillers	2,290	0.04	Material handling laborers:	ALCOHOLD .	
Manufacturing	3,855		Manufacturing	2,290	8.61	Manufacturing	191	8.88
		11.27	Nonmanufacturing	207	8.58			
Machine-tool operators (toolroom)	2,148	11.29	, to managed mig	2,033	8.61	Guards:		
Manufacturing	2,148	11.29	Shipping packers	400	0.00	Nonmanufacturing	416	4.15
	40 05 05 12 10 1	11.29	Manufacturing	469	8.80			
Tool and die makers	5,868	11 20	manufacturing	374	8.65	Guards, class B:		
Manufacturing	5,867	11.33	Material handling laborage		1000	Nonmanufacturing	396	4.01
	5,00/	11.33	Material handling laborers	3,415	9.19			4
Stationary engineers	640	11.32	Manufacturing	2,258	9.19	Janitors, porters, and cleaners	3,910	5.82
Manufacturing	548	11.32	Nonmanufacturing	1,157	9.18	Manufacturing	1 255	8.29
	548	11.48	Public utilities	476	10.68	Nonmanufacturing	2.655	4.65

Table A-7. Indexes of earnings and percent increases for selected occupational groups, Detroit, Mich., selected periods

			All industries					Manufacturing				Nonmanu	facturing	
Period*	Office clerical	Electronic data processing	Industrial nurses	Skilled mainte- nance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Skilled mainte- nance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Unskilled plant
ndexes (March 1977=100):							4400	119.1	118.2	120.0	115.2	117.6	(6)	117.6
March 1979	115.3	118.0	119.5	118.3	118.9	115.4	118.8		131.3	135.5	125.9	129.5	(6)	128.5
March 1980	127.1	130.2	134.0	131.4	132.7	128.9	131.2	134.0	131.3	133.5	123.9	120.0	()	120.0
ercent increases:														1
February 1972 to March 1973:	de La	(4)	-7	5.3	6.5	4.7	(6)	5.5	5.2	6.1	6.6	(6)	6.5	7.5
13-month increase	5.7	(6)	5.7			4.3	(6)	5.1	4.8	5.6	6.1	(6)	6.0	6.9
Annual rate of increase	5.3	(6)	5.3	4.9	6.0 9.3	7.4	(6)	8.8	8.7	10.6	7.0	(6)	(6)	5.6
March 1973 to March 1974	7.1	(6)	8.8	8.6	17 17 17 17 17 17 17 17 17 17 17 17 17 1	1.1	9.7	13.0	10.5	12.4	8.9	97	(6)	9.1
March 1974 to March 1975	10.5	9.5	13.0	10.4	11.4	12.3		7.9	7.1	8.3	8.0	7.5	(6)	9.0
March 1975 to March 1976	7.7	7.0	7.9	7.2	8.6	7.4	6.7		9.4	8.8	7.4	6.3	(6)	7.4
March 1976 to March 1977	7.6	7.0	8.5	9.3	8.2	7.9	7.8	8.7			7.0	6.1	11.0	7.2
March 1977 to March 1978	6.5	6.8	8.1	8.3	7.9	5.9	7.4	7.8	8.3	8.5		10.8	10.9	9.7
March 1978 to March 1979	8.3	10.5	10.5	9.2	10.2	9.0	10.6	10.5	9.1	10.6	7.7	100 TO 10	10.9	9.3
March 1979 to March 1980	10.2	10.3	12.1	11.1	11.6	11.7	10.4	12.5	11.1	12.9	9.3	10.1	(°)	9.3

Table A-8. Average pay relationships within establishments for office clerical occupations, Detroit, Mich., March 1980

									Office	clerica	l occupa	ation bei	ng com	pared					101 107	185		
Occupation which equals 100			Secret	aries		Steno	graphers	Tran- scrib- ing	Тур	ists	File o	clerks	Mes-	Switch- board		Order	clerks	Accou		Payroll	Key ent	
Occupation which equals 100	Cla	ss Clas	s Clas	SS Clas	SS Clas	S Senio	Gener- al	ma- chine typists	Class A	Class B	Class B	Class C	sen- gers	opera- tors	tor -recep- tionists	Class	Class B	Class A	Class B	clerks	Class C	B B
Secretaries, class A		00																				
ecretaries, class B	1	13 10															THE REAL PROPERTY.		100			
ecretaries, class C	40 LV	28 11							100					1								
ecretaries, class D	1	40 12					1000		9.00		155		Man.	1-14	PERM			VGin-A				
cretaries, class E		51 13								LIL WALL		1000		100		1000		15500			WE WILL	
enographers, senior	1	51 13							1	10.3			1.33	17.36		1	1				THE RES	
enographers, general		68 15				6) 119 0 107		100					190		The same		1.00			The second	A CONTRACTOR	
anscribing-machine typists		60 13				Million House State St.		98	100	A. His			四是始		1 1 1				0.00	L. Marie	1855	
pists, class A	1	51 13						105	122	100				Jan 1		L L R	121.37					
pists, class B	1	83 16				100		(6)	114	108	100		1	120				Ba .	1000	THE LEGIS		
e clerks, class B		86 15						119	130	110	(e)	100		120		11786			Marie			
lo clarke class C		20 18						114	121	103	107	95	100			- 3	100			11.00		
essengers		86 16					7.00	105	98	89	92	84	85	100	10133	4-15		6.6				
witchboard operators	1	48 12	8 1	13 11	04 11	1 90	92	103	30	00	02	1	1	A SPIR	100					100		
witchboard operator	CONTRACTOR AND AND ADDRESS.	53 13	7 1	22 1	23 10	A 16	104	87	(6)	90	(6)	80	80	94	100	1		1000	1. 10			
receptionists					82	6) (6		70	83	68	(6)	(6)	(6)	(6)	67	100	Part of	TO BE	1900			
der clerks, class A				23		6) (6		(6)	(6)	84	(6)		92		103	(6)	100		The No.		Control 1	
rder clerks, class Arder clerks, class B		37 12			(6)	6 86		79		72	68		73		84	139	(6)	100	1	1 1	1936	
and the clark clare A		26 1 55 1			21 11	10 To		104	102	96	89	80	90	100	104	161	118	124	100			
occupting clarks class B						2 92	111	78	84	82	76		75	84	91	124	97	102	90	100		
aurall alarke	**********	32 1			03 10			(6)	94	80	89		77		94	129	127	104	87	103	100	
(ey entry operators, class A		38 1				9 100		97	105	94	87	82	90	100	112	146	(6)	125	98	122	125	1
eventry operators class B		56 1	+4 1	20 1	20 1	100	101	31	100	57	1			_					Landin.	40	- account	T

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

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

See appendix A for method of computation.

Table A-9. Average pay relationships within establishments for professional and technical occupations, Detroit, Mich., March 1980

						P	rofessional a	nd technical	occupation b	eing compare	d					
Occupation which equals 100		mputer syste alysts (busine		Computer	programmers	s (business)	Cor	mputer opera	tors	Computer		Dra	fters		Electronics	Registere
	Class A	Class B	Class C	Class A	Class B	Class C	Class A	Class B	Class C	librarians	Class A	Class B	Class C	Class D	Class B	industrial nurses
Computer systems analysts	Water To	18 44 79				7 - 7					0.00071	Olass D	Class C	Class D	Class B	
(business), class A	100						10° N									
(business), class B	114	100											45.5			
(business), class C	137	118	100													100
(business), class A	126	113	(6)	100												
(business), class B	146	133	116	119	100									10		
(business), class C	167	150	131	139	122	100										
omputer operators, class A	141	125	109	110	98	100	400							Bath All		1000
omputer operators, class B	159	139	120	126	116		100					F2 7.37	a selection		10.	
omputer operators, class C	182	159	135	146	128	93	117	100								
omputer data librarians	195	154	134	(6)	123	109 107	138	122	100						10.00	
rafters, class A	129	117	103	104	87	79	131	114	100	100						15.00
ratters, class B	140	128	112	116	95	88	96	87	76	85	100			Part Part		
rafters, class C	167	152	131	137	117		100	91	85	85	116	100				
rafters, class Dlectronics technicians,	201	181	156	(6)	142	104 124	120 149	111 129	102 122	(6) 130	144 181	127 161	100 129	100		
class B	140	(6)	(6)	(6)	88	(e)	400								NULSE MORE	1 1 / 1
Registered industrial nurses	146	131	113	118	102	(°) 88	102	76 97	(6) 84	(6) 87	(6) *116	(6) 106	(6)	(6)	100	

See table A-8 for description of these pay relationships and appendix A for method of computation.

See footnotes at end of tables.

Table A-10. Average pay relationships within establishments for maintenance, toolroom, and powerplant occupations, Detroit, Mich., March 1980

			The beat of		Mainten	ance, toolro	om, and powe	erplant occupa	ition being co	mpared				
Occupation which equals 100					Mech	anics					Machine-			
	Carpenters	Electricians	Painters	Machinists	Machinery	Motor vehicles	Pipefitters	Sheet-metal workers	Millwrights	Trades helpers	tool operators (toolroom)	Tool and die makers	Stationary engineers	Boiler tenders
Maintenance carpenters	100			18677EV.	6 3 10		2799	U.S. Oranon	Things 1					
Maintenance electricians	98	100	Maria de la companya della companya della companya de la companya della companya		The second				11 17		THE PLANE			
Maintenance painters	101	103	100		The State of									
Maintenance machinists	98	101	100		1300			H. STEP SEE						
faintenance mechanics		101	98	100									THE REPORT OF	
(machinery)	98	101	98	100	100									
(motor vehicles)	99	102	99	101	100	1,000								
aintenance pipefitters	100	102	99	101	102	100					The second second			
laintenance sheet-metal	100	102	99	102	102	100	100							
workers	100	102	99	404	100		La delita		10/10/15					
fillwrights	99	102		101	102	100	100	100			BOOK BESTER			
laintenance trades helpers	115		99	102	102	100	100	100	100					
achine-tool operators	115	120	114	118	(6)	117	116	118	117	100	100			
(toolroom)	98	404								The same of the				
ool and die makers	90	101	98	100	100	99	99	99	99	(6)	100			
ationary engineers	97	100	97	99	99	98	98	98	98	(6)	99	100		
oiler tenders	96	99	96	98	99	97	97	98	97	86	100	100	400	
Olici teriocis	101	103	(6)	103	(6)	(6)	101	(6)	(6)	(6)	100	100	100	100

See table A-8 for description of these pay relationships and appendix A for method of computation.

Table A-11. Average pay relationships within establishments for material movement and custodial occupations, Detroit, Mich., March 1980

						Mate	erial moveme	ent and custoo	lial occupation	being comp	pared					
Occupation which equals 100		Truck	drivers				Shippers			Ohioniaa	Material	Forklift	Power-truck	Gu	ards	Janitors,
Occupation which equals 100	Light truck	Medium truck	Heavy truck	Tractor- trailer	Shippers	Receivers	and receivers	Warehouse- men	Order fillers	Shipping packers	handling laborers	operators	operators (other than forklift)	Class A	Class B	porters, an
Truckdrivers, light truck	100															
Truckdrivers, medium truck		100														
Truckdrivers, heavy truck		(6)	100										181 88			
Truckdrivers, tractor-trailer		(6)	99	100												The Section Store
Shippers	99	117	(6)	104	100						10000					
Receivers	. (6)	104	(6)	(e)	100	100										de la lateri
Shippers and receivers	(6)	104	(6)	111	(e)	(6)	100								The same	
Warehousemen		(6)	(6)	113	112	99	92	100								142 6 1 141
Order fillers		130	(6)	110	103	100	100	(6)	100	The same	Mark Black				Burtoll Start	THE RESERVE
Shipping packers		118	(6)	113	105	(6)	101	(6)	101	100						1000
Material handling laborers		109	103	110	104	(6)	101	101	98	100	100				1	The second
Forklift operatorsPower-truck operators		105	(6)	108	106	99	100	99	99	99	98	100				
(other than forklift)	(6)	(6)	(6)	106	(6)	(6)	(6)	(6)	101	(6)	(6)	(6)	100			A Charles
Guards, class A	The second secon	(6)	(6)	160	(6)	110	(6)	86	(6)	(6)	124	132	(6)	100	A Second Second	
Guards, class B	The state of the s	115	(6)	106	105	(0)	96	98	96	96	96	99	(6)	(6)	100	100
cleaners	126	113	(6)	116	111	103	105	109	104	103	104	106	(6)	115	108	100

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

Table A-12. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1980

Cocceptation and influsion workers (standard) workers (standard) Median workers (standard) Media		Number	Average	J. Holling	Weekly e							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in do	llars) of						
Marufacturing 3,000 380,		of	hours ¹ (stand-	Mean ²	Median ²	Middle range ²	and under	-	-	- 1	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	520 - 560
Manufacturing 3.069 3.069 3.060 3.06		7,346	39.5	358.00	365.00	303 50- 419 50		M. F.	6	24	140	174	204	000	047	000											6
Secretaris Sec		4,277	40.0					N. 1782	-		142				100000000000000000000000000000000000000											275	86
Manufacturing 129 Aug 486.0 486.0 482.0 486.0 482.0 486.0 482.0 486.0 482.0 486.0 482.0 486.0 482.0 486.0 48	Nonmanufacturing	3,069	39.0	315.50			-	-	6	1000 0000	138															256 19	1 100
Manufacturing	Secretaries, class A	439	39.5	427 00	441 00	351 00- 505 50						WITTE	-	40					177			GUILLE	V.35 X	Trans.			
Nemanufacturing		276					B	398	Van Ber		4	700	/	10	6	5	14					19				68	86
Public utilities 8 1,987 30.5 40.0 42.5 46.0 38.0 39.0 40.0 42.5 46.0 38.0 39.0 40.0 42.5 46.0 38.0 39.0 40.0 42.5 46.0 38.0 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 39.5 39.0 40.0 4	Nonmanufacturing	163						14506	100		4	CROT	7	2	-	-								27	30	57	85
Marufacturing	Public utilities	66	39.0				-		3		-	-	-	8	-	10001 100							5	1	8	11	1
Marufacturing	Secretaries, class B	1.687	39.5	400.00	415.00	346.00 463.50			100											7							
Normanufacturing 640 38.5 39.40 0 363.00 39.00 0 398.50 5 4 8 8 9 2 13 5 14 8 8 6 85 8 8 17 1 43 9 35 33 45 18 Public utilises 170 38.5 351.00 347.50 38.50 39.40.0 398.50 5 4 8 8 9 2 13 5 12 31 188 9 17 2 18 18 18 18 18 18 18 18 18 18 18 18 18							g Atlaba			4	8	100000				1000		102		76	157	145	141	184	276	195	
Public utilities								-	100	7	-	5									46	102	109	151	231	189	
Manufacturing 2,239 40.0 881 03 39.2 93.5 0 595.0 - 295.0 93.5 0 - 6 6 14 23 89 53 14 148 13 20 27 283 39 38 410 643 129 3 8 72 129 120 120 120 120 120 120 120 120 120 120							-	-	-	-	-	-	-				1000					43				6	
Manufacturing 2,239 40.0 881 03 39.2 93.5 0 595.0 - 295.0 93.5 0 - 6 6 14 23 89 53 14 148 13 20 27 283 39 38 410 643 129 3 8 72 129 120 120 120 120 120 120 120 120 120 120	Secretaries, class C	3,123	39.5	367.00	381.50	332 00- 420 00		200		0	14	07	440	00			1919	13 4			I I					Kan Is	
Normanufacturing	Manufacturing								0	0	14	21										410	643	129	3	8	
Public utilities 33 40.0 315.0 310.0 286.00 - 310.50 2 14 75 100 164 112 12 116 125 316 283 107 138 1104 105 4 1 1 4 1	Nonmanufacturing						1 3		6	0	14	9											534	109	3	6	Fire-
Nonmarufacturing	Public utilities							-	-	-	-		-			70		38	34		72	67	109		-	2 2	-
Nonmarufacturing	Secretaries, class D	1.769	39.5	303 50	310.00	256 00- 343 00					70	400							100.19					-	and the		
Stenographers									- 12														4 2	1	1 -	4	
Manufacturing	Secretaries, class E	283	39.5	252.00	246.50	215.50- 275.00		-	-	8	40	31	44	46	50	20	10	10	20	_	2	2					
Marufacturing	Stenographers	1 778	39.0	303.00	310.50	260 50 254 00			-	00							Ties and	11.09									
Nonmanufacturing 992 38.5 302.50 355.05 237.00 388.00 5 28 80 83 37 46 44 55 38 29 319 112 44 2	•							68 16	0	28	10000									145	89	10	-	100-	-	-	A MAN
Public utilities 232 40,0 330,50 354,00 296,50 362,00									-	-												8	-	-	-	200	-
Nonmanufacturing	Public utilities							_	-	-	-											2	_	-	-		-
Nonmanufacturing	Stenographers, senior	1 234	39.0	318 50	227.00	202.00 256.00				1			1333									10.10	1000	75-15			
Nonmanufacturing							-		-	-												Unit Unit 1997	-	-	-	-	1
Nonmanufacturing	Stenographers, general	544	40.0	267.50	269.50	207 00- 312 00	1940			20	60	05		05	-						XV.						
Public utilities		341						A COLUMN	-								19					9 -	-	-	- 20		-
Nonmanufacturing 113 39.5 180.00 176.50 165.00 183.00 8 71 28 2 3 3 1 1		141					-	-	-	-	-	4	1				2					-	-		-	-	450 - 560 -
Nonmanufacturing	Transcribing-machine typists	136	39.5	203.50	176.50	170 00- 190 50			0	71	20					3.54	Acces 1		1			1000					
Manufacturing 351 40.0 304.00 306.00 273.50-340.00 - - - 19 10 5 14 19 31 66 53 44 20 31 23 7 9 - - - - - 19 10 5 14 19 31 66 53 44 20 31 23 7 9 - - - - - 19 10 5 14 19 31 66 53 44 20 31 23 7 9 - - - - - 19 10 5 14 19 31 66 53 44 20 31 23 7 9 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Nonmanufacturing	113	39.5				-						-	-	-	-	-		4	Ē	1	0			-	-	
Manufacturing	Typists	1,676	39.0	239.00	209.00	169 50- 315 50		54	120	404	100	70	-		TO BY					SE .			10		1 11 15	NAME OF	
Nonmanufacturing	Manufacturing							54	139					4,4								7	9	-	-	3	9-
Public utilities	Nonmanufacturing							54	120			-	1.77				53				23	7	9	-	1 -	-	
Nonmanufacturing	Public utilities						-	-	-	100 100 100							4				1 -		-	-	-		_
Nonmanufacturing. 558 38.0 282.00 289.50 213.00 348.00 - 4 57 56 33 22 55 36 24 4 13 245 9		782	38.5	294.00	316.50	244.50- 348.00			4	50	50	20	00	00							7019				BATTA		
Public utilities							- 13	9 5 5	4								40				14	7	9	-	-	-	10 4
Manufacturing							-		4	-							4	777	1111000 0 100	-		-	-	- 12		-	135
Manufacturing	Typists, class B	894	40.0	191.00	173.00	160.00- 198.00		54	135	245	140	40	24	-	00	00			1					16.8	500		
Nonmanufacturing	Manufacturing		39.5				_	-	105			317 ST 100 ST							The second second	7		-	-	-	-	-	-
Manufacturing	Nonmanufacturing	767	40.0				-	54	135							4	-	-		6	9	-	-	_	1		
Manufacturing		752	39.5	171.00	154.00	142.00- 170.00		118	349	134	59	14	16		7								-		33.15	10	
Nonmanufacturing 676 39.5 156.50 151.00 141.00 164.00 142 349 459 50 50 50 50 50 50 50 50 50 50 50 50 50				300.00				-	045			4	9	100	6		/		4		2	-	-	-	-	-	-
	Nonmanufacturing	676	39.5				-	118	349	-	-	10	8	1	1	-	1	1	4	1	2	-	-	-	-	-	-
File clerks, class B	File clerks, class B	267	40.0	204.50	170.00	157.00- 212.00	_	1	72	83	41	4	13	1	6	2	6	7	4	27		18 - 1				1	

Table A-12. Weekly earnings of office workers-large establishments in Detroit, Mich., March 1980 —Continued

		Average		Weekly ea (in dolla							Nur	nber of	workers	receivi	ng strai	ght-time	weekly	earning	gs (in do	ollars) of	of —					
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range²	100 and under 120	120 - 140	140 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340	360 - 380	380 - 400	400 - 420	420 - 440	440	-	480 - 520	520 - 560
File clerks, class C	452 438		148.50 147.00		139.00- 153.00 139.00- 152.00	-	117 117	277 277	39 33	9 7	4 -	3	1	1 1	-	1 1	-	-			-	-	-	-		
Wessengers	339 105		203.50 249.00	171.50 214.50	156.00- 232.00 176.00- 340.00	-	41	54 5	97 24	35 16	20 14	12 8	26 2	-	1 -	4 4	6	1	25		1	-		-	-	-
Manufacturing Nonmanufacturing	234				150.50- 191.50	-	41	49	73	19	6	4	24	-	1	-	1	15		1	-		-			-
Switchboard operators					164.50- 355.50 287.00- 384.00	2	2	70	31	25 5	10	24	16	14	16 15		18					8				-
Manufacturing						2	2	70	27	20	10	19	11	6	1	1	1	7 18	1	1 :	2	2	-	- 300	-	-
Nonmanufacturing						100000000000000000000000000000000000000	2	70	21	20	10	6	2	3	1	1		14		85 100	-			-	-	-
Public utilities	34	40.0	306.00	326.00	254.00- 349.00		-					0	,	3												
Switchboard operator-						A.C.												4 3								
receptionists	67	39.5	238.00	230.50	206.00- 280.00	- 51	4	3	3	3	11	19	3	5	5	3		4 3								
Order clerks	112	38.0	262.50	203.00	152.50- 395.50	8	13	12	16	6	2	_	6	1	-	4	:	3 1	110 0100		13		2	-	2	1
Manufacturing	55					-	-	-	-	2	2	-	6	1	-	4		3 1		3 1	13	9	10			1
Order clerks, class B	73	37.0	192.00	162.00	135.00- 198.50	8	13	12	16	6	2		6	1	-			- 1	1	1	1	4	2	-	-	-
Accounting clerks							31	56	169			205 69			1.00	89									3 13 7 13	38
Manufacturing	997						-	1000	29									9 4		6		10	9	3	6	5
Nonmanufacturing	1,186	39.0	234.50	226.50	186.50- 285.50		31	56	140	176	142	136	117	/9	220	24										
Accounting clerks, class A	1,251	39.5	337.00	309.50			-	1	21	30		116					3								13 13 37 13	38
Manufacturing		40.0	390.50	405.00			-	-	5	-	22												9	3	6	5
Nonmanufacturing			266.50	261.00	220.00- 295.00			1	21	30	77	87	52	44	148	3 23	3	9 4	4	3	1	10	9	3	0	5
A state date B	932	39.0	225.50	209.00	179.50- 268.00		31	55	148	172	108	89	74	49	115	5 28	3 1	5 11	1 1	7 1	10	4	2	4	-	-
Accounting clerks, class B	1 6 9 SEC								29	26	43	40	9	14	37	7 27	1	5 11	1 1	4 1	10	4	2	4	-	-
Manufacturing	10.000000000000000000000000000000000000						31	55					65	35	78	3	2.25	-	- 100 - 14	3	-	-	-		-	
Nonmanuracturing											07	37	32	11	17	, ,	,	2 14	4 1	9	9	11	7	16	8	26
Payroll clerks							- 5	12								STATE OF THE STATE	1 (1) (1)	1 12				11	7	14		26
Manufacturing								-	12										2	1	1	- 1	-	2	1	-
Nonmanufacturing	. 165	39.0	213.00	203.50	175.00- 232.50		- 5	12	38	22	21	23	22		1											
Key entry operators								117	207									0 233 5 63		1 17		00 78	1			_
Manufacturing								2	17									5 170				22	-		-	- 0
Nonmanufacturing		7 39.5					-	115										1 9			2	-	_	_		-
Public utilities	. 279		288.50	300.00	242.00- 340.00)			21	20	19	8	17	49	10											
Key entry operators, class A								-	1	55		130		30				12 174				00 78	1	-		-
Manufacturing							34.04		1	47								1 14				22	-	-	-	-
Nonmanufacturing	56	39.0	278.0	244.00														18 5	9	11 16	69					
Key entry operators, class B							-	117										18 5			38				-	-
Manufacturing	38						-	- 2									7	4 2			31	_	-	-	-	-
Nonmanufacturing							1	115									6	1 1		19	2	_	-	-	-	-
Public utilities	. 15	3 39.0	266.0	0 270.00	194.50- 339.50	J	-	-	21	20	, ,		- 1	3		9	_				-	-		-	-	

Table A-13. Weekly earnings of professional and technical workers-large establishments in Detroit, Mich., March 1980

	Number	Average weekly		Weekly e (in doll							Nu	mber of	worker	s receivi	ng strai	ight-time	weekly	earning	s (in do	llars) of	_					
Occupation and industry division	of workers	hours¹ (stand- ard)	Mean ²	Median²	Middle range ²	Under 180	180 and under 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660 - 700	700 - 740	740 and over
Computer systems analysts										113									. 600							
(business)	2,614	39.5	529.50	544.00	442.50- 614.50	-	-	_	-	1	-	8	56	52	62	120	210	258	262	250	309	430	322	177	78	19
Manufacturing	1,616	40.0	546.00	564.00	465.00- 628.50	1	-	_	_			8	13		17		121		166			269	237	121		
Nonmanufacturing	998	39.0	503.00	504.00	413.00- 593.50	-	-	-	-	1	-	-	43		45		89					161	85		69	
Computer systems analysts																										
(business), class A	750	39.0	577.50	593.50	499.00- 658.50		1																			100 10
Manufacturing	328	40.0	609.50			1000	1000				1905		-	-	P. 5 5	12	35		82	99		135	89	85	78	19
Nonmanufacturing	422		552.50				1402							_		12	10 25		40 42			25 110	47 42		69	
C					/												20	20	44	00	45	110	42	21	9	
Computer systems analysts (business), class B	1 004	40.0	500.00	500.00								C. Land														
Manufacturing	1,201	40.0	533.00			-	7	-	-	-	-	-	6	15	25		136	142	65	42	140	224	233	92		193
Manufacturing	854	40.0	540.50			-	100 E	-	-	-	-	-	5	10	17	66	106	57	22	22	114	188	190	57	-	
Nonmanufacturing	347 142	39.5 38.5	513.50 460.00			-	-	-	-	-	-	-	1	5	8	15	30		43			36	43	35	-	-
	142	30.5	400.00	454.00	432.50- 477.00							-				8	11	67	37	8	3	8	-	- 1	-	
Computer systems analysts														6.5			100									Section .
(business), class C	663	39.5	470.00		386.50- 545.50	-	-	_	-	1	_	8	50	37	37	27	39	56	115	109	113	71		Service Line		
Manufacturing	434	40.0	509.00			-	-	-	_		-	8	8	10		-	5		104	102		56	\$10 k L	N445		S. V.
Nonmanufacturing	229	38.5	396.50	366.50	336.00- 429.50	-	-	-	-	1	-	-	42	27	37	27	34		11	7	11	15				-
Computer programmers (business)	1,743	40.0	432.50	434.50	372.00- 500.50				10	25	64	70	00													
Manufacturing	1,081	40.0	466.00						18	4	64	72	89	54	75		298		263	215		62	20	1	-	-
Nonmanufacturing	662	40.0	377.50				10 X X		9		12	2	6	11	25		210		194	176		51	19	1	-	-
Public utilities	56	40.0	365.00				_		9	21	52	70 7	83 10		50 9		88	65 5	69 8	39	22	11	1	-		-
Computer programmers																										
(business), class A	579	40.0	500 50	540.50	474.00 555.50						S 2 3 3	200														COP S
Nonmanufacturing	158	40.0 39.5	503.50 436.00				Fall E			-		15	15 15	11	10		15			147 16	115	57	20	1	-	-
												10	13	10	10	*	°	22	33	16	13	11				1
Computer programmers (business), class B	697	40.0	418.00	428.50	000 00 404 00						3													7.5		
	402	40.0						F 700	4	7	16	27	35	26	43		122		104	60	-	5		-	-	-
Nonmanufacturing	295	40.0	445.50 381.00						4	2 5	14	27	33	5 21	15 28		69 53		80 24	39	14	5	7	-	- 7	-
												-	00		20	23	33	33	24	21	9					
Computer programmers		A 100										0000	28.00	STALLS								1470				45
(business), class C	467	40.0	365.50			1900	B -	-	14	18	48	30	39	17	22	33	161	42	33	8	2	-	_	- 1000	-	
Manufacturing	258	40.0	396.00			-	-	-	9	2	10	2	4	5	10	21	134	32	21	6	2		-		-	-
Nonmanufacturing	209	40.0	328.00	308.00	272.00- 378.50		-		5	16	38	28	35	12	12		27	10	12	2		- 10	-	-	-	-
Computer operators	1,359	40.0	369.50	382.50	282.00- 455.50	20	18	43	84	102	59	92	70	52	66	74	164	212	242	00				1		
Manufacturing	849	40.0	406.50			20	2	18	39	27	14	19	38	28	54	71 58	161 99	212 184	210 180	80 71	19	7			7	100
Nonmanufacturing	510	39.5	308.00			20	16	25	45	75	45	73		24							18	-			-	-
Public utilities	104	39.5	308.00			3	-	2	9	8	6	40	32	3	12	1	62 24	28	30	9	1				100	
Computer energy	0.46	10.0																								
Computer operators, class A	249	40.0	417.50				-	-	2	15	15	13	11	13	9	8	23	34	48	40		-	- 18	-	1 P. J. E	1000
Manufacturing	161	40.0	457.00			-	-	-	2	4	-	-	7	5	6	3	11	31	39	35	18	- 1	_	-	-	17.50
Nonmanufacturing	88	39.5	345.50			-	-	-	-	11	15	13	4	8	3	5	12		9	5	-	-		-		-
Public utilities	28	40.0	343.00	320.50	278.50- 408.00	-	100	-	-	2	6	4	2	2	-	-	8	3	1	-	-	-	1	-	-	-
Computer operators, class B	563	39.5	377.00	394.00	286.50- 455.50		4	7	36	49	28	32	29	19	18	26	81	110	84	39						
Manufacturing	354	40.0	408.50					4	24	11	10	7	11	6	13		39		75	35		19.17	7	b. 20		
Nonmanufacturing	209	39.0	324.00				4	3	12	38	18	25	18	13	5		42		9	4		7	3395	1		
Public utilities	36	40.0	315.50			-	-	-	8	6	-	5	-	-	1	-	16		9	-		- 3			- 1	_
Computer operators, class C	547	40.0	340.00	241 50	251.00 400.00	00		000						100												
Manufacturing	334	40.0	340.00 380.50			20	14	36	46	38	16	47	30	20	39	37	57	68	78	1	-	-	-	91-	1 -	8 -
Nonmanufacturing	213	39.5	277.00			20	12	14 22	13	12	4	12	20	17	35	35	49		66	1	- C	-	-	5 5 5	30 m =	-
	213	38.3	277.00	235.00	210.00- 290.00	20	12	22	33	26	12	35	10	3	4	2	8	14	12		7	-	-	7 9.5	-	-
Barrier : 10 : 10 : 10 : 10 : 10 : 10 : 10 : 1																										

Table A-13. Weekly earnings of professional and technical workers-large establishments in Detroit, Mich., March 1980 —Continued

	Number	Average weekly		Weekly ea (in dolla		Wiggs.					Nu	mber of	worker	s receivi	ing strai	ght-time	weekly	earning	ıs (in do	llars) of	-					
Occupation and industry division	of workers	hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	Under 180	180 and under 200	200	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660	700 - 740	740 and over
Drafters	3,197	40.0	499.00	514.50	419.00- 588.00			6	10	18	23	13	70	105	160	100	070	201	000	000						
Manufacturing	3,035	40.0	507.00	523.00			- 13		10	5	9				162	120 102		294	380	386	446		364	2		
Nonmanufacturing	162	40.0	353.50					6	10	13			64	101	141 21	102		283 11	358 22	384	446	525	364	2		
Drafters, class A	1,933	40.0	561.00	573.50	524.00- 611.50	2.4							2	12	18	12	45	55	182	295	421	525	364			P.
Manufacturing	1,851	40.0	567.00	576.50	531.00- 611.50	1000			1					0	10	12	23	44	160	293	421			2		1
Nonmanufacturing	82	40.0	416.50	406.00			-	-	-	-	-	-	2	3	8	12	22	11	22	293	421	525	364	-	N. F.	
Drafters, class B	573	40.0	447.00	459.00	419.00- 491.50			1	4		0	7	10		200		05									
Manufacturing	520	40.0	460.50	463.00	431.00- 493.50			100	37	. "	9	'	10	11	23	11		143	170		25	-		-		1
Nonmanufacturing	53	39.5	312.00	307.00			-	1	4	4	9	7	4	1	13	5	61 4	143	170	90	25	_		9/ I		
Drafters, class C	459	40.0	387.00	391.00	364.00- 423.00	100		5	6	14		2	7	13	51	79	454									
Manufacturing	432	40.0	396.00			-	-	-	-	5	-	-	7	13	51	79		94 94	28 28	1		_	-			
Drafters, class D	224	40.0	335.50	336.00	318.00- 348.50						0	,	47	CE	70	40										
Manufacturing	224	40.0	335.50			-	-	-			9	4	47	65 65	70 70	18	9	2	_			1	2	1		
Electronics technicians	74	40.0	463.00	479.50	432.50- 479.50	-	6 %	_		-		148-			6	-	2	16	38	12	-					
Registered industrial nurses	434	40.0	425.50	435.50	393.50- 477.50	Bis .				6	2	19	10	7	20	25	87	100	147							
Manufacturing Nonmanufacturing:	385	40.0	430.50		400.50- 477.50				-	2	2	17	6	7	15	20		108 97	147 142	3	40 m =		-	-		
Public utilities	25	39.0	380.00	382.00	357.00- 423.50	Sec		380						Call Vi				7	TO LET	B					No. of	

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex-large establishments in Detroit, Mich., March 1980

	Number		rerage nean²)		Number		rerage nean²)				verage nean²)
Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars
Office occupations -				Switchboard operators	. 321	39.5	265.50	Computer programmers		aru)	
men				Manufacturing	. 136	40.0	332.00	(business), class B:	1000	Politic la	
Payroll clerks	76	40.0	413.50	Nonmanufacturing	. 185	39.5	216.00	Manufacturing	. 283	40.0	
		40.0	413.50	Public utilities	. 32	40.0	306.50		203	40.0	449.00
Office occupations -				Switchboard operator-			alabera bil	Computer programmers			
women		The state of		receptionists	. 63	20.5		(business), class C:			
Secretaries	0.570	00.5			. 03	39.5	233.00	Manufacturing	. 154	40.0	406.00
Manufacturing	6,573 4,270	39.5 40.0	364.50	Order clerks	. 85	37.5	219.50	Computer operators	. 893	40.0	007.00
		40.0	388.00			07.0	210.50	Manufacturing	610	40.0	387.00
Secretaries, class A	405	40.0	430.00	Order clerks, class B	. 67	37.0	174.00	[19] [10] [10] [10] [10] [10] [10] [10] [10	The same of the same	40.0	421.50
Manufacturing	276	40.0	468.50	Accounting clerks:				Computer operators, class A	. 207	40.0	428.00
				Manufacturing	740			Manufacturing	140	40.0	463.50
Secretaries, class B		39.5	407.50	Walled actioning.	710	40.0	320.00	Nonmanufacturing	. 67	40.0	354.00
Manufacturing	1,045	40.0	427.50	Accounting clerks, class A:		A STATE OF THE STA		Computer operators, class B			
Secretaries, class C				Manufacturing	446	40.0	356.50	Manufacturing		40.0	390.00
Manufacturing	2,975	39.5	371.50			10.0	550.50	wandacturing	. 252	40.0	420.50
Manufacturing Nonmanufacturing	. 2,234	40.0	380.50	Accounting clerks, class B:				Computer operators, class C	318	40.0	057.00
Public utilities	. 741	38.5	344.50	Manufacturing	264	39.5	258.00	Manufacturing	218	40.0	357.00 396.00
r abile duities	31	40.0	303.50	Payroll clorks	l line				210	40.0	396.00
Secretaries, class E	. 282	39.5	252.00	Payroll clerks	266	39.5	247.00	Drafters	3,059	40.0	504.50
		39.5	252.00	Nonmanufacturing	116	40.0	294.00	Manufacturing	2,904	40.0	512.50
Stenographers	1,729	39.0	305.00	riorinariaractaring	150	39.0	210.00	Nonmanufacturing	. 155	40.0	356.00
Manufacturing	. 854	40.0	303.00	Key entry operators	1,806	39.5		Drofton along t			
Nonmanufacturing	. 875	38.5	307.50	Manufacturing	645	40.0	276.50 337.00	Drafters, class A	1,918	40.0	561.50
Public utilities	. 223	40.0	334.00	Nonmanufacturing	1,161	39.5	242.50	Nonmanufacturing	1,839	40.0	567.50
Stonographers assist		125			1200	00.0	242.50	- Tormandiaotaning	79	40.0	418.50
Stenographers, senior		39.0	318.50	Key entry operators, class A	785	39.5	304.50	Drafters, class B	552	40.0	448.50
Nonmanufacturing	. 581	37.5	327.00	Manufacturing	261	40.0	351.50	Manufacturing	502	40.0	461.50
Stenographers, general	496	40.0	272.00	Nonmanufacturing	524	39.0	281.50	Nonmanufacturing	50	39.5	315.50
Manufacturing	202	40.0	277.50	Key entry operators, class B				Drafters class C			
Nonmanufacturing	294	40.0	268.00	Manufacturing	1,021	39.5	254.50	Drafters, class C	404	40.0	388.50
Public utilities	132	40.0	339.00	Nonmanufacturing	637	40.0 39.5	327.50		378	40.0	398.00
					037	39.5	210.50	Drafters, class D	181	40.0	335.50
Transcribing-machine typists		39.5	203.50	Professional and technical				Manufacturing	181	40.0	335.50
Nonmanufacturing	113	39.5	180.00	occupations - men						40.0	333,30
Typists	1,568	000		Computer systems analysts				Electronics technicians	74	40.0	463.00
Manufacturing	350	39.0 40.0	241.50	(business):		12.3		Registered industrial nurses:	12.5		
Nonmanufacturing	1,218	39.0	304.00 223.50	Manufacturing	1,420	40.0	550.50	Manufacturing	62	40.0	431.50
		00.0	223.50		1,420	40.0	553.50		02	40.0	431.50
Typists, class A	739	38.5	297.00	Computer systems analysts				Professional and technical			
Nonmanufacturing	516	38.0	285.50	(business), class A:				occupations - women			
	100			Manufacturing	297	40.0	619.00	Computer systems analysts			
Typists, class B	829	39.5	192.00	Computer systems analysts				(business):			
Manufacturing Nonmanufacturing	127	39.5	269.00	(business), class B	987	100		Manufacturing	196	40.0	493.50
1401IIIIaiiuiacturiig	702	40.0	178.00	Manufacturing	770	40.0	549.00		100	40.0	455.50
File clerks	703	39.5	100.00		770	40.0	547.00	Computer systems analysts			
Manufacturing	62	40.0	169.00 302.00	Computer systems analysts				(business), class B:		100	
Nonmanufacturing	641	39.5	156.50	(business), class C:				Manufacturing	84	40.0	484.00
		30.0	.50.50	Manufacturing	353	40.0	513.00	Computer programmers (business):	1000		
File clerks, class B	257	39.5	199.50	Computer programmers (business):		L. Ye		Manufacturing	279	40.0	430.50
				Manufacturing	000	10.0				40.0	450.50
File clerks, class C	414	39.5	148.00	Manufacturing	802	40.0	478.50	Computer programmers			
Nonmanufacturing	404	39.5	146.50	Public utilities	34	40.0	388.50	(business), class C:			
Messengers:			A PE			10.0		Manufacturing	104	40.0	382.00
Manufacturing	64	40.0	261.50	Computer programmers				Computer operators	402	39.5	040.00
See footnotes at end of tables.	04	40.0	201.50	(business), class A	452	40.0	516.50	Manufacturing	239	40.0	343.00 368.00

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex-large establishments in Detroit, Mich., March 1980 —Continued

Telephone Committee Commit			rerage nean²)				rerage nean²)		Number		rerage nean²)
Sex,3 occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars)
Computer operators, class B	168 102	39.0 40.0	357.00 378.50	Drafters	138 131	40.0 40.0	378.00 382.00	Registered industrial nurses	355 323	40.0 40.0	428.00 430.50
Computer operators, class C	192 116	40.0 40.0	325.50 351.00	Drafters, class C	55 54	40.0 40.0	377.50 380.00				

Table A-15. Hourly earnings of maintenance, toolroom, and powerplant workers-large establishments in Detroit, Mich., March 1980

	Number	Hourly earnings (in dollars)*				Number of workers receiving straight-time hourly earnings (in dollars) of —																					
Occupation and industry division	of workers	Mean ²	Median ²	Middle range ²	Under 7.40	7.40 and under 7.60	7.60 - 7.80	7.80 - 8.00	8.00 - 8.20	8.20 - 8.40	8.40 - 8.60	8.60 - 8.80	8.80 - 9.00	9.00	9.20 - 9.40	9.40 - 9.60	9.60 - 9.80	9.80	10.00	10.20	10.40	10.60	11.00	11.40	11.80 - 12.20	12.20 - 12.60	12.60 and over
Maintenance carpenters	689	10.89	11.28	11.15-11.32		. 4	- 12			1		13	48	21								1.83					
Manufacturing	597	11.04		11.15-11.32			N. M.					13		21	1000		-	36	-	20		7	517	18	4		
Nonmanufacturing		9.91	100000000000000000000000000000000000000	9.13-11.28			10/4/18	100			-	-	47	-	-	-	-	6	-	20	-	5	495		4		
Public utilities	37	9.11		8.73- 9.13						1		.13	1	21	-	-	-	30	-	-	-	2	22	2	-	-	
												13		11				6	-		-				-	-	
Maintenance electricians	3,790	11.46	11.60	11.53-11.61	-	-	7	-		_	34	-	64	5	24	13	1	1	32	7		133	00	2000	1	445	
Manufacturing	3,668	11.50	11.60	11.53-11.61	-	-	-			Access.	34		62		14		1	2			100		83		1	115	47
Nonmanufacturing		10.47		9.55-11.60			7	3			34	ST. (5)		0			1 385				-	129	78	Contract Contract	-	114	47
Public utilities	34	9.60		9.21- 9.72		28	-		100.2	3	1		2		10			2	22	7 7	1	4	5	47	1	1	
				1000															il and	·							3 40
Maintenance painters	591	10.98		11.28-11.28		-	1	-	-	-	4	2	30	-	-	-	18	7		24		19	466	9	0		
Manufacturing	527	11.08	11.28	11.28-11.28	-	-	-	-	-	-	_	-	30	-	-			100	1000	24	or series	19	445		0	BR	
Nonmanufacturing	64	10.16	9.81	9.65-11.28	3	-	- 1	-	-	-	4	2	-	-	-	_	18	7		-		-	21	8	9		
Maintenance machinists	718	11.07	11.42	10.99-11.55		1					18		05														
Manufacturing	630	11.28		11.41-11.55				Service R		-	10	14	25		13		25	4	-	18	-	78	18	410	11	62	The same of
	88					-	-		-	-	5	14	25	-	12		-	-	-	-	-	78	18	410	11	62	
Nonmanufacturing		9.56		9.55- 9.79		-	-	77	-	-	18	-	-	-	1	22		4	-	18	-	-	_	-	-	_	
Public utilities	88	9.56	9.63	9.55- 9.79	-	-		-	-	-	18	-	-	-	1	22	25	4	9 -	18	-	-	-	Table -	-	-	
Maintenance mechanics						1																					
(machinery)	4,011	11.35	11.53	11.51-11.60	100	20	10	20	-	13	54	50	15	6	46	15		100	10	2	34	45	101	2420	100	404	
Manufacturing	3,988	11.36		11.51-11.60		20	10		-	13	54	50	15		. 39			_	10		34	45	101	3439 3432		131	
Maintenance mechanics					- 33														100			-		8 7 7 9			
	1,772	10.00	44.00	11 00 11 00	05							-				Contract of			1	3333					STATE OF		
		10.98		11.32-11.36			5	-	8	-	10	27	39	18	18	7	67	19	1	51	F 0 -	17	1171	242	18	19	A 214
Manufacturing		11.11		11.32-11.36	35	-	5		8	-	10	-	17	18	9	-	-	-	_	12	_	15	972	216		19	
Nonmanufacturing	436	10.57		9.66-11.36	-	-	-	-	-	-	-	27	22	-	9	7	67	19	1	39	_	2	199		18		
Public utilities	285	10.30	10.37	9.66-11.09	-	-	-	-	-		-	27	22	-	-		67	13	1	39	-	2	70		18	_	
Maintenance pipefitters	2,599	11.25	11.33	11.32-11.36						18			60		10							07	0070				
Manufacturing	2,571	11.26		11.32-11.36				100		14			60	DEN	6			4				67	2272	35	133	-	
	2,07		11.00	11.02-11.00		7 10				14			00		0	3 - 35	-	4	-		1	67	2252	35	133	-	
Maintenance sheet-metal workers	597	11.21	11.32	11.32-11.33	_		_		_	4	6	100		2	3	2		- 92/6		11	16	15	504		00		
Manufacturing	574	11.28		11.32-11.33		-	-	-	-	4	-	-	_	2	-	-		_	4	-	16		504	9	20 20	_	
Millwrights	4,369	11.30	44.00	44.00.44.00		198																					
				11.32-11.36		-	-	-	-	20	-	-	50	4	-	-	-	10	-	-	20	33	4026	36	170	-	
Manufacturing	4,311	11.30	11.33	11.32-11.36		-	-	-	-	20	-	-	- 50	4		-	-	10	-	-	20	33	3968	36	170	-	-
Maintenance trades helpers	522	9.70	9.71	9.55- 9.71	-	-	-	-	2	2	2	-	7	27	57	50	298	1 -	-	-	77	-	-	-	-	-	
Machine-tool operators (toolroom)	2,064	11.34	11.42	11.41-11.43	_	-					80					2		1	6			1	70	1900			
Manufacturing	2,064	11.34		11.41-11.43	-	-	-	-	-	-	80	-	-		-	2		4	6				79 79	1892 1892	1		68 T
Tool and die makers	5,164	11.56	11.01	11 50 11 60																							
Manufacturing	5,163	11.56		11.58-11.62 11.58-11.62	-		-	-				14			4		335	5	44		-	1	177 177	4889 4889	35 35	-	
																							""	4009	35		
Stationary engineers	561	11.27		11.32-11.60	-	5	10	-	8	-	-	1	6	-	-	-	5	31	. 2	9	_	21	109	274	37	29	14
Manufacturing	472	11.36		11.32-11.60	-	5	10	-	8	-	-	-	5	-	-	-	-	2	100	8	-	12	105	252	29	24	14
Nonmanufacturing	89	10.80	10.63	9.98-11.77	-	-	-	-	-	-	-	1	1	_		-	5	31	2	1	3-15 E	9	4	22	8	5	

Table A-16. Hourly earnings of material movement and custodial workers-large establishments in Detroit, Mich., March 1980

		Hourly earnings (in dollars) ⁴			(Lysia (Sp	Number of workers receiving straight-time hourly earnings (in dollars) of —																					
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range²	Under 3.80	3.80 and under 4.00	4.00 - 4.20	4.20 - 4.40	4.40 - 4.60	4.60 - 4.80	4.80 - 5.00	5.00 - 5.40	5.40 - 5.80	5.80 - 6.20	6.20 - 6.60	6.60 - 7.00	7.00 - 7.40	7.40 - 7.80	7.80 - 8.20	8.20 - 8.60	8.60 - 9.00	9.00	9.40 - 9.80	9.80 - 10.20	10.20 - 10.60	10.60	11.00 and over
ruckdrivers	3,346	9.87	10.50	8.93-10.78	1	2	-				1	9	7	2	9	4	55	86	34	390	258		378	99		854	5 3
Manufacturing	1,972 1,374	9.61 10.25		8.65-10.55 10.45-10.87	ī	2	-			-	1	9	7	2	9	4	25 30	12 74	2	23		46 51	352 26		260	AND REAL PROPERTY.	
Truckdrivers, light truck Nonmanufacturing	141 110	7.55 7.34	7.74 7.52	7.40- 8.06 7.40- 7.74		1	-		-		1	2 2	5	2	3	3		74 74	19	9 -	7	1		-			
Truckdrivers, medium truck: Manufacturing	101	9.86	9.27	9.05-11.75	-		-	-	-		-	-		-			_	-	10			30			A Alle	-	*3
Truckdrivers, tractor-trailer	1,629 1,167 462	10.12 9.94 10.59	10.53	10.07-10.56 9.51-10.55 10.50-10.78	-												25 25	12					66			11	2
Nonmanufacturing	451	9.87		9.64- 9.73				1									_	-	1	_	-	-	388	2	5	26	2
Receivers		8.87	9.64	8.61- 9.64			1	1	1		. 7	10			Section 10	7	1 1 1 1		14	_	56		411	63 62		-	and A
Nonmanufacturing	. 289	7.98					1		1		7	10	62	3	3	7	8	11	38	15			5 100		4		
Shippers and receivers Manufacturing		9.30 9.38																	20	10	3	9	225	-	4	-	
Varehousemen		8.76 8.34					1		1			3		13	10				-	10	60	114	182	100	-	WE TO L	
Manufacturing Nonmanufacturing		March 1997 197 197 197 197 197 197 197 197 19				-	1		- 1		-	. 3		13	The Car	100	- 1	1	3		Talls:			1 - 1	Thomas		
Order fillers Nonmanufacturing				The second secon								- 4	16		- 30					11		- 517 - 363		199 199			
Shipping packers		9.02 8.78													- 30				86			- 101 - 14					
Material handling laborers	2,864					9 6	3 8	9 9	9 3	3	4 7	1 12	2 29	9	21		1	73 65			1011	840			3	-	
Manufacturing Nonmanufacturing	The second secon	9.28 7.94				9 6	3		9	3	4	7 12	2 25	9	7 1.		9 1	8	3			2 112	2 252	58		12 17 10	
Forklift operators	7,514	9.48				-			199								81					1 42		155	5 25	5 -	
Manufacturing Nonmanufacturing	6,669 845			9.55- 9.6					-		-							10	3	3 42	2 1	1	614	56	108	3	
Power-truck operators (other than forklift)	759	9.55	9.50	9.50- 9.5	0		-	-				-		-				3				- 48		1		3 -	
Guards						8	-	- 1	4	1			4 4	2.1	3 5	5 8						Children to the Color					
Manufacturing	2,343					8		1	4	1	_		4 4	4 1	9 5			1 2	3 34	4 2			2 79		3 4	4 -	
Nonmanufacturing Public utilities						-	-		-		-	-	- 1			-		1468	2 4		W.		2 1	A STATE	-		
Guards, class A Nonmanufacturing	335						-	- 1	and the same of	1	-	-	- 2		4 4							2 3	2 1		-		
Guards, class B	2,447					8	-	-	-		-	-	4 1	6	9	7	- 4									4	
Manufacturing	2,240					8		-	-	-	-	-	4 1	6	5	7	- 4	- 2	1 -	- 10	- 5		- 6			4	
Janitors, porters, and cleaners	7,598	7.5	4 9.1	9 5.20- 9.2		2 13	3 1	9 3	3 4	1 3	8 119														3		
Manufacturing	4,273			9 9.19- 9.2		2 13	3 1	0 0	3 4	1 9	8 119	- 1 7 81		2 4			0 2								3	-	-
Nonmanufacturing Public utilities				0 4.98- 5.8 5 6.04- 8.6		2 13	1			2	- 119	Service of the service of		5 11			3 1							-	-	- 0	-

^{*} All workers were at \$11.40 to \$11.80. See footnotes at end of tables.

Table A-17. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers by sex-large establishments in Detroit, Mich., March 1980

Sex,3 occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)	Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings
Maintenance, toolroom, and					(iii dollars)	BILL OF THE SHIP BUT BY SHIP SHIP SHIP SHIP SHIP SHIP SHIP SHIP		(in dollars)4
powerplant occupations - men			Tool and die makers	5,159	11.56	Forklift operators	3112000	120000000
			Manufacturing	5,158	11.56	Manufacturing	7,075	9.48
Maintenance carpenters	583	10.90			11.00	Manufacturing	6,322	9.46
Manufacturing	515	11.02	Stationary engineers	536	11.34	Nonmanufacturing	753	9.67
Normanulacturing:	515	11.02	Manufacturing	472	11.34			
Public utilities	37	0.44		412	11.36	Guards		
[통지] [하다 100 100 [100 100 [100 100 100 100 100 1	3/	9.11	Material movement and custodial			Monufacturing	2,381	9.37
Maintenance electricians	0.040		occupations - men			Manufacturing	2,055	9.63
Manufacturing	3,616	11.48	occupations - men		No. of Part of	Public utilities		
Nonmanufacturing:	3,516	11.50	Truckdrivere			Public utilities	68	8.54
Public utilities	1000	A STATE OF THE STA	Truckdrivers	3,028	9.91			
1 done dunies	34	9.60	Manufacturing	1,852	9.59	Guarde class B		
Maintenance painters			Nonmanufacturing	1,176	10.40	Guards, class B	2,136	9.62
Manufacturing	552	11.01			100	Manufacturing	1,958	9.69
Manufacturing	500	11.08	Truckdrivers, medium truck:			Nonmanufacturing	178	8.78
Maintanana maski-i-t-			Manufacturing	101	9.86			
Maintenance machinists	607	11.00			5.00	lapitore perters and discontinuous		P. L. S. B. B. B.
Manufacturing	519	11.24	Truckdrivers, tractor-trailer	1,511	10,14	Janitors, porters, and cleaners	5,347	7.59
Nonmanutacturing	88	9.56	Manufacturing			Manufacturing	3,083	8.94
Public utilities	88	9.56	Nonmanufacturing	1,051	9.94	Nonmanufacturing	2,264	5.75
		0.00	- Total Grand Gran	460	10.59			0.70
Maintenance mechanics			Shippere			Motorial management and a second		
(machinery)	3,976	11.35	Shippers	388	9.87	Material movement and custodial		
Manufacturing	3,953	11.36	Oh:			occupations - women		
	0,000	11.30	Shippers and receivers	232	9.30			
Maintenance mechanics			Manufacturing	214		Shippers and reactivers		
(motor vehicles)	1,508	11.00			0.40	Shippers and receivers	105	9.30
Manufacturing	1,158	11.06	Warehousemen	1,352	8.74	Manufacturing	61	9.30
	1,100	11.00	Manufacturing	796				
Maintenance pipefitters	2,450	11.27	Nonmanufacturing		8.31	Order fillers		The second second
Manufacturing	2,422			556	9.36	Order miera	473	9.34
	2,422	11.28	Order fillers			어머니 보고 있었다면 하는데 이 경우를 하는데 하나 있다면 살아갔다.		
Maintenance sheet-metal workers	591		Manufacturing	1,510	9.58	Shipping packers	0.10	
Manufacturing		11.22	Manufacturing	185	9.09	Manufacturing	249	9.11
	568	11.28	Nonmanufacturing	1,325	9.65		87	8.55
fillwrights	0.705			OTTO CHAIN				
Manufacturing	3,795	11.31	Shipping packers	426	8.97	Material handling laborers:		A STATE OF THE STA
	3,737	11.31	Manufacturing	331	8.84	Manufacturing	177	9.09
fachine-tool operators (toolroom)		Mary Land	[1] 2일 10일 10일 10일 10일 12일 [12] [12] 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	001	0.04		1//	9.09
Manufacturing	2,060 2,060	11.34	Material handling laborers	2,488	9.15	Janitors, porters, and cleaners:		
		11.34	Manufacturing					

Footnotes

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

² The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the workers receive the same or more and half receive the same or less than the rate shown. The middle range is defined by two rates of pay; one-fourth of the workers earn the same or less than the lower of these rates and one-fourth earn the same or more than the higher rate.

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

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

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

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

Appendix A. Scope and Method of Survey

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

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

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

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

Occupations and earnings

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

movement and custodial. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B.

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

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

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

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

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

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

Occupational employment estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures among establishments differ, estimates of occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the jobs studied. These differences in occupational structure do not affect materially the accuracy of the earnings data.

Wage trends for selected occupational groups

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

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

Occupations used to compute wage trends are:

Office clerical

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

Switchboard operators
Order clerks, classes A and B
Accounting clerks, classes A and B
Payroll clerks
Key entry operators, classes A and B

Electronic data processing

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

Industrial nurses

Registered industrial nurses

Skilled maintenance

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

Unskilled plant

Janitors, porters, and cleaners

Material handling laborers

Percent changes for individual areas in the program are computed as follows:

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

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

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

Average pay relationships within establishments

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

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

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

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

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

Establishment practices and supplementary wage provisions

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

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

Appendix table 1. Establishments and workers within scope of survey and number studied in Detroit, Mich., March 1980

	Minimum	Number of es	tablishments	Workers in establishments				
Industry division ²	employment in establish- ments in scope	Within scope	Studied	Within of st	Studied			
	of study	of study ³		Number	Percent	1000		
All establishments						to the		
All divisions	2	1,458	200	745,283	100	485,769		
	100	419	59	403,142	54	312,697		
anufacturing	.00	1,039	141	342,141	46	173,072		
onmanufacturing		.,000						
Transportation, communication, and	100	81	25	61,705	8	48,963		
other public utilitiess	50	207	21	42,578	6	20,606		
Wholesale trade*	100	208	23	116,224	16	63,544		
Retail trade	50	186	23	57,895	8	25,260		
Finance, insurance, and real estate ⁶	50	357	49	63,739	9	14,699		
Services ⁶ ?	50	337						
Large establishments								
All divisions		140	72	530,998	100	461,027		
	500	54	25	332,666	63	305,125		
anufacturing	500	86	47	198.332	37	155,902		
onmanufacturing		80		100,002				
Transportation, communication, and	500	16	12	49,238	9	46,192		
other public utilities ⁵	500	1	4	17,890	3	17,890		
Wholesale trades	500	24	13	79,204	15	60,975		
Retail trade6			10	37,789	7	23,285		
Finance, insurance, and real estate ⁶	500	27	10	14,211	3	7,560		
Services ⁶ 7	500	15	8	14,211	3	7,000		

¹The 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 provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

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

³ Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of nonmanufacturing companies are considered as one establishment when located within the same industry division.

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

^a 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.

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

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

Appendix B. Occupational Descriptions

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

Office

SECRETARY

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

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

- 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;

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

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

Level of Secretary's Supervisor (LS)

LS-1

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

a. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for LS-3, but whose organizational unit normally numbers at least several dozen employees and is usually divided into organizational segments which are often, in turn, further subdivided. In some companies, this level includes a wide range of organizational echelons; in others, only one or two; or

Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, fewer than 5,000 persons.

LS-3

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

LS-4

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

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

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

LR-1

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

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

LR-2

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

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

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

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

STENOGRAPHER

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

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

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

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

TRANSCRIBING-MACHINE TYPIST

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

TYPIST

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

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

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

FILE CLERK

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

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

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

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

MESSENGER

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

SWITCHBOARD OPERATOR

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

SWITCHBOARD OPERATOR-RECEPTIONIST

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

ORDER CLERK

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

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

Positions are classified into levels according to the following definitions:

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

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

ACCOUNTING CLERK

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

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

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

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

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

PAYROLL CLERK

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

KEY ENTRY OPERATOR

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

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

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

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

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

Professional and Technical

COMPUTER SYSTEMS ANALYST, BUSINESS

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

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

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

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

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

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

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

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

COMPUTER PROGRAMMER, BUSINESS

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

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

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

For wage study purposes, programmers are classified as follows:

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

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

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

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

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

May guide or instruct lower level programmers.

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

COMPUTER OPERATOR

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

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

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

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

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

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

An operator at this level typically guides lower level operators.

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

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

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

PERIPHERAL EQUIPMENT OPERATOR

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

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

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

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

COMPUTER DATA LIBRARIAN

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

DRAFTER

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

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

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

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

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

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

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

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

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

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

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

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

ELECTRONICS TECHNICIAN

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

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

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

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

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

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

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

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

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

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

REGISTERED INDUSTRIAL NURSE

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

Maintenance, Toolroom, and Powerplant

MAINTENANCE CARPENTER

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

MAINTENANCE ELECTRICIAN

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

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

MAINTENANCE PAINTER

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

MAINTENANCE MACHINIST

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

MAINTENANCE MECHANIC (MACHINERY)

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

MAINTENANCE MECHANIC (MOTOR VEHICLE)

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

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

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

MAINTENANCE PIPEFITTER

Installs or repairs water, steam, gas, or other types of pipe and pipefittings in an establishment. Work involves most of the following: Laying out work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipecutting 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-thejob training and experience.

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

TOOL AND DIE MAKER

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

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

STATIONARY ENGINEER

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

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

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

BOILER TENDER

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

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

Material Movement and Custodial

TRUCKDRIVER

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

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

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

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

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

Truckdriver, tractor-trailer

SHIPPER AND RECEIVER

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

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

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

For wage study purposes, workers are classified as follows:

Shipper Receiver Shipper and receiver

WAREHOUSEMAN

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

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

ORDER FILLER

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

SHIPPING PACKER

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

MATERIAL HANDLING LABORER

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

POWER-TRUCK OPERATOR

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

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

Forklift operator Power-truck operator (other than forklift)

GUARD

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

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

For wage study purposes, guards are classified as follows:

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

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

JANITOR, PORTER, OR CLEANER

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

Service Contract Act Surveys

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

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

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

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

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

ALSO AVAILABLE-

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

Area Wage Surveys

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

Area	Bulletin ni and pri	The state of the s
Akron, Ohio, Dec. 1978	2025-63	\$1.00
Albany-Schenectady-Troy, N.Y., Sept. 1979	2050-46	\$1.50
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1979	2050-48	\$1.50
Atlanta, Ga., May 1979	2050-20	\$1.30
Baltimore, Md., Aug. 1979	2050-42	\$1.75
Billings, Mont., July 1979	2050-43	\$1.50
Birmingham, Ala., Mar. 1978	2025-15	\$0.80
Boston, Mass., Aug. 1979	2050-50	\$1.75
Buffalo, N.Y., Oct. 1979	2050-65	\$2.25
Canton, Ohio, May 1978	2025-22	\$0.70
Chattanooga, Tenn.—Ga., Sept. 1979	2050-39	\$1.50
Chicago, III., May 1979	2050-21	\$1.75
Cincinnati, Ohio—Ky.—Ind., July 1979	2050-28	\$2.00
Cieveland, Onio, Sept. 1979	2050-47	\$1.75
Columbus, Ohio, Oct. 1979	2050-61	\$2.25
Corpus Christi, Tex., July 1979'	2050-33	\$1.75
Dallas—Fort Worth, Tex., Dec. 1979	2050-67	\$2.25
Davenport—Rock Island—Moline, Iowa—Ill., Feb. 1980	3000- 5	\$2.25
Dayton, Ohio, Dec. 1979	2050-64	\$2.00
Daytona Beach, Fla., Aug. 1979	2050-41	\$1.50
Denver—Boulder, Colo., Dec. 1979	2050-72	\$2.25
Detroit, Mich., Mar. 1980	3000- 7	\$2.25
Fresno, Calif., June 1979	2050-25	\$1.50
Gainesville, Fla., Sept. 1979	2050-45	\$1.50
Green Pay, Wis, July, 1979	2050-60	\$2.25
Green Bay, Wis., July 1979	2050-31	\$1.50
Greenville Sportonburg S.C. Lynn 1979	2050-49	\$1.50
Greenville—Spartanburg, S.C., June 1979	2050-29	\$1.75
Hartford, Conn., Mar. 1979	2050-12	\$1.10
Houston, Tex., Apr. 1979	2050-15	\$1.30
Huntsville, Ala., Feb. 1979	2050- 3	\$1.00
Indianapolis, Ind., Oct. 1979	2050-54	\$2.25
Jackson, Miss., Jan. 1980	3000- 2	\$1.75
Jacksonville, Fla., Dec. 1979	2050-69	\$2.25
Kansas City, Mo.—Kans., Sept. 1979	2050-58	\$2.75
Los Angeles—Long Beach, Calif., Oct. 1979	2050-59	\$2.25
Louisville, Ky.—Ind., Nov. 1979	2050-66	\$2.00

Area	Bulletin n	
Memphis, Tenn.—Ark.—Miss., Nov. 19791	2050-56	\$2.25
Miami, Fla., Oct. 1979	2050-55	\$2.25
Milwaukee, Wis., Apr. 1979	2050- 8	\$1.30
Minneapolis—St. Paul, Minn.—Wis., Jan. 1980	3000- 1	\$2.25
Nassau—Suffolk, N.Y., June 1979	2050-36	\$1.75
Newark, N.J., Jan. 1979	2050- 5	\$1.30
New Orleans, La., Oct. 1979	2050-53	\$2.25
New York, N.Y.—N.J., May 1979	2050-30	\$1.75
Norfolk—Virginia Beach—Portsmouth, Va.—N.C., May 1979	2050-22	\$1.75
Norfolk—Virginia Beach—Portsmouth and Newport News—	2000 22	41.13
Hampton, Va.—N.C., May 1978	2025-21	\$0.80
Northeast Pennsylvania, Aug. 1979	2050-32	\$1.75
Oklahoma City, Okla., Aug. 1979	2050-37	\$1.50
Omaha, Nebr.—Iowa, Oct. 1979	2050-51	\$1.50
Paterson—Clifton—Passaic, N.J., June 1979	2050-26	\$1.50
Philadelphia, Pa.—N.J., Nov. 1979 ¹	2050-57	\$3.00
Pittsburgh, Pa., Jan. 1980	3000- 3	\$2.25
Portland, Maine, Dec. 1979	2050-63	\$1.75
Portland, Oreg.—Wash., May 1979	2050-27	\$1.75
Poughkeepsie, N.Y., June 1979	2050-34	\$1.50
Poughkeepsie—Kingston—Newburgh, N.Y., June 1979	2050-35	\$1.50
Providence—warwick—Pawtucket, R.I.—Mass., June 1979	2050-38	\$1.75
Richmond, Va., June 1979	2050-24	\$1.50
St. Louis, Mo.—Ill., Mar. 1979 ¹	2050-13	\$1.50
Sacramento, Calif., Dec. 1979	2050-71	\$1.75
Saginaw, Mich., Nov. 1979 ¹	2050-52	\$1.75
Salt Lake City—Ogden, Utah, Nov. 1979	2050-62	\$2.00
San Antonio, Tex., May 1979	2050-17	\$1.00
San Diego, Calif., Nov. 1979	2050-70	\$2.00
San Francisco—Oakland, Calif., Mar. 1979	2050-14	\$1.20
San Jose, Calif., Mar. 1980	3000- 6	\$2.00
Seattle—Everett, Wash., Dec. 1979	2050-68	\$2.25
South Bend, Ind., Aug. 1979'	2050-44	\$1.75
Toledo, Ohio—Mich., May 1979	2050-16	\$1.10
Trenton, N.J., Sept. 1979	2050-40	\$1.50
Utica—Rome, N.Y., July 1978	2025-34	\$1.00
Washington, D.C.—Md.—Va., Mar. 1980	3000- 4	\$2.25
Wichita, Kans., Apr. 1979	2050-18	\$1.00
Worcester, Mass., Apr. 1979	2050-18	\$1.50
York, Pa., Feb. 1979	2050-25	\$1.00

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

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

U.S. Department of Labor Bureau of Labor Statistics Washington, D.C. 20212

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IX

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