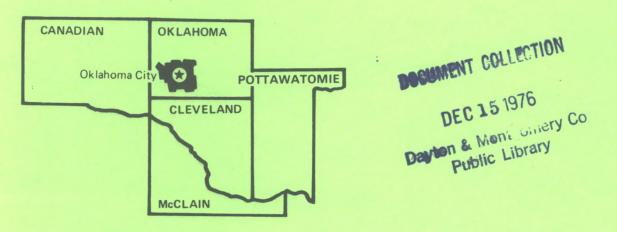
Area Wage Survey Oklahoma City, Oklahoma, Metropolitan Area, August 1976



Bulletin 1900-42

U.S. Department of Labor Bureau of Labor Statistics





Preface

This bulletin provides results of an August 1976 survey of occupational earnings in the Oklahoma City, Oklahoma, Standard Metropolitan Statistical Area (Canadian, Cleveland, McClain, Oklahoma, and Pottawatomie Counties). The survey was made as part of the Bureau of Labor Statistics' annual area wage survey program, which is designed to yield data for individual metropolitan areas as well as national and regional estimates 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.

Currently, 84 areas are included in the program. (See list of areas on inside back cover.) In each area, occupational earnings data are collected annually. Information on establishment practices and supplementary wage benefits is obtained every third year.

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.

The Oklahoma City survey was conducted by the Bureau's regional office in Dallas, Tex., under the general direction of Boyd B. O'Neal, 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.

Note:

A current report on occupational earnings in the Oklahoma City area is available for the moving and storage industry (August 1976). 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.)

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Introduction

This area is 1 of 84 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits. In this area, data were obtained by a combination of personal visit, mail questionnaire, and telephone interview. Representative establishments within six broad industry divisions were contacted: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Major industry groups excluded from these studies are government operations and the construction and extractive industries. Establishments having fewer than a prescribed number of workers are omitted because of insufficient employment in the occupations studied. Separate tabulations are provided for each of the broad industry divisions which meet publication criteria.

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. Occupations were selected from the following categories:

(a) Office clerical, (b) professional and technical,

(c) maintenance, toolroom, and powerplant, and (d) material movement and custodial. In the 31 largest survey areas, tables A-la through A-6a provide similar data for establishments employing 500 workers or more.

Table A-7 provides percent changes in average hourly earnings of office clerical workers, electronic data processing workers, industrial nurses, skilled maintenance trades workers, and unskilled plant workers. Where possible, data are presented for all industries, manufacturing, and nonmanufacturing. 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.

Appendixes

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

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

A. Earnings

Table A-1. Weekly earnings of office workers in Oklahoma City, Okla., August 1976

				Weekly (stan	earnings ¹ dard)						Numbe					-										
Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Mean 2	Median 2	Middle range 2	85 and under	90	-	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300	-	a
ALL WORKERS																										
ECRETARIES	500 930	40.0	175.00	168.00	\$141.50-186.00 155.00-190.00 132.50-184.00 175.50-255.50	:	4	11	33 33	42 1 41	88 9 79 3	166 38 128 5	155 42 113 3	186 116 70 7	151 58 93 24	117 58 59 13	155 53 102 19	61 26 35 10	89 48 41 9	74 33 41 24	42 6 36 34	25 7 18 14	15 1 14 12	8 3 5 5	6 6	
SECRETARIES, CLASS A	117 53 64	40.0	204.00	200.00	161.00-223.00 183.00-230.00 161.00-197.00	-	:	:	:	:	2 - 2	10 7 3	8 3 5	1 - 1	19 3 16	4-4	20 6 14	8 5 3	14 10 4	17 12 5	:	6 3 3	3 1 2	5	1	
SECRETARIES, CLASS B MANUFACTURING NONMANUFACTURING	83	40.0 39.5	189.50	183.00	144.00-204.50 158.50-212.00 142.00-195.50 224.50-300.50	:	:	:	6 -	16 16	12	21 2 19	53 9 44	16 10 6	24 3 21	39 15 24	30 7 23	16 9 7	32 10 22 7	23 13 10 8	8 2 6 4	7 2 5 4	3 3 3	5 1 4	5 5 5	
SECRETARIES, CLASS C MANUFACTURING NOMMANUFACTURING PURLIC UTILITIES	277 249	39.5	170.00	162.50	145.50-185.00 155.00-183.00 132.50-190.00 186.50-276.00	:	:	4	9 - 9 -	8 1 7	25 4 21	63 14 49	49 17 32 3	106 88 18	50 40 10	42 35 7 2	64 37 27 12	28 10 18 5	24 17 7 2	26 8 18 8	8 4 4 4	10 2 8 8	9 9	1 1	:	
SECRETARIES, CLASS D	87 373	40.0	160.00	155.50 154.00	132.50-175.50 142.00-173.50 132.50-176.00 167.00-245.00	:	4	7 -7 -	18	16 16	48 5 43 3	69 15 54 5	44 13 31	63 18 45 7	57 12 45 23	31 8 23 11	39 36 7	9 2 7 5	19 11 8	8 8	26 26 26	5 5	:	:	:	
ENOGRAPHERS, GENERAL	103 243	40.0	144.50	138.00	127.00-154.50 133.50-154.50 120.50-154.50 140.50-164.00	-	:	3	21 3 18	39 39	31 6 25	79 46 33 12	67 17 50 32	35 14 21 15	41 10 31 10	6	4 1 3 3	2 2 2		:	2 2	6 6	:	:	:	
TENOGRAPHERS, SENIOR	232	40.0	175.50 175.00	167.50 167.50	147.00-202.50 155.00-200.00 139.00-205.50	:	:	:	:	4 - 4	12	31 1 30	16 16	31 21 10	27 8 19	28 4 24	6 2 4	14 3 11	25 14 11	26 26	-	5	6	:	:	
RANSCRIBING-MACHINE TYPISTS NONMANUFACTURING	83 67				109.50-145.00 108.00-121.00		:	4	18 18	22 22	12	4	4	11	:	:	3	1 -	1 -	:	:	3	:	:	:	
PISTS, CLASS A	73 28 45	39.5	146.50	140.00	130.00-159.50 130.00-146.00 136.00-159.50	-	:	:	7 1 6	:	8 4 4	16 7 9	16 11 5	11	9 1 8	Ξ	:	:	6 4 2	:	:	:	:	:	:	
PISTS, CLASS B	213 197				104.50-116.00 104.50-116.00		16 16	9	100 97	46 41	17 16	18 18	:	2	3	1	1	:	=	:	:	:	:	:	:	
LE CLERKS, CLASS A NONMANUFACTURING	30 28				107.00-132.00 107.00-117.50		:	:	9	13 13	=	4	5	:	2	:	:	:	=	:	:	:	:	:	:	
LE CLERKS, CLASS B NONMANUFACTURING	281		108.00	103.50 103.50			4	78 75	110 110	60 54	21 19	9	12 8	:	5	:	:	:	:	:	:	:	:	:	:	
LE CLERKS, CLASS C NONMANUFACTURING	128	38.5		94.00	92.00-102.50	4	72 69	11	33	9	5	:	:	:	:	:	-	:	=	:	•	:	:	:	:	
SSENGERS	25 101	39.5 39.5	116.50	112.50	102.50-129.00 106.00-129.00 98.00-127.50 118.50-141.50	-	19 19 3	9 - 9 3	10 13	22 3 19 7	6 16 6	19 6 13 5	9 9 8	2 2	1	=	:	=	=	:	:	:	:	:	:	

Table A-1. Weekly earnings of office workers in Oklahoma City, Okla., August 1976—Continued

					earnings ¹ idard)									s rece												
Occupation and industry division	Number of workers	Average weekly hours l (standard)	Mean 2	Median 2	Middle range ²	85 and under	90 -	95	100	\$ 110 -	120 -	130 -	140	\$ 150 -	160 -	\$ 170 -	180 -	190 -	\$ 200 -	220	\$ 240 -		\$ 280 -	300 -	320	34 and
						90	95	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	ove
ALL WORKERS CONTINUED																										
SWITCHBOARD OPERATORS	113 90				\$ 100.00-138.00 98.50-133.00	:	14 14	10 9	31 29	3	13 10	15 7	3 2	3	7	4	4	2	3 2	:	5	:	1	:	:	
SWITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING NONMANUFACTURING	223 55 168	40.0	131.50	126.50	108.00-146.00 115.00-142.00 105.50-146.00	:	20	8	30 6 24	29 11 18	53 18 35	13 5 8	33 4 29	10 1 9	8 6 2	10 4 6	2	4	=	:	:	:	3	:	:	
ORDER CLERKS MANUFACTURING NONMANUFACTURING	162 41 121	40.0	160.50	154.50	120.00-154.50 138.00-180.50 116.00-148.00	:	9 - 9	3 - 3	16 16	6	24	32 17 15	20 1 19	12 4 8	5	6	13 6 7	16 2 14	3	Ξ	:	:	:	:	:	
ACCOUNTING CLERKS, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	164	39.5 40.0	181.50 187.50	178.00	159.00-202.50 161.00-194.00 155.50-207.00 214.00-272.00	-	:		:	2	28 2 26	36 11 25	22 8 14 2	46 20 26 1	29 6 23 1	83 40 43 8	69 25 44 2	50 18 32 4	57 12 45 8	26 18 8 5	27 1 26 26	17 3 14 14	8 8 8	5 5 5	:	
ACCOUNTING CLERKS, CLASS B MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	1,091 195 896 90	40.0 39.5	139.50	130.00	115.00-148.00 120.00-155.00 115.00-145.50 147.50-229.50	4	12	30 3 27	109 15 94 2	212 25 187 2	209 46 163 1	146 23 123 7	14	82 29 53 12	92 14 78 10	28 11 17 15	7 1 6	5 2 3 3	13 12 1 1	19 19 19	5 5	1 1	2 2	:	:	
BOOKKEEPING-MACHINE OPERATORS, CLASS B	43 25				120.00-132.50 120.00-145.00		2	:	2	2	21 5	7	9	:	:	:	Ξ	:	:	:	:	:	:	:	:	
BOOKKEEPING-MACHINE BILLERS	30	39.0	121.50	123.50	95.50-147.00	2	6	-	2	4	7	-	3	3	3	-	-	-	-	-	-	-	-	-	-	
PAYROLL CLERKS	124 47 77	40.0	176.00	178.00	126.50-184.00 158.00-202.50 115.50-168.00	-	3	:	11	10	11 1 10	14 4 10	11 6 5	5 3 2	14 3 11	11 10 1	4	3 2 1	18 14 4	2 - 2	:	1	6	:	:	
KEYPUNCH OPERATORS, CLASS A MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	208 54 154 26	40.0 39.5	160.00	163.00	133.50-165.00 139.00-179.00 132.50-156.00 167.50-236.50	:	:	:	:	12 1 11	24 5 19	48 8 40	44 8 36	17 4 13 2	19 7 12 5	17 8 9 5	11 7 4 4	4 4 -	5 2 3 3		1 1	6 6	:	:	:	
(EYPUNCH OPERATORS, CLASS B MANUFACTURING NONMANUFACTURING	368 116 252	39.5	133.00	133.50	116.00-143.00 119.50-145.00 116.00-140.00	-	3 - 3	13 13	28 9 19	66 20 46	77 11 66	67 32 35	52 28 24	15 11 4	11 5 6	15 - 15	4	:	14 - 14	3	:	:	:	:	:	

Table A-2. Weekly earnings of professional and technical workers in Oklahoma City, Okla., August 1976

					earnings 1 ndard)						Numbe	er of w	vorker	s rece	eiving	straig	ht-tir	ne we	ekly ea	arning	s of—					
Occupation and industry division	Number of workers	Average weekly hours 1 (standard	Mean 2			100 and under	110	120						180			\$ 210 -		240				320	340	360	31
						1000	120	130	140	150	160	170	180	190	200	210	220	240	260	280	300	320	340	360	380	4(
ALL WORKERS																										
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A	31	39.5	\$ 341.00	\$ 345.00	\$ 324.50-348.50	-										-	-				3	3	5	16	_	
OMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B	31	39.0	278.50	282.00	266.00-287.50	-		-	-	-		-	-	-		-	-	2	4	9	13	1	2	-	-	
OMPUTER PROGRAMMERS (BUSINESS), CLASS A	31	40.0	302.00	308.50	263.00-345.00		-	-		-	-	-	-	-	-	-	1	2	4	5	1	4	5	6	3	
OMPUTER PROGRAMMERS (BUSINESS), CLASS B	88 28 60	40.0	224.00	236.50	213.00-249.00 195.50-247.00 215.50-259.00	-	:	:	:	:	:	7 3	1 -	5 2	4	3	9 2 7	27 2 25	17 13	9	5	1	:	:	:	
COMPUTER PROGRAMMERS (BUSINESS),	28				149.50-173.00				1	18		1	5	-	1	1	-	1			-					
OMPUTER OPERATORS. CLASS A	66 45				197.50-223.50 191.50-218.50		:	-	:	:	1	:	6	4	9	19 15	7	8 -	7 2	1	4	:	:	:	:	
OMPUTER OPERATORS, CLASS B MANUFACTURING	208 49 159	39.5	181.50	184.50	152.00-200.00 159.50-203.50 149.50-198.00		:	:	10	39 7 32	21 7 14	33 4 29	23 4 19	19 6 13	6 1 5	25 15 10	7 4 3	22 1 21	:	3	:	:	:	:	:	
OMPUTER OPERATORS, CLASS C	83 69				125.50-142.50 123.00-138.00	4	13 13	19 19	24 18	15 13	2	2	3	1	:	:	-	:	:	:	:	:	:	:	:	
MANUFACTURING	75 31	40.0	253.00 212.00	257.00 208.00	215.50-280.00 192.00-231.00	:	:	:	:	Ξ	:	:	5	5 5	7	3	3	7 5	15	14	7	4	8	:	:	
RAFTERS, CLASS B	130 70 60	40.0	188.00	184.00	176.00-226.00 172.00-200.00 200.00-241.00	:	:	:	:	:	10	9 7 2	20 12 8	8	14 10 4	16 12 4	7 3 4	28 7 21	10 1 9	4	4	:	:	:	:	
MANUFACTURING	. 74 42				144.00-172.00 146.00-156.00	:	10	:	6	14 10	19 13	6	7 2	3	2	3	3	1 -	:	:	:	:	:	:	:	

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Oklahoma City, Okla., August 1976

			verage nean ²)			Aver (mea	rage in ²)			Ave (me:	erage an ²)
Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings ¹ (standard)	Sex, 3 occupation, and industry division	Number of workers	Weekly hours 1 (standard)	Weekly earnings (standard
OFFICE OCCUPATIONS - MEN			4	OFFICE OCCUPATIONS -				OFFICE OCCUPATIONS - WOMENCONTINUED			
MESSENGERS	74	39.5	119.00				\$				\$
NONMANUFACTURING	52	39.0	120.50	TYPISTS, CLASS A	73 28	39.0	145.00	KEYPUNCH OPERATORS, CLASS A	208		152.0
ORDEK CLERKS	59	40.0	168.00	NONMANUFACTURING	45		144.50	MANUFACTURING	154		149.5
ORDER CEERNS	3,	40.0	100.00					PUBLIC UTILITIES	26		199.5
ACCOUNTING CLERKS, CLASS A	107		211.00	TYPISTS. CLASS B	213		112.50				
NONMANUFACTURING	88 48		214.00	NONMANUFACTURING	197	39.0	110.50	MANUFACTURING	366 116		133.5
PORLIC OTTETTES TELESCOPE	40	40.0	234.50	FILE CLERKS. CLASS A	30	39.5	121.00	NONMANUFACTURING	250		134.0
ACCOUNTING CLERKS. CLASS B	53		160.50	NONMANUFACTURING	28		118.00			0.00	1
NONMANUFACTURING	43	39.5	152.50		201			PROFESSIONAL AND TECHNICAL			1
				FILE CLERKS, CLASS R	296 281		108.50	OCCUPATIONS - MEN			
OFFICE OCCUPATIONS - WOMEN	†	1		NONMANOF ACTORING		37.00		COMPUTER SYSTEMS ANALYSTS			1
				FILE CLERKS, CLASS C	131				30	39.5	341.0
SECRETARIES	1,430	40.0	169.50	NONMANUFACTURING	128	38.5	98.00	COMPUTER SYSTEMS ANALYSTS			
MANUFACTURING	500		175.00	MESSENGERS	52	40.0	111.50	(BUSINESS), CLASS B	26	39.0	280.5
NONMANUFACTURING	930	40.0	166.50	NONMANUFACTURING	49		110.50	155-1125-7 5-155-15		0,10	-
PUBLIC UTILITIES	189	40.0	219.00					COMPUTER PROGRAMMERS (BUSINESS) .			
SECRETARIES, CLASS A	117	40.0	195.50	SWITCHBOARD OPERATORS	113		127.50	CLASS A	25	40.0	308.0
MANUFACTURING	53		204.00	NONMANUFACTORING SEEDES	, ,	40.0	103.00	COMPUTER PROGRAMMERS (BUSINESS) .			
NONMANUFACTURING	64	39.5	188.50	SWITCHBOARD OPERATOR-RECEPTIONISTS-	217		131.00	CLASS B			229.5
SECRETARIES, CLASS B	214		170	MANUFACTURING	162		131.50	NONMANUFACTURING	51	40.0	234.0
MANUFACTURING	316 83	40.0	178.00	NONMANUFACTURING	102	39.5	130.50	COMPUTER OPERATORS, CLASS A	63	40.0	214.0
NONMANUFACTURING	233	39.5	174.00	ORDER CLERKS	103		126.50	NONMANUFACTURING			212.
PUBLIC UTILITIES	35	40.0	262.50	NONMANUFACTURING	78	40.0	120.00	COMPUTED OPERATORS OF ASS IS	112	30.5	
SECRETARIES, CLASS C	526	40.0	169.00	ACCOUNTING CLERKS, CLASS A	398	39.5	178.50	COMPUTER OPERATORS, CLASS B			175.
MANUFACTURING	277	39.5	170.00	MANUFACTURING	145	39.5	179.50	NONMANUFACTURING			174.
NONMANUFACTURING	249		168.50	NONMANUFACTURING	253		178.00				
PUBLIC UTILITIES	55	40.0	225.50	PUBLIC UTILITIES	36	40.0	244.50	COMPUTER OPERATORS, CLASS C			133.0
SECRETARIES, CLASS D	460	40.0	158.00	ACCOUNTING CLERKS. CLASS B	1,038	39.5	132.50		0.	37.00	1310
MANUFACTURING	87	40.0	160.00	MANUFACTURING	185			DRAFTERS, CLASS A			254.9
NONMANUFACTURING PUBLIC UTILITIES	373 97		157.50 196.50	NONMANUFACTURING	853		132.00		29	40.0	213.
TOREIG OTTETTIES SEEDES	,,,	40.0	170.50	PUBLIC UTILITIES	'	- 40.0	173.30	DRAFTERS, CLASS B	122	40.0	203.
STENOGRAPHERS, GENERAL	340	40.0	143.00	BOOKKEEPING-MACHINE OPERATORS.				MANUFACTURING	69	40.0	188.
MANUFACTURING	103		144.50	CLASS B	43		125.50		53	40.0	223.
NONMANUFACTURING	237 82		142.00	NONMANUFACTURING	25	40.0	126.50	DRAFTERS, CLASS C	68	40 0	156.
Could discilled and and and and and and and and and an	02	40.0	102.30	BOOKKEEPING-MACHINE BILLERS	27	38.5	119.00				148.
STENOGRAPHERS, SENIOR	231		175.00								1
MANUFACTURING	53		175.00	PAYROLL CLERKS	107		153.00				
NONMANUFACTURING	178	40.0	175.50	MANUFACTURING	36		173.00				
TRANSCRIBING-MACHINE TYPISTS	83	38.5	131.00	MONMANUF ACTORING	1 "	70.0		COMPUTER OPERATORS, CLASS B	95	40.0	178.9
NONMANUFACTURING	67		123.00					NONMANUFACTURING			0 177.0

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Oklahoma City, Okla., August 1976

			Hourly ea	mings 4							Numbe	r of w	orker	s rece	iving	straig	ght-tir	ne hou	rly ea	rnings	of—						
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	and under	. •	•	-	-	-	-		-	-	-	•	•	-	-	-	-	-	-	-	•	7.60 8 8.00 8	-
ALL WORKERS																											
AINTENANCE CARPENTERS	27	\$ 5.46	\$ 5.50	\$ 4.78- 6.24					-	5	2	1	3	1	3	2		1	9	-	-		-	-	-	-	
AINTENANCE ELECTRICIANS	54 43						3	:	: :	12	:	4	3	3	7	2	1	1	:	8 7	6	4	:	:	:	:	
AINTENANCE MACHINISTS	44 31			4.80- 7.04 4.80- 5.5			:	:	:	:	2	12	:	7	5	:	2	2	:	:	5	:	12	:	:	:	
AINTENANCE MECHANICS (MACHINERY) -	200 171			5.24- 6.8 5.00- 6.6			: :	3	2	12	11 9	15 15	7	7	4	7	7	1	:	46 41	39 19	6	:	:	14	16 16	
AINTENANCE MECHANICS (MOTOR VEHICLES)	530 79 451 401	5.49 7.00	5.67 7.87	6.48- 7.8	7 -		1 1	13 6 7	7 3 4 4	56 56 56	13 7 6 1	:	14 9 5	:	21 14 7	23 22 1	12 11 1	8 8	1 1	29 29 16	31 5 26 21	15 15 15	:	8 -	7	263 2 261 261	
INTENANCE TRADES HELPERS	27	4.83	4.16	4.26- 5.8	1 1			13	-	3	-	-	1	-	1	1	-	6	-	1	-	-	-		-	-	
OOL AND DIE MAKERS	88 88			5.81- 8.09 5.81- 8.09			:	:	: :	:	:	:	:	3	8	11	5	6	11	5	2	5	:	6	:	:	
TATIONARY ENGINEERS	41	6.09	6.02	5.15- 7.2	2 -			-	. 4	2	-	-	7	-	4	3	-	5	1	1	-	-	-	4	5	5	

Table A-5. Hourly earnings of material movement and custodial workers in Oklahoma City, Okla., August 1976

			Hourly ear	mings 4					N	ımber	of wo	rkers	receiv	ving st	raight	- tim e	hourl	y earni	ings o	<u> </u>							
Occupation and industry division	Number of workers	Mean 2	Median ²	Middle range ²	and under	•	-		-	-	-	-		-	3.80	-	•	-	-	-	-	-	•	•	-	•	-
ALL WORKERS					2.00				2000	30,44		30.0		-,													
RUCKDRIVERS	1,710 286 1,424 677	4.86 5.89	6.53	4.21- 7.76	:	:	:	23	63 63	98 15 83	36 3 33	36 13 23	43 28 15	19	14 10 4	19 12 7	204 204 2	18	1 1	17 15 2 1	26 26 23	208 186 22 22	34 4 30 23	206 206 125	148 148 36	53 53	44
TRUCKORIVERS, LIGHT TRUCK	164 157			3.05- 4.25 3.05- 4.25		:	:	:	7	28	7	:	14 14	5	6	7	72 72	16 16	:	2	:	:	:	:	:	:	
TRUCKDRIVERS. MEDIUM TRUCK MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	834 88 746 420	3.70 5.55	3.45 6.03	4.21- 7.78	:	:	:	23	56 56	70 15 55	19 3 16	26 13 13	29 28 1	14	8 7 1	9 7 2	127 127 1	2	1 1	13 11 2 1	25 25 22	21	26 4 22 15	131 131 125	:	:	23 23
TRUCKDRIVERS, HEAVY TRUCK (TRAILER)	390 385 125	6.78	6.92	6.42- 7.30	-	:	:	:	:	:	10 10	10 10	:	:	:	3	1 1 1	:	Ξ	2	1 1 1	1 1 1	8 8 8	75 75	148 148 36	53 53	7 7 7
HIPPING CLERKS	46	4.27	4.26	3.35- 5.36	-	-	•	7	-	-	-	7	-	1	1	7	-	6	-	1	4	10	1	1	-	-	
ECEIVING CLERKS	103 26 77	4.28	3.96	3.55- 4.86	-	Ξ	:	9 2 7	5 5	1	8 - 8	2	3	4 3 1	6 4 2	9 1 8	16 16	:	1	4	8 - 8	2	4 3 1	9 1 8	:	14	
HIPPING AND RECEIVING CLERKS	57 25			3.31- 4.05 3.25- 4.65		:	:	5	:	:	1	14 14	:	9	:	17	2	4	4	4	-	:	:	:	:	:	
AREHOUSEMEN	328 61 267	4.06	4.16	3.05- 4.00 3.64- 4.55 3.05- 3.60	:	Ξ	:	7 6 1	25 3 22	12 3 9	78 3 75	64	23	17 3 14	16 4 12	21 9 12	15 12 3	9 3 6	4 - 4	2 1 1	21 12 9	2 2	10	:	:	:	
RDER FILLERS MANUFACTURING NONMANUFACTURING	794 196 598	3.96	3.51	4.79- 6.80 2.94- 5.16 6.30- 6.80	-	13 12 1	4 3 1	27 15 12	25 6 19	49 49	18 9 9	3 3 -	3 3	:	:	15 15	3 3	26 4 22	16 16	23 2 21	63 25 38	13 13	8 - 8	64 18 46	360 360	61	
HIPPING PACKERS	167 114					-	:	3	-	7	9	12	3	=	9	19 19	35 35	42 14	Ξ	:	18	10	:	:	:	:	
ATERIAL HANDLING LABORERS MANUFACTURING NONMANUFACTURING	962 372 590	3.71	3.37	2.75- 4.25 2.75- 4.58 2.90- 4.21		42 16 26	:	82 40 42	150 85 65	27 27	180 29 151	44 16 28	23 14 9	14 11 3	10 10	48 46 2	206 3 203	18 18	27 27	5	25 18 7	6 5 1	5	49 32 17	4	:	
ORKLIFT OPERATORS	581 340 241	4.77	5.42	4.16- 6.32 3.90- 5.42 4.50- 6.75	-	:	:	:	3 3 -	16 16	17 17	20 10 10	39 29 10	:	21 21	36 26 10	12 4 8	67 17 50	:	19 19	8 8	142	1 - 1	76 36 40	80 80	16 16	
UARDS AND WATCHMEN	661 112 549	3.86	3.70	2.33- 2.80 2.90- 5.41 2.33- 2.50	-	210 2 208	167 167	47 24 23	44	54 12 42	31 6 25	4	14 1 13	13 10 3	19 19	2 2	:	1	:	:	5	21 21	8	:	:	:	
GUARDS: MANUFACTURING	71	4.38	3.88	3.19- 5.63	-	-			-	12	6	4	1	4	10	2		1	-	_	2	21	8				
ANITORS, PORTERS, AND CLEANERS MANUFACTURING NONMANUFACTURING PUBLIC UTILITIES	1,824 147 1,677 77	3.24	3.05	2.75- 3.92	14	582 8 574	282 7 275 3	515 6 509	120 25 95 8	85 1 84 7	85 38 47 20	31 12 19 4	13 5 8 6	30 2 28 20	27 23 4 1	5 5	11 11 -	6 4 2 2	:	:	4 4	:	5 - 5	:	12	:	

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Oklahoma City, Okla., August 1976

Sex, 3 occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴	Sex, 3 occupation, and industry division	Number of workers	Average (mean ²) hourly earnings ⁴
MAINTENANCE, TOOLROOM, AND			MATERIAL MOVEMENT AND CUSTODIAL		
POWERPLANT OCCUPATIONS - MEN			OCCUPATIONS - MENCONTINUED		
		\$	DECETATION OF EDIC		\$
MAINTENANCE CARPENTERS	27	5.46	RECEIVING CLERKS	101	
			MANUFACTURING	25	4.29
MAINTENANCE ELECTRICIANS	54 43		NONMANUFACTURING	76	4.80
			SHIPPING AND RECEIVING CLERKS	54	
MAINTENANCE MACHINISTS	44		NONMANUFACTURING	25	3.69
MANUFACTURING	31	5.32			
			WAREHOUSEMEN	247	
MAINTENANCE MECHANICS (MACHINERY) -	500	6.19	MANUFACTURING	58	
MANUFACTURING	171	6.16	NONMANUFACTURING	189	3.62
MAINTENANCE MECHANICS			ORDER FILLERS	671	6.09
(MOTOR VEHICLES)	530		MANUFACTURING	88	4.65
MANUFACTURING	79	5.49	NONMANUFACTURING	583	6.30
NONMANUFACTURING	451	7.00			
PUBLIC UTILITIES	401	7.08	SHIPPING PACKERS	159	4.24
MAINTENANCE TRADES HELPERS	27	4.83	MANUFACTURING	109	4.13
HATHTENANCE TRADES HEEFERS		4.05	MATERIAL HANDLING LABORERS	941	3.59
TOOL AND DIE MAKERS	88	6.83	MANUFACTURING	352	3.65
MANUFACTURING	88		NONMANUFACTURING	589	3.55
STATIONARY ENGINEERS	41	6.09	FORKLIFT OPERATORS	566	5.20
STATIONART ENGINEERS	7.	0.07	MANUFACTURING	325	4.80
			NONMANUFACTURING	241	5.76
MATERIAL MOVEMENT AND CUSTODIAL					30.0
OCCUPATIONS - MEN			GUARDS AND WATCHMEN	634	2.74
			MANUFACTURING	112	3.86
			NONMANUFACTURING	522	2.50
TRUCKDRIVERS	1,695				
MANUFACTURING	286	4.86	GUARDS:		
NONMANUFACTURING	1,409	5.88	MANUFACTURING	71	4.38
PUBLIC UTILITIES	662	7.27			
TOUCKDOTHEDS TCHT - DUCK			JANITORS, PORTERS, AND CLEANERS	1,006	2.72
TRUCKDRIVERS. LIGHT TRUCK	164	3.82	MANUFACTURING	132	3.32
NONMANUFACTURING	157	3.81	PUBLIC UTILITIES	874	2.63
TRUCKDRIVERS, MEDIUM TRUCK	819	5.33			
MANUFACTURING	88	3.70			
NONMANUFACTURING	731	5.53			
PUBLIC UTILITIES	405	7.10	MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - WOMEN		
TRUCKDRIVERS. HEAVY TRUCK					
(TRAILER)	390	6.75			
NONMANUFACTURING	385	6.78	ORDER FILLERS	123	3.45
PURLIC UTILITIES	125	7.29			
		1	JANITORS, PORTERS, AND CLEANERS	818	2.48
SHIPPING CLERKS	46	4.27	NONMANUFACTURING	803	2.48

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

Industry and occupational group	July 1972	July 1973 to	August 1974	August 1974	August 1975
(men and women combined)	to July 1973	13-month increase	Annual rate of increase	to August 1975	to August 1976
All industries:		0.0	0.0		7.0
Office clerical	5.5	8.9	8.2	8.8	7.3 8.7
Electronic data processing	*	7.6	7.0	7.6	
Industrial nurses		**	**	**	**
Skilled maintenance trades ***	7.9	9.3	8.6	8.7	9.1
Unskilled plant workers ***	4.7	10.9	10.0	10.6	6.0
Manufacturing:	1.00				
Office clerical	6.2	11.7	10.8	8.9	7.5
Electronic data processing	*	**	**	**	**
Industrial nurses	**	**	**	**	**
Skilled maintenance trades ***	**	12.6	11.6	9.8	8.9
Unskilled plant workers ***	4.1	10.3	9.5	13.2	5.2
Nonmanufacturing:					
Office clerical	5.4	8.1	7.5	8.8	7.2
Electronic data processing	*	**	**	**	**
Industrial nurses	**	**	**	**	**
Skilled maintenance trades ***	**	**	**	**	ate ate
Unskilled plant workers ***	4.8	11.2	10.3	9.6	6.2
Oliverine Plant "Olivero				7.0	

Data not available.

Footnotes

Data do not meet publication criteria.

^{***} Percent increases for periods ending prior to 1976 relate to men only.

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

to these weekly hours.

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

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

Appendix A

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

In each of the 84 ² areas currently surveyed, data are obtained from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Major industry groups excluded from these studies are government operations and the construction and extractive industries. Establishments having fewer than a prescribed number of workers are omitted because of insufficient employment in the occupations studied. Separate tabulations are provided for each of the broad industry divisions which meet publication criteria.

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

Occupations and earnings

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

described, or for some industry divisions within the scope of the survey, are not presented in the A-series tables, because either (1) employment in the occupation is too small to provide enough data to merit presentation, or (2) there is possibility of disclosure of individual establishment data. Separate men's and women's earnings data are not presented when the number of workers not identified by sex is 20 percent or more of the men or women identified in an occupation. Earnings data not shown separately for industry divisions are included in data for all industries combined. Likewise, data are included in the overall classification when a subclassification of electronics technicians, secretaries, or truckdrivers 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.

These surveys measure the level of occupational earnings in an area at a particular time. Comparisons of individual occupational averages over time may not reflect expected wage changes. The averages for individual jobs are affected by changes in wages and employment patterns. For example, proportions of workers employed by high- or low-wage firms may change, or high-wage workers may advance to better jobs and be replaced by new workers at lower rates. Such shifts in employment could decrease an occupational average even though most establishments in an area increase wages during the year. Changes in earnings of occupational groups, shown in table A-7, are better indicators of wage trends than are earnings changes for individual jobs within the groups.

Average earnings reflect composite, areawide estimates. Industries and establishments differ in pay level and job staffing, and thus contribute differently to the estimates for each job. Pay averages may fail to reflect accurately the wage differential among jobs in individual establishments.

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

¹ Personal visits were on a 2-year cycle before July 1972.

Included in the 84 areas are 14 studies conducted by the Bureau under contract. These areas are Akron, Ohio; Austin, Tex.; Binghamton, N.Y.-Pa.; Birmingham, Ala.; Fort Lauderdale-Hollywood and West Palm Beach-Boca Raton, Fla.; Lexington-Fayette, Ky.; Melbourne-Titusville-Cocoa, Fla.; Norfolk-Virginia Beach-Portsmouth and Newport News-Hampton, Va.-N.C.; Poughkeepsie-Kingston-Newburgh, N.Y.; Raleigh-Durham, N.C.; Stamford, Conn.; Syracuse, N.Y.; Utica-Rome, N.Y.; and Westchester County, N.Y. In addition, the Bureau conducts more limited area studies in approximately 100 areas at the request of the Employment Standards Administration of the U.S. Department of Labor.

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

Wage trends for selected occupational groups

The percent increases presented in table A-7 are based on changes in average hourly earnings for 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. Hiring, 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 enter at the bottom of the range, depressing the average without a change in wage rates.

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

Occupations used to compute wage trends are:

Office clerical (men and women):

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

Office clerical (men and women)—Continued

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

Electronic data processing (men and women):

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

Industrial nurses (men and women):

Registered industrial nurses

Skilled maintenance (men and women):

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

Unskilled plant (men and women):

Janitors, porters, and cleaners
Material handling laborers

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

- Each occupation is assigned a weight based on its proportionate employment in the occupational group in the base year.
- 2. These weights are used to compute group averages. Each occupation's average (mean) earnings is multiplied by its weight. The products are totaled to obtain a group average.
- 3. The ratio of group averages for 2 consecutive years is computed by dividing the average for the current year by the average for the earlier year. The result—expressed as a percent—less 100 is the percent change.

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

Establishment practices and supplementary wage provisions

Tabulations on selected establishment practices and supplementary wage provisions (B-series tables) are not presented in this bulletin. Information for these tabulations is collected at 3-year intervals. ¹ 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 Personal visits were on a 2-year cycle before July 1972.

Appendix table 1. Establishments and workers within scope of survey and number studied in Oklahoma City, Okla., August 1976

	Minimum	Number of est	tablishments	Wo	rkers in establishme	nts
Industry division ²	employment in establish-	Within scope		Within sco	pe of study 4	
	ments in scope of study	of study 3	Studied	Number	Percent	Studied
ALL DIVISIONS	_	567	154	107,987	100	58,904
ANUFACTURING DNMANUFACTURING TRANSPORTATION, COMMUNICATION, AND	50	130 437	46 108	34.246 73,741	32 68	22,528 36,376
OTHER PUBLIC UTILITIES 5	50 50	50 70	20 14	16,451 7,722	15	12,633
RETAIL TRADE 6	50	167	33	31,102	29	14,079
FINANCE, INSURANCE, AND REAL ESTATE 6 SERVICES 6 7	50 50	82 68	17 24	11,360 7,106	11 7	3,715 3,287

The Oklahoma City Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Canadian, Cleveland, McClain, Oklahoma, and Pottawatomic Counties. The "workers within scope of study" estimates shown in this table provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other employment indexes to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

2 The 1967 edition of the Standard Industrial Classification Manual was used in classifying establishments by industry division.

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

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

⁶ This division is represented in estimates for "all industries" and "nonmanufacturing" in the A-series tables. Separate presentation of data is not made for one or more of the following reasons: (1) Employment is too small to provide enough data to merit separate study, (2) the sample was not designed initially to permit separate presentation, (3) response was insufficient or inadequate to permit separate presentation, and (4) there is possibility of disclosure of individual establishment data.

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

³ Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of companies in industries such as trade, finance, auto repair service, and motion picture theaters are considered as 1 establishment.

Appendix B. Occupational Descriptions

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

OFFICE

SECRETARY

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

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

SECRETARY—Continued

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

Exclusions

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

- a. Positions which do not meet the "personal" secretary concept described above;
 - b. Stenographers not fully trained in secretarial-type duties;
- c. Stenographers serving as office assistants to a group of professional, technical, or managerial persons;
- d. Secretary positions in which the duties are either substantially more routine or substantially more complex and responsible than those characterized in the definition:

Beginning with calendar year 1976 surveys, the Bureau has grouped occupations studied in its area wage surveys into job families in order to present information on related occupations in sequence. Job families have not been titled, however, since doing so might have added extraneous elements to the job matching process.

The Bureau has also revised several occupational titles. The titles more nearly reflect usual word order and are more descriptive of the survey jobs.

Exclusions—Continued

e. Assistant-type positions which involve more difficult or more responsible technical, administrative, supervisory, or specialized clerical duties which are not typical of secretarial work.

NOTE: The term "corporate officer," used in the level definitions following, refers to those officials who have a significant corporatewide policymaking role with regard to major company activities. The title "vice president," though normally indicative of this role, does not in all cases 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 following level definitions.

Class A

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

Class B

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

Class C

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

Class D

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

STENOGRAPHER

Primary duty is to take dictation using shorthand, and to transcribe the dictation. May also type from written copy. May operate from a stenographic pool. May occasionally transcribe from voice recordings (if primary duty is transcribing from recordings, see Transcribing-Machine Typist).

NOTE: This job is distinguished from that of a secretary in that a secretary normally works in a confidential relationship with only one manager or executive and performs more responsible and discretionary tasks as described in the secretary job definition.

Stenographer, General

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

Stenographer, Senior

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

OR

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

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

Class A. Operates a single- or multiple-position telephone switch-board handling incoming, outgoing, intraplant or office calls. Performs full telephone information service or handles complex calls, such as conference, collect, overseas, or similar calls, either in addition to doing routine work as described for switchboard operator, class B, or as a full-time assignment. ("Full" telephone information service occurs when the establishment has varied functions that are not readily understandable for telephone information purposes, e.g., because of overlapping or interrelated functions, and consequently present frequent problems as to which extensions are appropriate for calls.)

Class B. Operates a single- or multiple-position telephone switch-board handling incoming, outgoing, intraplant or office calls. May handle routine long distance calls and record tolls. May perform limited telephone information service. ("Limited" telephone information service occurs if the functions of the establishment serviced are readily understandable for telephone information purposes, or if the requests are routine, e.g., giving extension numbers when specific names are furnished, or if complex calls are referred to another operator.)

These classifications do not include switchboard operators in telephone companies who assist customers in placing calls.

SWITCHBOARD OPERATOR-RECEPTIONIST

In addition to performing duties of operator on a single-position or monitor-type switchboard, acts as receptionist and may also type or perform routine clerical work as part of regular duties. This typing or clerical work may take the major part of this worker's time while at switchboard. ORDER CLERK

Receives customers' orders for material or merchandise by mail, phone, or personally. Duties involve any combination of the following: Quoting prices to customers; making out an order sheet listing the items to make up the order; checking prices and quantities of items on order sheet; and distributing order sheets to respective departments to be filled. May check with credit department to determine credit rating of customer, acknowledge receipt of orders from customers, follow up orders to see that they have been filled, keep file of orders received, and check shipping invoices with original orders.

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.

ACCOUNTING CLERK-Continued

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.

BOOKKEEPING-MACHINE OPERATOR

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

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

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

MACHINE BILLER

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

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

MACHINE BILLER—Continued

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

PAYROLL CLERK

Computes wages of company employees and enters the necessary data on the payroll sheets. Duties involve: Calculating workers' earnings based on time or production records; and posting calculated data on payroll sheet, showing information such as worker's name, working days, time, rate, deductions for insurance, and total wages due. May make out paychecks and assist paymaster in making up and distributing pay envelopes. May use a calculating machine.

KEYPUNCH OPERATOR

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

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

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

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

TABULATING-MACHINE OPERATOR

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

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

Class A. Performs complete reporting and tabulating assignments including devising difficult control panel wiring under general supervision. Assignments typically involve a variety of long and complex reports which often are irregular or nonrecurring, requiring some planning of the nature and sequencing of operations, and the use of a variety of machines. Is

typically involved in training new operators in machine operations or training lower level operators in wiring from diagrams and in the operating sequences of long and complex reports. Does not include positions in which wiring responsibility is limited to selection and insertion of prewired boards.

<u>Class B.</u> Performs work according to established procedures and under specific instructions. Assignments typically involve complete but routine and recurring reports or parts of larger and more complex reports. Operates more difficult tabulating or electrical accounting machines such as

the tabulator and calculator, in addition to the simpler machines used by class C operators. May be required to do some wiring from diagrams. May train new employees in basic machine operations.

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

PROFESSIONAL AND TECHNICAL

COMPUTER SYSTEMS ANALYST, BUSINESS

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

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

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

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

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

Class B. Works independently or under only general direction on problems that are relatively uncomplicated to analyze, plan, program, and operate. Problems are of limited complexity because sources of input data are homogeneous and the output data are closely related. (For example,

COMPUTER SYSTEMS ANALYST, BUSINESS-Continued

develops systems for maintaining depositor accounts in a bank, maintaining accounts receivable in a retail establishment, or maintaining inventory accounts in a manufacturing or wholesale establishment.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of the data processing systems to be applied.

OR

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

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

COMPUTER PROGRAMMER, BUSINESS

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

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

For wage study purposes, programmers are classified as follows:

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

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

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

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

OR

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

May guide or instruct lower level programmers.

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

COMPUTER OPERATOR

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

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

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

Class B. Operates independently, or under only general direction, a computer running programs with most of the following characteristics: Most of the programs are established production runs, typically run on a regularly recurring basis; there is little or no testing of new programs required; alternate programs are provided in case original program needs major change or cannot be corrected within a reasonably short time. In common error situations, diagnoses cause and takes corrective action. This usually involves applying previously programmed corrective steps, or using standard correction techniques.

OR

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

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

DRAFTER

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

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

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

DRAFTER-TRACER

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

AND/OR

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

ELECTRONICS TECHNICIAN

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

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

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

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

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

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

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

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

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

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

A registered nurse who gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises of a factory or other establishment. Duties involve a combination of the following: Giving first aid to the ill or injured; attending to subsequent dressing of employees' injuries; keeping records of patients treated; preparing accident reports for compensation or

other purposes; assisting in physical examinations and health evaluations of applicants and employees; and planning and carrying out programs involving health education, accident prevention, evaluation of plant environment, or other activities affecting the health, welfare, and safety of all personnel. Nursing supervisors or head nurses in establishments employing more than one nurse are excluded.

MAINTENANCE, TOOLROOM, AND POWERPLANT

MAINTENANCE CARPENTER

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves most of the following: Planning and 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 Vehicles)

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.

MAINTENANCE MECHANIC (Motor Vehicles)—Continued

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

MAINTENANCE PIPEFITTER

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

MAINTENANCE SHEET-METAL WORKER

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

MILLWRIGHT

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

MAINTENANCE TRADES HELPER

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

MACHINE-TOOL OPERATOR (Toolroom)

Specializes in the operation of one or more types of machine tools, such as jig borers, cylindrical or surface grinders; engine lathes; or milling machines, in the construction of machine-shop tools, gauges, jigs, fixtures, or dies. Work involves most of the following: Planning and performing difficult machining operations; processing items requiring complicated setups or a high degree of accuracy; using a variety of precision measuring instruments; selecting feeds, speeds, tooling, and operation sequence; and making necessary adjustments during operation to achieve requisite tolerances or dimensions. May be required to recognize when tools need dressing, to dress tools, and to select proper coolants and cutting and lubricating oils. For cross-industry wage study purposes, machine-tool operators (toolroom) in tool and die jobbing shops are excluded from this classification.

TOOL AND DIE MAKER

Constructs and repairs machine-shop tools, gauges, jigs, fixtures or dies for forgings, punching, and other metal-forming work. Work involves most of the following: Planning and laying out work according to models, blueprints, drawings, or other oral and written specifications; using a variety of tool and die maker's handtools and precision measuring instruments; understanding of the working properties of common metals and alloys; setting up and operating of machine tools and related equipment; making necessary shop computations relating to dimensions of work, speeds, feeds, and tooling of machines; heat-treating of metal parts during fabrication as well as of finished tools and dies to achieve required qualities; working to close tolerances; fitting and assembling of parts to prescribed tolerances and allowances; and selecting appropriate materials, tools, and processes. In general, the tool and die maker's work requires a rounded training in machine-shop and toolroom practice usually acquired through a formal apprenticeship or equivalent training and experience.

For cross-industry wage study purposes, tool and die makers in tool and die jobbing shops are excluded from this classification.

STATIONARY ENGINEER

Operates and maintains and may also supervise the operation of stationary engines and equipment (mechanical or electrical) to supply the establishment in which employed with power, heat, refrigeration, or airconditioning. Work involves: Operating and maintaining equipment such as steam engines, air compressors, generators, motors, turbines, ventilating and refrigerating equipment, steam boilers and boiler-fed water pumps; making equipment repairs; and keeping a record of operation of machinery, temperature, and fuel consumption. May also supervise these operations. Head or chief engineers in establishments employing more than one engineer are excluded.

BOILER TENDER

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

MATERIAL MOVEMENT AND CUSTODIAL

TRUCKDRIVER

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

For wage study purposes, truckdrivers are classified by size and type of equipment, as follows: (Tractor-trailer should be rated on the basis of trailer capacity.)

Truckdriver, light truck (under $1^1/2$ tons) Truckdriver, medium truck ($1^1/2$ to and including 4 tons) Truckdriver, heavy truck (trailer) (over 4 tons) Truckdriver, heavy truck (other than trailer) (over 4 tons)

SHIPPING AND RECEIVING CLERK

Prepares merchandise for shipment, or receives and is responsible for incoming shipments of merchandise or other materials. Shipping work involves: A knowledge of shipping procedures, practices, routes, available means of transportation, and rates; and preparing records of the goods shipped, making up bills of lading, posting weight and shipping charges, and keeping a file of shipping records. May direct or assist in preparing the merchandise for shipment. Receiving work involves: Verifying or directing others in verifying the correctness of shipments against bills of lading, invoices, or other records; checking for shortages and rejecting damaged goods; routing merchandise or materials to proper departments; and maintaining necessary records and files.

For wage study purposes, workers are classified as follows:

Shipping clerk Receiving clerk Shipping and receiving clerk

WAREHOUSEMAN

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

WAREHOUSEMAN-Continued

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

ORDER FILLER

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

SHIPPING PACKER

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

MATERIAL HANDLING LABORER

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

POWER-TRUCK OPERATOR

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

For wage study purposes, workers are classified by type of power-truck, as follows:

Forklift operator Power-truck operator (other than forklift)

GUARD AND WATCHMAN

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

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

JANITOR, PORTER, OR CLEANER

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

Area Wage Surveys

A list of the latest available bulletins is presented below. A directory of area wage studies including more limited studies conducted at the request of the Employment Standards Administration of the U.S. Department of Labor is available on request. 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

Area	Bulletin number and price*	Area	Bulletin number and price*
Akron, Ohio, Dec. 1975	1850-80 45 cents	Miami, Fla., Oct. 1975	1850-76 95 cents
Albany-Schenectady-Troy, N.Y., Sept. 19751	1850-63 \$1.20	Milwaukee, Wis., Apr. 1976	
Anaheim—Santa Ana—Garden Grove, Calif., Oct. 19751	1850-75 85 cents	Minneapolis-St. Paul, MinnWis., Jan. 1976	
Atlanta, Ga., May 1976		Nassau-Suffolk, N.Y., June 1976	
Austin, Tex., Dec. 19751		Newark, N.J., Jan. 1976	
Baltimore, Md., Aug. 1975 ¹		New Orleans, La., Jan. 1976	
Billings, Mont., July 1976.		New York, N.YN.J., May 19751	1850-45 \$1.10
Binghamton, N.Y.—Pa., July 1975	1850-50 65 cents	Norfolk-Virginia Beach-Portsmouth, VaN.C., May 19761	
Birmingham, Ala., Mar. 1976	1900-11 95 cents	Norfolk-Virginia Beach-Portsmouth and Newport News-	1,00 21, 05 00115
Boston, Mass., Aug. 19751		Hampton, VaN.C., May 1976 1	1000-33 85 cente
Buffalo, N.Y., Oct. 1975		Northeast Pennsylvania, Aug. 1975	
Canton, Ohio, May 1976	1000-07, 75 cents	Oklahoma City, Okla., Aug. 1976	
Chattanooga, Tenn,—Ga., Sept. 19751	1950-67 05 cents	Omaha, NebrIowa, Oct. 1975	
		Paterson-Clifton-Passaic, N.J., June 1976	
Chicago, Ill., May 1976	1900-32, \$1.05	Philadelphia, Pa-N.J., Nov. 1975	
Cincinnati, Ohio-KyInd., Mar. 1976	1900-7, 75 Cents	Pittsburgh, Pa., Jan. 1976	
Cleveland, Ohio, Sept. 1975		Portland, Maine, Nov. 1975	
Columbus, Ohio, Oct. 1975			
Corpus Christi, Tex., July 1976	1900-41, 55 Cents	Portland, OregWash., May 1975	1850-40, 75 cents
Dallas-Fort Worth, Tex., Oct. 19751		Poughkeepsie, N.Y., June 19751	1850-70, 65 cents
Davenport-Rock Island-Moline, Iowa-Ill., Feb. 1976		Poughkeepsie-Kingston-Newburgh, N.Y., June 19751	1850-68, 75 cents
Dayton, Ohio, Dec. 1975	1850-73, 45 cents	Providence-Warwick-Pawtucket, R.IMass., June 1976	
Daytona Beach, Fla., Aug. 1975	1850-47, 65 cents	Raleigh-Durham, N.C., Feb. 1976	
Denver-Boulder, Colo., Dec. 1975	1850-82, 75 cents	Richmond, Va., June 1976	1900-34, 65 cents
Detroit, Mich., Mar. 19761	1900-15, \$1.25	St. Louis, MoIll., Mar. 19761	
Fort Lauderdale-Hollywood and West Palm Beach-		Sacramento, Calif., Dec. 1975	1850-87, 45 cents
Boca Raton, Fla., Apr. 1976	1900-20, 55 cents	Saginaw, Mich., Nov. 1975Salt Lake City-Ogden, Utah, Nov. 1975 ¹	1850-71, 35 cents
Fresno, Calif., June 1976	1900-29, 55 cents	Salt Lake City-Ogden, Utah, Nov. 1975	1850-74, 75 cents
Gainesville, Fla., Sept. 1975	1850-57, \$1.10	San Antonio, Tex., May 1976	1900-23, 65 cents
Green Bay, Wis., July 1976	1900-37, 55 cents	San Diego, Calif., Nov. 1975	1850-77, 45 cents
Greensboro-Winston-Salem-High Point, N.C., Aug. 1975	1850-49, 65 cents	San Francisco-Oakland, Calif., Mar. 1976	
Greenville-Spartanburg, S.C., June 1976 1	1900-36, 85 cents	San Jose, Calif., Mar. 1976	
Hartford, Conn., Mar. 1976	1900-14, 55 cents	Seattle-Everett, Wash., Jan. 1976	
Houston, Tex., Apr. 1976	1900-26, 85 cents	South Bend, Ind., Mar. 1976	1900-5, 55 cents
Huntsville, Ala., Feb. 1976	1900-17, 55 cents	Stamford, Conn., May 19761	1900-40, 85 cents
Indianapolis, Ind., Oct. 19751	1850-66, 95 cents	Syracuse, N.Y., July 1975	
Jackson, Miss., Feb. 1976	1900-8, 55 cents	Toledo, Ohio-Mich., May 1976	
Jacksonville, Fla., Dec. 1975	1850-81, 45 cents	Trenton, N.J., Sept. 19751	1850-60, \$1.20
Kansas City, MoKans., Sept. 1975		Utica-Rome, N.Y., July 19751	1850-48, 80 cents
Lexington-Fayette, Ky., Nov. 19751	1850-84, 75 cents	Washington, D.CMdVa., Mar. 1976	
Los Angeles-Long Beach, Calif., Oct. 1975 1	1850-86, \$1.15	Westchester County, N.Y., May 19751	
Louisville, Ky,-Ind., Nov. 1975	1850-79, 45 cents	Wichita, Kans., Apr. 1976	
Melbourne-Titusville-Cocoa, Fla., Aug. 1975	1850-54, 65 cents	Worcester, Mass., Apr. 1976	1900-16, 55 cents
Memphis, Tenn,-Ark,-Miss., Nov. 1975	1850-85, 45 cents	York, Pa., Feb. 1976	1900-4, 55 cents

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

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

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

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IX X
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