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1900-74

Area Wage Survey Saginaw, Michigan, Metropolitan Area, November 1976



Bulletin 1900-74

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Bureau of Labor Statistics



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Preface

This bulletin provides results of a November 1976 survey of occupational earnings and supplementary wage benefits in the Saginaw, Michigan, Standard Metropolitan Statistical Area (Saginaw County). 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 Saginaw survey was conducted by the Bureau's regional office in Chicago, Ill., under the general direction of Lois L. Orr, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

Area Wage Survey: Saginaw, Michigan, Metropolitan Area November 1976

Bulletin 1900-74 February 1977



U.S. DEPARTMENT OF LABOR, Ray Marshall, Secretary
BUREAU OF LABOR STATISTICS, Julius Shiskin, Commissioner

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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 personal visits of Bureau field economists to 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.

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-1a 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.

B-series tables

The B-series tables present information on minimum entrance salaries for office workers; late shift pay provisions and practices for plant workers in manufacturing; and data separately for plant and office workers on scheduled weekly hours and days of first-shift workers; paid holidays; paid vacations; and health, insurance, and pension plans.

Appendixes

Appendix A describes the methods and concepts used in the area wage survey program. It provides information on the scope of the area survey, on the area's industrial composition in manufacturing, and on labor-management agreement coverage.

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 Saginaw, Mich., November 1976

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																				
			Mean ²	Median ²	Middle range ²	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$				
						90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380
						and under																				
ALL WORKERS																										
SECRETARIES ----- NONMANUFACTURING -----	157 81	39.0 38.0	\$ 233.00 179.50	\$ 232.00 160.00	\$ 153.50-297.50 140.50-224.50	-	-	-	10	10	13	7	5	4	2	7	15	15	16	3	12	18	6	6	1	7
SECRETARIES, CLASS B -----	27	39.0	228.00	179.50	150.00-314.00	-	-	-	-	2	5	3	1	3	-	-	-	1	1	1	1	4	3	1	-	1
SECRETARIES, CLASS C ----- NONMANUFACTURING -----	70 37	39.0 38.5	224.00 167.00	251.00 142.50	140.00-294.50 127.50-191.50	-	-	-	10	8	6	2	-	-	-	2	-	3	12	2	10	13	2	-	-	-
SECRETARIES, CLASS D -----	37	38.0	210.50	214.00	205.00-233.50	-	-	-	-	-	-	4	-	2	3	15	11	2	-	-	-	-	-	-	-	-
STENOGRAPHERS, SENIOR ----- NONMANUFACTURING -----	46 21	40.0 39.5	191.00 146.50	161.50 140.00	140.00-246.50 135.00-157.00	-	-	-	-	10	11	2	2	1	-	1	3	3	4	4	5	-	-	-	-	-
TYPISTS, CLASS A -----	20	40.0	179.00	146.50	123.00-245.50	-	-	3	5	2	-	-	2	1	-	-	-	1	2	1	3	-	-	-	-	-
TYPISTS, CLASS B -----	42	38.5	135.50	128.50	108.00-154.50	-	12	6	6	6	1	1	-	4	3	1	2	-	-	-	-	-	-	-	-	-
FILE CLERKS, CLASS B -----	28	38.0	122.00	119.50	112.00-130.50	2	4	11	3	5	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
FILE CLERKS, CLASS C -----	44	39.0	113.50	114.50	110.50-114.50	-	10	28	5	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SWITCHBOARD OPERATORS -----	17	39.5	157.00	140.00	100.00-204.00	1	7	-	-	-	2	-	-	2	-	-	2	-	-	1	2	-	-	-	-	-
SWITCHBOARD OPERATOR-RECEPTIONISTS- MANUFACTURING ----- NONMANUFACTURING -----	45 21 24	39.5 40.0 39.0	145.00 175.50 118.50	135.00 152.00 115.50	108.00-152.00 152.00-228.00 103.00-130.50	5 2 3	7 - 7	5 - 5	- 1 -	6 - 5	3 - 3	8 8 -	3 3 -	1 - 1	- - -	1 1 -	- 3 -	3 - -	2 2 -	1 1 -	- - -	- - -	- - -	- - -	- - -	- - -
ORDER CLERKS, CLASS B -----	33	39.0	123.50	116.50	98.00-146.00	9	6	2	3	1	5	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-
ACCOUNTING CLERKS, CLASS A ----- MANUFACTURING ----- NONMANUFACTURING -----	131 65 66	39.5 40.0 39.0	216.50 238.00 194.50	221.00 251.50 173.00	164.50-268.50 180.00-294.00 150.00-252.00	-	-	2	2	15	4	6	12	7	8	3	4	9	21	13	15	10	-	-	-	-
ACCOUNTING CLERKS, CLASS B ----- MANUFACTURING ----- NONMANUFACTURING -----	113 25 88	39.0 40.0 39.0	138.00 131.50 140.00	131.00 134.50 130.00	112.00-153.50 131.00-140.00 112.00-156.50	3	22	14	10	16	17	8	8	4	1	-	4	4	2	-	-	-	-	-	-	-
PAYROLL CLERKS ----- MANUFACTURING ----- NONMANUFACTURING -----	37 21 16	40.0 40.0 39.5	172.00 162.00 184.50	159.00 157.50 159.50	126.50-206.00 115.00-206.00 152.50-199.00	-	-	9	2	-	2	8	3	3	-	-	1	2	2	1	4	-	-	-	-	
KEYPUNCH OPERATORS, CLASS B ----- MANUFACTURING ----- NONMANUFACTURING -----	60 26 34	39.5 40.0 39.0	165.00 194.00 143.00	154.50 218.00 135.00	124.00-209.00 134.00-228.00 120.00-167.50	2	4	-	12	8	2	4	2	6	-	-	7	11	-	2	-	-	-	-	-	-

See footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Saginaw, Mich., November 1976

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Number of workers receiving straight-time weekly earnings of—																				
			Mean ²	Median ²	Middle range ²																					
						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
						130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	320	340	360
						and	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						under	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	320	340	360
ALL WORKERS																										
COMPUTER OPERATORS, CLASS B -----	23	39.5	\$ 261.00	\$ 299.50	\$ 191.50-317.50	1	-	1	2	-	1	2	1	1	-	-	-	1	-	-	-	2	6	3	2	-
DRAFTERS, CLASS B -----	66	40.0	274.00	291.50	214.00-323.00	-	1	-	-	2	2	10	1	3	-	3	1	4	1	4	1	3	9	13	5	3
MANUFACTURING -----	66	40.0	274.00	291.50	214.00-323.00	-	1	-	-	2	2	10	1	3	-	3	1	4	1	4	1	3	9	13	5	3
DRAFTERS, CLASS C -----	24	40.0	184.50	164.00	158.50-202.50	-	3	3	9	-	2	-	1	3	-	-	-	-	1	-	-	-	1	1	-	-
MANUFACTURING -----	24	40.0	184.50	164.00	158.50-202.50	-	3	3	9	-	2	-	1	3	-	-	-	-	1	-	-	-	1	1	-	-

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Saginaw, Mich., November 1976

Sex, ³ occupation, and industry division	Number of workers	Average (mean ²)		Sex, ³ occupation, and industry division	Number of workers	Average (mean ²)		Sex, ³ occupation, and industry division	Number of workers	Average (mean ²)	
		Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)			Weekly hours ¹ (standard)	Weekly earnings ¹ (standard)
OFFICE OCCUPATIONS - WOMEN				OFFICE OCCUPATIONS - WOMEN--CONTINUED				OFFICE OCCUPATIONS - WOMEN--CONTINUED			
SECRETARIES -----	157	39.0	\$ 233.00	SWITCHBOARD OPERATOR-RECEPTIONISTS-	45	39.5	\$ 145.00	KEYPUNCH OPERATORS, CLASS B -----	57	39.5	\$ 166.50
NONMANUFACTURING -----	81	38.0	179.50	MANUFACTURING -----	21	40.0	175.50	MANUFACTURING -----	26	40.0	194.00
SECRETARIES, CLASS B -----	27	39.0	228.00	NONMANUFACTURING -----	24	39.0	118.50	NONMANUFACTURING -----	31	39.5	144.00
SECRETARIES, CLASS C -----	70	39.0	224.00	ORDER CLERKS, CLASS B -----	30	39.0	120.50				
NONMANUFACTURING -----	37	38.5	167.00	ACCOUNTING CLERKS, CLASS A -----	112	39.5	211.50	PROFESSIONAL AND TECHNICAL			
SECRETARIES, CLASS D -----	37	38.0	210.50	MANUFACTURING -----	53	40.0	229.50	OCCUPATIONS - MEN			
STENOGRAPHERS, SENIOR -----	46	40.0	191.00	NONMANUFACTURING -----	69	39.5	195.50	DRAFTERS, CLASS B -----	66	40.0	274.00
NONMANUFACTURING -----	21	39.5	146.50	ACCOUNTING CLERKS, CLASS B -----	105	39.5	137.50	MANUFACTURING -----	66	40.0	274.00
TYPISTS, CLASS A -----	20	40.0	179.00	MANUFACTURING -----	22	40.0	130.50	DRAFTERS, CLASS C -----	24	40.0	184.50
TYPISTS, CLASS B -----	42	38.5	135.50	NONMANUFACTURING -----	83	39.0	139.00	MANUFACTURING -----	24	40.0	184.50
SWITCHBOARD OPERATORS -----	17	39.5	157.00	PAYROLL CLERKS -----	33	40.0	162.00				
				MANUFACTURING -----	20	40.0	156.50				

See footnotes at end of tables.

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Saginaw, Mich., November 1976

NOTE: Data for maintenance and powerplant workers do not meet publication criteria.

Table A-5. Hourly earnings of material movement and custodial workers in Saginaw, Mich., November 1976

Occupation and industry division	Number of workers	Hourly earnings ⁴			Number of workers receiving straight-time hourly earnings of—																							
		Mean ²	Median ²	Middle range ²	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
					2.20	2.30	2.40	2.50	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00
ALL WORKERS					2.30	2.40	2.50	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00	
TRUCKDRIVERS -----	171	\$ 6.57	\$ 6.61	\$ 6.43- 7.01	-	-	-	-	-	-	-	-	-	-	2	2	-	-	20	11	-	-	57	45	6	28		
MANUFACTURING -----	110	7.03	7.01	6.61- 7.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	-	-	24	45	6	28		
NONMANUFACTURING -----	61	5.75	6.43	5.00- 6.43	-	-	-	-	-	-	-	-	-	-	2	2	-	-	17	7	-	-	33	-	-	-		
TRUCKDRIVERS, MEDIUM TRUCK -----	51	6.35	6.43	6.43- 6.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	-	-	44	-	-	-		
RECEIVING CLERKS -----	16	6.00	6.48	5.16- 6.66	-	-	-	-	-	-	1	-	-	1	-	-	-	3	-	-	2	5	4	-	-			
WAREHOUSEMEN -----	78	5.36	5.03	4.73- 5.93	-	-	-	-	-	-	3	-	-	2	-	-	18	20	-	16	5	14	-	-	-			
SHIPPING PACKERS -----	78	6.33	6.41	6.41- 6.85	-	-	-	-	-	-	2	-	-	-	-	-	-	6	-	2	3	42	23	-	-			
MATERIAL HANDLING LABORERS -----	160	6.18	6.85	6.26- 6.85	-	5	3	5	2	-	1	-	-	-	-	-	-	5	-	5	24	17	93	-	-			
GUARDS AND WATCHMEN -----	274	5.27	7.12	2.30- 7.12	-	81	1	3	2	1	2	1	4	3	-	-	-	18	1	2	3	2	150	-	-			
JANITORS, PORTERS, AND CLEANERS -----	502	5.85	6.68	5.55- 6.68	6	-	5	9	7	9	11	5	12	3	1	7	16	3	25	13	21	62	287	-	-			
NONMANUFACTURING -----	104	3.72	3.39	2.75- 4.64	6	-	5	9	7	9	11	5	12	3	1	7	-	3	9	2	14	1	-	-	-			

See footnotes at end of tables.

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Saginaw, Mich., November 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
MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN--CONTINUED		
TRUCKDRIVERS -----	170	\$ 6.57	GUARDS AND WATCHMEN -----	253	\$ 5.32
MANUFACTURING -----	109	7.03	JANITORS, PORTERS, AND CLEANERS ---	433	6.01
NONMANUFACTURING -----	61	5.75	NONMANUFACTURING -----	74	3.94
TRUCKDRIVERS, MEDIUM TRUCK -----	51	6.35	MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - WOMEN		
RECEIVING CLERKS -----	16	6.00	JANITORS, PORTERS, AND CLEANERS ---	69	4.88
WAREHOUSEMEN -----	78	5.36	NONMANUFACTURING -----	30	3.16
SHIPPING PACKERS -----	74	6.40			
MATERIAL HANDLING LABORERS -----	158	6.19			

See footnotes at end of tables.

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

Industry and occupational group (men and women combined)	November 1974 to November 1975	November 1975 to November 1976
All industries:		
Office clerical.....	7.9	7.2
Electronic data processing.....	*	*
Industrial nurses.....	*	*
Skilled maintenance trades.....	*	*
Unskilled plant workers.....	10.1	10.2

* Data do not meet publication criteria.

B. Establishment practices and supplementary wage provisions

Table B-1. Minimum entrance salaries for inexperienced typists and clerks in Saginaw, Mich., November 1976

Minimum weekly straight-time salary ⁵	Inexperienced typists				Other inexperienced clerical workers ⁶							
	All industries	Manufacturing		Non-manufacturing	All industries	Manufacturing			Nonmanufacturing			
		Based on standard weekly hours ⁷ of—				Based on standard weekly hours ⁷ of—						
		All schedules	40	All schedules		All schedules	40	All schedules	40	37½		
ESTABLISHMENTS STUDIED -----	60	21	XXX	39	60	21	XXX	39	XXX	XXX		
ESTABLISHMENTS HAVING A SPECIFIED MINIMUM -----	10	7	7	3	27	10	9	17	9	5		
UNDER \$87.50 -----	-	-	-	-	1	-	-	1	-	-		
\$87.50 AND UNDER \$90.00 -----	-	-	-	-	1	-	-	1	-	1		
\$90.00 AND UNDER \$92.50 -----	-	-	-	-	5	2	2	3	3	-		
\$92.50 AND UNDER \$95.00 -----	-	-	-	-	-	-	-	-	-	-		
\$95.00 AND UNDER \$97.50 -----	-	-	-	-	1	-	-	1	-	-		
\$97.50 AND UNDER \$100.00 -----	-	-	-	-	-	-	-	-	-	-		
\$100.00 AND UNDER \$105.00 -----	1	-	-	1	6	-	-	6	3	2		
\$105.00 AND UNDER \$110.00 -----	1	-	-	1	1	-	-	1	1	-		
\$110.00 AND UNDER \$115.00 -----	-	-	-	-	2	1	-	1	-	1		
\$115.00 AND UNDER \$120.00 -----	-	-	-	-	1	-	-	1	1	-		
\$120.00 AND UNDER \$125.00 -----	-	-	-	-	-	-	-	-	-	-		
\$125.00 AND UNDER \$130.00 -----	-	-	-	-	-	-	-	-	-	-		
\$130.00 AND UNDER \$135.00 -----	-	-	-	-	-	-	-	-	-	-		
\$135.00 AND UNDER \$140.00 -----	-	-	-	-	-	-	-	-	-	-		
\$140.00 AND UNDER \$145.00 -----	1	1	1	-	1	1	1	-	-	-		
\$145.00 AND UNDER \$150.00 -----	1	-	-	1	1	-	-	1	-	1		
\$150.00 AND UNDER \$155.00 -----	-	-	-	-	-	-	-	-	-	-		
\$155.00 AND UNDER \$160.00 -----	6	6	6	-	6	6	6	-	-	-		
\$160.00 AND UNDER \$165.00 -----	-	-	-	-	1	-	-	1	1	-		
ESTABLISHMENTS HAVING NO SPECIFIED MINIMUM -----	3	2	XXX	1	13	6	XXX	7	XXX	XXX		
ESTABLISHMENTS WHICH DID NOT EMPLOY WORKERS IN THIS CATEGORY -----	47	12	XXX	35	20	5	XXX	15	XXX	XXX		

See footnotes at end of tables.

Table B-2. Late shift pay provisions for full-time manufacturing plant workers in Saginaw, Mich., November 1976

(All full-time manufacturing plant workers = 100 percent)

Item	All workers ⁸		Workers on late shifts	
	Second shift	Third shift	Second shift	Third shift
PERCENT OF WORKERS				
IN ESTABLISHMENTS WITH LATE SHIFT PROVISIONS -----	99.3	95.6	28.8	12.9
WITH NO PAY DIFFERENTIAL FOR LATE SHIFT WORK -----	-	-	-	-
WITH PAY DIFFERENTIAL FOR LATE SHIFT WORK -----	99.3	95.6	28.8	12.9
UNIFORM CENTS-PER-HOUR DIFFERENTIAL -----	13.1	9.4	1.9	.5
UNIFORM PERCENTAGE DIFFERENTIAL -----	86.2	82.9	26.9	11.8
OTHER DIFFERENTIAL -----	-	3.2	-	.5
AVERAGE PAY DIFFERENTIAL				
UNIFORM CENTS-PER-HOUR DIFFERENTIAL -----	19.2	18.6	18.1	13.6
UNIFORM PERCENTAGE DIFFERENTIAL -----	5.0	9.9	5.0	10.0
PERCENT OF WORKERS BY TYPE AND AMOUNT OF PAY DIFFERENTIAL				
UNIFORM CENTS-PER-HOUR:				
7 CENTS -----	1.1	-	.2	-
10 CENTS -----	1.6	1.1	.4	.2
15 CENTS -----	1.9	2.8	.3	.4
20 CENTS -----	2.8	-	.4	-
21 CENTS -----	2.6	2.6	.4	-
23 CENTS -----	-	2.0	-	-
25 CENTS -----	.7	.8	-	(9)
30 CENTS -----	2.4	-	.3	-
UNIFORM PERCENTAGE:				
5 PERCENT -----	86.2	.4	26.9	(9)
7 PERCENT -----	-	1.6	-	(9)
10 PERCENT -----	-	81.0	-	11.8

See footnotes at end of tables.

Table B-3. Scheduled weekly hours and days of full-time first-shift workers in Saginaw, Mich., November 1976

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
PERCENT OF WORKERS BY SCHEDULED WEEKLY HOURS AND DAYS								
ALL FULL-TIME WORKERS -----	100	100	100	100	100	100	100	100
30 HOURS-6 DAYS -----	(10)	-	1	-	-	-	-	-
32 1/2 HOURS-5 DAYS -----	1	-	4	-	-	-	-	-
35 HOURS-5 DAYS -----	1	-	9	-	1	-	2	-
36 HOURS-5 DAYS -----	-	-	-	-	2	-	4	-
37 1/2 HOURS-5 DAYS -----	1	(10)	6	-	25	9	43	65
38 1/2 HOURS-5 DAYS -----	-	-	-	-	6	-	13	-
40 HOURS-5 DAYS -----	92	95	73	99	65	91	38	35
42 HOURS-5 DAYS -----	2	3	(10)	(10)	-	-	-	-
44 HOURS-5 DAYS -----	(10)	-	1	-	-	-	-	-
45 HOURS-5 DAYS -----	1	1	-	-	-	-	-	-
46 HOURS-5 1/2 DAYS -----	1	1	-	-	-	-	-	-
47 HOURS-5 DAYS -----	1	-	3	-	-	-	-	-
52 HOURS-6 DAYS -----	(10)	-	(10)	-	-	-	-	-
55 HOURS-6 DAYS -----	(10)	-	2	-	-	-	-	-
AVERAGE SCHEDULED WEEKLY HOURS								
ALL WEEKLY WORK SCHEDULES -----	40.1	40.2	39.6	40.0	39.1	39.8	38.5	38.4

See footnote at end of tables.

Table B-4. Annual paid holidays for full-time workers in Saginaw, Mich., November 1976

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
PERCENT OF WORKERS								
ALL FULL-TIME WORKERS -----	100	100	100	100	100	100	100	100
IN ESTABLISHMENTS NOT PROVIDING PAID HOLIDAYS -----	2	-	16	-	(10)	-	1	-
IN ESTABLISHMENTS PROVIDING PAID HOLIDAYS -----	98	100	84	100	99	100	99	100
AVERAGE NUMBER OF PAID HOLIDAYS								
FOR WORKERS IN ESTABLISHMENTS PROVIDING HOLIDAYS -----	12.8	13.5	8.3	10.5	11.3	13.0	9.5	10.6
PERCENT OF WORKERS BY NUMBER OF PAID HOLIDAYS PROVIDED								
3 HOLIDAYS -----	-	-	-	-	(10)	-	(10)	-
6 HOLIDAYS -----	3	(10)	19	2	10	11	10	2
PLUS 1 HALF DAY -----	1	1	2	-	(10)	-	1	-
PLUS 2 HALF DAYS -----	-	-	-	-	(10)	(10)	-	-
7 HOLIDAYS -----	2	-	12	-	3	-	6	-
PLUS 3 HALF DAYS -----	1	-	4	-	3	-	6	-
8 HOLIDAYS -----	2	-	11	-	(10)	-	1	-
PLUS 1 HALF DAY -----	-	-	-	-	2	-	4	-
PLUS 2 HALF DAYS -----	-	-	-	-	(10)	-	(10)	-
9 HOLIDAYS -----	4	2	14	-	3	3	3	-
10 HOLIDAYS -----	5	3	16	67	27	1	54	65
PLUS 2 HALF DAYS -----	-	-	-	-	1	3	-	-
11 HOLIDAYS -----	2	2	-	-	4	7	-	-
12 HOLIDAYS -----	3	2	7	31	10	6	14	33
13 HOLIDAYS -----	6	8	-	-	3	6	-	-
PLUS 1 HALF DAY -----	-	-	-	-	(10)	-	1	-
14 HOLIDAYS -----	70	83	-	-	1	1	-	-
15 HOLIDAYS -----	-	-	-	-	32	61	-	-
PERCENT OF WORKERS BY TOTAL PAID HOLIDAY TIME PROVIDED ¹¹								
6 DAYS OR MORE -----	98	100	84	100	99	100	99	100
6 1/2 DAYS OR MORE -----	95	99	66	98	89	89	89	98
7 DAYS OR MORE -----	94	99	64	98	89	89	89	98
8 DAYS OR MORE -----	92	99	52	98	86	89	82	98
8 1/2 DAYS OR MORE -----	90	99	41	98	85	89	82	98
9 DAYS OR MORE -----	90	99	37	98	81	89	73	98
10 DAYS OR MORE -----	86	97	23	98	78	86	69	98
11 DAYS OR MORE -----	81	94	7	31	51	85	15	33
12 DAYS OR MORE -----	79	92	7	31	46	75	15	33
13 DAYS OR MORE -----	77	90	-	-	36	69	1	-
13 1/2 DAYS OR MORE -----	70	83	-	-	33	63	1	-
14 DAYS OR MORE -----	70	83	-	-	32	63	-	-
15 DAYS -----	-	-	-	-	32	61	-	-

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Saginaw, Mich., November 1976

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
PERCENT OF WORKERS								
ALL FULL-TIME WORKERS -----	100	100	100	100	100	100	100	100
IN ESTABLISHMENTS NOT PROVIDING PAID VACATIONS -----	1	-	6	-	(10)	-	(10)	-
IN ESTABLISHMENTS PROVIDING PAID VACATIONS -----	99	100	94	100	99	100	99	100
LENGTH-OF-TIME PAYMENT -----	94	94	94	100	99	100	99	100
PERCENTAGE PAYMENT -----	5	6	-	-	-	-	-	-
AMOUNT OF PAID VACATION AFTER: ¹²								
6 MONTHS OF SERVICE:								
UNDER 1 WEEK -----	4	4	6	-	3	1	6	-
1 WEEK -----	74	81	32	67	57	76	37	65
OVER 1 AND UNDER 2 WEEKS -----	(10)	(10)	-	-	11	15	6	-
2 WEEKS -----	-	-	-	-	2	-	4	-
1 YEAR OF SERVICE:								
1 WEEK -----	20	14	53	31	18	5	31	34
OVER 1 AND UNDER 2 WEEKS -----	1	1	2	-	(10)	-	(10)	-
2 WEEKS -----	75	82	37	69	77	86	67	66
OVER 2 AND UNDER 3 WEEKS -----	3	3	1	-	(10)	-	1	-
3 WEEKS -----	(10)	(10)	-	-	5	9	-	-
2 YEARS OF SERVICE:								
1 WEEK -----	12	9	32	(10)	4	2	7	1
OVER 1 AND UNDER 2 WEEKS -----	3	4	-	-	-	-	-	-
2 WEEKS -----	80	83	61	99	90	89	92	99
OVER 2 AND UNDER 3 WEEKS -----	4	4	1	-	(10)	-	1	-
3 WEEKS -----	(10)	(10)	-	-	5	9	-	-
3 YEARS OF SERVICE:								
1 WEEK -----	3	1	10	-	(10)	-	1	1
OVER 1 AND UNDER 2 WEEKS -----	4	5	-	-	1	2	-	-
2 WEEKS -----	20	8	84	100	60	28	93	99
OVER 2 AND UNDER 3 WEEKS -----	72	85	1	-	32	61	1	-
3 WEEKS -----	(10)	(10)	-	-	7	9	5	-
4 YEARS OF SERVICE:								
1 WEEK -----	3	1	10	-	(10)	-	(10)	-
OVER 1 AND UNDER 2 WEEKS -----	2	3	-	-	1	2	-	-
2 WEEKS -----	21	10	84	100	60	28	94	100
OVER 2 AND UNDER 3 WEEKS -----	73	86	1	-	32	61	1	-
3 WEEKS -----	(10)	(10)	-	-	7	9	5	-
5 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
OVER 1 AND UNDER 2 WEEKS -----	1	1	3	-	(10)	-	(10)	-
2 WEEKS -----	20	12	66	100	54	25	85	100
OVER 2 AND UNDER 3 WEEKS -----	2	2	3	-	1	-	2	-
3 WEEKS -----	72	82	17	-	40	66	12	-
OVER 3 AND UNDER 4 WEEKS -----	3	3	-	-	-	-	-	-
4 WEEKS -----	(10)	(10)	-	-	5	9	-	-

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Saginaw, Mich., November 1976—Continued

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
AMOUNT OF PAID VACATION AFTER ¹² - CONTINUED								
10 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	4	2	13	(10)	4	4	4	1
OVER 2 AND UNDER 3 WEEKS -----	5	6	-	-	4	7	-	-
3 WEEKS -----	17	7	72	99	51	19	85	99
OVER 3 AND UNDER 4 WEEKS -----	71	84	-	-	32	61	-	-
4 WEEKS -----	1	1	3	-	9	9	10	-
12 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	3	1	13	(10)	4	4	4	-
OVER 2 AND UNDER 3 WEEKS -----	3	3	-	-	4	7	-	-
3 WEEKS -----	19	10	72	99	51	19	86	100
OVER 3 AND UNDER 4 WEEKS -----	72	85	-	-	32	61	-	-
4 WEEKS -----	1	1	3	-	9	9	10	-
15 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	-	-	-	-	(10)	1	-	-
OVER 2 AND UNDER 3 WEEKS -----	2	1	3	-	(10)	-	(10)	-
3 WEEKS -----	10	7	26	2	28	17	40	2
OVER 3 AND UNDER 4 WEEKS -----	3	3	1	-	(10)	-	1	-
4 WEEKS -----	80	84	57	98	71	82	58	98
OVER 4 AND UNDER 5 WEEKS -----	3	3	-	-	-	-	-	-
5 WEEKS -----	1	1	2	-	1	(10)	1	-
20 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	-	-	-	-	(10)	1	-	-
OVER 2 AND UNDER 3 WEEKS -----	1	1	-	-	-	-	-	-
3 WEEKS -----	4	1	17	2	7	5	10	2
OVER 3 AND UNDER 4 WEEKS -----	2	3	-	-	3	5	-	-
4 WEEKS -----	17	10	60	98	55	27	85	98
5 WEEKS -----	70	81	11	-	34	61	5	-
OVER 5 AND UNDER 6 WEEKS -----	3	3	-	-	-	-	-	-
6 WEEKS -----	(10)	1	-	-	(10)	(10)	-	-
25 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	-	-	-	-	(10)	1	-	-
OVER 2 AND UNDER 3 WEEKS -----	1	1	-	-	-	-	-	-
3 WEEKS -----	3	1	14	2	7	5	9	2
OVER 3 AND UNDER 4 WEEKS -----	1	1	3	-	(10)	-	(10)	-
4 WEEKS -----	9	6	24	(10)	26	21	31	-
OVER 4 AND UNDER 5 WEEKS -----	1	1	-	-	(10)	-	1	-
5 WEEKS -----	81	86	48	98	66	73	58	98
OVER 5 AND UNDER 6 WEEKS -----	3	3	-	-	-	-	-	-
6 WEEKS -----	-	-	-	-	(10)	(10)	-	-
7 WEEKS -----	(10)	1	-	-	-	-	-	-

See footnotes at end of tables.

Table B-5. Paid vacation provisions for full-time workers in Saginaw, Mich., November 1976—Continued

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
AMOUNT OF PAID VACATION AFTER¹²—								
CONTINUED								
30 YEARS OF SERVICE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	-	-	-	-	(10)	1	-	-
OVER 2 AND UNDER 3 WEEKS -----	1	1	-	-	-	-	-	-
3 WEEKS -----	3	1	14	2	7	5	9	2
OVER 3 AND UNDER 4 WEEKS -----	(10)	1	-	-	-	-	-	-
4 WEEKS -----	9	6	27	(10)	26	21	31	-
OVER 4 AND UNDER 5 WEEKS -----	1	1	-	-	-	-	-	-
5 WEEKS -----	81	86	48	98	66	73	59	98
OVER 5 AND UNDER 6 WEEKS -----	3	3	-	-	-	-	-	-
6 WEEKS -----	-	-	-	-	(10)	(10)	-	-
7 WEEKS -----	(10)	1	-	-	-	-	-	-
MAXIMUM VACATION AVAILABLE:								
1 WEEK -----	1	-	6	-	(10)	-	(10)	-
2 WEEKS -----	-	-	-	-	(10)	1	-	-
OVER 2 AND UNDER 3 WEEKS -----	1	1	-	-	-	-	-	-
3 WEEKS -----	3	1	14	2	7	5	9	2
OVER 3 AND UNDER 4 WEEKS -----	(10)	1	-	-	-	-	-	-
4 WEEKS -----	9	6	27	(10)	26	21	31	-
OVER 4 AND UNDER 5 WEEKS -----	1	1	-	-	-	-	-	-
5 WEEKS -----	78	84	48	98	66	73	58	98
OVER 5 AND UNDER 6 WEEKS -----	3	3	-	-	-	-	-	-
6 WEEKS -----	2	3	-	-	(10)	(10)	-	-
7 WEEKS -----	(10)	1	-	-	(10)	-	1	-

See footnotes at end of tables.

Table B-6. Health, insurance, and pension plans for full-time workers in Saginaw, Mich., November 1976

Item	Plant workers				Office workers			
	All industries	Manufacturing	Nonmanufacturing	Public utilities	All industries	Manufacturing	Nonmanufacturing	Public utilities
PERCENT OF WORKERS								
ALL FULL-TIME WORKERS -----	100	100	100	100	100	100	100	100
IN ESTABLISHMENTS PROVIDING AT LEAST ONE OF THE BENEFITS SHOWN BELOW ¹³ -----	99	100	90	100	99	100	99	100
LIFE INSURANCE -----	97	100	79	100	98	99	95	100
NONCONTRIBUTORY PLANS -----	94	99	70	100	93	97	88	100
ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE -----	93	99	59	69	86	99	71	67
NONCONTRIBUTORY PLANS -----	91	99	47	67	79	97	59	66
SICKNESS AND ACCIDENT INSURANCE OR SICK LEAVE OR BOTH ¹⁴ -----	98	100	86	100	98	98	97	100
SICKNESS AND ACCIDENT INSURANCE -----	91	99	44	(10)	55	82	26	1
NONCONTRIBUTORY PLANS -----	90	99	39	(10)	52	82	20	1
SICK LEAVE (FULL PAY AND NO WAITING PERIOD) -----	3	-	22	33	75	94	55	35
SICK LEAVE (PARTIAL PAY OR WAITING PERIOD) -----	5	1	31	67	20	3	38	65
LONG-TERM DISABILITY INSURANCE -----	72	83	14	(10)	53	79	26	1
NONCONTRIBUTORY PLANS -----	70	82	2	(10)	49	76	19	1
HOSPITALIZATION INSURANCE -----	99	100	90	100	99	100	99	100
NONCONTRIBUTORY PLANS -----	94	99	68	98	89	95	83	99
SURGICAL INSURANCE -----	99	100	90	100	99	100	99	100
NONCONTRIBUTORY PLANS -----	94	99	68	98	89	95	83	99
MEDICAL INSURANCE -----	98	100	87	100	99	100	99	100
NONCONTRIBUTORY PLANS -----	94	99	68	98	89	95	83	99
MAJOR MEDICAL INSURANCE -----	23	15	65	100	93	97	88	100
NONCONTRIBUTORY PLANS -----	18	14	43	98	51	31	72	99
DENTAL INSURANCE -----	82	91	32	98	66	81	51	98
NONCONTRIBUTORY PLANS -----	81	91	26	98	62	81	43	98
RETIREMENT PENSION -----	94	99	68	98	92	91	94	99
NONCONTRIBUTORY PLANS -----	93	99	62	98	89	91	88	99

See footnotes at end of tables.

Footnotes

All of these standard footnotes may not apply to this bulletin.

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

² The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the workers receive more and half receive less than the rate shown. The middle range is defined by two 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.

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

⁵ Formally established minimum regular straight-time hiring salaries that are paid for standard workweeks.

⁶ Excludes workers in subclerical jobs such as messenger.

⁷ Data are presented for all standard workweeks combined, and for the most common standard workweeks reported.

⁸ Includes all plant workers in establishments currently operating late shifts, and establishments whose formal provisions cover late shifts, even though the establishments were not currently operating late shifts.

⁹ Less than 0.05 percent.

¹⁰ Less than 0.5 percent.

¹¹ All combinations of full and half days that add to the same amount are combined; for example, the proportion of workers receiving a total of 10 days includes those with 10 full days and no half days, 9 full days and 2 half days, 8 full days and 4 half days, and so on. Proportions then were cumulated.

¹² Includes payments other than "length of time," such as percentage of annual earnings or flat-sum payments, converted to an equivalent time basis; for example, 2 percent of annual earnings was considered as 1 week's pay. Periods of service are chosen arbitrarily and do not necessarily reflect individual provisions for progression; for example, changes in proportions at 10 years include changes between 5 and 10 years. Estimates are cumulative. Thus, the proportion eligible for at least 3 weeks' pay after 10 years includes those eligible for at least 3 weeks' pay after fewer years of service.

¹³ Estimates listed after type of benefit are for all plans for which at least a part of the cost is borne by the employer. "Noncontributory plans" include only those financed entirely by the employer. Excluded are legally required plans, such as workers disability compensation, social security, and railroad retirement.

¹⁴ Unduplicated total of workers receiving sick leave or sickness and accident insurance shown separately below. Sick leave plans are limited to those which definitely establish at least the minimum number of days' pay that each employee can expect. Informal sick leave allowances determined on an individual basis are excluded.

Appendix A

Area wage and related benefits data are obtained by personal visits of Bureau field representatives at 3-year intervals.¹ 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 84² 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

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

² 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.

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.

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 effect on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. Hirings, layoffs, and turnover may affect an establishment average for an occupation when workers are paid under plans providing a range of wage rates for individual jobs. In periods of increased hiring, for example, new employees 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
Order clerks, classes A and B
Accounting clerks, classes A and B
Bookkeeping-machine operators, class B
Payroll clerks
Keypunch operators, classes A and B
Tabulating-machine operators, class B

Electronic data processing (men and women):

Computer systems analysts, classes A, B, and C

Electronic data processing (men and women)—

Continued

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:

1. 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

The incidence of selected establishment practices and supplementary wage provisions is studied for plant workers and office workers. Plant workers include nonsupervisory workers and working supervisors engaged in nonoffice functions. (Cafeteria workers and route workers are excluded in manufacturing industries, but included in nonmanufacturing industries.) Office workers include nonsupervisory workers and working supervisors performing clerical or related functions. Lead workers and trainees are included among nonsupervisory workers. Administrative, executive, and professional employees and construction workers utilized as separate work forces are excluded from both the plant and office worker categories.

Minimum entrance salaries (table B-1). Minimum entrance salaries for office workers relate only to the establishments visited. Because of the optimum sampling techniques used and the probability that large establishments are more likely than small establishments to have formal entrance rates above the subclerical level, the table is more representative of policies in medium and large establishments.

Shift differentials—manufacturing (table B-2). Data were collected on policies of manufacturing establishments regarding pay differentials for plant workers on late shifts. Establishments considered as having policies are those which (1) have provisions in writing covering the operation of late shifts, or (2) have operated late shifts at any time during the 12 months preceding a survey. When establishments have several differentials which vary by job, the differential applying to the majority of the plant workers is recorded. When establishments have differentials which apply only to certain hours of work, the differential applying to the majority of the shift hours is recorded.

For purposes of this study, a late shift is either a second (evening) shift which ends at or near midnight or a third (night) shift which starts at or near midnight.

Differentials for second and third shifts are summarized separately for (1) establishment policies (an establishment's differentials are weighted by

all plant workers in the establishment at the time of the survey) and (2) effective practices (an establishment's differentials are weighted by plant workers employed on the specified shift at the time of the survey).

Scheduled weekly hours; paid holidays; paid vacations; and health, insurance, and pension plans. Provisions which apply to a majority of the plant or office workers in an establishment are considered to apply to all plant or office workers in the establishment; a practice or provision is considered nonexistent when it applies to less than a majority. Holidays; vacations; and health, insurance, and pension plans are considered applicable to employees currently eligible for the benefits as well as to employees who will eventually become eligible.

Scheduled weekly hours and days (table B-3). Scheduled weekly hours and days refer to the number of hours and days per week which full-time first (day) shift workers are expected to work, whether paid for at straight-time or overtime rates.

Paid holidays (table B-4). Holidays are included only if they are granted annually on a formal basis (provided for in written form or established by custom) and employees are paid for the time off. They are included even though in a particular year they fall on a nonworkday and employees are not granted another day off.

Data are tabulated to show the percent of workers who (1) are granted specific numbers of whole and half holidays and (2) are granted specified amounts of total holiday time (whole and half holidays are aggregated).

Paid vacations (table B-5). Establishments report their method of calculating vacation pay (time basis, percent of annual earnings, flat-sum payment, etc.) and the amount of vacation pay granted. Only basic formal plans are reported. Vacation bonuses, vacation-savings plans, and "extended" or "sabbatical" benefits beyond basic plans are excluded.

For tabulating vacation pay granted, all provisions are expressed on a time basis. Vacation pay calculated on other than a time basis is converted to its equivalent time period. Two percent of annual earnings, for example, is tabulated as 1 week's vacation pay.

Also, provisions after each specified length of service are related to all plant or office workers in an establishment regardless of length of service. Vacation plans commonly provide for larger amount of vacation pay as service lengthens. Counts of plant or office workers by length of service were not obtained. The tabulations of vacation pay granted presents, therefore, statistical measures of these provisions rather than proportions of workers actually receiving specific benefits.

Health, insurance, and pension plans (table B-6). Health, insurance, and pension plans include plans for which the employer pays either all or part of the cost. The cost may be (1) underwritten by a commercial insurance company or nonprofit organization, (2) covered by a union fund to

which the employer has contributed, or (3) borne directly by the employer out of operating funds or a fund set aside to cover the cost. A plan is included even though a majority of the employees in an establishment do not choose to participate in it because they are required to bear part of its cost (provided the choice to participate is available or will eventually become available to a majority). Legally required plans such as social security, railroad retirement, workers' disability compensation, and temporary disability insurance³ are excluded.

Life insurance includes formal plans providing indemnity (usually through an insurance policy) in case of death of the covered worker.

Accidental death and dismemberment is limited to plans which provide benefit payments in case of death or loss of limb or sight as a direct result of an accident.

Sickness and accident insurance includes only those plans which provide that predetermined cash payments be made directly to employees who lose time from work because of illness or injury, e.g., \$50 a week for up to 26 weeks of disability.

Sick leave plans are limited to formal plans⁴ which provide for continuing an employee's pay during absence from work because of illness. Data collected distinguish between (1) plans which provide full pay with no waiting period, and (2) plans which either provide partial pay or require a waiting period.

Long-term disability insurance plans provide payments to totally disabled employees upon the expiration of their paid sick leave and/or sickness and accident insurance, or after a predetermined period of disability (typically 6 months). Payments are made until the end of the disability, a maximum age, or eligibility for retirement benefits. Full or partial payments are almost always reduced by social security, workers' disability compensation, and private pension benefits payable to the disabled employee.

Hospitalization, surgical, and medical insurance plans reported in these surveys provide full or partial payment for basic services rendered.

³ Temporary disability insurance which provides benefits to covered workers disabled by injury or illness which is not work-connected is mandatory under State laws in California, New Jersey, New York, and Rhode Island. Establishment plans which meet only the legal requirements are excluded from these data, but those under which (1) employers contribute more than is legally required or (2) benefits exceed those specified in the State law are included. In Rhode Island, benefits are paid out of a State fund to which only employees contribute. In each of the other three States, benefits are paid either from a State fund or through a private plan:

State fund financing: In California, only employees contribute to the State fund; in New Jersey, employees and employers contribute; in New York, employees contribute up to a specified maximum and employers pay the difference between the employees' share and the total contribution required.

Private plan financing: In California and New Jersey, employees cannot be required to contribute more than they would if they were covered by the State fund; in New York, employees can agree to contribute more if the State rules that the additional contribution is commensurate with the benefit provided.

Federal legislation (Railroad Unemployment Insurance Act) provides temporary disability insurance benefits to railroad workers for illness or injury, whether work-connected or not. The legislation requires that employers bear the entire cost of the insurance.

⁴ An establishment is considered as having a formal plan if it specifies at least the minimum number of days of sick leave available to each employee. Such a plan need not be written, but informal sick leave allowances determined on an individual basis are excluded.

Hospitalization insurance covers hospital room and board and may cover other hospital expenses. Surgical insurance covers surgeons' fees. Medical insurance covers doctors' fees for home, office, or hospital calls. Plans restricted to post-operative medical care or a doctor's care for minor ailments at a worker's place of employment are not considered to be medical insurance.

Major medical insurance coverage applies to services which go beyond the basic services covered under hospitalization, surgical, and medical insurance. Major medical insurance typically (1) requires that a

"deductible" (e.g., \$50) be met before benefits begin, (2) has a coinsurance feature that requires the insured to pay a portion (e.g., 20 percent) of certain expenses, and (3) has a specified dollar maximum of benefits (e.g., \$10,000 a year).

Dental insurance plans provide normal dental service benefits, usually for fillings, extractions, and X-rays. Plans which provide benefits only for oral surgery or repairing accident damage are not reported.

Retirement pension plans provide for regular payments to the retiree for life. Included are deferred profit-sharing plans which provide the option of purchasing a lifetime annuity.

Appendix table 1. Establishments and workers within scope of survey and number studied in Saginaw, Mich.,¹ November 1976

Industry division ²	Minimum employment in establishments in scope of study	Number of establishments		Workers in establishments				
		Within scope of study ³	Studied	Within scope of study				Studied
				Total ⁴		Full-time plant workers	Full-time office workers	
				Number	Percent			
ALL DIVISIONS -----	-	121	50	42,844	100	29,244	5,195	37,013
MANUFACTURING -----	50	50	21	31,308	73	24,814	2,678	28,550
NONMANUFACTURING -----	-	71	39	11,536	27	4,430	2,517	8,463
TRANSPORTATION, COMMUNICATION, AND OTHER PUBLIC UTILITIES ⁵ -----	50	5	4	2,715	6	1,026	1,102	2,296
WHOLESALE TRADE -----	50	7	3	833	2	(⁶)	(⁶)	543
RETAIL TRADE -----	50	37	20	5,723	13	(⁶)	(⁶)	4,091
FINANCE, INSURANCE, AND REAL ESTATE -----	50	11	6	1,416	3	(⁷)	(⁶)	1,044
SERVICES ⁸ -----	50	11	6	849	2	(⁶)	(⁶)	489

¹ The Saginaw Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Saginaw County. 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 to classify establishments by industry division.

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

⁴ Includes executive, professional, part-time, and other workers excluded from the separate plant and office categories.

⁵ Abbreviated to "public utilities" in the A- and B-series tables. Taxicabs and services incidental to water transportation are excluded. Saginaw's transit system is municipally owned 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, and for "all industries" in the B-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 Workers from this entire division are represented in estimates for "all industries" and "nonmanufacturing" in the A-series tables, but from the real estate portion only in estimates for "all industries" and "nonmanufacturing" in the B-series tables. Separate presentation of data is not made for one or more of the reasons given in footnote 6.

⁸ 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.

Labor-management agreement coverage

The following tabulation shows the percent of full-time plant and office workers employed in establishments in the Saginaw area in which a union contract or contracts covered a majority of the workers in the respective categories, November 1976:

	Plant workers	Office workers
All industries -----	89	14
Manufacturing -----	98	-
Nonmanufacturing -----	39	28
Public utilities -----	98	65

An establishment is considered to have a contract covering all plant or office workers if a majority of such workers is covered by a labor-management agreement. Therefore, all other plant or office workers are employed in establishments that either do not have labor-management contracts in effect, or have contracts that apply to fewer than half of their plant or office workers. Estimates are not necessarily representative of the extent to which all workers in the area may be covered by the provisions of labor-management agreements, because small establishments are excluded and the industrial scope of the survey is limited.

Industrial composition in manufacturing

Almost three-fourths of the workers within scope of the survey in the Saginaw area were employed in manufacturing firms. The following presents the major industry groups and specific industries as a percent of all manufacturing:

Industry groups	Specific industries
Primary metal industries 43	Iron and steel foundries 43
Transportation equipment..... 37	Motor vehicles and equipment 36
Machinery, except electrical .. 8	

This information is based on estimates of total employment derived from universe materials compiled before actual survey. Proportions in various industry divisions may differ from proportions based on the results of the survey as shown in appendix table 1.

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;

SECRETARY—Continued

- 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.

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.

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 revised titles more nearly reflect usual word order and are more descriptive of the survey jobs.

Revised occupational descriptions are being introduced this year for: Order clerk; payroll clerk; switchboard operator; switchboard operator-receptionist; transcribing-machine typist (previously titled transcribing-machine operator); machine-tool operator (toolroom); and tool and die maker. They are the result of the Bureau's policy of periodically reviewing area wage survey occupational descriptions in order to take into account technological developments and to clarify descriptions so that they are more readily understood and uniformly interpreted. Even though the revised descriptions reflect basically the same occupations as previously defined, some reporting changes may occur because of the revisions.

Exclusions

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

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

NOTE: The term "corporate officer," used in the level definitions following, refers to those officials who have a significant corporatewide policymaking role with regard to major company activities. The title "vice president," though normally indicative of this role, does not in all cases 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 corporatewide functional activity (e.g., marketing, research, operations, industrial relations, etc.) or a major geographic or organizational segment (e.g., a regional headquarters; a major division) of a company that employs, in all, over 5,000 but fewer than 25,000 employees; or

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

5. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) or a company that employs, in all, over 25,000 persons.

Class C

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

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

Class D

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

2. Secretary to a nonsupervisory staff specialist, professional employee, administrative officer, or assistant, skilled technician, or expert. (NOTE: Many companies assign stenographers, rather than secretaries as described above, to this level of supervisory or nonsupervisory worker.)

STENOGRAPHER

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

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

Stenographer, General

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

Stenographer, Senior

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

OR

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

TRANSCRIBING-MACHINE TYPIST

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

TYPIST

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

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

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

FILE CLERK

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

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

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

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

MESSENGER

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

SWITCHBOARD OPERATOR

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

SWITCHBOARD OPERATOR-RECEPTIONIST

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

ORDER CLERK

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

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

Positions are classified into levels according to the following definitions:

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

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

ACCOUNTING CLERK

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

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

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

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

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

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.

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

PAYROLL CLERK

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

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

TABULATING-MACHINE OPERATOR—Continued

from this definition are working supervisors. Also excluded are operators of electronic digital computers, even though they may also operate electric accounting machine equipment.

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

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

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

COMPUTER SYSTEMS ANALYST, BUSINESS—Continued

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.

COMPUTER PROGRAMMER, BUSINESS—Continued

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

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

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

OR

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

May guide or instruct lower level programmers.

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

COMPUTER OPERATOR

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.

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

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

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

REGISTERED INDUSTRIAL NURSE

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

MAINTENANCE ELECTRICIAN—Continued

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

MAINTENANCE MACHINIST—Continued

and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment required for this work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MECHANIC (MACHINERY)

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

MAINTENANCE MECHANIC (MOTOR VEHICLE)

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

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

MAINTENANCE PIPEFITTER

Installs or repairs water, steam, gas, or other types of pipe and pipefittings in an establishment. Work involves most of the following: Laying out work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machines; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and size of pipe required; and making standard tests to determine whether finished pipes

MAINTENANCE PIPEFITTER—Continued

meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.

MAINTENANCE SHEET-METAL WORKER

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

MILLWRIGHT

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

MAINTENANCE TRADES HELPER

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

MACHINE-TOOL OPERATOR (TOOLROOM)

Specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: Planning and performing difficult machining operations which require complicated setups or a high degree of accuracy; setting up machine

tool or tools (e.g., install cutting tools and adjust guides, stops, working tables, and other controls to handle the size of stock to be machined; determine proper feeds, speeds, tooling, and operation sequence or select those prescribed in drawings, blueprints, or layouts); using a variety of precision measuring instruments; making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. May be required to select proper coolants and cutting and lubricating oils, to recognize when tools need dressing, and to dress tools. In general, the work of a machine-tool operator (toolroom) at the skill level called for in this classification requires extensive knowledge of machine-shop and toolroom practice usually acquired through considerable on-the-job training and experience.

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

TOOL AND DIE MAKER

Constructs and repairs jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: Planning and laying out work according to models, blueprints, drawings, or other written or oral specifications; understanding the working properties of common metals and alloys; selecting appropriate materials, tools, and processes required to complete task; making necessary shop computations; setting up and operating various machine tools and related equipment; using various tool and die maker's handtools and precision measuring instruments;

working to very close tolerances; heat-treating metal parts and finished tools and dies to achieve required qualities; fitting and assembling parts to prescribed tolerances and allowances. In general, the tool and die maker's work requires rounded training in machine-shop and toolroom practice usually acquired through formal apprenticeship or equivalent training and experience.

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

STATIONARY ENGINEER

Operates and maintains 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 air-conditioning. 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 1½ tons)
- Truckdriver, medium truck (1½ 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

SHIPPING AND RECEIVING CLERK—Continued

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

WAREHOUSEMAN—Continued

of the following: Verifying materials (or merchandise) against receiving documents, noting and reporting discrepancies and obvious damages; routing materials to prescribed storage locations; storing, stacking, or palletizing materials in accordance with prescribed storage methods; rearranging and taking inventory of stored materials; examining stored materials and reporting deterioration and damage; removing material from storage and preparing it for shipment. May operate hand or power trucks in performing warehousing duties.

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

ORDER FILLER

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

SHIPPING PACKER

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping 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

MATERIAL HANDLING LABORER—Continued

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. 1976	1900-66, 75 cents
Albany-Schenectady-Troy, N.Y., Sept. 1976	1900-59, 55 cents	Milwaukee, Wis., Apr. 1976	1900-22, 85 cents
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1976	1900-67, 75 cents	Minneapolis-St. Paul, Minn.-Wis., Jan. 1976	1900-3, 95 cents
Atlanta, Ga., May 1976	1900-30, 85 cents	Nassau-Suffolk, N.Y., June 1976	1900-35, 85 cents
Austin, Tex., Dec. 1975 ¹	1850-83, 75 cents	Newark, N.J., Jan. 1976	1900-10, 85 cents
Baltimore, Md., Aug. 1976	1900-52, 85 cents	New Orleans, La., Jan. 1976	1900-2, 75 cents
Billings, Mont., July 1976	1900-39, 55 cents	New York, N.Y.-N.J., May 1976	1900-48, \$1.05
Binghamton, N.Y.-Pa., July 1976 ¹	1900-49, 85 cents	Norfolk-Virginia Beach-Portsmouth, Va.-N.C., May 1976 ¹	1900-27, 85 cents
Birmingham, Ala., Mar. 1976 ¹	1900-11, 95 cents	Norfolk-Virginia Beach-Portsmouth and Newport News-Hampton, Va.-N.C., May 1976 ¹	1900-33, 85 cents
Boston, Mass., Aug. 1976	1900-53, 85 cents	Northeast Pennsylvania, Aug. 1976	1900-43, 65 cents
Buffalo, N.Y., Oct. 1976	1900-70, 75 cents	Oklahoma City, Okla., Aug. 1976	1900-42, 55 cents
Canton, Ohio, May 1976	1900-28, 55 cents	Omaha, Nebr.-Iowa, Oct. 1976	1900-61, 55 cents
Chatanooga, Tenn.-Ga., Sept. 1976	1900-57, 55 cents	Paterson-Clifton-Passaic, N.J., June 1976	1900-38, 55 cents
Chicago, Ill., May 1976	1900-32, \$1.05	Philadelphia, Pa.-N.J., Nov. 1976 ¹	1900-64, \$1.10
Cincinnati, Ohio-Ky.-Ind., Mar. 1976	1900-7, 75 cents	Pittsburgh, Pa., Jan. 1976 ¹	1900-1, \$1.15
Cleveland, Ohio, Sept. 1976	1900-62, 95 cents	Portland, Maine, Dec. 1976 ¹	1900-72, 85 cents
Columbus, Ohio, Oct. 1976	1900-68, 75 cents	Portland, Oreg.-Wash., May 1976	1900-51, 75 cents
Corpus Christi, Tex., July 1976	1900-41, 55 cents	Poughkeepsie, N.Y., June 1976	1900-50, 45 cents
Dallas-Fort Worth, Tex., Oct. 1976	1900-63, 85 cents	Poughkeepsie-Kingston-Newburgh, N.Y., June 1976	1900-55, 55 cents
Davenport-Rock Island-Moline, Iowa-Ill., Feb. 1976	1900-25, 55 cents	Providence-Warwick-Pawtucket, R.I.-Mass., June 1976	1900-31, 75 cents
Dayton, Ohio, Dec. 1975	1850-73, 45 cents	Raleigh-Durham, N.C., Feb. 1976	1900-18, 55 cents
Daytona Beach, Fla., Aug. 1976	1900-45, 45 cents	Richmond, Va., June 1976	1900-34, 65 cents
Denver-Boulder, Colo., Dec. 1976	1900-73, 85 cents	St. Louis, Mo.-Ill., Mar. 1976 ¹	1900-19, \$1.25
Detroit, Mich., Mar. 1976 ¹	1900-15, \$1.25	Sacramento, Calif., Dec. 1976	1900-71, 55 cents
Fort Lauderdale-Hollywood and West Palm Beach-Boca Raton, Fla., Apr. 1976	1900-20, 55 cents	Saginaw, Mich., Nov. 1976 ¹	1900-74, 75 cents
Fresno, Calif., June 1976	1900-29, 55 cents	Salt Lake City-Ogden, Utah, Nov. 1976	1900-65, 55 cents
Gainesville, Fla., Sept. 1976	1900-54, 45 cents	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. 1976	1900-47, 65 cents	San Francisco-Oakland, Calif., Mar. 1976	1900-9, 95 cents
Greenville-Spartanburg, S.C., June 1976 ¹	1900-36, 85 cents	San Jose, Calif., Mar. 1976	1900-13, 75 cents
Hartford, Conn., Mar. 1976	1900-14, 55 cents	Seattle-Everett, Wash., Jan. 1976	1900-6, 65 cents
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 1976 ¹	1900-40, 85 cents
Indianapolis, Ind., Oct. 1976	1900-58, 75 cents	Syracuse, N.Y., July 1976	1900-44, 55 cents
Jackson, Miss., Feb. 1976	1900-8, 55 cents	Toledo, Ohio-Mich., May 1976	1900-24, 55 cents
Jacksonville, Fla., Dec. 1975	1850-81, 45 cents	Trenton, N.J., Sept. 1976	1900-56, 55 cents
Kansas City, Mo.-Kans., Sept. 1976 ¹	1900-60, \$1.05	Utica-Rome, N.Y., July 1975 ¹	1850-48, 80 cents
Lexington-Fayette, Ky., Nov. 1975 ¹	1850-84, 75 cents	Washington, D.C.-Md.-Va., Mar. 1976	1900-12, 85 cents
Los Angeles-Long Beach, Calif., Oct. 1975 ¹	1850-86, \$1.15	Westchester County, N.Y., May 1976	1900-46, 55 cents
Louisville, Ky.-Ind., Nov. 1976	1900-69, 55 cents	Wichita, Kans., Apr. 1976	1900-21, 55 cents
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.

Official Business
Penalty for private use, \$300

Third Class Mail

Lab-441



Bureau of Labor Statistics Regional Offices

Region I

1603 JFK Federal Building
Government Center
Boston, Mass. 02203
Phone: 223-6761 (Area Code 617)

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Region II

Suite 3400
1515 Broadway
New York, N.Y. 10036
Phone: 662-5406 (Area Code 212)

New Jersey
New York
Puerto Rico
Virgin Islands

Region III

3535 Market Street,
P.O. Box 13309
Philadelphia, Pa. 19101
Phone: 596-1154 (Area Code 215)

Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

Region IV

Suite 540
1371 Peachtree St., N.E.
Atlanta, Ga. 30309
Phone: 821-4418 (Area Code 404)

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

Region V

9th Floor, 230 S. Dearborn St.
Chicago, Ill. 60604
Phone: 353-1880 (Area Code 312)

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

Region VI

Second Floor
555 Griffin Square Building
Dallas, Tex. 75202
Phone: 749-3516 (Area Code 214)

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Regions VII and VIII

Federal Office Building
911 Walnut St., 15th Floor
Kansas City, Mo. 64106
Phone: 374-2481 (Area Code 816)

VII
Iowa
Kansas
Missouri
Nebraska

VIII
Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

Regions IX and X

450 Golden Gate Ave.
Box 36017
San Francisco, Calif. 94102
Phone: 556-4678 (Area Code 415)

IX
Arizona
California
Hawaii
Nevada

X
Alaska
Idaho
Oregon
Washington

