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2050-48

# Area Wage Survey

# Anaheim—Santa Ana—Garden Grove, California, Metropolitan Area, October 1979



U.S. Department of Labor  
Bureau of Labor Statistics

Bulletin 2050-48

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# Preface

This bulletin provides results of an October 1979 survey of occupational earnings in the Anaheim-Santa Ana-Garden Grove, California, Standard Metropolitan Statistical Area. The survey was made as part of the Bureau of Labor Statistics' annual area wage survey program. It was conducted by the Bureau's regional office in San Francisco, Calif., under the general direction of Susan Holland, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

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## Note:

A report on occupational earnings in the Anaheim-Santa Ana-Garden Grove area is available for the refuse hauling (October 1979) industry. Listings of union wage rates for the city of Santa Ana alone are available for the building trades, printing trades, local-transit operating employees, local truckdrivers and helpers, and grocery store employees. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

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ERRATA

Area Wage Survey: Anaheim-Santa Ana-Garden Grove, California, Metropolitan Area, October 1979,  
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Drafters were inadvertently left off tables A-2, A-3, A-8, A-11, and A-12. Attached are  
corrected tables.



**Table A-2. Weekly earnings of professional and technical workers, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																				
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640	
						UNDER 180	AND 200	220	240	260	280	300	320	340	360	380	400	420	440	460	520	560	600	640	AND OVER	
COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	489	39.5	\$437.50	\$443.00	\$368.00-448.50	-	-	-	-	-	5	5	11	21	57	37	21	26	51	49	67	73	33	25	6	2
MANUFACTURING.....	258	40.0	444.00	442.50	379.50- 500.00	-	-	-	-	4	2	7	17	20	16	13	14	28	25	27	36	22	19	6	2	
NONMANUFACTURING.....	231	39.5	430.00	443.00	363.50- 477.50	-	-	-	-	1	3	4	4	37	21	8	12	23	24	40	37	11	6	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	157	39.5	502.00	498.50	455.50- 538.00	-	-	-	-	-	-	-	-	-	-	-	4	22	14	24	34	27	24	6	2	
MANUFACTURING.....	82	40.0	524.00	522.00	478.00- 570.00	-	-	-	-	-	-	-	-	-	-	-	1	7	5	10	15	17	19	6	2	
NONMANUFACTURING.....	75	39.0	478.00	471.50	446.50- 503.00	-	-	-	-	-	-	-	-	-	-	-	3	15	9	14	19	10	5	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	263	40.0	421.00	433.00	362.50- 463.00	-	-	-	-	3	4	13	40	27	12	12	29	34	43	39	6	1	-	-		
NONMANUFACTURING.....	149	39.5	409.00	391.00	352.00- 461.00	-	-	-	-	3	4	3	36	21	8	5	8	15	26	18	1	1	-	-		
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C.....	65	40.0	355.00	355.00	330.00- 385.00	-	-	-	-	5	-	7	8	15	10	9	10	-	1	-	-	-	-	-	-	
COMPUTER PROGRAMMERS (BUSINESS): MANUFACTURING.....	75	39.5	359.00	351.00	321.50- 389.50	-	-	-	-	-	2	9	16	14	7	10	12	4	1	-	-	-	-	-	-	
COMPUTER OPERATORS.....	602	39.5	268.00	264.50	230.00- 302.00	15	21	59	79	110	74	35	135	29	31	6	6	2	-	-	-	-	-	-	-	
MANUFACTURING.....	265	40.0	275.50	266.00	231.00- 319.00	1	11	22	45	39	36	22	25	23	27	6	6	2	-	-	-	-	-	-	-	
NONMANUFACTURING.....	337	39.5	262.00	264.50	230.00- 302.00	14	10	37	34	71	38	13	110	6	4	-	-	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS A.....	154	39.5	305.00	305.00	270.00- 343.00	-	-	-	10	22	17	19	29	16	27	6	6	2	-	-	-	-	-	-	-	
MANUFACTURING.....	115	40.0	309.50	315.00	261.00- 355.00	-	-	-	9	18	9	10	12	16	27	6	6	2	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS B.....	378	40.0	261.50	254.00	228.50- 302.00	-	11	46	65	80	40	13	106	13	4	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING.....	110	40.0	253.00	241.50	225.00- 285.50	-	7	12	33	13	16	9	13	7	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	268	39.5	265.00	254.00	237.50- 302.00	-	4	34	32	67	24	4	93	6	4	-	-	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS C.....	70	39.5	222.00	214.50	180.50- 264.00	15	10	13	4	8	17	3	-	-	-	-	-	-	-	-	-	-	-	-	-	
DRAFTERS.....	979	40.0	275.00	270.00	224.50- 310.50	47	56	97	97	121	177	59	95	63	27	69	22	25	5	11	4	4	-	-	-	-
MANUFACTURING.....	750	40.0	265.50	262.50	219.00- 300.00	44	54	91	73	101	131	52	68	36	18	44	9	20	3	-	4	2	-	-	-	-
NONMANUFACTURING.....	229	40.0	304.50	300.00	260.00- 360.00	3	2	6	24	20	46	7	27	27	9	25	13	5	2	11	-	2	-	-	-	-
DRAFTERS, CLASS A.....	237	40.0	346.50	358.00	300.00- 385.50	-	-	-	5	7	19	19	39	20	10	52	19	23	5	11	4	4	-	-	-	-
MANUFACTURING.....	163	40.0	338.00	334.50	299.00- 375.00	-	-	-	5	5	15	16	30	13	10	33	9	18	3	-	4	2	-	-	-	-
NONMANUFACTURING.....	74	40.0	365.00	360.00	320.00- 400.00	-	-	-	-	2	4	3	9	7	-	19	10	5	2	11	-	2	-	-	-	-
DRAFTERS, CLASS B.....	460	40.0	270.50	269.00	240.00- 288.00	-	4	31	52	93	138	36	37	32	17	15	3	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	357	40.0	262.00	260.00	240.00- 276.50	-	4	31	49	88	103	32	19	12	8	9	-	2	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	103	40.0	300.00	300.00	270.00- 320.00	-	-	-	3	5	35	4	18	20	9	6	3	-	-	-	-	-	-	-	-	-
DRAFTERS, CLASS C.....	236	40.0	218.50	209.00	190.00- 233.50	33	46	65	39	17	19	4	-	11	-	2	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	184	40.0	215.50	200.00	185.00- 221.50	30	44	59	18	4	12	4	-	11	-	2	-	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	52	40.0	228.50	220.00	220.00- 245.50	3	2	6	21	13	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ELECTRONICS TECHNICIANS: MANUFACTURING.....	906	40.0	304.50	287.50	252.00- 374.50	3	7	12	125	138	109	117	68	43	37	94	21	120	-	2	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS A: MANUFACTURING.....	377	40.0	354.00	375.00	310.00- 403.00	-	-	-	5	8	29	34	41	27	27	57	19	120	-	-	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS B: MANUFACTURING.....	518	40.0	288.50	273.00	237.50- 348.50	-	16	25	92	79	60	60	28	24	19	41	72	-	-	2	-	-	-	-	-	
NONMANUFACTURING.....	288	40.0	283.50	268.00	251.50- 300.00	-	-	7	28	79	59	43	12	9	10	37	2	-	-	2	-	-	-	-	-	
ELECTRONICS TECHNICIANS, CLASS C: MANUFACTURING.....	228	40.0	251.00	240.50	228.00- 276.50	3	7	5	94	43	22	32	15	7	-	-	-	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	223	40.0	251.00	240.00	228.00- 276.50	3	7	5	92	42	21	31	15	7	-	-	-	-	-	-	-	-	-	-	-	-
REGISTERED INDUSTRIAL NURSES: MANUFACTURING.....	57	40.0	310.50	310.50	286.00- 346.00	-	-	-	8	2	4	13	8	2	10	6	-	4	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	51	40.0	312.00	310.50	290.00- 346.00	-	-	-	8	1	2	12	8	2	8	6	-	4	-	-	-	-	-	-	-	-

See footnotes at end of tables.

**Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )	
		Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)
<b>OFFICE OCCUPATIONS - MEN</b>				<b>OFFICE OCCUPATIONS - WOMEN--CONTINUED</b>				<b>PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN</b>			
ORDER CLERKS.....	221	43.0	\$267.50	FILE CLERKS.....	590	38.5	\$157.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	415	39.5	\$444.00
MANUFACTURING.....	92	40.0	254.00	MANUFACTURING.....	90	40.0	165.50	MANUFACTURING.....	218	40.0	\$51.00
ORDER CLERKS, CLASS A.....	125	40.0	298.00	NONMANUFACTURING.....	500	38.0	156.50	NONMANUFACTURING.....	197	39.5	436.00
<b>OFFICE OCCUPATIONS - WOMEN</b>				FILE CLERKS, CLASS B.....	285	38.5	158.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	142	39.5	504.50
SECRETARIES.....	3,718	39.5	261.00	NONMANUFACTURING.....	257	38.5	157.50	MANUFACTURING.....	74	40.0	526.50
MANUFACTURING.....	2,248	40.0	274.50	FILE CLERKS, CLASS C.....	289	38.5	153.00	NONMANUFACTURING.....	68	39.0	481.00
NONMANUFACTURING.....	1,470	39.0	240.50	NONMANUFACTURING.....	61	39.5	162.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	226	40.0	423.50
PUBLIC UTILITIES.....	49	40.0	297.50	MESSENGERS.....	98	39.5	167.00	NONMANUFACTURING.....	124	39.5	413.50
SECRETARIES, CLASS A.....	224	39.5	304.50	NONMANUFACTURING.....	61	39.0	161.50	COMPUTER PROGRAMMERS (BUSINESS): MANUFACTURING.....	63	39.5	356.50
MANUFACTURING.....	112	40.0	323.50	SWITCHBOARD OPERATORS.....	256	39.5	197.00	COMPUTER OPERATORS:			
NONMANUFACTURING.....	112	39.0	285.50	MANUFACTURING.....	94	40.0	213.50	COMPUTER OPERATORS, CLASS A.....	122	39.5	306.50
SECRETARIES, CLASS B.....	726	39.5	285.00	NONMANUFACTURING.....	162	39.5	187.00	MANUFACTURING.....	89	40.0	312.00
MANUFACTURING.....	494	40.0	296.50	SWITCHBOARD OPERATOR-RECEPTIONISTS.....	567	39.5	179.50	NONMANUFACTURING.....	850	40.0	278.50
NONMANUFACTURING.....	232	39.5	261.50	MANUFACTURING.....	271	40.0	182.00	MANUFACTURING.....	624	40.0	268.50
SECRETARIES, CLASS C.....	1,335	39.5	269.00	NONMANUFACTURING.....	296	39.0	177.50	NONMANUFACTURING.....	226	40.0	305.00
MANUFACTURING.....	1,020	40.0	277.00	ORDER CLERKS.....	444	40.0	232.50	DRAFTERS.....	850	40.0	278.50
NONMANUFACTURING.....	315	39.0	244.00	MANUFACTURING.....	431	40.0	233.50	MANUFACTURING.....	624	40.0	268.50
SECRETARIES, CLASS D.....	677	39.5	251.00	NONMANUFACTURING.....	431	40.0	233.50	NONMANUFACTURING.....	226	40.0	305.00
MANUFACTURING.....	351	39.5	269.00	ORDER CLERKS, CLASS A.....	184	40.0	214.50	DRAFTERS, CLASS A.....	237	40.0	353.50
NONMANUFACTURING.....	346	39.5	234.00	MANUFACTURING.....	184	40.0	214.50	MANUFACTURING.....	135	40.0	342.00
PUBLIC UTILITIES.....	25	40.0	297.00	NONMANUFACTURING.....	259	40.0	192.50	NONMANUFACTURING.....	72	40.0	366.50
SECRETARIES, CLASS E.....	449	39.5	217.50	ORDER CLERKS, CLASS B.....	217	40.0	194.50	DRAFTERS, CLASS B.....	407	40.0	272.50
MANUFACTURING.....	152	40.0	211.00	MANUFACTURING.....	217	40.0	194.50	MANUFACTURING.....	395	40.0	263.00
NONMANUFACTURING.....	297	39.0	221.00	ACCOUNTING CLERKS.....	2,124	39.5	209.50	NONMANUFACTURING.....	172	40.0	300.00
STENOGRAPHERS.....	320	39.5	237.50	MANUFACTURING.....	907	40.0	209.00	DRAFTERS, CLASS C.....	198	40.0	221.00
MANUFACTURING.....	161	40.0	248.50	NONMANUFACTURING.....	1,217	39.5	210.00	MANUFACTURING.....	186	40.0	218.50
NONMANUFACTURING.....	159	39.5	227.00	ACCOUNTING CLERKS, CLASS A.....	899	40.0	233.50	NONMANUFACTURING.....	52	40.0	228.50
STENOGRAPHERS, SENIOR.....	190	40.0	246.00	MANUFACTURING.....	438	40.0	231.00	ELECTRONICS TECHNICIANS: MANUFACTURING.....	888	40.0	304.50
MANUFACTURING.....	138	40.0	248.50	NONMANUFACTURING.....	461	39.5	235.50	ELECTRONICS TECHNICIANS, CLASS A: MANUFACTURING.....	373	40.0	354.00
NONMANUFACTURING.....	52	39.0	238.00	ACCOUNTING CLERKS, CLASS B.....	1,225	39.5	192.50	MANUFACTURING.....	460	40.0	284.00
STENOGRAPHERS, GENERAL.....	126	39.5	222.50	MANUFACTURING.....	469	40.0	188.50	NONMANUFACTURING.....	283	40.0	283.50
NONMANUFACTURING.....	133	39.5	217.00	PAYROLL CLERKS.....	480	39.5	214.50	ELECTRONICS TECHNICIANS, CLASS B: MANUFACTURING.....	218	40.0	250.00
TRANSCRIBING-MACHINE TYPISTS.....	125	38.0	186.00	MANUFACTURING.....	198	40.0	207.00	NONMANUFACTURING.....	214	40.0	250.00
TYPISTS.....	1,128	39.0	184.00	NONMANUFACTURING.....	242	39.0	223.50	ELECTRONICS TECHNICIANS, CLASS C: MANUFACTURING.....	214	40.0	250.00
MANUFACTURING.....	391	40.0	185.00	KEY ENTRY OPERATORS.....	1,022	39.5	205.00	NONMANUFACTURING.....	129	40.0	251.00
NONMANUFACTURING.....	737	39.0	183.50	MANUFACTURING.....	364	40.0	210.00	MANUFACTURING.....	126	40.0	250.00
TYPISTS, CLASS A.....	310	39.0	208.00	NONMANUFACTURING.....	658	39.5	202.50	REGISTERED INDUSTRIAL NURSES.....	53	40.0	310.00
MANUFACTURING.....	58	40.0	211.50	KEY ENTRY OPERATORS, CLASS A.....	518	39.5	216.00	DRAFTERS.....			
NONMANUFACTURING.....	252	38.5	207.00	MANUFACTURING.....	183	40.0	226.50	MANUFACTURING.....			
TYPISTS, CLASS B.....	818	39.5	175.00	NONMANUFACTURING.....	335	39.0	210.50	PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMEN			
MANUFACTURING.....	333	40.0	183.50	KEY ENTRY OPERATORS, CLASS B.....	574	39.5	194.00	DRAFTERS.....			
NONMANUFACTURING.....	485	39.0	171.00	MANUFACTURING.....	181	40.0	193.50	MANUFACTURING.....			
				NONMANUFACTURING.....	323	39.5	194.50				

See footnotes at end of tables.



**Table A-11. Weekly earnings of professional and technical workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																				
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	UNDER AND OVER																				
						180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640	
COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	354	43.0	\$447.50	\$450.00	\$385.00-\$500.00	-	-	-	-	-	5	5	11	20	24	18	13	22	30	36	41	66	31	24	6	2
MANUFACTURING.....	255	43.0	444.50	444.00	379.50- 500.00	-	-	-	-	-	4	2	7	17	20	16	13	14	25	25	27	36	22	19	6	2
NONMANUFACTURING.....	99	43.0	456.00	470.50	421.50- 508.00	-	-	-	-	-	1	3	4	3	4	2	-	8	5	11	14	30	9	5	-	-
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	112	40.0	521.00	519.00	483.50- 563.50	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	14	30	25	23	6	2
MANUFACTURING.....	79	40.0	527.00	524.00	481.50- 572.50	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5	10	15	17	19	6	2
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	173	40.0	437.50	444.00	410.00- 477.50	-	-	-	-	-	3	4	12	7	8	4	9	26	30	27	36	6	1	-	-	
NONMANUFACTURING.....	59	40.0	438.50	444.50	404.00- 483.00	-	-	-	-	-	3	4	2	3	2	-	2	5	11	10	15	1	1	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C.....	65	40.0	355.00	355.00	330.00- 385.00	-	-	-	-	-	5	-	7	8	15	10	9	10	-	1	-	-	-	-	-	-
COMPUTER PROGRAMMERS (BUSINESS), MANUFACTURING.....	52	39.0	373.00	382.00	345.00- 400.00	-	-	-	-	-	-	2	1	8	7	7	10	12	4	1	-	-	-	-	-	-
COMPUTER OPERATORS.....	387	39.5	276.00	290.00	238.50- 302.00	15	12	28	44	47	37	29	110	26	25	6	6	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	232	40.0	275.50	265.00	231.00- 322.00	1	11	18	29	31	27	19	11	20	21	6	6	2	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	185	39.5	276.50	302.00	241.50- 302.00	14	1	10	15	16	10	10	99	6	4	-	-	-	-	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS A.....	117	40.0	304.00	303.00	270.50- 347.00	-	-	-	6	15	15	17	13	16	21	6	6	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	94	40.0	313.00	322.50	269.50- 353.00	-	-	-	5	14	9	10	7	16	21	6	6	2	-	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS B.....	228	39.5	272.00	291.50	234.50- 302.00	-	8	20	34	24	19	12	97	10	4	-	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	81	40.0	248.00	240.00	222.00- 273.00	-	7	11	21	9	16	9	4	4	-	-	-	-	-	-	-	-	-	-	-	-
DRAFTERS.....	328	40.0	269.50	264.00	220.00- 308.50	21	23	37	41	32	42	32	30	24	15	14	7	4	-	-	4	2	-	-	-	-
MANUFACTURING.....	279	40.0	264.50	264.00	216.50- 308.50	21	23	31	35	24	36	27	19	17	15	14	7	4	-	-	4	2	-	-	-	-
DRAFTERS, CLASS A.....	120	40.0	321.00	309.50	280.00- 343.00	-	-	-	2	7	19	16	25	17	10	9	7	2	-	-	4	2	-	-	-	-
MANUFACTURING.....	95	40.0	326.00	310.50	280.00- 359.50	-	-	-	2	5	15	13	16	19	10	9	7	2	-	-	4	2	-	-	-	-
DRAFTERS, CLASS B.....	95	40.0	274.00	264.00	245.00- 291.50	-	-	3	17	19	21	15	5	5	5	3	-	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	81	40.0	276.00	265.00	245.00- 297.00	-	-	3	14	14	19	13	3	5	5	3	-	2	-	-	-	-	-	-	-	-
DRAFTERS, CLASS C.....	92	40.0	217.00	213.00	199.00- 224.00	7	20	33	21	5	1	1	-	2	-	2	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	82	40.0	216.50	211.00	198.00- 223.00	7	20	27	18	4	1	1	-	2	-	2	-	-	-	-	-	-	-	-	-	-
ELECTRONICS TECHNICIANS.....	1,024	40.0	312.00	299.50	256.00- 376.00	3	7	14	125	120	109	125	83	59	43	101	92	122	-	2	4	6	-	-	-	-
MANUFACTURING.....	888	40.0	305.00	289.00	251.00- 375.00	3	7	12	125	129	109	108	68	43	37	94	21	120	-	2	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS A.....	390	40.0	354.50	371.50	312.00- 403.00	-	-	-	5	8	29	34	41	31	28	62	20	122	-	-	4	6	-	-	-	-
MANUFACTURING.....	377	40.0	354.00	375.00	310.00- 403.00	-	-	-	5	8	29	34	41	27	27	57	19	120	-	-	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS B.....	410	40.0	305.00	287.50	256.00- 375.00	-	-	9	28	79	59	59	27	21	15	39	72	-	-	2	-	-	-	-	-	-
MANUFACTURING.....	288	40.0	283.50	268.00	251.50- 300.00	-	-	7	28	79	59	43	12	9	10	37	2	-	-	2	-	-	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS C.....	224	40.0	251.00	240.50	228.00- 277.00	3	7	5	92	42	21	32	15	7	-	-	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	223	40.0	251.00	240.00	228.00- 276.50	3	7	5	92	42	21	31	15	7	-	-	-	-	-	-	-	-	-	-	-	-
REGISTERED INDUSTRIAL NURSES.....	50	40.0	318.00	313.50	295.00- 349.50	-	-	-	4	2	4	10	8	2	10	6	-	4	-	-	-	-	-	-	-	-

See footnotes at end of tables.

**Table A-12. Average weekly earnings of office, professional, and technical workers, by sex, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )	
		Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)
<b>OFFICE OCCUPATIONS - WOMEN</b>			<b>OFFICE OCCUPATIONS - WOMEN--CONTINUED</b>			<b>PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN--CONTINUED</b>					
SECRETARIES.....	2,715	39.5	\$266.50	SWITCHBOARD OPERATOR-RECEPTIONISTS.....	78	39.5	\$179.50	COMPUTER OPERATORS--CONTINUED			
MANUFACTURING.....	1,865	40.0	279.00	NONMANUFACTURING.....	57	39.0	177.00	COMPUTER OPERATORS, CLASS A.....	96	40.0	\$313.50
NONMANUFACTURING.....	850	39.5	238.00	ORDER CLERKS.....	122	40.0	204.00	MANUFACTURING.....	76	40.0	320.50
PUBLIC UTILITIES.....	41	40.0	305.00	MANUFACTURING.....	110	40.0	203.50	COMPUTER OPERATORS, CLASS B:			
SECRETARIES, CLASS A.....	133	39.5	321.50	ACCOUNTING CLERKS:				MANUFACTURING.....	53	40.0	251.00
MANUFACTURING.....	84	40.0	336.00	MANUFACTURING.....	354	40.0	217.50	DRAFTERS.....	272	40.0	271.50
SECRETARIES, CLASS B.....	542	40.0	291.00	ACCOUNTING CLERKS, CLASS A.....	191	40.0	242.50	MANUFACTURING.....	225	40.0	271.50
MANUFACTURING.....	435	40.0	298.00	NONMANUFACTURING.....	157	40.0	258.50	DRAFTERS, CLASS A.....	136	40.0	323.50
NONMANUFACTURING.....	107	40.0	263.50	ACCOUNTING CLERKS, CLASS B:				MANUFACTURING.....	83	40.0	329.50
SECRETARIES, CLASS C.....	958	40.0	275.50	MANUFACTURING.....	163	39.5	187.50	DRAFTERS, CLASS B.....	75	40.0	272.00
MANUFACTURING.....	816	40.0	283.00	PAYROLL CLERKS.....	150	39.5	227.00	MANUFACTURING.....	61	40.0	274.50
NONMANUFACTURING.....	142	40.0	232.50	MANUFACTURING.....	60	40.0	208.50	MANUFACTURING.....	79	40.0	215.50
SECRETARIES, CLASS D.....	480	40.0	258.50	NONMANUFACTURING.....	93	39.5	239.00	ELECTRONICS TECHNICIANS.....	944	40.0	311.00
MANUFACTURING.....	378	39.5	272.00	KEY ENTRY OPERATORS.....	540	39.5	216.50	MANUFACTURING.....	873	40.0	335.50
NONMANUFACTURING.....	172	40.0	233.50	MANUFACTURING.....	200	40.0	222.50	ELECTRONICS TECHNICIANS, CLASS A:			
SECRETARIES, CLASS E.....	337	39.5	224.00	NONMANUFACTURING.....	340	39.0	212.50	MANUFACTURING.....	376	40.0	354.00
MANUFACTURING.....	111	39.5	212.50	KEY ENTRY OPERATORS, CLASS A.....	377	39.0	221.50	MANUFACTURING.....	373	40.0	354.00
NONMANUFACTURING.....	226	39.5	230.00	MANUFACTURING.....	112	40.0	238.50	ELECTRONICS TECHNICIANS, CLASS B:			
STENOGRAPHERS.....	234	39.5	234.50	NONMANUFACTURING.....	265	39.0	214.50	MANUFACTURING.....	354	40.0	302.00
NONMANUFACTURING.....	98	39.0	208.00	KEY ENTRY OPERATORS, CLASS B:				MANUFACTURING.....	283	40.0	283.50
STENOGRAPHERS, SENIOR.....	149	39.5	244.50	MANUFACTURING.....	88	40.0	202.50	ELECTRONICS TECHNICIANS, CLASS C:			
STENOGRAPHERS, GENERAL.....	85	39.5	216.50	PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN				MANUFACTURING.....	214	40.0	250.00
NONMANUFACTURING.....	68	39.5	206.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	336	40.0	454.50	MANUFACTURING.....	214	40.0	250.00
TYPISTS.....	365	39.5	180.50	MANUFACTURING.....	215	40.0	451.00	COMPUTER OPERATORS:			
MANUFACTURING.....	194	40.0	199.50	NONMANUFACTURING.....	91	40.0	462.50	MANUFACTURING.....	53	40.0	255.50
NONMANUFACTURING.....	171	39.0	158.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	131	40.0	525.00	DRAFTERS.....	56	40.0	258.00
TYPISTS, CLASS A.....	69	40.0	214.50	MANUFACTURING.....	71	40.0	530.00	MANUFACTURING.....	54	40.0	256.50
TYPISTS, CLASS B.....	296	39.5	172.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	158	40.0	438.00				
MANUFACTURING.....	151	40.0	195.50	NONMANUFACTURING.....	56	40.0	443.50				
NONMANUFACTURING.....	145	39.0	148.50	COMPUTER OPERATORS:							
FILE CLERKS.....	172	39.5	176.00	MANUFACTURING.....	145	40.0	284.50				
MANUFACTURING.....	53	39.5	174.50								
FILE CLERKS, CLASS C.....	141	39.0	163.00								
MESSENGERS.....	80	39.5	171.50								
SWITCHBOARD OPERATORS.....	184	40.0	206.00								
MANUFACTURING.....	79	40.0	220.00								
NONMANUFACTURING.....	107	40.0	195.50								

See footnotes at end of tables.



# Area Wage Survey

# Anaheim—Santa Ana—Garden Grove, California, Metropolitan Area, October 1979



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

January 1980

Bulletin 2050-48

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# Introduction

This area is 1 of 72 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits. (See list of areas on inside back cover.) In each area, earnings data for selected occupations (A-series tables) are collected annually. Information on establishment practices and supplementary wage benefits (B-series tables) is obtained every third year. This report has no B-series tables.

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

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

## A-series tables

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

manufacturing and nonmanufacturing industries. The occupations are defined in Appendix B. For the 31 largest survey areas, tables A-10 through A-15 provide similar data for establishments employing 500 workers or more.

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

Tables A-8 and A-9 provide for the first time measures of average pay relationships within establishments. These measures may differ considerably from the pay relationships of overall averages published in tables A-1 through A-6. See appendix A for details.

## Appendixes

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

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

# Earnings: All establishments

## Table A-1. Weekly earnings of office workers, Anaheim—Santa Ana—Garden Grove, Calif., October 1979

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																				
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	130		140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440
						UNDER	AND	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440
SECRETARIES.....	3,731	39.5	\$261.00	\$253.00	\$222.00-\$298.00	-	-	4	8	25	126	106	139	468	608	564	329	499	212	294	266	61	9	11	-	2
MANUFACTURING.....	2,248	40.0	274.50	271.50	230.50-318.50	-	-	-	-	6	18	41	44	247	330	289	229	320	181	234	252	47	8	-	-	2
NONMANUFACTURING.....	1,483	39.0	240.50	236.00	207.00-269.00	-	-	4	8	19	108	65	95	221	278	275	100	179	31	60	14	14	1	11	-	-
PUBLIC UTILITIES.....	49	40.0	299.50	318.50	274.50-335.00	-	-	-	-	-	3	-	-	3	1	4	4	6	6	14	5	2	1	-	-	-
SECRETARIES, CLASS A.....	224	39.5	304.50	300.00	266.00-344.00	-	-	-	-	-	-	-	1	2	33	19	4	49	30	28	26	16	4	10	-	2
MANUFACTURING.....	112	40.0	323.50	328.50	300.00-352.00	-	-	-	-	-	-	-	1	1	1	8	2	13	27	11	26	16	4	-	-	2
NONMANUFACTURING.....	112	39.0	285.50	287.50	239.50-315.00	-	-	-	-	-	-	-	-	1	32	11	2	36	3	17	-	-	-	-	10	-
SECRETARIES, CLASS B.....	726	39.5	285.00	282.00	254.00-315.00	-	-	-	-	-	-	2	9	34	60	106	137	141	71	68	66	32	-	-	-	-
MANUFACTURING.....	494	40.0	296.50	288.50	269.50-327.00	-	-	-	-	-	-	-	1	4	25	54	103	107	61	49	61	29	-	-	-	-
NONMANUFACTURING.....	232	39.5	261.50	254.00	230.00-284.50	-	-	-	-	-	-	2	8	30	35	52	34	34	10	19	5	3	-	-	-	-
SECRETARIES, CLASS C.....	1,336	39.5	269.00	261.00	230.00-300.00	-	-	-	1	3	19	36	22	116	237	229	110	238	47	107	163	3	5	-	-	-
MANUFACTURING.....	1,020	40.0	277.00	272.00	236.00-324.00	-	-	-	-	4	23	2	-	86	163	166	88	176	40	103	163	2	4	-	-	-
NONMANUFACTURING.....	316	39.0	244.00	241.50	218.50-278.50	-	-	-	1	3	15	13	20	30	74	63	22	62	7	4	-	1	1	-	-	-
SECRETARIES, CLASS D.....	677	39.5	251.00	241.00	213.00-293.00	-	-	-	1	8	41	18	34	120	98	104	39	54	60	87	9	4	-	-	-	-
MANUFACTURING.....	331	39.5	269.00	267.00	226.00-318.50	-	-	-	-	-	1	4	8	60	48	31	29	24	53	71	2	-	-	-	-	-
NONMANUFACTURING.....	346	39.5	234.00	230.00	195.50-255.00	-	-	-	1	8	40	14	26	60	50	73	10	30	7	16	7	4	-	-	-	-
PUBLIC UTILITIES.....	25	40.0	297.00	333.50	232.50-335.00	-	-	-	-	-	-	3	-	3	1	-	-	-	1	13	4	-	-	-	-	-
SECRETARIES, CLASS E.....	452	39.5	217.50	218.50	195.50-238.00	-	-	-	-	6	61	22	48	99	107	77	17	13	2	-	-	-	-	-	-	-
MANUFACTURING.....	152	40.0	211.00	210.00	194.50-228.00	-	-	-	-	6	12	10	21	46	38	14	5	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	300	39.0	220.50	224.00	196.00-241.50	-	-	-	-	-	49	12	27	53	69	63	12	13	2	-	-	-	-	-	-	-
STENOGRAPHERS.....	320	39.5	237.50	238.00	212.00-255.00	-	-	-	2	11	7	20	15	58	69	64	28	12	17	17	-	-	-	-	-	-
NONMANUFACTURING.....	159	39.5	227.00	220.50	195.50-248.00	-	-	-	2	7	7	19	9	35	32	11	22	10	1	4	-	-	-	-	-	-
STENOGRAPHERS, SENIOR.....	190	40.0	246.00	243.00	219.00-272.00	-	-	-	-	4	2	1	8	35	41	46	24	1	15	13	-	-	-	-	-	-
STENOGRAPHERS, GENERAL.....	126	39.5	222.50	217.00	188.50-248.00	-	-	-	2	7	5	19	7	23	28	18	4	11	2	-	-	-	-	-	-	-
NONMANUFACTURING.....	103	39.5	217.00	213.00	184.00-238.00	-	-	-	2	7	5	18	7	20	22	11	1	10	-	-	-	-	-	-	-	-
TYPISTS.....	1,131	39.0	184.00	176.00	155.00-207.00	27	35	124	130	187	108	121	44	132	97	100	14	-	3	9	-	-	-	-	-	-
MANUFACTURING.....	391	40.0	185.00	182.00	161.00-202.00	-	8	23	36	90	25	85	21	51	32	6	2	-	3	9	-	-	-	-	-	-
NONMANUFACTURING.....	740	39.0	183.00	172.00	152.00-215.00	27	27	101	94	97	83	36	23	81	65	94	12	-	-	-	-	-	-	-	-	-
TYPISTS, CLASS A.....	310	39.0	208.00	205.00	180.00-234.50	-	-	-	11	16	50	48	15	61	72	16	12	-	-	9	-	-	-	-	-	-
NONMANUFACTURING.....	252	38.5	207.00	205.00	180.00-234.50	-	-	-	11	10	40	29	13	58	65	14	12	-	-	-	-	-	-	-	-	-
TYPISTS, CLASS B.....	821	39.5	174.50	163.50	150.00-193.50	27	35	124	119	171	58	73	29	71	25	84	2	-	3	-	-	-	-	-	-	-
MANUFACTURING.....	333	40.0	180.50	180.00	160.00-198.00	-	8	23	36	84	15	66	19	48	25	4	2	-	3	-	-	-	-	-	-	-
NONMANUFACTURING.....	488	39.0	171.00	161.00	147.50-176.00	27	27	101	83	87	43	7	10	23	-	80	-	-	-	-	-	-	-	-	-	-
FILE CLERKS.....	599	38.5	158.00	148.00	138.00-160.00	9	180	131	130	37	37	26	2	12	3	-	15	-	17	-	-	-	-	-	-	-
MANUFACTURING.....	98	40.0	166.50	161.50	145.00-172.50	-	8	24	6	22	17	11	2	4	2	-	-	-	2	-	-	-	-	-	-	-
NONMANUFACTURING.....	501	38.0	156.50	146.00	136.00-157.50	9	172	107	124	15	20	15	-	8	1	-	15	-	15	-	-	-	-	-	-	-

See footnotes at end of tables.

**Table A-1. Weekly earnings of office workers, Anaheim—Santa Ana—Garden Grove, Calif., October 1979—Continued**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																						
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	130		140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440		
						UNDER	AND	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440	460	
<b>FILE CLERKS--CONTINUED</b>																												
FILE CLERKS, CLASS B.....	290	38.5	\$159.00	\$150.00	\$146.00-\$157.50	-	46	95	94	14	10	5	1	8	1	-	15	-	1	-	-	-	-	-	-	-	-	-
FILE CLERKS, CLASS C.....	253	38.5	153.00	138.00	132.50-155.50	9	134	36	26	13	7	6	1	4	2	-	-	-	15	-	-	-	-	-	-	-	-	-
MESSENGERS.....	146	39.0	170.00	154.00	138.50-191.00	-	41	23	13	9	4	14	18	12	2	5	-	-	5	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	98	39.0	162.50	149.50	137.00-177.00	-	37	20	10	5	2	4	8	5	-	2	-	-	5	-	-	-	-	-	-	-	-	
SWITCHBOARD OPERATORS.....	259	39.5	196.50	180.00	162.00-230.00	5	-	34	4	29	55	12	13	24	47	14	10	2	5	5	-	-	-	-	-	-	-	
MANUFACTURING.....	94	40.0	213.50	208.50	170.00-254.50	-	-	6	3	7	16	4	8	12	8	14	10	-	1	5	-	-	-	-	-	-	-	
NONMANUFACTURING.....	165	39.5	187.00	172.50	160.00-230.00	5	-	28	1	22	39	8	5	12	39	-	-	2	4	-	-	-	-	-	-	-	-	
SWITCHBOARD OPERATOR-RECEPTIONISTS.....	567	39.5	179.50	173.00	161.00-195.50	-	20	34	52	136	94	60	47	83	10	24	3	-	4	-	-	-	-	-	-	-	-	
MANUFACTURING.....	271	40.0	182.00	177.50	161.00-199.00	-	4	6	24	62	51	29	35	44	6	8	2	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	296	39.0	177.50	170.00	161.00-195.50	-	16	28	28	74	43	31	12	39	4	16	1	-	4	-	-	-	-	-	-	-	-	
ORDER CLERKS.....	664	40.0	223.50	215.50	190.00-240.00	1	13	16	7	14	43	73	56	144	114	62	47	12	11	24	16	-	-	11	-	-	-	
MANUFACTURING.....	493	40.0	213.00	208.50	184.00-230.00	-	8	15	7	13	38	63	55	102	105	37	25	1	-	8	16	-	-	8	-	-	-	
ORDER CLERKS, CLASS A.....	309	40.0	248.00	235.00	206.00-260.00	-	-	-	-	4	14	12	19	63	58	43	22	12	11	24	16	-	-	11	-	-	-	
MANUFACTURING.....	244	40.0	231.00	224.50	205.00-242.50	-	-	-	-	4	14	12	19	63	58	27	22	1	-	8	16	-	-	11	-	-	-	
ORDER CLERKS, CLASS B.....	355	40.0	202.00	204.00	182.50-223.50	1	13	16	7	10	29	61	37	81	56	19	25	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING.....	249	40.0	195.00	192.00	178.50-214.00	-	8	15	7	9	24	51	36	39	47	10	3	-	-	-	-	-	-	-	-	-	-	
ACCOUNTING CLERKS.....	2,349	40.0	212.50	204.50	184.00-225.00	1	16	30	88	208	196	199	251	662	234	117	26	177	68	60	10	2	1	-	2	1		
MANUFACTURING.....	935	40.0	209.00	206.50	184.00-224.00	1	4	16	32	58	50	121	129	272	97	50	22	56	8	12	7	-	-	-	-	-		
NONMANUFACTURING.....	1,414	39.5	214.50	204.00	178.50-233.00	-	12	14	56	150	146	78	122	390	137	67	4	121	60	48	3	2	1	-	2	1		
ACCOUNTING CLERKS, CLASS A.....	938	40.0	234.50	223.00	207.00-251.00	-	-	-	3	25	12	33	93	292	171	108	24	76	29	59	8	1	1	-	2	1		
MANUFACTURING.....	454	40.0	231.50	219.00	207.00-251.00	-	-	-	2	10	6	23	45	142	73	49	22	55	8	12	7	-	-	-	-	-		
NONMANUFACTURING.....	484	39.5	237.00	224.50	207.00-253.00	-	-	-	1	15	6	10	48	150	98	59	2	21	21	47	1	1	1	-	2	1		
ACCOUNTING CLERKS, CLASS B.....	1,411	39.5	198.00	191.00	172.50-210.00	1	16	30	85	183	184	166	158	370	63	9	2	101	39	1	2	1	-	-	-	-		
MANUFACTURING.....	481	40.0	188.00	190.00	172.50-207.00	1	4	16	30	48	44	98	84	130	24	1	-	1	-	-	-	-	-	-	-	-		
NONMANUFACTURING.....	930	39.5	203.00	195.50	172.50-216.00	-	12	14	55	135	140	68	74	240	39	8	2	130	39	1	2	1	-	-	-	-		
PAYROLL CLERKS.....	446	39.5	214.00	207.00	185.50-230.00	1	1	24	5	2	52	36	73	92	63	31	21	20	14	9	2	-	-	-	-	-		
MANUFACTURING.....	199	40.0	207.00	196.00	170.50-238.00	-	-	24	4	-	29	11	41	31	9	14	21	12	3	-	-	-	-	-	-	-		
NONMANUFACTURING.....	247	39.0	220.00	209.00	195.50-230.00	1	1	-	1	2	23	25	32	61	54	17	-	8	11	9	2	-	-	-	-	-		
KEY ENTRY OPERATORS.....	1,104	39.5	208.00	200.00	184.00-221.00	-	-	13	25	73	97	197	128	277	129	33	21	63	41	6	1	-	-	-	-	-		
MANUFACTURING.....	365	40.0	210.00	199.50	188.50-223.50	-	-	4	13	26	20	36	84	74	40	19	20	15	7	6	1	-	-	-	-	-		
NONMANUFACTURING.....	739	39.5	207.00	200.00	184.00-220.00	-	-	9	12	47	77	161	44	203	89	14	1	48	34	-	-	-	-	-	-	-		
KEY ENTRY OPERATORS, CLASS A.....	533	39.5	216.00	208.00	188.00-233.00	-	-	-	8	26	38	86	62	138	101	28	17	17	35	6	1	-	-	-	-	-		
MANUFACTURING.....	182	40.0	226.00	210.00	194.00-256.00	-	-	-	8	-	9	12	35	36	22	15	16	15	7	6	1	-	-	-	-	-		
NONMANUFACTURING.....	351	39.0	210.50	206.00	184.00-223.00	-	-	-	-	26	29	74	27	72	79	13	1	2	28	-	-	-	-	-	-	-		
KEY ENTRY OPERATORS, CLASS B.....	571	39.5	200.50	195.00	181.00-203.00	-	-	13	17	47	59	111	66	169	28	5	4	46	6	-	-	-	-	-	-	-		
MANUFACTURING.....	183	40.0	193.50	192.00	179.50-207.00	-	-	4	5	26	11	24	49	38	18	4	4	-	-	-	-	-	-	-	-	-		
NONMANUFACTURING.....	388	39.5	203.50	200.00	183.00-200.00	-	-	9	12	21	48	87	17	131	10	1	-	46	6	-	-	-	-	-	-	-		

See footnotes at end of tables.

**Table A-2. Weekly earnings of professional and technical workers, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																					
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640	AND OVER
						AND UNDER 180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640		
COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	489	39.5	\$437.50	\$443.00	\$368.00-\$486.50	-	-	-	-	-	5	5	11	21	57	37	21	26	51	49	67	73	33	25	6	2	
MANUFACTURING.....	258	40.0	444.00	442.50	379.50-500.00	-	-	-	-	-	4	2	7	17	20	16	13	14	28	25	27	36	22	19	6	2	
NONMANUFACTURING.....	231	39.5	430.00	443.00	363.50-477.50	-	-	-	-	-	1	3	4	4	37	21	8	12	23	24	40	37	11	6	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	157	39.5	502.00	498.50	455.50-538.00	-	-	-	-	-	-	-	-	-	-	-	-	4	22	14	24	34	27	24	6	2	
MANUFACTURING.....	82	40.0	524.00	522.00	478.00-570.00	-	-	-	-	-	-	-	-	-	-	-	-	1	7	5	10	15	17	19	6	2	
NONMANUFACTURING.....	75	39.0	478.00	471.50	446.50-503.00	-	-	-	-	-	-	-	-	-	-	-	-	3	15	9	14	19	10	5	-	-	
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	263	40.0	421.00	433.00	362.50-463.00	-	-	-	-	-	3	4	13	40	27	12	12	29	34	43	39	6	1	-	-		
NONMANUFACTURING.....	149	39.5	409.00	391.00	352.30-461.00	-	-	-	-	-	3	4	3	36	21	8	5	8	15	26	18	1	1	-	-		
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C.....	65	40.0	355.00	355.00	330.30-385.00	-	-	-	-	-	5	-	7	8	15	10	9	10	-	1	-	-	-	-	-	-	
COMPUTER PROGRAMMERS (BUSINESS).....	504	39.5	375.00	373.50	321.00-431.50	-	-	-	2	11	14	45	49	46	38	81	22	46	42	50	37	21	-	-	-	-	
MANUFACTURING.....	75	39.5	359.00	351.00	321.50-389.50	-	-	-	-	-	-	2	9	16	14	7	10	12	4	1	-	-	-	-	-	-	
COMPUTER OPERATORS.....	602	39.5	268.00	264.50	230.00-302.00	15	21	59	79	110	74	35	135	29	31	6	6	2	-	-	-	-	-	-	-	-	
MANUFACTURING.....	265	40.0	275.50	266.00	231.00-319.00	1	11	22	45	39	36	22	25	23	27	6	6	2	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	337	39.5	262.00	264.50	230.00-302.00	14	10	37	34	71	38	13	110	6	4	-	-	-	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS A.....	154	39.5	305.00	305.00	270.00-343.00	-	-	-	10	22	17	19	29	16	27	6	6	2	-	-	-	-	-	-	-	-	
MANUFACTURING.....	115	40.0	309.50	315.00	261.00-355.00	-	-	-	9	18	9	10	12	16	27	6	6	2	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS B.....	378	40.0	261.50	254.00	228.50-302.00	-	11	46	65	80	40	13	106	13	4	-	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING.....	110	40.0	253.00	241.50	225.00-285.50	-	7	12	33	13	16	9	13	7	-	-	-	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	268	39.5	265.00	254.00	237.50-302.00	-	4	34	32	67	24	4	93	6	4	-	-	-	-	-	-	-	-	-	-	-	
COMPUTER OPERATORS, CLASS C.....	73	39.5	222.00	214.50	180.50-264.00	15	10	13	4	8	17	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ELECTRONICS TECHNICIANS: MANUFACTURING.....	936	40.0	304.50	287.50	252.00-374.50	3	7	12	125	138	109	117	68	43	37	94	21	120	-	2	4	6	-	-	-	-	
ELECTRONICS TECHNICIANS, CLASS A: MANUFACTURING.....	377	40.0	354.00	375.00	310.00-403.00	-	-	-	5	8	29	34	41	27	27	57	19	120	-	-	4	6	-	-	-	-	
ELECTRONICS TECHNICIANS, CLASS B: MANUFACTURING.....	518	40.0	288.50	273.00	237.50-348.50	-	16	25	92	79	60	60	28	24	19	41	72	-	-	2	-	-	-	-	-	-	
MANUFACTURING.....	288	40.0	283.50	268.00	251.50-300.00	-	-	7	28	79	59	43	12	9	10	37	2	-	-	2	-	-	-	-	-	-	
ELECTRONICS TECHNICIANS, CLASS C: MANUFACTURING.....	228	40.0	251.00	240.50	228.00-276.50	3	7	5	94	43	22	32	15	7	-	-	-	-	-	-	-	-	-	-	-	-	
MANUFACTURING.....	223	40.0	251.00	240.00	228.00-276.50	3	7	5	92	42	21	31	15	7	-	-	-	-	-	-	-	-	-	-	-	-	
REGISTERED INDUSTRIAL NURSES.....	57	40.0	310.50	310.50	286.00-346.00	-	-	-	8	2	4	13	8	2	10	6	-	4	-	-	-	-	-	-	-	-	
MANUFACTURING.....	51	40.0	312.00	310.50	290.00-346.00	-	-	-	8	1	2	12	8	2	8	6	-	4	-	-	-	-	-	-	-	-	

See footnotes at end of tables.

**Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )	
		Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)
OFFICE OCCUPATIONS - MEN				OFFICE OCCUPATIONS - WOMEN--CONTINUED				OFFICE OCCUPATIONS - WOMEN--CONTINUED			
ORDER CLERKS.....	221	40.0	\$267.50	TYPISTS--CONTINUED				KEY ENTRY OPERATORS - CONTINUED			
MANUFACTURING.....	92	40.0	254.00								
ORDER CLERKS, CLASS A.....	125	40.0	298.00	TYPISTS, CLASS B.....	818	39.5	\$175.00	KEY ENTRY OPERATORS, CLASS A.....	501	39.5	\$213.00
OFFICE OCCUPATIONS - WOMEN				MANUFACTURING.....	333	40.0	180.50	MANUFACTURING.....	166	40.0	217.50
SECRETARIES.....	3,718	39.5	261.00	NONMANUFACTURING.....	485	39.0	171.00	NONMANUFACTURING.....	335	39.0	210.50
MANUFACTURING.....	2,248	40.0	274.50	FILE CLERKS.....	589	38.5	157.50	KEY ENTRY OPERATORS, CLASS B.....	504	39.5	194.00
NONMANUFACTURING.....	1,470	39.0	240.50	MANUFACTURING.....	89	40.0	164.00	MANUFACTURING.....	181	40.0	193.50
PUBLIC UTILITIES.....	49	40.0	299.50	NONMANUFACTURING.....	500	38.0	156.50	NONMANUFACTURING.....	323	39.5	194.50
SECRETARIES, CLASS A.....	224	39.5	304.50	FILE CLERKS, CLASS B.....	285	38.5	158.50	PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN			
MANUFACTURING.....	112	40.0	323.50	NONMANUFACTURING.....	257	38.5	157.50				
NONMANUFACTURING.....	112	39.0	285.50	FILE CLERKS, CLASS C.....	249	38.5	153.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	415	39.5	444.00
SECRETARIES, CLASS B.....	726	39.5	285.00	MANUFACTURING.....	61	39.5	162.50	MANUFACTURING.....	218	40.0	451.00
MANUFACTURING.....	494	40.0	296.50	NONMANUFACTURING.....	188	38.5	150.00	NONMANUFACTURING.....	197	39.5	436.00
NONMANUFACTURING.....	232	39.5	261.50	MESSENGERS.....	98	39.5	167.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	142	39.5	504.50
SECRETARIES, CLASS C.....	1,335	39.5	269.00	NONMANUFACTURING.....	61	39.0	161.50	MANUFACTURING.....	74	40.0	526.50
MANUFACTURING.....	1,020	40.0	277.00	SWITCHBOARD OPERATORS.....	256	39.5	197.00	NONMANUFACTURING.....	68	39.0	481.00
NONMANUFACTURING.....	315	39.0	244.00	MANUFACTURING.....	94	40.0	213.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	226	40.0	423.50
SECRETARIES, CLASS D.....	677	39.5	251.00	NONMANUFACTURING.....	162	39.5	187.00	NONMANUFACTURING.....	124	39.5	413.50
MANUFACTURING.....	331	39.5	269.00	SWITCHBOARD OPERATOR-RECEPTIONISTS.....	567	39.5	179.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C.....	43	40.0	361.50
NONMANUFACTURING.....	346	39.5	234.00	MANUFACTURING.....	271	40.0	182.00	COMPUTER PROGRAMMERS (BUSINESS): MANUFACTURING.....	63	39.5	356.50
PUBLIC UTILITIES.....	25	40.0	297.00	NONMANUFACTURING.....	296	39.0	177.50	COMPUTER OPERATORS:			
SECRETARIES, CLASS E.....	449	39.5	217.50	ORDER CLERKS.....	443	40.0	201.50	COMPUTER OPERATORS, CLASS A.....	122	39.5	306.50
MANUFACTURING.....	152	40.0	211.00	MANUFACTURING.....	401	40.0	203.50	MANUFACTURING.....	89	40.0	312.00
NONMANUFACTURING.....	297	39.0	221.00	ORDER CLERKS, CLASS A.....	184	40.0	214.50	COMPUTER OPERATORS, CLASS B.....			
STENOGRAPHERS.....	320	39.5	237.50	MANUFACTURING.....	184	40.0	214.50	COMPUTER OPERATORS, CLASS C.....			
MANUFACTURING.....	161	40.0	248.50	ORDER CLERKS, CLASS B.....	259	40.0	192.50	ELECTRONICS TECHNICIANS:			
NONMANUFACTURING.....	159	39.5	227.00	MANUFACTURING.....	217	40.0	194.50	MANUFACTURING.....	888	40.0	304.50
STENOGRAPHERS, SENIOR.....	190	40.0	246.00	ACCOUNTING CLERKS.....	2,125	39.5	209.50	ELECTRONICS TECHNICIANS, CLASS A:			
MANUFACTURING.....	138	40.0	248.50	MANUFACTURING.....	908	40.0	209.00	MANUFACTURING.....	373	40.0	354.00
NONMANUFACTURING.....	52	39.0	238.00	NONMANUFACTURING.....	1,217	39.5	210.00	ELECTRONICS TECHNICIANS, CLASS B:			
STENOGRAPHERS, GENERAL.....	126	39.5	222.50	ACCOUNTING CLERKS, CLASS A.....	899	40.0	233.50	MANUFACTURING.....	460	40.0	284.00
MANUFACTURING.....	103	39.5	217.00	MANUFACTURING.....	438	40.0	231.00	MANUFACTURING.....	283	40.0	283.50
TRANSCRIBING-MACHINE TYPISTS.....	125	38.0	186.00	NONMANUFACTURING.....	461	39.5	235.50	ELECTRONICS TECHNICIANS, CLASS C:			
TYPISTS.....	1,128	39.0	184.00	ACCOUNTING CLERKS, CLASS B.....	1,226	39.5	192.50	MANUFACTURING.....	218	40.0	250.00
MANUFACTURING.....	391	40.0	185.00	MANUFACTURING.....	470	40.0	188.50	MANUFACTURING.....	214	40.0	250.00
NONMANUFACTURING.....	737	39.0	183.50	PAYROLL CLERKS.....	440	39.5	214.50	PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMEN			
TYPISTS, CLASS A.....	310	39.0	208.00	MANUFACTURING.....	198	40.0	207.00	REGISTERED INDUSTRIAL NURSES.....	53	40.0	310.00
MANUFACTURING.....	58	40.0	211.50	NONMANUFACTURING.....	242	39.0	220.50				
NONMANUFACTURING.....	252	38.5	207.00	KEY ENTRY OPERATORS.....	1,005	39.5	203.50				
				MANUFACTURING.....	347	40.0	205.00				
				NONMANUFACTURING.....	658	39.5	202.50				

See footnotes at end of tables.

**Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers,  
Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Hourly earnings <sup>4</sup>			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																						
		Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	4.60	4.80	5.00	5.20	5.40	5.80	6.20	6.60	7.00	7.40	7.80	8.20	8.60	9.00	9.40	9.80	10.20	10.60	11.00	11.40	11.80	12.20	12.60
					4.80	5.00	5.20	5.40	5.80	6.20	6.60	7.00	7.40	7.80	8.20	8.60	9.00	9.40	9.80	10.20	10.60	11.00	11.40	11.80	12.20	12.60	13.00
MAINTENANCE CARPENTERS.....	101	\$8.73	\$8.85	\$7.39- \$9.39	-	-	-	-	-	-	1	-	25	3	3	10	16	22	10	-	5	2	4	-	-	-	
MANUFACTURING.....	68	9.07	9.39	8.65- 9.41	-	-	-	-	-	-	1	-	7	3	2	2	13	22	10	-	2	2	4	-	-	-	
MAINTENANCE ELECTRICIANS.....	237	9.14	9.17	8.22- 10.10	-	-	-	-	-	5	9	4	14	6	20	13	21	47	30	35	13	-	-	8	-	12	
MANUFACTURING.....	204	9.30	9.17	8.99- 10.10	-	-	-	-	-	5	8	4	-	6	17	9	19	45	23	35	13	-	-	8	-	12	
MAINTENANCE PAINTERS.....	152	7.69	7.39	6.97- 8.83	2	6	2	-	2	1	18	14	42	-	8	14	11	23	5	-	-	-	4	-	-	-	
MANUFACTURING.....	57	8.89	8.85	8.22- 9.16	-	-	-	-	-	-	-	-	-	-	8	14	11	20	-	-	-	4	-	-	-	-	
MAINTENANCE MACHINISTS.....	244	9.13	9.04	8.65- 9.55	-	-	-	-	-	8	-	1	9	1	2	10	75	61	28	23	4	-	-	22	-	-	
MANUFACTURING.....	237	9.13	9.04	8.65- 9.55	-	-	-	-	-	8	-	-	8	1	2	9	75	61	28	23	-	-	-	22	-	-	
MAINTENANCE MECHANICS (MACHINERY).....	872	8.26	8.00	7.56- 8.96	-	-	-	-	-	4	19	54	115	177	100	42	147	132	26	-	-	-	56	-	-	-	
MANUFACTURING.....	861	8.26	8.00	7.56- 8.85	-	-	-	-	-	4	19	54	115	177	100	39	139	132	26	-	-	-	56	-	-	-	
MAINTENANCE MECHANICS (MOTOR VEHICLES).....	285	9.34	9.45	8.50- 10.54	-	-	-	-	-	-	15	3	22	8	11	35	7	39	23	37	14	47	9	-	15	-	
MANUFACTURING.....	56	9.42	9.16	9.09- 10.48	-	-	-	-	-	-	-	1	4	-	-	6	26	-	3	14	-	2	-	-	-	-	
NONMANUFACTURING.....	229	9.32	9.56	8.45- 10.64	-	-	-	-	-	-	15	3	21	4	11	35	1	13	23	34	-	47	7	-	15	-	
PUBLIC UTILITIES.....	90	8.78	8.59	7.27- 9.45	-	-	-	-	-	-	15	1	7	4	5	19	1	13	7	-	-	3	-	-	15	-	
MACHINE-TOOL OPERATORS (TOOLROOM).....	119	9.08	9.19	8.85- 9.19	-	-	-	-	-	-	-	-	-	8	-	2	40	43	16	10	-	-	-	-	-	-	
MANUFACTURING.....	80	9.04	8.85	8.85- 9.73	-	-	-	-	-	-	-	-	-	8	-	2	38	6	16	10	-	-	-	-	-	-	
TOOL AND DIE MAKERS.....	395	9.36	9.32	8.79- 9.61	-	-	-	-	-	-	-	-	1	5	10	20	75	105	87	65	3	12	-	3	-	9	
MANUFACTURING.....	395	9.36	9.32	8.79- 9.61	-	-	-	-	-	-	-	-	1	5	10	20	75	105	87	65	3	12	-	3	-	9	
STATIONARY ENGINEERS.....	110	8.79	9.09	7.51- 9.68	-	-	-	-	-	-	-	2	10	29	1	9	1	20	11	-	27	-	-	-	-	-	
NONMANUFACTURING.....	80	8.73	7.64	7.51- 10.44	-	-	-	-	-	-	-	2	10	29	1	1	-	-	10	-	27	-	-	-	-	-	

See footnotes at end of tables.

**Table A-5. Hourly earnings of material movement and custodial workers, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Hourly earnings <sup>4</sup>			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																						
		Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	3.00 UNDER AND 3.00 UNDER 3.20		3.20	3.60	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80	11.20
					3.60	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80	11.20	11.60		
TRUCKDRIVERS.....	2,882	\$8.36	\$9.23	\$6.25- \$9.98	-	-	45	9	28	32	33	157	326	101	58	104	106	63	109	115	90	662	263	32	178	359	12
MANUFACTURING.....	819	8.10	8.08	5.86- 10.43	-	-	3	9	12	16	33	102	36	43	31	27	58	23	73	14	2	32	8	32	178	87	-
NONMANUFACTURING.....	2,063	8.47	9.23	6.98- 9.77	-	-	42	-	16	16	-	55	290	58	27	77	48	40	36	101	88	639	255	-	-	272	12
PUBLIC UTILITIES.....	695	8.38	8.60	5.60- 10.82	-	-	-	-	8	-	-	-	230	-	-	50	-	-	-	99	9	15	-	-	-	272	12
TRUCKDRIVERS, LIGHT TRUCK.....	183	4.81	5.07	4.25- 5.25	-	-	45	-	12	32	33	22	25	4	1	3	1	3	-	2	-	-	-	-	-	-	-
MANUFACTURING.....	98	5.27	5.07	5.07- 5.40	-	-	3	-	4	16	33	22	9	4	1	3	1	-	-	2	-	-	-	-	-	-	-
NONMANUFACTURING.....	85	4.27	4.25	3.50- 4.50	-	-	42	-	8	16	-	-	16	-	-	-	-	3	-	-	-	-	-	-	-	-	-
TRUCKDRIVERS, MEDIUM TRUCK.....	666	8.54	9.18	6.98- 10.82	-	-	-	9	16	-	-	68	22	26	19	70	68	11	4	2	79	-	-	-	-	272	-
MANUFACTURING.....	204	6.13	5.86	5.50- 7.47	-	-	-	9	8	-	-	68	22	23	14	4	46	10	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	462	9.60	10.82	9.10- 10.82	-	-	-	-	8	-	-	-	-	3	5	66	22	1	4	2	79	-	-	-	-	272	-
TRUCKDRIVERS, HEAVY TRUCK.....	535	8.35	9.63	5.60- 10.51	-	-	-	-	-	-	-	-	231	-	2	5	-	-	-	-	-	24	8	-	178	87	-
MANUFACTURING.....	305	10.42	10.43	10.43- 11.01	-	-	-	-	-	-	-	-	1	-	2	5	-	-	-	-	-	24	8	-	178	87	-
TRUCKDRIVERS, TRACTOR-TRAILER.....	1,289	9.14	9.56	8.60- 9.56	-	-	-	-	9	14	-	12	4	16	14	15	26	49	105	108	10	631	255	32	-	-	12
MANUFACTURING.....	231	7.89	8.08	6.83- 8.19	-	-	-	-	-	-	-	12	4	16	14	15	11	13	73	9	1	1	-	32	-	-	-
NONMANUFACTURING.....	1,088	9.37	9.56	9.23- 9.56	-	-	-	-	-	-	-	-	-	-	-	-	15	36	32	99	9	630	255	-	-	-	12
SHIPPERS.....	226	6.06	5.70	5.08- 6.57	-	-	-	-	1	44	23	27	33	15	46	8	-	-	1	-	28	-	-	-	-	-	-
MANUFACTURING.....	188	5.89	5.75	4.81- 6.57	-	-	-	-	-	44	20	11	32	15	45	8	-	-	1	-	12	-	-	-	-	-	-
RECEIVERS.....	239	6.41	5.50	4.78- 8.94	-	-	1	9	22	28	19	50	14	2	11	4	8	1	-	1	40	-	29	-	-	-	-
MANUFACTURING.....	169	5.83	5.44	4.62- 6.74	-	-	-	8	21	26	19	33	14	-	6	4	8	1	-	1	28	-	-	-	-	-	-
SHIPPERS AND RECEIVERS.....	269	5.93	5.95	5.11- 7.00	-	-	-	7	26	20	22	17	43	40	11	74	1	8	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	206	5.90	5.93	5.20- 6.60	-	-	-	7	11	20	13	17	43	37	10	50	-	-	-	-	-	-	-	-	-	-	-
WAREHOUSEMEN.....	1,449	7.73	8.90	6.75- 9.38	-	-	4	8	70	75	37	27	37	83	74	149	95	29	18	-	295	368	80	-	-	-	-
MANUFACTURING.....	473	6.54	6.34	5.05- 7.01	-	-	-	-	48	64	12	19	35	59	8	127	2	19	-	-	-	-	80	-	-	-	-
NONMANUFACTURING.....	976	8.30	8.90	7.33- 9.38	-	-	4	8	22	11	25	8	2	24	66	22	93	10	18	-	295	368	-	-	-	-	-
ORDER FILLERS.....	480	6.86	8.95	4.30- 8.95	-	-	-	46	81	27	12	40	13	11	-	-	-	-	-	-	250	-	-	-	-	-	-
MANUFACTURING.....	230	4.60	4.24	4.00- 5.38	-	-	-	46	81	27	12	40	13	11	-	-	-	-	-	-	-	-	-	-	-	-	-
SHIPPING PACKERS.....	497	4.95	5.13	3.85- 5.99	-	9	83	59	43	47	9	30	163	-	48	4	-	1	1	-	-	-	-	-	-	-	-
MANUFACTURING.....	455	4.99	5.56	3.84- 5.99	-	9	83	59	43	5	9	30	163	-	48	4	-	1	1	-	-	-	-	-	-	-	-
MATERIAL HANDLING LABORERS.....	691	5.82	6.26	5.14- 6.28	-	-	7	8	58	27	76	70	42	276	91	9	9	4	2	-	12	-	-	-	-	-	-
MANUFACTURING.....	621	5.79	6.28	4.95- 6.28	-	-	-	8	56	27	75	69	42	228	91	9	6	4	2	-	4	-	-	-	-	-	-
FORKLIFT OPERATORS.....	1,254	7.12	7.18	6.49- 7.68	-	-	-	-	13	30	64	103	25	23	216	206	119	221	17	89	88	4	36	-	-	-	-
MANUFACTURING.....	709	6.53	6.49	5.54- 7.04	-	-	-	-	13	30	64	101	22	23	209	70	65	19	-	89	-	4	-	-	-	-	-
NONMANUFACTURING.....	545	7.87	7.68	7.18- 8.25	-	-	-	-	-	-	-	2	3	-	7	136	54	202	17	-	88	-	36	-	-	-	-
GUARDS.....	1,606	4.24	3.75	3.25- 4.97	-	196	570	180	163	78	143	54	11	42	11	51	29	37	1	40	-	-	-	-	-	-	-
MANUFACTURING.....	294	6.25	6.38	4.75- 7.92	-	-	-	-	2	47	26	26	29	2	18	8	46	12	37	1	40	-	-	-	-	-	-
NONMANUFACTURING.....	1,312	3.79	3.50	3.25- 4.00	-	196	570	178	116	52	117	25	9	24	3	5	17	-	-	-	-	-	-	-	-	-	-
GUARDS, CLASS A.....	165	7.31	7.29	6.91- 7.92	-	-	-	-	-	5	7	3	4	12	9	40	7	37	1	40	-	-	-	-	-	-	-
GUARDS, CLASS B.....	1,430	3.89	3.50	3.25- 4.20	-	196	570	178	155	72	136	51	7	30	2	11	22	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	142	5.15	4.90	4.37- 5.40	-	-	-	-	39	25	21	29	-	8	2	6	12	-	-	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	1,288	3.75	3.50	3.25- 4.00	-	196	570	178	116	47	115	22	7	22	-	5	10	-	-	-	-	-	-	-	-	-	-
JANITORS, PORTERS, AND CLEANERS.....	3,064	4.31	3.99	3.30- 5.17	52	469	854	160	273	177	595	85	144	54	51	4	7	22	104	-	13	-	-	-	-	-	-
MANUFACTURING.....	813	5.37	5.10	4.29- 6.00	-	-	-	42	46	172	84	88	53	125	44	49	-	6	-	104	-	-	-	-	-	-	-
NONMANUFACTURING.....	2,251	3.92	3.40	3.20- 4.92	52	469	812	114	101	93	507	32	19	10	2	4	1	22	-	-	13	-	-	-	-	-	-

See footnotes at end of tables.

**Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>3</sup> ) hourly earnings <sup>4</sup>	Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>3</sup> ) hourly earnings <sup>4</sup>
MAINTENANCE, TOOLROOM, AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN--CONTINUED		
MAINTENANCE CARPENTERS.....	100	\$8.73	TRUCKDRIVERS - CONTINUED		
MANUFACTURING.....	68	9.07	TRUCKDRIVERS, TRACTOR-TRAILER....	1,265	\$9.14
MAINTENANCE ELECTRICIANS.....	237	9.14	MANUFACTURING.....	201	7.89
MANUFACTURING.....	204	9.30	NONMANUFACTURING.....	1,064	9.37
MAINTENANCE PAINTERS.....	152	7.69	SHIPPEES.....	160	5.99
MANUFACTURING.....	57	8.89	MANUFACTURING.....	160	5.99
MAINTENANCE MACHINISTS.....	244	9.13	RECEIVERS.....	184	6.50
MANUFACTURING.....	237	9.13	MANUFACTURING.....	155	5.89
MAINTENANCE MECHANICS (MACHINERY)...	871	8.26	SHIPPEES AND RECEIVERS.....	253	5.93
MANUFACTURING.....	860	8.26	MANUFACTURING.....	192	5.90
MAINTENANCE MECHANICS (MOTOR VEHICLES).....	285	9.34	WAREHOUSEMEN.....	1,350	7.67
MANUFACTURING.....	56	9.42	MANUFACTURING.....	470	6.56
NONMANUFACTURING.....	229	9.32	NONMANUFACTURING.....	880	8.26
PUBLIC UTILITIES.....	90	8.78	ORDER FILLERS.....	451	6.96
MACHINE-TOOL OPERATORS (TOOLROOM)...	119	9.08	MANUFACTURING.....	201	4.50
MANUFACTURING.....	80	9.04	FORKLIFT OPERATORS.....	1,218	7.08
TOOL AND DIE MAKERS.....	395	9.36	MANUFACTURING.....	707	6.53
MANUFACTURING.....	395	9.36	NONMANUFACTURING.....	511	7.83
STATIONARY ENGINEERS.....	107	8.81	GUARDS.....	1,495	4.26
NONMANUFACTURING.....	77	8.76	MANUFACTURING.....	278	6.23
MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN			NONMANUFACTURING.....	1,217	3.81
TRUCKDRIVERS.....	2,821	8.33	GUARDS, CLASS A.....	146	7.43
MANUFACTURING.....	816	8.11	GUARDS, CLASS B.....	1,338	3.91
NONMANUFACTURING.....	2,005	8.42	MANUFACTURING.....	138	5.14
PUBLIC UTILITIES.....	637	8.22	NONMANUFACTURING.....	1,200	3.77
TRUCKDRIVERS, LIGHT TRUCK.....	180	4.83	JANITORS, PORTERS, AND CLEANERS:		
MANUFACTURING.....	95	5.33	MANUFACTURING.....	698	5.19
NONMANUFACTURING.....	85	4.27	MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - WOMEN		
TRUCKDRIVERS, MEDIUM TRUCK.....	632	8.41	GUARDS.....	104	3.95
MANUFACTURING.....	204	6.13	NONMANUFACTURING.....	88	3.48
NONMANUFACTURING.....	428	9.50	GUARDS, CLASS B.....	92	3.56
TRUCKDRIVERS, HEAVY TRUCK.....	535	8.35	NONMANUFACTURING.....	88	3.48
MANUFACTURING.....	305	10.42			

See footnotes at end of tables.

**Table A-7. Percent increases in average hourly earnings for selected occupational groups, Anaheim—Santa Ana—Garden Grove, Calif., for selected periods**

Industry and occupational group <sup>5</sup>	October 1974 to October 1975	October 1975 to October 1976	October 1976 to October 1977	October 1977 to October 1978	October 1978 to October 1979
<b>All industries:</b>					
Office clerical.....	8.1	6.6	7.7	8.6	8.8
Electronic data processing.....	6.2	5.9	6.3	4.3	5.2
Industrial nurses.....	( <sup>6</sup> )	( <sup>6</sup> )	7.7	6.5	10.1
Skilled maintenance trades.....	8.7	8.0	8.0	8.9	9.5
Unskilled plant workers.....	5.3	10.6	5.5	6.9	8.7
<b>Manufacturing:</b>					
Office clerical.....	8.6	6.2	7.5	7.9	9.3
Electronic data processing.....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Industrial nurses.....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	9.6
Skilled maintenance trades.....	8.7	8.3	8.1	9.2	9.7
Unskilled plant workers.....	( <sup>6</sup> )	( <sup>6</sup> )	7.3	5.6	9.4
<b>Nonmanufacturing:</b>					
Office clerical.....	7.5	7.1	7.9	9.4	7.6
Electronic data processing.....	( <sup>6</sup> )	( <sup>6</sup> )	5.7	( <sup>6</sup> )	( <sup>6</sup> )
Industrial nurses.....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Unskilled plant workers.....	3.7	12.3	4.7	7.4	8.3

See footnotes at end of tables.

**Table A-8. Average pay relationships within establishments for white-collar occupations, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation which equals 100	Office clerical occupation being compared—																					
	Secretaries					Stenographers		Typists		File clerks		Messengers	Switchboard operators	Switchboard operator-receptionists	Order clerks		Accounting clerks		Payroll clerks	Key entry operators		
	Class A	Class B	Class C	Class D	Class E	Senior	General	Class A	Class B	Class B	Class C				Class A	Class B	Class A	Class B		Class A	Class B	Class A
SECRETARIES, CLASS A.....	100																					
SECRETARIES, CLASS B.....	113	100																				
SECRETARIES, CLASS C.....	125	110	100																			
SECRETARIES, CLASS D.....	140	121	108	100																		
SECRETARIES, CLASS E.....	154	130	126	118	100																	
STENOGRAPHERS, SENIOR.....	131	122	116	(6)	(6)	100																
STENOGRAPHERS, GENERAL.....	155	134	126	118	(6)	118	100															
TYPISTS, CLASS A.....	152	127	113	110	102	(6)	100															
TYPISTS, CLASS B.....	176	150	140	125	135	132	114	124	100													
FILE CLERKS, CLASS B.....	184	(6)	144	143	(6)	(6)	(6)	(6)	104	100												
FILE CLERKS, CLASS C.....	183	173	171	133	148	(6)	(6)	(6)	109	(6)	100											
MESSENGERS.....	185	161	149	143	141	143	128	131	106	101	93	100										
SWITCHBOARD OPERATORS.....	155	131	122	117	114	(6)	(6)	110	84	81	84	77	100									
SWITCHBOARD OPERATOR-RECEPTIONISTS.....	161	141	130	133	122	104	(6)	110	91	86	(6)	85	(6)	100								
ORDER CLERKS, CLASS A.....	152	106	109	88	84	(6)	(6)	(6)	81	(6)	(6)	(6)	82	86	100							
ORDER CLERKS, CLASS B.....	156	124	127	106	100	(6)	(6)	(6)	95	(6)	(6)	87	(6)	96	122	100						
ACCOUNTING CLERKS, CLASS A.....	133	122	110	103	102	95	85	95	80	77	72	76	87	84	118	91	100					
ACCOUNTING CLERKS, CLASS B.....	177	142	135	122	119	123	99	104	96	86	84	94	100	104	139	113	118	100				
PAYROLL CLERKS.....	143	120	112	95	89	(6)	91	(6)	81	87	66	82	86	91	113	89	101	86	100			
KEY ENTRY OPERATORS, CLASS A.....	146	122	108	104	106	101	86	91	76	(6)	(6)	79	90	93	106	90	105	85	106	100		
KEY ENTRY OPERATORS, CLASS B.....	164	144	132	118	122	(6)	92	99	92	84	83	86	105	105	120	102	119	98	118	117	100	
Professional and technical occupation being compared—																						
Computer systems analysts (business)			Computer operators			Electronics technicians			Registered industrial nurses													
Class A			Class B			Class C			Class B		Class C											
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....			100																			
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....			122			100																
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS C.....			152			125			100													
COMPUTER OPERATORS, CLASS A.....			162			137			(6)		100											
COMPUTER OPERATORS, CLASS B.....			207			174			149		124		100									
COMPUTER OPERATORS, CLASS C.....			240			208			(6)		140		113		100							
ELECTRONICS TECHNICIANS, CLASS B.....			158			138			107		99		85		79		100					
ELECTRONICS TECHNICIANS, CLASS C.....			176			148			(6)		115		94		(6)		113		100			
REGISTERED INDUSTRIAL NURSES.....			153			128			105		(6)		80		69		92		(6)		100	

See footnote at end of tables.

NOTE: Tables A-8 and A-9 present the average pay relationship between pairs of occupations within establishments. For example, a value of 122 indicates that earnings for the occupation directly above in the heading are 22 percent greater than earnings for the occupation directly to the left in the stub. Similarly, a value of 85 indicates earnings for the occupation in the heading are 15 percent below earnings for the occupation in the stub.

See appendix A for method of computation.



# Earnings: Large establishments

Table A-10. Weekly earnings of office workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																				
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	120 AND UNDER																				
						120	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440
SECRETARIES.....	2,724	39.5	\$266.00	\$258.50	\$223.50-\$310.50	-	-	4	6	25	52	68	104	341	417	361	233	355	184	261	237	57	6	11	-	2
MANUFACTURING.....	1,865	40.0	279.00	281.00	235.00-324.00	-	-	-	6	14	16	32	192	257	225	174	272	162	231	230	47	5	-	-	2	
NONMANUFACTURING.....	859	39.5	238.00	232.00	202.50-262.50	-	-	4	6	19	38	52	72	149	160	136	59	83	22	30	7	10	1	11	-	
PUBLIC UTILITIES.....	41	40.0	305.00	318.50	277.50-335.00	-	-	-	-	-	-	-	-	3	1	3	4	6	6	14	1	2	1	-	-	
SECRETARIES, CLASS A.....	133	39.5	321.50	319.50	287.50-355.00	-	-	-	-	-	-	-	-	2	7	10	4	25	19	11	26	16	1	10	-	
MANUFACTURING.....	84	40.0	336.00	344.00	318.00-357.50	-	-	-	-	-	-	-	-	1	1	-	2	5	19	11	26	16	1	-	2	
SECRETARIES, CLASS B.....	542	40.0	291.00	288.50	260.00-322.00	-	-	-	-	-	2	8	14	45	61	82	125	55	55	63	32	-	-	-	-	
MANUFACTURING.....	435	40.0	298.00	292.00	270.00-331.00	-	-	-	-	-	-	-	4	21	50	74	103	50	46	58	29	-	-	-	-	
NONMANUFACTURING.....	107	40.0	263.50	255.00	222.50-291.50	-	-	-	-	2	8	10	24	11	8	22	5	9	5	3	-	-	-	-		
SECRETARIES, CLASS C.....	958	40.0	275.50	276.00	234.00-324.00	-	-	-	1	3	19	17	22	74	136	147	74	159	47	107	144	3	5	-	-	
MANUFACTURING.....	816	40.0	283.00	281.50	242.00-331.50	-	-	-	-	4	4	2	56	124	127	66	140	40	103	144	2	4	-	-		
NONMANUFACTURING.....	142	40.0	232.50	220.00	192.00-274.50	-	-	-	1	3	15	13	20	18	12	20	8	19	7	4	-	1	-	-		
SECRETARIES, CLASS D.....	480	40.0	258.50	249.00	217.50-312.00	-	-	-	1	8	11	13	14	90	74	59	35	29	60	84	2	-	-	-	-	
MANUFACTURING.....	308	39.5	272.00	274.50	226.50-318.50	-	-	-	-	1	2	8	56	40	26	25	24	53	71	2	-	-	-	-		
NONMANUFACTURING.....	172	40.0	233.50	233.00	207.00-251.50	-	-	-	1	8	10	11	6	34	34	33	10	5	7	13	-	-	-	-		
SECRETARIES, CLASS E.....	337	39.5	224.00	227.00	205.00-241.50	-	-	-	-	6	17	8	37	75	104	58	17	13	2	-	-	-	-	-	-	
STENOGRAPHERS.....	234	39.5	234.50	229.50	206.50-255.00	-	-	-	2	7	7	20	15	48	42	45	7	12	16	13	-	-	-	-	-	
STENOGRAPHERS, GENERAL.....	85	39.5	216.50	207.00	184.00-248.50	-	-	-	2	7	5	19	7	16	4	8	4	11	2	-	-	-	-	-	-	
TYPISTS.....	368	39.5	180.00	166.50	148.00-203.00	4	12	85	44	45	23	32	20	47	33	7	4	-	3	9	-	-	-	-	-	
MANUFACTURING.....	194	40.0	199.50	190.00	170.00-217.50	-	-	3	13	30	21	29	17	35	26	6	2	-	3	9	-	-	-	-	-	
TYPISTS, CLASS A.....	69	40.0	214.50	194.50	180.00-229.00	-	-	-	1	6	10	13	5	12	8	3	2	-	-	9	-	-	-	-	-	
TYPISTS, CLASS B.....	299	39.5	172.00	161.00	144.50-194.50	4	12	85	43	39	13	19	15	35	25	4	2	-	3	-	-	-	-	-	-	
MANUFACTURING.....	151	40.0	195.50	192.00	166.50-216.00	-	-	3	13	24	11	19	15	32	25	4	2	-	3	-	-	-	-	-	-	
FILE CLERKS.....	177	39.5	175.50	141.50	132.50-200.50	-	85	8	6	14	8	7	2	12	3	-	15	-	17	-	-	-	-	-	-	
MESSENGERS.....	115	39.5	175.50	169.00	146.00-191.00	-	21	20	9	8	4	14	18	9	2	5	-	-	5	-	-	-	-	-	-	
SWITCHBOARD OPERATORS.....	189	40.0	205.50	202.00	162.00-230.00	5	-	24	4	22	12	11	13	16	46	14	10	2	5	5	-	-	-	-	-	
MANUFACTURING.....	79	40.0	220.00	216.00	177.00-255.00	-	-	6	3	7	4	4	8	9	8	14	10	-	1	5	-	-	-	-	-	
NONMANUFACTURING.....	110	40.0	195.00	191.00	160.00-230.00	5	-	18	1	15	8	7	5	7	38	-	-	2	4	-	-	-	-	-	-	
SWITCHBOARD OPERATOR-RECEPTIONISTS.....	78	39.5	179.50	167.00	149.50-190.00	-	-	21	12	8	8	10	1	4	7	-	3	-	4	-	-	-	-	-	-	
NONMANUFACTURING.....	57	39.0	177.00	150.50	145.00-185.00	-	-	17	12	5	5	6	-	3	4	-	1	-	4	-	-	-	-	-	-	
ACCOUNTING CLERKS.....	1,055	40.0	222.50	207.00	182.00-280.00	1	16	22	53	80	72	75	94	234	94	28	16	140	64	59	7	-	-	-	-	
MANUFACTURING.....	370	40.0	219.00	210.00	184.00-244.00	1	4	8	13	25	24	33	38	75	51	19	13	37	8	12	7	-	-	-	-	
NONMANUFACTURING.....	685	40.0	224.50	204.50	180.50-286.00	-	12	14	40	55	46	42	56	159	43	9	3	103	56	47	-	-	-	-	-	

See footnotes at end of tables.

**Table A-10. Weekly earnings of office workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979—Continued**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																					
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	120	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440	460
						AND UNDER	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400	420	440	460
<b>ACCOUNTING CLERKS--CONTINUED</b>																											
ACCOUNTING CLERKS, CLASS A.....	379	40.0	\$249.50	\$231.00	\$206.50-\$298.50	-	-	-	3	10	12	21	29	79	56	19	15	40	29	59	7	-	-	-	-	-	
MANUFACTURING.....	203	40.0	244.00	233.50	209.00- 285.50	-	-	-	2	6	6	11	14	43	27	18	13	36	8	12	7	-	-	-	-	-	
NONMANUFACTURING.....	176	40.0	256.00	230.00	205.00- 332.50	-	-	-	1	4	6	10	15	36	29	1	2	4	21	47	-	-	-	-	-	-	
ACCOUNTING CLERKS, CLASS B.....	676	40.0	207.50	199.50	170.00- 225.00	1	16	22	50	70	60	54	65	155	38	9	1	100	35	-	-	-	-	-	-	-	
MANUFACTURING.....	167	39.5	188.50	188.50	169.50- 207.00	1	4	8	11	19	20	22	24	32	24	1	-	1	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	509	40.0	214.00	202.00	171.00- 280.00	-	12	14	39	51	40	32	41	123	14	8	1	99	35	-	-	-	-	-	-	-	
PAYROLL CLERKS.....	156	39.5	225.50	213.50	184.50- 262.50	1	1	16	5	2	13	8	16	20	20	12	5	12	14	9	2	-	-	-	-	-	
MANUFACTURING.....	61	40.0	208.50	214.00	150.00- 247.50	-	-	16	4	-	-	4	4	6	9	6	5	4	3	-	-	-	-	-	-	-	
NONMANUFACTURING.....	95	39.5	236.50	211.50	190.00- 297.00	1	1	-	1	2	13	4	12	14	11	6	-	8	11	9	2	-	-	-	-	-	
KEY ENTRY OPERATORS.....	594	39.5	220.50	210.50	187.00- 245.00	-	-	9	16	44	46	63	40	125	98	29	13	63	41	6	1	-	-	-	-	-	
MANUFACTURING.....	201	40.0	222.00	208.00	193.50- 255.00	-	-	-	13	2	7	14	33	54	21	16	12	15	7	6	1	-	-	-	-	-	
NONMANUFACTURING.....	393	39.0	219.50	214.00	182.00- 235.50	-	-	9	3	42	39	49	7	71	77	13	1	48	34	-	-	-	-	-	-	-	
KEY ENTRY OPERATORS, CLASS A.....	380	39.0	221.50	215.00	188.00- 234.00	-	-	-	8	26	29	47	14	85	79	24	9	17	35	6	1	-	-	-	-	-	
MANUFACTURING.....	111	40.0	238.00	229.00	200.00- 284.50	-	-	-	8	-	-	4	11	28	11	12	8	15	7	6	1	-	-	-	-	-	
NONMANUFACTURING.....	269	39.0	214.50	213.00	183.00- 230.00	-	-	-	-	26	29	43	3	57	68	12	1	2	28	-	-	-	-	-	-	-	
KEY ENTRY OPERATORS, CLASS B.....	214	40.0	218.50	206.00	182.50- 267.50	-	-	9	8	18	17	16	26	40	19	5	4	46	6	-	-	-	-	-	-	-	
MANUFACTURING.....	90	40.0	202.50	198.00	188.50- 216.00	-	-	-	5	2	7	10	22	26	10	4	4	-	-	-	-	-	-	-	-	-	
NONMANUFACTURING.....	124	39.5	230.00	218.50	170.00- 294.00	-	-	9	3	16	10	6	4	14	9	1	-	46	6	-	-	-	-	-	-	-	

See footnotes at end of tables.

**Table A-11. Weekly earnings of professional and technical workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Average weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME WEEKLY EARNINGS (IN DOLLARS) OF--																				
			Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640
						AND UNDER 180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600	640	AND OVER
COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	354	40.0	\$447.50	\$450.00	\$385.00-\$500.00	-	-	-	-	-	5	5	11	20	24	18	13	22	30	36	41	66	31	24	6	2
MANUFACTURING.....	255	40.0	444.50	444.00	379.50- 500.00	-	-	-	-	-	4	2	7	17	20	16	13	14	25	25	27	36	22	19	6	2
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS A.....	112	40.0	521.00	519.00	483.50- 563.50	-	-	-	-	-	-	-	-	-	-	-	-	3	4	5	14	30	25	23	6	2
COMPUTER SYSTEMS ANALYSTS (BUSINESS), CLASS B.....	173	40.0	437.50	444.00	410.00- 477.50	-	-	-	-	-	3	4	12	7	8	4	9	26	30	27	36	6	1	-	-	
COMPUTER PROGRAMMERS (BUSINESS).....	400	40.0	389.00	385.50	349.50- 443.00	-	-	-	-	2	13	24	20	31	28	71	22	45	40	50	37	17	-	-	-	-
MANUFACTURING.....	52	39.0	373.00	382.00	345.00- 400.00	-	-	-	-	-	2	1	8	7	7	19	12	4	1	-	-	-	-	-	-	
COMPUTER OPERATORS.....	387	39.5	276.00	290.00	238.50- 302.00	15	12	28	44	47	37	29	110	26	25	6	6	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	202	40.0	275.50	265.00	231.00- 322.00	1	11	18	29	31	27	19	11	20	21	6	6	2	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	185	39.5	276.50	302.00	241.50- 302.00	14	1	10	15	16	10	10	99	6	4	-	-	-	-	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS A.....	117	40.0	308.00	303.00	270.50- 347.00	-	-	-	6	15	15	17	13	16	21	6	6	2	-	-	-	-	-	-	-	-
MANUFACTURING.....	96	40.0	313.00	322.50	269.50- 353.00	-	-	-	5	14	9	10	7	16	21	6	6	2	-	-	-	-	-	-	-	-
COMPUTER OPERATORS, CLASS B.....	228	39.5	272.00	291.50	234.50- 302.00	-	8	20	34	24	19	12	97	10	4	-	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	81	40.0	248.00	240.00	222.00- 273.00	-	7	11	21	9	16	9	4	4	-	-	-	-	-	-	-	-	-	-	-	-
ELECTRONICS TECHNICIANS.....	1,024	40.0	312.00	299.50	256.00- 376.00	3	7	14	125	129	109	125	83	59	43	101	92	122	-	2	4	6	-	-	-	-
MANUFACTURING.....	888	40.0	305.00	289.00	251.00- 375.00	3	7	12	125	129	109	108	68	43	37	94	21	120	-	2	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS A.....	390	40.0	354.50	371.50	312.00- 403.00	-	-	-	5	8	29	34	41	31	28	62	20	122	-	-	4	6	-	-	-	-
MANUFACTURING.....	377	40.0	354.00	375.00	310.00- 403.00	-	-	-	5	8	29	34	41	27	27	57	19	120	-	-	4	6	-	-	-	-
ELECTRONICS TECHNICIANS, CLASS B.....	410	40.0	305.00	287.50	256.30- 375.00	-	-	9	28	79	59	59	27	21	15	39	72	-	-	2	-	-	-	-	-	-
MANUFACTURING.....	288	40.0	283.50	268.00	251.50- 300.00	-	-	7	28	79	59	43	12	9	10	37	2	-	-	2	-	-	-	-	-	-
REGISTERED INDUSTRIAL NURSES.....	50	40.0	318.00	313.50	295.00- 349.50	-	-	-	4	2	4	10	8	2	10	6	-	4	-	-	-	-	-	-	-	-

See footnotes at end of tables.

**Table A-12. Average weekly earnings of office, professional, and technical workers, by sex, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )		Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> )	
		Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)			Weekly hours <sup>1</sup> (standard)	Weekly earnings <sup>1</sup> (standard)
OFFICE OCCUPATIONS - WOMEN				OFFICE OCCUPATIONS - WOMEN--CONTINUED				PROFESSIONAL AND TECHNICAL OCCUPATIONS - MEN			
SECRETARIES.....	2,715	39.5	\$266.50	MESSENGRS.....	80	39.5	\$171.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS).....	306	40.0	\$454.50
MANUFACTURING.....	1,865	40.0	279.00	SWITCHBOARD OPERATORS.....	186	40.0	206.00	MANUFACTURING.....	215	40.0	451.00
NONMANUFACTURING.....	850	39.5	238.00	MANUFACTURING.....	79	40.0	220.00	COMPUTER SYSTEMS ANALYSTS (BUSINESS); CLASS A.....	101	40.0	525.00
PUBLIC UTILITIES.....	41	40.0	305.00	NONMANUFACTURING.....	107	40.0	195.50	COMPUTER SYSTEMS ANALYSTS (BUSINESS); CLASS B.....	158	40.0	438.00
SECRETARIES, CLASS A.....	133	39.5	321.50	SWITCHBOARD OPERATOR-RECEPTIONISTS.....	78	39.5	179.50	COMPUTER OPERATORS: MANUFACTURING.....	145	40.0	284.50
MANUFACTURING.....	84	40.0	336.00	NONMANUFACTURING.....	57	39.0	177.00	COMPUTER OPERATORS, CLASS A.....	96	40.0	313.50
SECRETARIES, CLASS B.....	542	40.0	291.00	ACCOUNTING CLERKS: MANUFACTURING.....	355	40.0	217.50	COMPUTER OPERATORS, CLASS B: MANUFACTURING.....	53	40.0	251.00
MANUFACTURING.....	435	40.0	298.00	ACCOUNTING CLERKS, CLASS A.....	348	40.0	250.00	ELECTRONICS TECHNICIANS.....	944	40.0	311.00
NONMANUFACTURING.....	107	40.0	263.50	MANUFACTURING.....	191	40.0	242.50	MANUFACTURING.....	870	40.0	305.50
SECRETARIES, CLASS C.....	958	40.0	275.50	NONMANUFACTURING.....	157	40.0	258.50	ELECTRONICS TECHNICIANS, CLASS A.....	376	40.0	354.00
MANUFACTURING.....	816	40.0	283.00	ACCOUNTING CLERKS, CLASS B: MANUFACTURING.....	164	39.5	187.50	MANUFACTURING.....	373	40.0	354.00
NONMANUFACTURING.....	142	40.0	232.50	NONMANUFACTURING.....	150	39.5	227.00	ELECTRONICS TECHNICIANS, CLASS B.....	354	40.0	302.00
SECRETARIES, CLASS D.....	480	40.0	258.50	PAYROLL CLERKS.....	60	40.0	208.50	MANUFACTURING.....	283	40.0	283.50
MANUFACTURING.....	308	39.5	272.00	MANUFACTURING.....	90	39.5	239.00	PROFESSIONAL AND TECHNICAL OCCUPATIONS - WOMEN			
NONMANUFACTURING.....	172	40.0	233.50	NONMANUFACTURING.....	60	40.0	208.50	COMPUTER OPERATORS: MANUFACTURING.....	53	40.0	255.50
SECRETARIES, CLASS E.....	337	39.5	224.00	KEY ENTRY OPERATORS.....	523	39.5	213.00				
STENOGRAPHERS.....	234	39.5	234.50	MANUFACTURING.....	183	40.0	214.50				
STENOGRAPHERS, GENERAL.....	85	39.5	216.50	NONMANUFACTURING.....	340	39.0	212.50				
TYPISTS.....	365	39.5	180.50	KEY ENTRY OPERATORS, CLASS A.....	360	39.0	217.50				
MANUFACTURING.....	194	40.0	199.50	MANUFACTURING.....	95	40.0	225.50				
TYPISTS, CLASS A.....	69	40.0	214.50	NONMANUFACTURING.....	265	39.0	214.50				
TYPISTS, CLASS B.....	296	39.5	172.50	KEY ENTRY OPERATORS, CLASS B: MANUFACTURING.....	88	40.0	202.50				
MANUFACTURING.....	151	40.0	195.50								
FILE CLERKS.....	171	39.5	175.00								

See footnotes at end of tables.

**Table A-13. Hourly earnings of maintenance, toolroom, and powerplant workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Hourly earnings <sup>4</sup>			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																		
		Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	5.80 and under	6.20	6.60	7.00	7.40	7.80	8.20	8.60	9.00	9.40	9.80	10.20	10.60	11.00	11.40	11.80	12.20	12.60	
MAINTFNANCE CARPENTERS.....	88	\$8.71	\$8.86	\$7.53- \$9.39	-	1	-	21	1	3	7	16	22	10	-	5	2	-	-	-	-	-	-
MANUFACTURING.....	58	9.10	9.39	8.85- 9.39	-	1	-	3	1	2	2	13	22	10	-	2	2	-	-	-	-	-	-
MAINTENANCE ELECTRICIANS.....	202	9.14	9.24	8.12- 10.10	5	9	4	13	1	20	5	11	44	30	35	13	-	-	-	-	-	-	12
MANUFACTURING.....	172	9.31	9.30	8.96- 10.10	5	8	4	-	1	17	3	9	42	23	35	13	-	-	-	-	-	-	12
MAINTENANCE PAINTERS.....	126	7.79	7.39	6.97- 8.85	1	18	14	42	-	6	6	11	23	5	-	-	-	-	-	-	-	-	-
MAINTENANCE MACHINISTS.....	83	10.02	10.14	9.17- 11.63	-	-	1	1	1	2	2	4	21	2	23	4	-	-	22	-	-	-	-
MAINTENANCE MECHANICS (MACHINERY).....	323	8.59	8.85	8.19- 8.96	-	1	12	6	27	35	23	139	54	26	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	312	8.58	8.85	8.00- 9.00	-	1	12	6	27	35	20	131	54	26	-	-	-	-	-	-	-	-	-
MAINTENANCE MECHANICS (MOTOR VEHICLES).....	134	9.48	9.37	8.79- 10.11	-	-	2	17	-	6	6	7	33	7	34	-	-	7	-	15	-	-	-
NONMANUFACTURING.....	197	9.60	10.11	8.45- 10.11	-	-	2	16	-	6	6	1	13	7	34	-	-	7	-	15	-	-	-
PUBLIC UTILITIES.....	41	10.15	9.45	9.36- 11.99	-	-	-	2	-	-	3	1	13	7	-	-	-	-	-	15	-	-	-
TOOL AND DIE MAKERS.....	179	9.33	9.32	9.00- 9.60	-	-	-	1	5	2	12	25	62	33	24	-	12	-	3	-	-	-	-
MANUFACTURING.....	179	9.33	9.32	9.00- 9.60	-	-	-	1	5	2	12	25	62	33	24	-	12	-	3	-	-	-	-

See footnotes at end of tables.

**Table A-14. Hourly earnings of material movement and custodial workers, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation and industry division	Number of workers	Hourly earnings <sup>1</sup>			NUMBER OF WORKERS RECEIVING STRAIGHT-TIME HOURLY EARNINGS (IN DOLLARS) OF--																					
		Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	3.00 UNDER 3.00	3.20	3.60	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00	10.40	10.80	11.20
TRUCKDRIVERS.....	1,032	\$9.52	\$9.98	\$9.23-\$10.82	-	-	-	-	-	1	6	20	17	13	22	45	46	10	14	26	238	208	-	82	272	12
MANUFACTURING.....	187	8.65	9.34	6.73- 10.43	-	-	-	-	-	1	6	20	14	8	6	8	6	6	12	2	8	8	-	82	-	-
TRUCKDRIVERS, TRACTOR-TRAILER....	540	9.26	9.23	9.23- 9.98	-	-	-	-	-	-	4	8	5	3	18	36	6	7	10	231	200	-	-	-	-	12
SHIPPERS.....	74	6.29	5.68	5.21- 6.51	-	-	-	1	1	15	11	16	11	2	-	-	-	1	-	16	-	-	-	-	-	-
MANUFACTURING.....	52	5.60	5.62	5.17- 5.97	-	-	-	-	1	12	11	15	11	1	-	-	-	1	-	-	-	-	-	-	-	-
RECEIVERS.....	98	7.12	6.48	5.35- 9.77	-	-	-	1	1	7	3	6	26	2	2	7	-	-	1	-	1	12	-	29	-	-
SHIPPERS AND RECEIVERS.....	147	5.55	5.46	4.50- 6.97	-	-	-	-	7	26	20	16	8	15	12	5	29	1	8	-	-	-	-	-	-	-
WAREHOUSEMEN.....	700	7.40	7.33	6.92- 8.90	-	-	-	-	48	25	33	21	18	7	10	125	95	20	3	-	295	-	-	-	-	-
MANUFACTURING.....	234	5.89	6.52	4.51- 6.92	-	-	-	-	48	25	8	13	16	5	4	103	2	10	-	-	-	-	-	-	-	-
NONMANUFACTURING.....	466	8.16	8.90	7.33- 8.90	-	-	-	-	-	-	25	8	2	2	6	22	93	10	3	-	295	-	-	-	-	-
MATERIAL HANDLING LABORERS.....	375	6.04	6.28	5.74- 6.28	-	-	-	7	4	11	7	16	47	34	220	1	1	9	4	2	-	12	-	-	-	-
FORKLIFT OPERATORS.....	528	7.21	7.50	5.62- 8.56	-	-	-	-	4	24	27	71	21	20	16	51	113	27	17	9	88	4	36	-	-	-
MANUFACTURING.....	291	6.24	6.00	5.54- 7.27	-	-	-	-	4	24	27	69	18	20	9	47	59	1	-	9	-	4	-	-	-	-
GUARDS.....	443	6.01	5.50	5.00- 6.97	-	-	-	-	8	43	20	126	30	7	40	11	51	29	37	1	40	-	-	-	-	-
MANUFACTURING.....	231	6.63	6.96	5.13- 7.92	-	-	-	-	2	31	12	13	9	2	18	8	46	12	37	1	40	-	-	-	-	-
GUARDS, CLASS B.....	272	5.29	5.00	5.00- 5.50	-	-	-	-	6	35	14	124	27	3	28	2	11	22	-	-	-	-	-	-	-	-
JANITORS, PORTERS, AND CLEANERS.....	1,372	4.75	4.94	3.50- 5.17	1	281	-	81	99	92	79	456	77	21	30	39	2	1	-	100	-	13	-	-	-	-
MANUFACTURING.....	390	5.91	5.46	4.47- 8.23	-	-	-	-	15	72	32	43	53	14	24	37	-	-	-	100	-	-	-	-	-	-
NONMANUFACTURING.....	982	4.29	4.50	3.04- 5.17	1	281	-	81	84	20	47	413	24	7	6	2	2	1	-	-	-	13	-	-	-	-

See footnotes at end of tables.

**Table A-15. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, large establishments, Anaheim—Santa Ana—Garden Grove, Calif., October 1979**

Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>	Occupation, sex, <sup>3</sup> and industry division	Number of workers	Average (mean <sup>2</sup> ) hourly earnings <sup>4</sup>
MAINTENANCE, TOOLROOM, AND POWERPLANT OCCUPATIONS - MEN			MATERIAL MOVEMENT AND CUSTODIAL OCCUPATIONS - MEN		
MAINTENANCE CARPENTERS.....	87	\$8.72	TRUCKDRIVERS.....	974	\$9.49
MANUFACTURING.....	58	9.10	MANUFACTURING.....	187	8.65
MAINTENANCE ELECTRICIANS.....	202	9.14	TRUCKDRIVERS, TRACTOR-TRAILER....	516	9.26
MANUFACTURING.....	172	9.31	SHIPPERS AND RECEIVERS.....	139	5.55
MAINTENANCE PAINTERS.....	126	7.79	WAREHOUSEMEN.....	601	7.22
MAINTENANCE MACHINISTS.....	83	10.02	MANUFACTURING.....	231	5.92
MAINTENANCE MECHANICS (MACHINERY)..	322	8.59	FORKLIFT OPERATORS.....	492	7.13
MANUFACTURING.....	311	8.58	MANUFACTURING.....	289	6.24
MAINTENANCE MECHANICS (MOTOR VEHICLES).....	134	9.48	GUARDS.....	416	6.02
NONMANUFACTURING.....	107	9.60	MANUFACTURING.....	217	6.62
PUBLIC UTILITIES.....	41	10.15	GUARDS, CLASS B.....	264	5.31
TOOL AND DIE MAKERS.....	179	9.33	JANITORS, PORTERS, AND CLEANERS....	1,167	8.56
MANUFACTURING.....	179	9.33	MANUFACTURING.....	283	5.62
			NONMANUFACTURING.....	884	4.23

See footnotes at end of tables.

## Footnotes

<sup>1</sup> 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.

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

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

<sup>4</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

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

<sup>6</sup> Data do not meet publication criteria or data not available.

# Appendix A.

## Scope and Method of Survey

In each of the 72<sup>1</sup> areas currently surveyed, the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. Establishments having fewer than a prescribed number of workers are also excluded because of insufficient employment in the occupations studied. Appendix table 1 shows the number of establishments and workers estimated to be within the scope of this survey, as well as the number actually studied.

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

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

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

### Occupations and earnings

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

and powerplant; and (4) material movement and custodial. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B.

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

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

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

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

<sup>1</sup> Included in the 72 areas are 2 studies conducted by the Bureau under contract. These areas are Akron, Ohio and Poughkeepsie-Kingston-Newburgh, N.Y. In addition, the Bureau conducts more limited area studies in approximately 100 areas at the request of the Employment Standards Administration of the U.S. Department of Labor.

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

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

#### Wage trends for selected occupational groups

The percent increases presented in table A-7 are based on changes in average hourly earnings of men and women in establishments reporting the trend jobs in both the current and previous year (matched establishments). The data are adjusted to remove the effects on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. Hirings, layoffs, and turnover may affect an establishment average for an occupation when workers are paid under plans providing a range of wage rates for individual jobs. In periods of increased hiring, for example, new employees may enter at the bottom of the range, depressing the average without a change in wage rates.

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

Occupations used to compute wage trends are:

#### Office clerical

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

#### Electronic data processing

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

#### Electronic data processing— Continued

Computer operators,  
classes A, B, and C  
Industrial nurses  
Registered industrial  
nurses  
Skilled maintenance  
Carpenters  
Electricians  
Painters  
Machinists  
Mechanics (machinery)  
Mechanics (motor vehicle)  
Pipefitters  
Tool and die makers  
Unskilled plant  
Janitors, porters, and  
cleaners  
Material handling laborers

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

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

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

#### Average pay relationships within establishments

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

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

#### Establishment practices and supplementary wage provisions

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

**Appendix table 1. Establishments and workers within scope of survey and number studied, Anaheim—Santa Ana—Garden Grove, Calif.,<sup>1</sup> October 1979**

Industry division <sup>2</sup>	Minimum employment in establishments in scope of study	Number of establishments		Workers in establishments		
		Within scope of study <sup>3</sup>	Studied	Within scope of study <sup>4</sup>		Studied
				Number	Percent	
<b>ALL ESTABLISHMENTS</b>						
ALL INDUSTRY DIVISIONS -----	-	1,240	199	328,344	100	158,878
MANUFACTURING -----	50	472	82	144,835	44	71,820
NONMANUFACTURING -----	-	768	117	183,509	56	87,058
TRANSPORTATION, COMMUNICATION, AND OTHER PUBLIC UTILITIES <sup>5</sup> -----	50	33	17	17,001	5	15,204
WHOLESALE TRADE <sup>6</sup> -----	50	104	10	13,237	4	1,492
RETAIL TRADE <sup>6</sup> -----	50	309	40	91,452	28	51,192
FINANCE, INSURANCE, AND REAL ESTATE <sup>6</sup> -----	50	115	19	30,247	9	8,993
SERVICES <sup>6,7</sup> -----	50	207	31	31,572	10	16,177
<b>LARGE ESTABLISHMENTS</b>						
ALL INDUSTRY DIVISIONS -----	-	110	64	170,960	100	134,733
MANUFACTURING -----	500	44	27	71,766	42	59,322
NONMANUFACTURING -----	-	66	37	99,194	58	75,421
TRANSPORTATION, COMMUNICATION, AND OTHER PUBLIC UTILITIES <sup>5</sup> -----	500	7	7	13,598	8	13,598
WHOLESALE TRADE <sup>6</sup> -----	500	-	-	-	-	-
RETAIL TRADE <sup>6</sup> -----	500	31	19	59,869	35	48,448
FINANCE, INSURANCE, AND REAL ESTATE <sup>6</sup> -----	500	16	6	14,048	8	6,770
SERVICES <sup>6,7</sup> -----	500	12	5	11,679	7	6,605

<sup>1</sup> The Anaheim—Santa Ana—Garden Grove Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Orange County. The "workers within scope of study" estimates provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

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

<sup>3</sup> Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of companies in industries such as trade,

finance, auto repair service, and motion picture theaters are considered as one establishment.

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

<sup>5</sup> Abbreviated to "public utilities" in the A-series tables. Taxicabs and services incidental to water transportation are excluded.

<sup>6</sup> Separate data for this division are not presented in the A-series tables, but the division is represented in the "all industries" and "nonmanufacturing" estimates.

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

# Appendix B. Occupational Descriptions

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

## Office

### SECRETARY

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

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

- a. Positions which do not meet the "personal" secretary concept described above;
- b. Stenographers not fully trained in secretarial-type duties;
- c. Stenographers serving as office assistants to a group of professional, technical, or managerial persons;
- d. Assistant-type positions which entail more difficult or more responsible technical, administrative, or supervisory duties which are not typical of secretarial work, e.g., Administrative Assistant, or Executive Assistant:

### SECRETARY—Continued

#### Exclusions—Continued

- e. Positions which do not fit any of the situations listed in the sections below titled "Level of Supervisor," e.g., secretary to the president of a company that employs, in all, over 5,000 persons;
- f. Trainees.

#### Classification by Level

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

#### Level of Secretary's Supervisor (LS)

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

SECRETARY—Continued

Classification by Level—Continued

- b. Secretary to a nonsupervisory staff specialist, professional employee, administrative officer or assistant, skilled technician or expert. (NOTE: Many companies assign stenographers, rather than secretaries as described above, to this level of supervisory or nonsupervisory worker.)
- LS-2 a. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for LS-3, but whose organizational unit normally numbers at least several dozen employees and is usually divided into organizational segments which are often, in turn, further subdivided. In some companies, this level includes a wide range of organizational echelons; in others, only one or two; or
- b. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, fewer than 5,000 persons.
- LS-3 a. Secretary to the chairman of the board or president of a company that employs, in all, fewer than 100 persons; or
- b. Secretary to a corporate officer (other than chairman of the board or president) of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- c. Secretary to the head (immediately below the officer level) over either a major corporatewide functional activity (e.g., marketing, research, operations, industrial relations, etc.) or a major geographic or organizational segment (e.g., a regional headquarters; a major division) of a company that employs, in all, over 5,000 but fewer than 25,000 employees; or
- d. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, over 5,000 persons; or
- e. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) of a company that employs, in all, over 25,000 persons.
- LS-4 a. Secretary to the chairman of the board or president of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- b. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 5,000 but fewer than 25,000 persons; or
- c. Secretary to the head, immediately below the corporate officer level, of a major segment or subsidiary of a company that employs, in all, over 25,000 persons.

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

SECRETARY—Continued

Classification by Level—Continued

positions. Vice presidents whose primary responsibility is to act personally on individual cases or transactions (e.g., approve or deny individual loan or credit actions; administer individual trust accounts; directly supervise a clerical staff) are not considered to be "corporate officers" for purposes of applying the definition.

Level of Secretary's Responsibility (LR)

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

LR-1. Performs varied secretarial duties including or comparable to most of the following:

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

LR-2. Performs duties described under LR-1 and, in addition performs tasks requiring greater judgment, initiative, and knowledge of office functions including or comparable to most of the following:

- a. Screens telephone and personal callers, determining which can be handled by the supervisor's subordinates or other offices.
- b. Answers requests which require a detailed knowledge of office procedures or collection of information from files or other offices. May sign routine correspondence in own or supervisor's name.
- c. Compiles or assists in compiling periodic reports on the basis of general instructions.

SECRETARY—Continued

- d. Schedules tentative appointments without prior clearance. Assembles necessary background material for scheduled meetings. Makes arrangements for meetings and conferences.
- e. Explains supervisor's requirements to other employees in supervisor's unit. (Also types, takes dictation, and files.)

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

Level of secretary's supervisor	Level of secretary's responsibility	
	LR-1	LR-2
LS-1	Class E	Class D
LS-2	Class D	Class C
LS-3	Class C	Class B
LS-4	Class B	Class A

STENOGRAPHER

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

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

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

OR

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

STENOGRAPHER—Continued

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

TRANSCRIBING-MACHINE TYPIST

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

TYPIST

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

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.

## FILE CLERK—Continued

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.

## ORDER CLERK—Continued

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.

## BOOKKEEPING-MACHINE OPERATOR

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

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

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

#### MACHINE BILLER

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

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

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

#### PAYROLL CLERK

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

#### KEY ENTRY OPERATOR

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

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

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

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

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

## Professional and Technical

#### COMPUTER SYSTEMS ANALYST, BUSINESS

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

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

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

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

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

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

#### COMPUTER SYSTEMS ANALYST, BUSINESS—Continued

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

OR

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

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

#### COMPUTER PROGRAMMER, BUSINESS

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

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

For wage study purposes, programmers are classified as follows:

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

#### COMPUTER PROGRAMMER, BUSINESS—Continued

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

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

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

OR

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

May guide or instruct lower level programmers.

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

#### COMPUTER OPERATOR

In accordance with operating instructions, monitors and operates the control console of a digital computer to process data. Executes runs by either serial processing (processes one program at a time) or multi-processing (processes two or more programs simultaneously). The following duties characterize the work of a computer operator:

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

## COMPUTER OPERATOR—Continued

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

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

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

An operator at this level typically guides lower level operators.

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

Class C. Work assignments are limited to established production runs (i.e., programs which present few operating problems). Assignments may consist primarily of on-the-job training (sometimes argued by classroom instruction). When learning to run programs, the supervisor or a higher level operator provides detailed written or oral guidance to the operator before and during the run. After the operator has gained experience with a program, however, the operator works fairly independently in applying standard operating or corrective procedures in responding to computer output instructions or error conditions, but refers problems to a higher level operator or the supervisor when standard procedures fail.

## PERIPHERAL EQUIPMENT OPERATOR

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

## PERIPHERAL EQUIPMENT OPERATOR—Continued

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

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

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

## COMPUTER DATA LIBRARIAN

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

## DRAFTER

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

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

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

## DRAFTER-TRACER

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

## AND/OR

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

## ELECTRONICS TECHNICIAN

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

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

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

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

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

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

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

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

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

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

## REGISTERED INDUSTRIAL NURSE

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

## Maintenance, Toolroom, and Powerplant

## MAINTENANCE CARPENTER

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

#### MAINTENANCE CARPENTER—Continued

laying out of work from blueprints, drawings, models, or verbal instructions; using a variety of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

#### MAINTENANCE ELECTRICIAN

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

#### MAINTENANCE PAINTER

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

#### MAINTENANCE MACHINIST

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

#### MAINTENANCE MECHANIC (Machinery)

Repairs machinery or mechanical equipment of an establishment. Work involves most of the following: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items

#### MAINTENANCE MECHANIC (Machinery)—Continued

obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines; and making all necessary adjustments for operation. In general, the work of a machinery maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose primary duties involve setting up or adjusting machines.

#### MAINTENANCE MECHANIC (Motor vehicle)

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

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

#### MAINTENANCE PIPEFITTER

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

#### MAINTENANCE SHEET-METAL WORKER

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

## 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

## TOOL AND DIE MAKER—Continued

alloys; selecting appropriate materials, tools, and processes required to complete tasks; making necessary shop computations; setting up and operating various machine tools and related equipment; using various tool and die maker's handtools and precision measuring instruments; working to very close tolerances; heat-treating metal parts and finished tools and dies to achieve required qualities; fitting and assembling parts to prescribed tolerances and allowances. In general, the tool and die maker's work requires rounded training in machine-shop and toolroom practice usually acquired through formal apprenticeship or equivalent training and experience.

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

## STATIONARY ENGINEER

Operates and maintains and may also supervise the operation of stationary engines and equipment (mechanical or electrical) to supply the establishment in which employed with power, heat, refrigeration, or 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. Salesroute and over-the-road drivers are excluded.

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

### Truckdriver, light truck

(straight truck, under 1½ tons, usually 4 wheels)

### Truckdriver, medium truck

(straight truck, 1½ to 4 tons inclusive, usually 6 wheels)

### Truckdriver, heavy truck

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

### Truckdriver, tractor-trailer

## SHIPPER AND RECEIVER

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

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

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

For wage study purposes, workers are classified as follows:

Shipper  
Receiver  
Shipper and receiver

## WAREHOUSEMAN

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

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

## ORDER FILLER

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

## SHIPPING PACKER

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

## MATERIAL HANDLING LABORER

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

## POWER-TRUCK OPERATOR

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

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

Forklift operator  
Power-truck operator (other than forklift)

## GUARD

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

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

For wage study purposes, guards are classified as follows:

Class A. Enforces regulations designed to prevent breaches of security. Exercises judgment and uses discretion in dealing with emergencies and security violations encountered. Determines whether first

GUARD—Continued

response should be to intervene directly (asking for assistance when deemed necessary and time allows), to keep situation under surveillance, or to report situation so that it can be handled by appropriate authority. Duties require specialized training in methods and techniques of protecting security areas. Commonly, the guard is required to demonstrate continuing physical fitness and proficiency with firearms or other special weapons.

Class B. Carries out instructions primarily oriented toward insuring that emergencies and security violations are readily discovered and reported to appropriate authority. Intervenes directly only in situations which require minimal action to safeguard property or persons. Duties re-

GUARD—Continued

quire minimal training. Commonly, the guard is not required to demonstrate physical fitness. May be armed, but generally is not required to demonstrate proficiency in the use of firearms or special weapons.

JANITOR, PORTER, OR CLEANER

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

# Service Contract Act Surveys

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

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

Fayetteville, N.C.  
Fort Lauderdale—Hollywood and West Palm Beach—Boca Raton, Fla.  
Fort Smith, Ark.—Okla.  
Fort Wayne, Ind.  
Gadsden and Anniston, Ala.  
Goldsboro, N.C.  
Grand Island—Hastings, Nebr.  
Guam, Territory of  
Harrisburg—Lebanon, Pa.  
Knoxville, Tenn.  
La Crosse—Sparta, Wis.  
Laredo, Tex.  
Las Vegas—Tonopah, Nev.  
Lexington—Fayette, Ky.  
Lima, Ohio  
Little Rock—North Little Rock, Ark.  
Lorain—Elyria, Ohio  
Lower Eastern Shore, Md.—Va.—Del.  
Macon, Ga.  
Madison, Wis.  
Maine (statewide)  
Mansfield, Ohio  
McAllen—Pharr—Edinburg and Brownsville—Harlingen—San Benito, Tex.  
Meridian, Miss.  
Middlesex, Monmouth, and Ocean Counties, N.J.  
Mobile—Pensacola—Panama City, Ala.—Fla.  
Montana (statewide)  
Nashville—Davidson, Tenn.  
New Bern—Jacksonville, N.C.  
New Hampshire (statewide)  
North Dakota (statewide)  
Northern New York  
Northwest Texas  
Orlando, Fla.  
Oxnard—Simi Valley—Ventura, Calif.  
Peoria, Ill.  
Phoenix, Ariz.  
Pine Bluff, Ark.  
Pueblo, Colo.  
Puerto Rico  
Raleigh—Durham, N.C.  
Reno, Nev.

Riverside—San Bernardino—Ontario, Calif.  
Salina, Kans.  
Salinas—Seaside—Monterey, Calif.  
Sandusky, Ohio  
Santa Barbara—Santa Maria—Lompoc, Calif.  
Savannah, Ga.  
Selma, Ala.  
Sherman—Denison, Tex.  
Shreveport, La.  
South Dakota (statewide)  
Southeastern Massachusetts  
Southern Idaho  
Southwest Virginia  
Spokane, Wash.  
Springfield, Ill.  
Stockton, Calif.  
Tacoma, Wash.  
Tampa—St. Petersburg, Fla.  
Topeka, Kans.  
Tucson—Douglas, Ariz.  
Tulsa, Okla.  
Upper Peninsula, Mich.  
Vallejo—Fairfield—Napa, Calif.  
Vermont (statewide)  
Virgin Islands of the U.S.  
Waco and Killeen—Temple, Tex.  
Waterloo—Cedar Falls, Iowa  
West Virginia (statewide)  
Western and Northern Massachusetts  
Wichita Falls—Lawton—Altus, Tex.—Okla.  
Yakima—Richland—Kennewick—Pendleton, Wash.—Oreg.

## ALSO AVAILABLE—

An annual report on salaries for accountants, auditors, chief accountants, attorneys, job analysts, directors of personnel, buyers, chemists, engineers, engineering technicians, drafters, and clerical employees is available. Order as BLS Bulletin 2004, National Survey of Professional, Administrative, Technical and Clerical Pay, March 1978, \$2.40 a copy, from any of the BLS regional sales offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

# Area Wage Surveys

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

Area	Bulletin number and price*
Akron, Ohio, Dec. 1978	2025-63, \$ 1.00
Albany-Schenectady-Troy, N.Y., Sept. 1979	2050-46, \$ 1.50
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1979	2050-48, \$ 1.50
Atlanta, Ga., May 1979	2050-20, \$ 1.30
Baltimore, Md., Aug. 1979	2050-42, \$ 1.75
Billings, Mont., July 1979	2050-43, \$ 1.50
Birmingham, Ala., Mar. 1978	2025-15, 80 cents
Boston, Mass., Aug. 1978 <sup>1</sup>	2025-43, \$ 1.50
Buffalo, N.Y., Oct. 1978 <sup>1</sup>	2025-71, \$ 1.30
Canton, Ohio, May 1978	2025-22, 70 cents
Chattanooga, Tenn.-Ga., Sept. 1979	2050-39, \$ 1.50
Chicago, Ill., May 1979	2050-21, \$ 1.75
Cincinnati, Ohio-Ky.-Ind., July 1979 <sup>1</sup>	2050-28, \$ 2.00
Cleveland, Ohio, Sept. 1979	2050-47, \$ 1.75
Columbus, Ohio, Oct. 1978 <sup>1</sup>	2025-59, \$ 1.50
Corpus Christi, Tex., July 1979 <sup>1</sup>	2050-33, \$ 1.75
Dallas-Fort Worth, Tex., Oct. 1978 <sup>1</sup>	2025-52, \$ 1.50
Davenport-Rock Island-Moline, Iowa-Ill., Feb. 1979	2050-10, \$ 1.00
Dayton, Ohio, Dec. 1978	2025-66, \$ 1.00
Daytona Beach, Fla., Aug. 1979 <sup>1</sup>	2050-41, \$ 1.50
Denver-Boulder, Colo., Dec. 1978	2025-68, \$ 1.20
Detroit, Mich., Mar. 1979 <sup>1</sup>	2050-7, \$ 1.50
Fresno, Calif., June 1979	2050-25, \$ 1.50
Gainesville, Fla., Sept. 1979	2050-45, \$ 1.50
Gary-Hammond-East Chicago, Ind., Oct. 1979 <sup>1</sup>	(To be surveyed)
Green Bay, Wis., July 1979	2050-31, \$ 1.50
Greensboro-Winston-Salem-High Point, N.C., Aug. 1978	2025-46, \$ 1.00
Greenville-Spartanburg, S.C., June 1979 <sup>1</sup>	2050-29, \$ 1.75
Hartford, Conn., Mar. 1979	2050-12, \$ 1.10
Houston, Tex., Apr. 1979	2050-15, \$ 1.30
Huntsville, Ala., Feb. 1979	2050-3, \$ 1.00
Indianapolis, Ind., Oct. 1978 <sup>1</sup>	2025-57, \$ 1.50
Jackson, Miss., Jan. 1979 <sup>1</sup>	2050-9, \$ 1.20
Jacksonville, Fla., Dec. 1978	2025-67, \$ 1.00
Kansas City, Mo.-Kans., Sept. 1978	2025-53, \$ 1.30
Los Angeles-Long Beach, Calif., Oct. 1978 <sup>1</sup>	2025-61, \$ 1.50
Louisville, Ky.-Ind., Nov. 1978	2025-69, \$ 1.00
Memphis, Tenn.-Ark.-Miss., Nov. 1978	2025-62, \$ 1.00

Area	Bulletin number and price*
Miami, Fla., Oct. 1978 <sup>1</sup>	2025-60, \$ 1.30
Milwaukee, Wis., Apr. 1979	2050-8, \$ 1.30
Minneapolis-St. Paul, Minn.-Wis., Jan. 1979	2050-1, \$ 1.30
Nassau-Suffolk, N.Y., June 1979	2050-36, \$ 1.75
Newark, N.J., Jan. 1979	2050-5, \$ 1.30
New Orleans, La., Jan. 1979 <sup>1</sup>	2050-2, \$ 1.30
New York, N.Y.-N.J., May 1979	2050-30, \$ 1.75
Norfolk-Virginia Beach-Portsmouth, Va.-N.C., May 1979 <sup>1</sup>	2050-22, \$ 1.75
Norfolk-Virginia Beach-Portsmouth and Newport News-Hampton, Va.-N.C., May 1978	2025-21, 80 cents
Northeast Pennsylvania, Aug. 1979 <sup>1</sup>	2050-32, \$ 1.75
Oklahoma City, Okla., Aug. 1979	2050-37, \$ 1.50
Omaha, Nebr.-Iowa, Oct. 1978	2025-56, \$ 1.00
Paterson-Clifton-Passaic, N.J., June 1979	2050-26, \$ 1.50
Philadelphia, Pa.-N.J., Nov. 1978	2025-54, \$ 1.30
Pittsburgh, Pa., Jan. 1979 <sup>1</sup>	2050-11, \$ 1.50
Portland, Maine, Dec. 1978 <sup>1</sup>	2025-70, \$ 1.20
Portland, Oreg.-Wash., May 1979	2050-27, \$ 1.75
Poughkeepsie, N.Y., June 1979	2050-34, \$ 1.50
Poughkeepsie-Kingston-Newburgh, N.Y., June 1979	2050-35, \$ 1.50
Providence-Warwick-Pawtucket, R.I.-Mass., June 1979 <sup>1</sup>	2050-38, \$ 1.75
Richmond, Va., June 1979	2050-24, \$ 1.50
St. Louis, Mo.-Ill., Mar. 1979 <sup>1</sup>	2050-13, \$ 1.50
Sacramento, Calif., Dec. 1978	2025-75, \$ 1.00
Saginaw, Mich., Nov. 1978	2025-64, \$ 1.00
Salt Lake City-Ogden, Utah, Nov. 1978 <sup>1</sup>	2025-72, \$ 1.30
San Antonio, Tex., May 1979	2050-17, \$ 1.00
San Diego, Calif., Nov. 1978	2025-73, \$ 1.00
San Francisco-Oakland, Calif., Mar. 1979	2050-14, \$ 1.20
San Jose, Calif., Mar. 1979	2050-19, \$ 1.10
Seattle-Everett, Wash., Dec. 1978	2025-74, \$ 1.00
South Bend, Ind., Aug. 1979 <sup>1</sup>	2050-44, \$ 1.75
Toledo, Ohio-Mich., May 1979	2050-16, \$ 1.10
Trenton, N.J., Sept. 1979	2050-40, \$ 1.50
Utica-Rome, N.Y., July 1978	2025-34, \$ 1.00
Washington, D.C.-Md.-Va., Mar. 1979	2050-4, \$ 1.20
Wichita, Kans., Apr. 1979	2050-18, \$ 1.00
Worcester, Mass., Apr. 1979	2050-23, \$ 1.50
York, Pa., Feb. 1979	2050-6, \$ 1.00

\* Prices are determined by the Government Printing Office and are subject to change.

<sup>1</sup> Data on establishment practices and supplementary wage provisions are also presented.

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