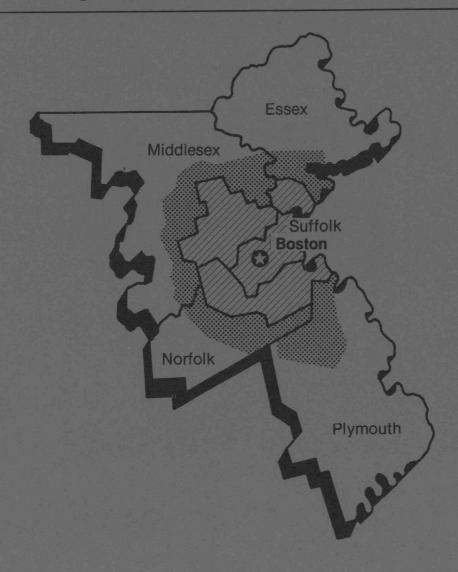
## Area Wage Survey

# Boston, Massachusetts, Metropolitan Area August 1981



U.S. Department of Labor Bureau of Labor Statistics

Bulletin 3010-48



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## **Preface**

This bulletin provides results of an August 1981 survey of occupational earnings and supplementary wage benefits in the Boston, Mass., 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 Boston, Mass., under the general direction of Gordon E. Bowen, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

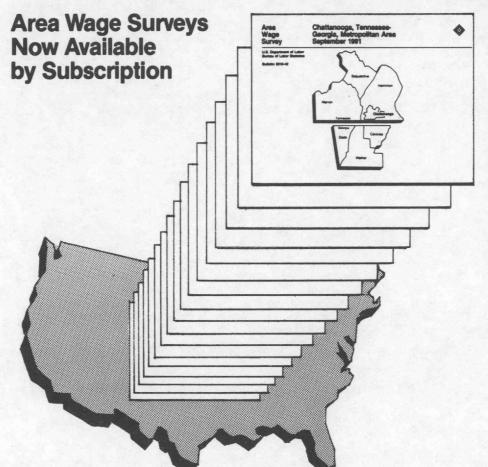
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### Note:

Reports on occupational earnings and supplementary wage provisions in the Boston area are available for the banking (February 1980), laundry and dry cleaning (August 1981), life insurance (February 1980), machinery manufacturing (January 1981), and savings and loan (February 1980) industries. Also available are listings of union wage rates for building trades, printing trades, local-transit operating employees, local truckdrivers and helpers, and grocery store employees. A report on occupational earnings and supplementary benefits for municipal government workers is available for the city of Boston. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

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## Area Wage Survey

# Boston, Massachusetts, Metropolitan Area August 1981



U.S. Department of Labor Raymond J. Donovan, Secretary

Bureau of Labor Statistics Janet L. Norwood, Commissioner

November 1981

**Bulletin 3010-48** 

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### Introduction

This area is 1 of 71 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits. (See list of areas on inside back cover.) In each area, earnings data for selected occupations (A-series tables) are collected annually. Information on establishment practices and supplementary wage benefits (B-series tables) is obtained every third year.

Each year after all individual area wage surveys have been completed, two summary reports 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. Where possible, occupations with related duties (e.g. accounting clerks and payroll clerks) are clustered to facilitate comparison. The occupations are defined in appendix B. For the 31 largest survey areas, tables A-12 through A-17 provide similar data for establishments employing 500 workers or more.

Beginning in 1981, multilevel jobs are designated numerically instead of alphabetically. A job conversion list is provided in appendix C.

Table A-7 provides indexes and percent changes in average hourly earnings for office clerical workers, electronic data processing workers, industrial

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

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

#### **B-series tables**

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

### **Appendixes**

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

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

Appendix C is an alphabetic to numeric conversion list for all multilevel jobs in the survey.

Table A-1. Weekly earnings of office workers in Boston, Mass., August 1981

Manufacturing		Number	Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ing strai	ght-time	weekly	earning	s (in dol	lars) of					1181	
Manufacturing		of	hours <sup>1</sup> (stand-	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	and under	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	and
Nomanufacturing 4.600 37.5 286.50 290.00 250.00 980.0 10 88 90 90 20 47.5 511 758 562 489 346 346 282 227 106 114 77 39 2 Transportation and utilities.  2877 37.0 216.00 215.00 2	Secretaries	9,172	38.5	282.00	277.00	241.00- 319.00				10	97	99	106	296	625	927	1309	1329	1012	1078	832	609	360	217	128	100	3
Transportation and utilities	Manufacturing	4,552	39.5	296.00	293.00	258.50- 326.00	-	-	-	-	9	9	17	16	150	416	551	737	544	730	550	337	254	103	51	64	14
Secretarions	Nonmanufacturing	4,620	37.5	268.50	260.00	225.00- 306.50	-	-	-	10	88	90	89	280	475	511	758	592	468	348	282	272	106	114	77	36	24
Manufacturing							-	-	-	-	-	-	-	-	-	17	20		5	37	33	40	10	41	27	22	6
Manufacturing	Secretaries I	877	37.0	216.00	215.50	191.00- 240.00	-		-		72	61	59	117	179	165	152	42	30		-	_	-	-	_	-	AL T
Nonmanificturing		227	39.5	230.00	230.00	215.50- 241.00	-	-	-	-	-	- 2	6	5	54	101	43	15	3	-	-		-	-	-	-	
Manufacturing   1,222   39,5   27,50   24,50   27,50   24,50   24,50   27,50   24,50   24,50   27,50   24,50							-	55	-	-	72	61	53	112					27	-	-	-	-	-	-	7 -	
Manufacturing   1,222   39,5   27,50   24,50   27,50   24,50   24,50   27,50   24,50   24,50   27,50   24,50	Secretaries II	2.680	38.5	258.50	255.00	230.00- 285.00			-	10	15	24	23	85	259	479	539	493	292	329	97	33	1	1			
Nonmanufacturing		1,222					-	_	-	_	_	_		3	44	152	221		148	266	68	4	_		-	-	
Transportation and utilities							-		-	10	15	24		82								29	1	1	-	_	
Secretaries III											-			_									1	- 1		_	
Manufacturing   1,23   39,5   295.50   293.00   265.00   280.00   240.00   215.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00   270.00   280.00	Transportation and utilities		40.0	312.00	324.50	307.00- 340.30		100			144		v 1			13				02	20	20					
Nommunifacturing   1.223   38.0   28.05   278.00   248.00   391.00   402.00     - 5   15   70   74   88   198   182   171   134   138   65   26   22   20   15   Transportation and utilities   38.0   38.00   38.							-	-	-					70												19	5
Secretaries IV							-	-	-	-	9			-												4	5
Secretaries IV   1,807   38.5   325.00   334.50   288.00   359.00     14   42   21   127   153   120   197   168   366   206   99   34   54   35   35   35   305.00   300.							-	-	-	-	-	5	15	70	74	88			171		138						-
Manufacturing	Transportation and utilities	69	39.5	351.00	358.50	311.00- 402.00	-	-		-	-	. 5	-	-	-	-	15	1	- No	2	7	10	7	7	11	9	- 7
Manufacturing	Secretaries IV	1,607	38.5	325.00	334.50	288.00- 359.00	_	_	- 1			_		14	42	21	127	153	120	197	168	366	206	99	34	54	6
Nommarufacturing							-	_	-	_	_	_		-	-	-	-							42	13	37	1
Transportation and utilities							-	-	-		0 82	100	_	14	42	21	127									17	5
Manufacturing							-	-	-	-	-	- 100	-	-	-			-	1		-	1					2
Manufacturing	Secretaries V	483	37.5	348.00	345.50	294.00- 399.50		3-00	1	-		1		_	13	6	2	71	32	70	38	47	51	33	66	27	27
Nonmanufacturing 376 37.5 331.50 317.00 283.00 374.00 13 6 2 71 32 70 34 37 27 25 36 4 1 energy appers 287.00 33.00 30.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 283.00 357.00 322.00 357.00 1 1 2 4 34 12 20 9 5 3 4 31 3 1 1 1 2 4 34 12 20 9 5 3 4 31 3 1 1 1 2 2 4 34 12 20 9 5 3 4 31 3 1 1 1 2 2 4 34 12 20 9 5 3 4 31 3 1 1 1 2 2 4 34 12 20 9 5 3 4 31 3 1 1 1 2 2 2 5 5 3 4 3 1 3 1 1 1 2 2 2 5 5 3 4 3 1 3 1 1 1 2 2 2 5 5 3 4 3 1 3 1 1 1 1 2 2 2 5 5 3 1 4 31 3 1 1 1 1 2 1 2 1 2 2 1 5 3 3 1 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1		107		406.00	403.00	378.00- 433.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10	24	8	30	23	8
Normanufacturing				331.50	317.00	283.00- 374.00	-	-	-	-	-	-	-		13	6	2	71	32	70	34	37	27	25	36	4	19
Nommanufacturing	Stenographers	267	39.5	280.00	304.00	235.00- 308.00				-	1	1	2	4	36	23	36	12	6	107	4	31	3	1			
Transportation and utilities							-	-	_	-	1	1	2	4					5		4	31	3	1		-	
Nommanufacturing							-	-	-	-	-	-	- 7	-	-	1					4		3	1	-	-	-
Nommanufacturing	Stenographers I	107	39.0	268 50	246.00	210.00- 357.00					1	1	1		30	15	17	5		2	4	30		1	7		
Manufacturing         668         39.5         205.50         198.00         180.00 - 220.00         -         -         9         10         53         70         83         119         164         71         29         12         8         39         -         -         -         1         -         -         -         -         9         10         53         70         83         119         164         71         29         12         8         39         -         -         -         1         -         -         -         1         -         -         -         1         -         -         -         1         -							-	-	-	-	1	1	1	-			1		-		4		-	1	-	-	-
Manufacturing         668         39.5         205.50         198.00         180.00 - 220.00         -         -         9         10         53         70         83         119         164         71         29         12         8         39         -         -         -         1         -         -         -         -         9         10         53         70         83         119         164         71         29         12         8         39         -         -         -         1         -         -         -         1         -         -         -         1         -         -         -         1         -	Tyniete	1 982	38.0	202.00	197 50	180 00- 218 00		11	65	48	105	168	389	313	425	277	80	17	12	39		30		3			9
Nonmanufacturing								- 1						90.2576								-		1			
Transportation and utilities							188	11												-		30	7	2			
Manufacturing         391         40.0         190.50         185.50         177.00- 205.00         -         -         9         10         53         67         72         51         99         10         11         1         -         8         - <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td></td><td>1</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td></td><td>-</td><td>-</td><td></td></th<>							-	-	-	-	-	-	-	1		1			-	-	-		-		-	-	
Manufacturing         391         40.0         190.50         185.50         177.00- 205.00         -         -         9         10         53         67         72         51         99         10         11         1         -         8         - <th< td=""><td>Tuniete I</td><td>1 496</td><td>38.0</td><td>191 50</td><td>189 50</td><td>179 00- 205 00</td><td></td><td>11</td><td>65</td><td>48</td><td>100</td><td>155</td><td>373</td><td>239</td><td>334</td><td>138</td><td>23</td><td>9</td><td></td><td>R</td><td></td><td></td><td>Live I</td><td></td><td>1</td><td>-110</td><td>3</td></th<>	Tuniete I	1 496	38.0	191 50	189 50	179 00- 205 00		11	65	48	100	155	373	239	334	138	23	9		R			Live I		1	-110	3
Nonmanufacturing																				-		W 1830		70			Marin .
Manufacturing							-	11												-	-	-		-		-	
Manufacturing	Tuninto II	496	30.0	235.00	228 00	200 00- 247 00		15			5	12	16	74	01	130	57	15	19	31		30		2			
Nonmanufacturing 209 38.0 247.00 239.50 222.00 248.50 5 10 5 6 26 78 39 4 4 30 - 2 17 ransportation and utilities 49 38.5 311.50 341.50 248.50 352.50 6 - 11 30 - 2 10 etclerks 208 39.0 195.00 196.50 175.00 216.50 9 - 35 11 27 46 51 19 9 1											5											30		-			
Transportation and utilities							123	S . 126	1.5		5								4	01		30					
Manufacturing       208       39.0       195.00       196.50       175.00- 216.50       -       -       9       -       35       11       27       46       51       19       9       -       -       1       -       <							1		1	_	-	-	-	-		-		-	-	-	-		-			-	0
Manufacturing       208       39.0       195.00       196.50       175.00- 216.50       -       -       9       -       35       11       27       46       51       19       9       -       -       1       -       <	The shades	1 200	27.5	169.00	160.00	150.00 184.50	10	95	279	260	261	60	60	92	170	30	0			4	1			1			
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File clerks I							10	85		268							9	0 1		-			1 2	_			_
Manufacturing 81 38.5 191.00 196.50 164.00- 218.50 25 1 8 23 24														17.91				10	- 200		- 39	4		The h	JAN.		
							10	35	132	160		9				5	-	3	-	-	-	1.5	-	-	-	-	-
	Nonmanufacturing	490	37.5	157.00			10	35	132	160	81	8	23	10	26	5			177			A 1915				50	2 83

Table A-1. Weekly earnings of office workers in Boston, Mass., August 1981 —Continued

	Number	Average weekly		Weekly ea (in dolla				1			Nu	mber of	worker	s receivi	ng strai	ght-time	weekly	earning	s (in do	lars) of	_					
Occupation and industry division	of workers	hours¹ (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	120 and under 130	130 - 140	140 - 150	150 - 160	160 - 170	170 - 180	180 - 190	190 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 430	430 - 460	460 and over
File clerks II	482	37.0				-	20	61	78	131	49	27	46	45	24	_		_	1	-	-	-	-	-	_	_
Manufacturing Nonmanufacturing	96 386	39.5 36.5				-	20	9 52	78	10 121	10 39	19	14 32	24 21	9 15	-	_	-	1 -	-	-	-	-	-	-	-
File clerks III	127	36.0	209.00	210.00	200.00- 215.00					4	1	. 11	13	79	10	9										
Nonmanufacturing	96	35.5	203.50			-	-	-	-	4	j	11	4	76	-	-	-	-	-	-	-	-	-			-
Messengers	526	37.5	176.50			- 6 -	2	53	107	103	63	91	51	18	6	8	1	23	_	-	-	-	-	-	-	-
Manufacturing	82	38.5	201.50			-	-	4	5	16	10	6	12	8	2		-	12	-	-	-	-	-	-	-	-
Nonmanufacturing	444	37.5	171.50	165.00	155.00- 184.50	-	2	49	102	87	53	85	39	10	4	1	1	11	-	-	-	-	-	-		
Switchboard operators	635	39.0	225.00	218.00	181.00- 252.50	-	_	-	8	9	63	137	41	73	84	66	52	48	12	20	21	1	-	-	-	-
Manufacturing	154	39.5	257.00			-	-	-	-	-	-	7	3	11	46	17		15	12	15		-	-	-	-	-
Nonmanufacturing Transportation and utilities	481 101	38.5 39.5	215.00 263.50			-	-	_	8 -	9	63 30	130	38	62	38	49	24 12	33 28	1	5	21 21	1	-	1	-	
Switchboard operator-																						-		la diese		
receptionists	886	38.0	203.50	196.00	175.00- 230.50	-	_	-	56	116	60	89	194	58	144	99	57	7	6	-	-	-	-	-	-	-
Manufacturing	326	39.0	212.50	210.00	184.00- 238.00	-	-	-	18		13	37	60	22	95	34		6	6	-	-	-	2	-	-	-
Nonmanufacturing	560	38.0	198.50	190.00	170.00- 225.00	-	-	-	38	93	47	52	134	36	49	65	45	1	-	-	-	16-		-	-	-
Order clerks	676	39.0	213.50			-	-	-	32	84	-	118	113	47	69	24	150	8	31	_	-	-	-	-		-
Manufacturing	239	39.5	221.00			-	-	-	-	18	-	10	88	46	14	24		8	31	-	-	-	-	-	. 1512	-
Nonmanufacturing	437	39.0	210.00	190.00	180.00- 260.00	-	-	-	32	66	-	108	25	1	55		150	Lane.		-	-	-	-		-	-
Order clerks I	434	39.0	Control of the Contro			-	-	70-	32	84	-	118	81	21	66	21	-	3	8	-	-	-	-	-		-
Manufacturing	147 287	39.0 38.5	210.00 183.50			-			32	18 66	1 2	108	56 25	20	11 55	21	-	3 -	8		-	1		_	_	
	0.040	07.5	007.50	045.00	404 50 355 50	00	045	040		04.4	204	200		4050	004	507	000	407	450	440	404		40	70		
Accounting clerks  Manufacturing	6,219 1,395	37.5 39.5				98	215	310	244	214 18	324 45	390 73	443 90	1053 317	861 273	567 188	363 95	167	153 80	146 100		29 21	40 20	78 13	27 11	3
Manufacturing	4,824	37.0	223.00			98	215	310	244	196	279	317	353	736	588	379		133	73			8	20	65	16	3
Accounting clerks I	1,120	37.0	162.00	158.00	135.00- 185.00	98	215	182	93	94	79	125	116	66	35	13	4				1.5					
Manufacturing	95	39.5				-		-	-	_	35	27	4	25	4	_		_	_	-	-	-	_	-		-
Nonmanufacturing	1,025	36.5	159.50	151.00	133.00- 180.00	98	215	182	93	94	44	98	112	41	31	13	4	-	-	-	-	-	-	-	-	-
Accounting clerks II	2,322	38.0	212.00	201.50	175.00- 234.50	-	_	128	151	120	219	219	249	384	325	189		43	27	10	132	1	-	1000	-	-
Manufacturing	566	39.5				-	-	-	-	18	10	46	76	163	120	67		9	25	5		-	-	-	-	-
Nonmanufacturing	1,756	37.5	208.50	195.00	170.00- 231.00	-		128	151	102	209	173	173	221	205	122	98	34	2	5	132	1	-	-		
Accounting clerks III	2,337	37.5				-	-	-	-	_	8	26	60	553	482	346		106	100	95		17	17	-	-	
Manufacturing	680	39.5				-	-	-	-	-	-	-	10	129	149	115		22	55	93		17	17	-	-	-
Nonmanufacturing	1,657	37.0	259.00	237.00	215.00- 288.00			-			8	26	50	424	333	231	125	84	45	2	329	-			The state of	
Accounting clerks IV		39.0				-	-	-	-	-	-	-	-	-	1	11	43	4	22	40		9	3	31	11	3
Manufacturing	54 135	39.0 38.5	352.00 323.00			-	-	-	-			-	-		-	6	12	3	22	38		5	3	13	11	3
Nonmanufacturing	135	30.5	323.00	324.00	270.00- 345.50											9	31		22	36	11	3	7 1 2 5	18		3
Payroll clerks	799	38.5				7	21	46	7	21	20	26	47	145	156	71 30	93	9	68	27		3	1	5	-	3
Manufacturing	356 443	39.5 38.0				7	21	18 28	7	21	10 10	16 10	22 25		47 109	41		5 4	44 24	12		2	-	5		3
Nonmanufacturing Transportation and utilities	26	40.0	311.00			-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	1	1	1	5	-	*3
Key entry operators	2,222	38.0	214.00	200.00	176.00- 240.00		9	38	99	234	236	303	168	261	297	196	116	74	86	19	76	5		1	2	2
Manufacturing	540	39.5				-	9	-	-	25	15	26	42	66	108	84	55	27	64	5	4	5	_	1	2	
Nonmanufacturing	1,682	38.0				-	-	38	99	209	221	277	126	195	189	112		47	22	14			-	-	-	-
Transportation and utilities	131	38.5	320.00	341.50	305.00- 341.50	-	-	-	-	-	-	-	1	-	3	3	6	14	18	14	72	-	-	-	-	-

Table A-1. Weekly earnings of office workers in Boston, Mass., August 1981 —Continued

		Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	ıs (in dol	lars) of						
Occupation and industry division	Number of workers	weekly hours <sup>1</sup> (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	120 and under 130	130 - 140	140 - 150	150 - 160	160 - 170	170 - 180	180 - 190	190 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 430	430 - 460	460 and over
Key entry operators I	1,537	38.0	198.50	185.00	170.00- 215.00		9	38	99	230	221	275	122	188	171			11	22	10	70	-	-	-	5.8	
Manufacturing	211	39.5	206.00	208.00	180.50- 225.00	-	9	-	-	25	15		10	37	66	13	2	-	8	-	-	-	-	-	-	
Nonmanufacturing	1,326	37.5	197.50	183.50	169.00- 209.00	-	-	38	99	205	206	249	112	151	105	49	7	11	14	10	70	-	-	-	-	
Key entry operators II	673	39.0	249.00	245.50	220.00- 277.00	-		_	_	4	15	28	46	73	120			61		9	6	5	_	1	2	2
Manufacturing	329	39.5	262.00				-	-	-	-	-	-	32	29		71		27		5	4	5	-	1	2	2
Nonmanufacturing	344	38.5	236.00	236.00	211.00- 266.00	-	-	-	-	4	15	28	14	44	78	61	54	34	6	4	2	-	-	-	-	

<sup>\*</sup> All workers were at \$460.00 to \$490.00. Also see footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Boston, Mass., August 1981

division	Number	Average		(in dolla	ars)1						Nui	mber of	workers	receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of	_					
	of workers	hours <sup>1</sup> (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	150 and under 170	170 - 190	190 - 210	210 - 230	230 - 250	250 - 270	270 - 290	290 - 310	310 - 330	330 - 360	360 - 390	390 - 420	420 - 450	450 - 480	480 - 510	510 - 540	540 - 570	570 - 610	610 - 650	650 - 690	690 and over
Computer systems analysts	W 15															5.50										
(business)	2,357	38.5	465.00	464.50		-	-	-	-	13	17	63	118	83	135	230	167	218	202	266	216	218	212	112	67	20
Manufacturing	594 1,763	39.5 38.0	505.00 451.50	512.00 441.50	454.00- 568.50 368.50- 532.00	=			_	13	17	62	110	10 73	20 115	26 204	18 149	56 162	50 152	107 159	73 143	89 129	100 112	14 98	19 48	3
Computer systems analysts										1.																
(business) I	430	38.5	324.50	317.50	293.00- 347.00	-	-	-	_	13	17	63	117	51	80	48	24	17	44							
Manufacturing	67	39.5	358.50	347.00	325.50- 376.00	-	-	-	-	10000		1	8	10	20	13	5	10				1000	7 - D	and of		-
Nonmanufacturing	363	38.5	318.50	307.00	288.50- 344.00	-	-	-	-	13	17	62	109	41	60	35	19	7	-	-	-	-	-	-		_
Computer systems analysts																										
(business) II	974	38.0	451.00	438.00	387.50- 499.00	-	-	-	-	-	-	-	1	32	53	181	123	138	114	122	62	56	37	51	4	-
Manufacturing	171	39.5	468.50	476.50	435.00- 493.50	-	-	-	-	-	-	-	-	-	-	13	12	40	25	56	6	18	1	_	-	-
Nonmanufacturing	803	37.5	447.00	429.00	384.00- 509.00	-	-	-	-	-	-	-	1	32	53	168	111	98	89	66	56	38	36	51	4	-
Computer systems analysts (business) III	953	38.5	E40 E0	F40.00	404.00 504.50													1-1-								
Manufacturing	356	39.5	542.50	540.00	494.00- 581.50	-	-	-	-	-	-	-	-	-	2	1	20	63	88	144	154	162	175	61	63	20
Nonmanufacturing	597	38.0	550.00 537.50	554.00 532.00	517.00- 577.00 480.00- 595.00	-	_		1	-	-	_	-	-	- 2	1	19	6 57	25 63	51 93	67 87	71 91	99 76	14 47	19 44	
Computer programmers (business)	2,294	38.0	373.00	369.00	323.50- 424.50				28	61	76	175	100	454	405	000										
Manufacturing	837	39.0	401.00	386.00	345.50- 459.50				20	01	10	39	160	151	405 185	386	193	275	197	85	84	11	6	1	-	-
Nonmanufacturing	1,457	37.5	356.50	353.50	298.00- 404.50	- 25		1	28	61	76	136	140	102	220	138 248	79 114	95 180	129	23 62	67 17	8	4 2	1	-	- D
Computer programmers																								200		
(business) I	534	37.5	287.50	280.00	269.00- 311.00	_	-	-	28	61	76	160	69	46	72	14	5	3	_							
Manufacturing	87 447	39.0 37.0	325.50 280.00	335.00 275.00	279.50- 352.50 259.50- 303.50	-	-	-	28	61	76	33 127	6 63	3 43	28 44	9	5	3	-	- 1	-	-	-	=		-
Computer programmers						34-1																				
(business) II	1,032	38.0	365.00	357.00	336.00- 385.00	_	_					15	91	105	322	258	104	87	27		8					1
Manufacturing	465	39.0	379.00	366.50	336.00- 414.50	_						6	14	46	157	64	65	65	37 35	4	8		-	-	-	-
Nonmanufacturing	567	37.5	353.50	355.00	326.50- 375.00	- T	-	-	-	-	-	9	77	59	165	194	39	22	2	-	-	- 1				_
Computer programmers																										1
(business) III	728	38.0	446.50	446.00	403.00- 478.00	-	-	-	-	-	-	-	-		11	114	84	185	160	81	76	10	6	1	_	_
Manufacturing	285 443	38.5 37.5	460.00 438.00	462.50 435.50	414.00- 510.00 402.00- 469.00		_	-		-	-	_	-	-	11	65 49	9 75	27 158	94 66	19 62	59 17	7 3	4	1	-	-
	2,092	38.5	272.50			4-	0.	44-	000		-								00	02	"	١	2			
Manufacturing	705	39.5	297.00	263.00 285.00	225.00- 312.00 250.00- 338.00	45	94	117	320	331	261	172	215	114	210	125	60	15	5	4	-	4	-	-	-	-
Nonmanufacturing	1,387	38.0	260.00	246.00	220.00- 336.00	45	70	113	55 265	86 245	124	72	84	57	64	63	54	12	-	2	-	4	-	-	-	-
Transportation and utilities	117	39.0	302.00	359.50	215.00- 359.50	15	-	1	30	245	137	100	131	57	146 55	62	6	3	5	2 2			-	_	-	-
Computer operators I	932	38.5	232.50	225.00	210.00- 249.00	45	94	93	268	216	99	40	15	7	55		19.								1	
Manufacturing	195	39.5	242.50	248.00	224.50- 264.00	-	24	4	50	26	54	25	4	6	2				8 8	3			-		-	-
Nonmanufacturing	737	38.0	229.50	220.50	205.00- 242.00	45	70	89	218	190	45	15	11	1	53	-	-	-	_	-	-	-	-	-	-	-
Computer operators II	763	38.5	283.50	280.00	252.50- 306.00	_	_	24	52	111	149	94	159	67	66	30	2		5			4				
Manufacturing	343	39.0	294.00	291.00	257.50- 317.50	-	-	-	5	60	70	34	69	43	29	28	1	-	-	_	_	4				
Nonmanufacturing	420	38.0	274.50	275.00	236.00- 304.50	-	-	24	47	51	79	60	90	24	37	2	1	-	5	-	-	-	-	-	-	-
Computer operators III	332	39.0	358.00	361.00	334.50- 378.00	-	-	-	-	-	1	14	16	40	89	95	58	15	-	4	_	-				
Manufacturing	167	40.0	367.00	375.00	334.50- 394.00	-	-	-	-	-	-	13	11	8	33	35	53	12	-	2	-	-	-	_	_	-
Nonmanufacturing	165	38.5	348.50	346.00	335.00- 364.00		-	1	-	-	1	1	5	32	56	60	5	3	-	2	-	-	-	-	-	-
Peripheral equipment operators	182	37.0	210.00	193.50	165.00- 242.00	50	37	15	24	17	20	11	-	1	7	-	-	-	-	_	-	-	-	-	_	-

Table A-2. Weekly earnings of professional and technical workers in Boston, Mass., August 1981 —Continued

		Average		Weekly ea							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of			7	1		
Occupation and industry division	Number of workers	weekly hours <sup>1</sup> (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	150 and under 170	170 - 190	190 - 210	210	230 - 250	250 - 270	270 - 290	290 - 310	310 - 330	330 - 360	360 - 390	390 - 420	420 - 450	450 - 480	480 - 510	510 - 540	540 - 570	570 - 610	610 - 650	650 - 690	690 and over
Computer data librarians	152	38.0	222.50	210.00	188.50- 250.00	7	32	37	4	33	- 11	20	- 1	7		-	-	-		-	1		-	-	_	
Manufacturing		38.5	241.50	242.00	199.50- 274.00	-	-	23	-	4	5	15	-	5	-	-	-	-	-	-	-	-	-	-	-	
Nonmanufacturing			213.00		181.00- 234.00	7	32	14	4	29	6	5	1	2	-	-		-	-		-	-	-	-	-	20.
Drafters	2,943	40.0	355.00	354.00	280.00- 422.00	3	3	136	164	126	200	208	211	148			374	260	198	133	125	38		-	-	
Manufacturing	1,608	40.0	339.50			-	-	97	137	86	117	151	109				229	114	86	59	65	9		-	-	1
Nonmanufacturing	1,335	39.5	374.00	367.00	303.50- 440.00	3	3	39	27	40	83	57	102	66	172	157	145	146	112	74	60	29	20	1		
Drafters I	81	39.5	202.50	200.00	190.00- 208.00	3	3	60	10	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-		
Drafters II	498	40.0	244.50	242.50	217.00- 264.00	-	_	76	120	81	101	62	40		10	-	-	-	-	-	-	-	-	-	-	
Manufacturing	297	40.0	230.50				-	65	100	56		23	6		-	-	-	-	-	-	-	-	-	-	-	
Nonmanufacturing	201	40.0	265.50	260.50	247.50- 300.00	-	-	11	20	25	54	39	34	8	10	-		-		84.						
Drafters III	731	40.0	305.50				-	-	34	43		135	123			68	33	18		-	9	-	-	-	-	
Manufacturing			281.50				-	-	28	29		118	70			6		-	-	-	7	-	-	-		
Nonmanufacturing	346	39.5	333.00	340.00	299.00- 360.00				6	14	27	17	53	37	79	62	33	18								
Drafters IV		40.0	379.50				-	-	-	-	-	10	48				211	97	68	10	-	-	-	-	-	
Manufacturing	498	40.0	371.00					-	-		-	10	33			60 71	155	32 65	21 47	10	-	100	-	1		
Nonmanufacturing	362	39.5	390.50	388.00	343.00- 432.50		-						15	21	"	/1	56	00	47	10				100		
Drafters V	773	40.0	462.00	460.00	420.00- 505.00	-	_		-	-	-	-	-	1	9	52	130	145	130	123	125	38	20	-	-	200
Manufacturing		40.0	455.00		418.50- 500.00	-		-	-	-	-	-	-	1	3	28		82	65	59	65	9		-	-	1
Nonmanufacturing	387	40.0	469.00	465.00	420.00- 517.50	-	-	-	-	-	-	-	-	-	6	24	56	63	65	64	60	29	20	-	-	-
Electronics technicians	3,082		417.00				_	-	-	44	84	198	176		334	316		148	58	36	1176	-	-	-	-	
Manufacturing	1,530	40.0	347.50	346.00	304.00- 386.00	-	-	-	-	34	70	172	152	193	266	269	228	113	33	-	-			-	-	
Electronics technicians II	711	40.0	345.00				-	-	-	5	27	67	48			184	16	2	-	36	-	-	-	-	-	1
Manufacturing		40.0	336.00				-	-	-	-	22	61	42	98		137	10	2	-	-	-	-	-	-	-	
Nonmanufacturing	184	40.0	370.50	358.50	330.00- 387.00	-	-	-		5	5	6	6	22	51	47	6	-		36		18	-	-		
Electronics technicians III			470.50				-	- 1-	-	-	-	3	21	34				146	58	-	1176	16-	-	-	-	-
Manufacturing	637	40.0	392.50	397.00	367.00- 417.50	-	- 25	-	-	-	-	3	7	34	99	132	218	111	33	-			-	1	-	
Registered industrial nurses			355.50					-	-	-	9	9	19				22	17	7	1	-	-	-	-	-	
Manufacturing			353.50				-	-	-	1	9	1	15	11	43		17	10	1	1	-			V S	To St.	
Nonmanufacturing	59	38.5	360.00	346.00	329.50- 396.00	-	-	-	-	-	-	8	4	3	16	4	1/	/	-	-	-	-	-	-	-	

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Boston, Mass., August 1981

	Number		erage ean²)		Number		rerage nean²)				verage nean²)
Sex, <sup>a</sup> occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	Number of workers	Weekly hours <sup>1</sup> (stand- ard)	Weekly earnings (in dollars)
Office occupations - men				Typists II	452	38.5	232.50	Key entry operators	1,929	38.0	215.00
men				Manufacturing	277	39.5	226.00	Manufacturing	540	39.5	240.00
File clerks:				Nonmanufacturing	175	37.5	243.00	Nonmanufacturing	1,389	37.5	205.00
				File clerks	1,227	37.5	100.50	Transportation and utilities	130	38.5	321.00
File clerks II	. 52	38.0	200.50	Manufacturing	196	39.0	166.50 195.00				10000
				Nonmanufacturing	1,031	37.0	161.50	Key entry operators I	1,366	38.0	200.00
Messengers	. 325	37.5	172.00	- Tormandidotoring	1,001	37.0	101.50	Manufacturing	211	39.5	206.00
Nonmanufacturing	. 278	37.5	168.50	File clerks I	491	37.5	161.00	Nonmanufacturing	1,155	37.5	199.00
Accounting closure				Manufacturing	80	38.5	190.50	Key entry operators II:			100
Accounting clerks:				Nonmanufacturing	411	37.5	155.50	Manufacturing	329	39.5	262.00
Accounting clerks III	352	37.0	244.00					Handiactaring	323	39.5	202.00
Manufacturing	. 75	39.5	244.00 297.50	File clerks II	430	37.0	168.00	Professional and technical			
Nonmanufacturing	277	36.5	230.00	Manufacturing	86	39.5	188.00	occupations - men			1000
140/ilinariaractaring	211	30.5	230.00	Nonmanufacturing	344	36.5	163.00				7-17-1
Office occupations -				File clerks III				Computer systems analysts	1		
women				Nonmanufacturing	126 96	36.0	209.00	(business)	1,342	38.0	487.50
				Normanuracturing	90	35.5	203.50	Nonmanufacturing	995	38.0	474.50
Secretaries	. 9,104	38.5	282.00	Messengers	183	38.0	184.00	0			
Manufacturing	. 4,551	39.5	296.00	Nonmanufacturing	152	37.5	177.50	Computer systems analysts			Carlotte and
Nonmanufacturing	. 4,553	37.5	268.50		102	07.0	177.50	(business) I:			
Transportation and utilities	. 261	39.5	349.00	Switchboard operators	562	39.0	229.00	Nonmanufacturing	143	38.5	320.00
		1		Manufacturing	144	39.5	259.00	Computer systems analysts			
Secretaries I	. 876	37.0	216.50	Nonmanufacturing	418	38.5	218.50	(business) II	564	38.0	464.00
Manufacturing		39.5	230.00	Transportation and utilities	101	39.5	263.50	Nonmanufacturing	482	37.5	463.50
Nonmanufacturing	. 649	36.0	211.50	Suitable and annual				The state of the s	402	07.5	403.50
Secretaries II	0.070			Switchboard operator-				Computer systems analysts			
Secretaries II		38.5	258.50	receptionists	886	38.0	203.50	(business) III	624	38.5	549.00
Nonmanufacturing		39.5	274.50	Nonmanufacturing	326	39.0	212.50	Nonmanufacturing	370	38.0	548.50
Transportation and utilities		38.0 40.0	245.00 312.50	Normandiacturing	560	38.0	198.50				
rransportation and dulities		40.0	312.50	Order clerks	597	39.0	208.00	Computer programmers (business)	1,225	38.0	379.50
Secretaries III	3.352	39.0	290.00	Manufacturing	186	39.5	206.50	Nonmanufacturing	806	37.5	366.50
Manufacturing		39.5	295.50	Nonmanufacturing	411	39.0	209.00	C			
Nonmanufacturing	1,221	38.0	281.00					Computer programmers (business) I	050	07.0	
Transportation and utilities	69	39.5	351.00	Order clerks I	378	38.5	187.00	Nonmanufacturing	253 230	37.0 37.0	286.00
				Manufacturing	117	39.0	204.00	(40) manuacturing	230	37.0	279.00
Secretaries IV	1,602	38.5	325.00	Nonmanufacturing	261	38.5	179.50	Computer programmers			
Manufacturing		39.5	346.00	Accounting clorks	5.050	07.5		(business) II	583	38.0	374.00
Nonmanufacturing		37.5	306.00	Accounting clerks	5,350 1,242	37.5 39.5	226.50	(business) II	300	37.5	362.50
Transportation and utilities	44	39.5	384.00	Nonmanufacturing	4,108	39.5	241.00 222.00				
				1401111aridiacturing	4,100	37.0	222.00	Computer programmers	0.00		
Secretaries V		37.5	347.50	Accounting clerks I	1.068	36.5	161.50	(business) III	389	38.0	449.00
Manufacturing		38.5	406.00	Manufacturing	90	39.5	189.00	Nonmanufacturing	276	37.5	443.50
Nonmanufacturing	375	37.5	331.00	Nonmanufacturing	978	36.5	158.50	C			
Stenographers	255	39.5	277.00					Computer operators	1,533	38.5	272.50
Nonmanufacturing	118	39.5	277.00 261.00	Accounting clerks II	1,989	38.0	213.00	Manufacturing	502	39.5	306.50
Transportation and utilities		40.0	331.50	Manufacturing	505	39.0	219.50	Nonmanufacturing	1,031	38.0	256.00
Transportation and dunies	42	40.0	331.30	Nonmanufacturing	1,484	37.5	210.50	Computer operators I	652	20 5	204.50
Stenographers I	96	39.0	259.00	Accounting clerks III	1,950	07.5	004.00	Manufacturing	125	38.5 40.0	224.50 248.50
Nonmanufacturing	64	38.5	269.50	Manufacturing	601	37.5 39.5	264.00 258.50	Nonmanufacturing	527	38.0	218.50
				Nonmanufacturing	1,349	39.5	258.50	To the total and	321	30.0	210.00
Typists	1,931	38.0	201.00	romandactumg	1,349	37.0	200.00	Computer operators II	561	38.0	284.00
Manufacturing	665	39.5	205.50	Accounting clerks IV	163	38.5	331.50	Manufacturing	258	39.0	298.50
Nonmanufacturing	1,266	37.0	198.50	Nonmanufacturing	117	38.5	325.50	Nonmanufacturing	303	37.5	271.00
			FE 75-1								
Typists I	1,479	38.0	191.00	Payroll clerks	723	38.5	231.00	Computer operators III	265	39.0	365.00
Manufacturing		40.0	191.00	Manufacturing	337	39.5	241.00	Manufacturing	119	40.0	385.50
Nonmanufacturing	1,091	37.0	191.00	Nonmanufacturing	386	38.0	222.00	Nonmanufacturing	146	38.5	348.00

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Boston, Mass., August 1981 —Continued

			rerage nean²)				verage nean²)		Number		verage nean²)
Sex,* occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>
Drafters	2,686	40.0	360.50	Professional and technical		-		Computer operators II:			
Manufacturing		40.0	343.00	occupations - women		1		Manufacturing	79	39.0	280.00
Nonmanufacturing	1,221	39.5	381.50			The said					
	.,			Computer programmers (business)	919	38.0	361.00	0 - 1 11 11 - 1 - 1	100	00.0	218.00
Drafters I	70	39.5	202.00	Nonmanufacturing		37.5	347.00	Computer data librarians		38.0 38.0	205.50
								Nonmanufacturing	57	38.0	205.50
Drafters II		40.0	240.50	Computer programmers		F FLOW	10 To 10 To 10				
Manufacturing		40.0	229.00	(business) I	281	38.0	288.50	Drafters	243	40.0	294.50
Nonmanufacturing	132	40.0	264.50	Manufacturing	64	38.5	314.50	Manufacturing	129	40.0	297.50
				Nonmanufacturing	217	37.5	280.50	Nonmanufacturing	114	39.5	291.00
Drafters III		39.5	309.50		-	1					
Manufacturing		40.0	284.50	Computer programmers							
Nonmanufacturing	327	39.5	334.50	(business) II:	100			Drafters II	85	40.0	264.50
				Nonmanufacturing	227	37.5	350.00	Nonmanufacturing	69	40.0	266.50
Drafters IV		40.0	381.50				200			-	
Manufacturing		40.0	373.00	Computer programmers				Drafters III	78	40.0	276.00
Nonmanufacturing	346	39.5	392.50	(business) III	300	37.5	439.00			40.0	265.50
Drafters V	760	400	462.50	Nonmanufacturing	167	37.0	429.00	Manufacturing	59	40.0	205.50
		40.0	456.50								
Manufacturing		40.0	469.00	Computer operators:				Drafters IV	60	40.0	358.50
Nonmanufacturing	362	40.0	409.00	Manufacturing	193	39.0	272.00				
Electronics technicians:		1		Computer operators I	248	38.0	248.50	Registered industrial nurses	182	39.5	353.50
Electronics technicians III:				Manufacturing	70	39.0	232.00	Manufacturing		40.0	350.00
	576	39.5	395.00	Nonmanufacturing		38.0	255.00	Nonmanufacturing		38.5	362.00
Manufacturing	3/6	39.5	395.00	Nonmanulactumy	110	00.0	2.00.00	1101IIII alialatatii g	30	00.0	002.00

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Boston, Mass., August 1981

	Nt	H	lourly earn (in dollars								N	umber of	worker	s receiv	ring strai	ight-time	hourly	earning	s (in doll	lars) of	_						
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	Under 6.30	6.30 and under 6.60	6.60 - 6.90	6.90 - 7.20	7.20 - 7.50	7.50 - 7.80	7.80 - 8.10	8.10 - 8.40	8.40 - 8.70	8.70 - 9.00	9.00 - 9.40	9.40 - 9.80	9.80 - 10.20	10.20	10.60	11.00	11.40	11.80 - 12.20	12.20	12.60	13.00	13.40 - 14.20	14.20 - 15.00
Maintenance carpenters	407	9.10	9.14	8.55- 9.61	-	9	-	15	4	10	34	19	46	20	135	25	44	10	23	_	_	6	4	3			_
Manufacturing	257	9.18	9.14	8.67- 9.36	-	-	-	-	-	5	26	16	24	19	118	11	5	6	18	_	-	2	4	3	-	-	-
Nonmanufacturing	150	8.95	9.11	8.00-10.10	-	9	-	15	4	5	8	3	22	1	17	14	39	4	5	-	-	4		-	-	-	-
Maintenance electricians	990	9.95	9.89	9.11-10.77		-	-	6	18	39	2	46	29	67	124	53	282	55	112	73	10			45	29	-	
Manufacturing	749	9.94	9.89	9.11-10.30	_	-	-	- A	18	2	2	39	24	62	111	30	248	53	57	44	2	-		29	28	-	-
Nonmanufacturing	241	9.96	10.03			-	-	6	-	37	-	7	5	5	13			2	55	29	8			16		-	-
Maintenance painters	262	8.33	8.34	6.99- 8.97		31	32	19	9	21	8	14	3	60	14	7	4	22	12	_	-			6		-	10 Y
Manufacturing	114	8.86	8.75	8.34- 8.88	-	-	-	6	1	9	8	9	3	59	1	2	2	8	-	-	-	-		6	-	-	-
Nonmanufacturing	148				-	31	32	13	8	12	-	5	-	1	13	5		14	12	-	-	1		-	-	-	-
Maintenance machinists	533	9.58	9.65	9.15- 9.94		-		14		_	5	3	32	43	110	178	39	23	69	17	-			-		-	-
Manufacturing	533	9.58	9.65	9.15- 9.94	-	-	-	14	-	-	5	3	32	43	110	178	39	23	69	17	-	-		-	-	-	-
Maintenance mechanics			1.5	100				13																1 = 5		-	- 85
(machinery)		9.01		7.80- 9.89	-	36		130	73	5			61	139		22		50	108	83	-	-	. 8	-	5	-	-
Manufacturing	1,074	8.97	8.87	7.56- 9.89	-	35	29	130	71	5	69	26	57	139	70	16	198	50	87	83	-	-		-	-	-	-
Nonmanufacturing	72	9.50	10.03	7.80-10.93	-	1	9	-	2	-	11	1	4	-	-	6	12	-	21	-	-	-		-	5	-	-
Maintenance mechanics			2- 3			1000																	100		OF THE		
(motor vehicles)	527	11.23		9.69-12.91	100 m	-	2	-	-	23	5		24	10		25	-	18	130	-	21	6		125	55	34	-
Manufacturing	90	9.63	9.17	8.70-10.60	-	-	-	-	-	-	5	-	24	6	23	5	-	4	14	-	-	-		9	-	-	-
Nonmanufacturing	437	11.56	11.78	10.70-12.91	-	-	2	-	-	23	-	4	-	4	22	20	-	14	116	-	21	6	3	116	55	34	-
Transportation and utilities	369	11.72	12.91	10.70-12.91	-	-	-	-	-	16	-	1	-	4	22	20	-	14	87	-	-	1		116	55	34	-
Maintenance pipefitters	483	9.94	9.58	9.36- 9.89	-		-	-	2		2	13	14	30	174	39	98	6	23	43	_			- 33	_	-	6
Manufacturing	465	9.99	9.58	9.36- 9.89	-	-	-	-	-	-	-	4	14	30	173	39	98	6	19	43	-			- 33	-	-	6
Maintenance sheet-metal workers	81	9.80	9.89	9.36- 9.89	-	-	_		1	_	-	-	6	6	13	10	33	2	2	6	-				-	2	-
Manufacturing	77	9.85	9.89	9.36- 9.89	-	-	-	-	-	-	-	-	6	6	12	8	33	2	2	6	-	1		-	-	2	-
Millwrights	155	9.10	9.14	9.14- 9.22	-		_	-	3	6	-		16	2	117	_	7	4	_	-	_				-	-	-
Manufacturing	153	9.11	9.14	9.14- 9.22	-	-	-	-	3	6	-	-	16	2	115	-	7	4	-	-	-			-	-	-	-
Maintenance trades helpers	99	6.40	6.45	5.67- 6.92	* 45	14	4	21	7	5 -	2	-	-	-	3	_	1 -	_	3	100	-				1	_	18
Manufacturing	80	6.09	5.81	5.25- 6.92	45	4	4	19	6	-	2	-	-	-	-	-	-	-	-	-	-	1		-	-	-	-
Machine-tool operators (toolroom)	117	9.08	9.14	8.85- 9.33	-	-	2	1	1	_	3		4	38		7	17	_		-	-				-	-	
Manufacturing	117	9.08	9.14	8.85- 9.33	-	-	2	1	1	-	3	-	4	38	44	7	17	-	-	-	-			-	-	-	7 -
Tool and die makers	810	9.94	10.00	9.09-10.50	-		-				10	9	103	62	146	5	86	218	92	4	_	17	2	37	_	-	
Manufacturing	810	9.94	10.00	9.09-10.50	-	-	-	-	-		10	9	103		146	5	86	218	92		-	17				-	-
Stationary engineers	185	10.16	9.64	8.84-12.06				3	1	6	1		10	36	22	29	3	12	1	10		36	3	- 10	6		
Manufacturing				8.84-12.06		-		3	1	6	-	-	9	36				7	-	10		36		- 10		-	-
Boiler tenders	165	8.68	8.67	7.15- 9.50	-	. 5	6	36	1		_	-	35			13	3	37	-		_	36		_	46		
Manufacturing	155	8.81	8.87	8.47- 9.81	-	-	1	36	1	-	-	-	35	23	6	13	3	37	-		_			-	-	-	-

<sup>\*</sup> Workers were distributed as follows: 21 under \$5.40; 5 at \$5.40 to \$5.70; 15 at \$5.70 to \$6.00; and 4 at \$6.00 to \$6.30. Also see footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Boston, Mass., August 1981

	Noneta	H	lourly earn (in dollars								Nu	imber of	worker	s receiv	ing strai	ght-time	hourly	earning	s (in doll	lars) of -	-						
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	3.30 and under 3.40	3.40 - 3.50	3.50 - 3.90	3.90 - 4.30	4.30 - 4.70	4.70 - 5.10	5.10 - 5.50	5.50 - 5.90	5.90 - 6.30	6.30 - 6.70	6.70 - 7.10	7.10 - 7.50	7.50 - 7.90	7.90 - 8.30	8.30 - 8.70	8.70 - 9.10	9.10 - 9.50	9.50 - 9.90	9.90	10.30	10.70 - 11.30	11.30 - 11.90	11.90 and over
Truckdrivers	3,257	9.80	10.40	8.75-12.71	-	_	192	62	44	41	22	41	25	56	44	47	47	50	26	435	319	16	8	416		267	* 93
Manufacturing	1,178	9.11	9.22	8.67-10.40	-	-	-	-	30	41	19	17	10	55	13	14	45		25	32	309	8	-	415	118	-	
Nonmanufacturing	2,079	10.20	11.59	8.75-12.71	-	-	192	62	14	-	3	24	15	1	31	33	2	23	1	403	10	8	8	1	47	267	93
Transportation and utilities	973	12.54	12.71	12.71-12.71	-	-	-	-	-	-	-	-	-	-	-	-	-	22	1	3	2	2	8	1	-	-	93
Truckdrivers, light truck	839	6.61	7.24		-	-	192	62	36	16			11	14	1	39	6	3	-	400	-	-	-	-	-	-	
Manufacturing	111	5.55			-	-	-	-	30	16			4	14	- 1	6	4	3	-	-	-	-	-	-	-	-	
Nonmanufacturing	728	6.77	8.75	3.75- 8.75		-	192	62	6		3	23	7	-	-	33	2	-	-	400	-	- 3	-	-	-		
Truckdrivers, medium truck	952	10.53	10.40	10.21-12.71	-	-	-	-	8	25	-	4	13	10	15	8	23	-	- 1	3	122	6	-	401	-	-	31
Truckdrivers, tractor-trailer	936	11.16	11.59	9.20-12.71	-	-	- 3-	-	- 4	1114	-	. 4	_	_	25	-	18	-	18	5	197	8	-	15	47	267	33
Nonmanufacturing	683	11.91		11.59-12.71	-	-	-		-	-	-			-	25	-	-	-	-	-	8	-	-	-	47	267	33
Shippers	454	6.72	6.00	5.35- 8.05	-		-	-	8	95	45	71	22	27	35	7	28	9	20	-	-	87		20	-	-	
Manufacturing	222	6.39			-	-	-		-	24	42		10	21	27	4	28	9	20	-	_	-	_	-	-	-	
Nonmanufacturing	232	7.02			-	-	-	-	8	71	3	34	12	6	8	3	-		-	-	-	87	-		-	-	
Receivers	872	7.83	8.17	6.40- 9.38		_	-	-	4	37	18	79	67	38	63	61	28	103	42	3	183	133	12	1	-	-	
Manufacturing	197	6.49		5.33- 7.32	_	_	-	-	3	36	16	17	6	18	29	31	13	4	24	-	-	-	-	-	-	-	
Nonmanufacturing	675	8.22			-	-	-	-	1	1	2	62	61	20	34	30	15	99	18	3	183	133	12	1	-	-	
Shippers and receivers	474	6.18			-	-	-	-	5	6	115	107	97	37	31	29	10	5	25	-	-	7	-	-	-	-	
Manufacturing	258	6.40			-	-	-	-	5	5	35		66	24	22	29	3	4	25	-	_	_		-	-	-	
Nonmanufacturing	216	5.93	5.75	5.50- 6.00	-	-	-	-	-	1	80	67	31	13	9	-	7	1	-			7			20.5	-5	
Warehousemen	2,425	7.46	6.98	6.98- 8.13	_	_	-		3	28	60	29	63	55	1448	67	14	107	202	28	47	130	87	20	13	24	
Nonmanufacturing	509	9.23			-	-	-	-	3	7	4	1	4	3	17	6	4	11	101	27	47	130	87	20	13	24	
Order fillers	1,598	6.62	7.95	4.86- 8.20	_	155	155	6	65	42	55	51	61	62	52	8	3	671	198	4	6	2	2	-	-	_	
Manufacturing	373	7.35			-	-	-	6	39	9	9	_	23	30	22	2	2	19	198	4	6	2	2	-	-	-	
Nonmanufacturing	1,225	6.39			-	155	155	-	26	33	46	51	38	32	30	6	1	652	-	-	-	-	-	-	-	-	
Shipping packers	612	4.86	4.52	3.40- 5.62	-	186	9	67	62	20	81	70	41	3	31	-	25	17	-	-	-	-	-	-	-	-	
Manufacturing	374	5.53			-	-	9	64	51	7	76	64	34		27	-	25	17	-	-	-	-	-	-	-	-	
Material handling laborers	2,054	5.75	5.50	4.97- 5.80	1 3 3		214	37	175	452	131	535	39	138	81	_	10	2	1	78.	10	228	1	-	-	-	
Manufacturing	1,080	5.55			-	_	-	12	62	386		385	11	110	74	_	10	-	_	F 5		-	-	_	_	_	
Nonmanufacturing	974	5.97			-	F -	214	25	113			150	28	28	7	-	-	2	1	-	10	228	- 1	-	-	-	
Forklift operators	760	7.40	7.73	6.40- 8.31	-		-	25	50	25	51	2	7	108	12	97	5	100	137	_		104	4	22	11	_	
Manufacturing	484	7.65			-		-	-	-	-	1	2	7	108	12	97	5	100	131	-		6	4	-	11	-	
Nonmanufacturing	276	6.96		4.40- 9.65	-	-	-	25	50	25	50	-	-	-	-	-	-	-	6	-	-	98	-	22	-	-	
Guards	7,571	4.25	3.65	3.50- 4.15	168	894	3789	1137	196	108	108	133	108	147	357	146	118	77	49	_	3	-	2	1	-	30	
Manufacturing	965	6.97			1	-	2	2	5	40		65	35	122	300	92	107	58	42	-	-	-	_	-	-	30	
Nonmanufacturing	6,606	3.86				894	3787	1135	191	68			73	25	57	54	11	19	7	-	3	-	2	1	-	-	
Guards I	7,036	4.16	3.65	3.50- 4.00	168	876	3732	985	163	100	100	89	76	97	334	98	107	39	42	_	-	-	-	_	-	30	
Manufacturing	881	7.01			-	_	2	2	5	34	63	44	35	92	294	92	107	39	42	-	-	-	-	-	-	30	
Nonmanufacturing	6,155	3.75		3.50- 3.87	168	876	3730	983	158	66	37	45	41	5	40	6	-	-	-	-	-	-	-	-	-	-	
Guards II	535	5.49	5.08	4.25- 6.67	-	18	57	152	33	8	8	44	32	50	23	48	11	38	7	_	3	-	2	1	-	-	
Nonmanufacturing	451	5.29		4.25- 6.59	-	18	57	152	33	2	6	23	32	20	17	48	- 11	19	7	-	3	-	2	1	-	-	-
Janitors, porters, and cleaners	9,897	4.69			18	150	1103	4791	1286	613		183	205	212	361	89	156	250	214	29	-	1	-	26	-	-	-
Manufacturing	1,924	6.42			-	-	23	20	127	312		120	136	110	351	67	114	225	118	20	-	-	-	26	-	-	
Nonmanufacturing	7,973	4.27			18	150	1080	4771	1159	301	55	63	69	102	10	22	42	25	96	9	-	1	-	-	-	-	-
Transportation and utilities	183	8.21	8.64	7.61- 8.64	-	-	-	_	-	-	-	-	-	2	-	20	42	13	96	9	-	1	-	-	-	-	

Workers were distributed as follows: 5 at \$11.90 to \$12.50; and 929 at \$12.50 to \$13.10.
 Also see footnotes at end of tables.

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Boston, Mass., August 1981

Sex,3 occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex,3 occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)⁴	Sex, <sup>2</sup> occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4
Maintenance, toolroom, and			Tool and die makers	810	9.94	Shipping packers	497	4.74
powerplant occupations - men			Manufacturing	810	9.94	Manufacturing		5.57
Maintenance carpenters	396	9.09	Stationary engineers	173	10.20	Material handling laborers:		
Manufacturing		9.18	Manufacturing	144	10.18		070	5.50
Nonmanufacturing		8.92	Manuracturing	144	10.18	Manufacturing	973	5.59
Maintenance electricians	980	9.95	Boiler tenders	165	8.68	Forklift operators	646	7.06
Manufacturing		9.94	Manufacturing	155	8.81	Manufacturing	467	7.66
						Manufacturing	401	1.00
Nonmanufacturing	231	9.98	Material movement and custodial				The Desire of the Land	
Maintanana paintan	253	8.30	occupations - men			Guards		4.27
Maintenance painters						Manufacturing		7.01
Manufacturing		8.86	Truckdrivers	3,248	9.81	Nonmanufacturing	5,803	3.85
Nonmanufacturing	139	7.83	Manufacturing	1,177	9.12			
Maintenance machinists	500	0.50	Nonmanufacturing	2,071	10.20	Guards I	6,266	4.17
		9.58	Transportation and utilities	972	12.55	Manufacturing		7.06
Manufacturing	526	9.58	Transportation and dulities	312	12.55	Nonmanufacturing	5,461	3.75
Maintenance mechanics			Truckdrivers, light truck	837	6.61			
(machinery)		9.01	Manufacturing	110	5.54	Guards II	423	5.72
Manufacturing	1,070	8.98	Nonmanufacturing	727	6.77	Nonmanufacturing	342	5.54
Nonmanufacturing	72	9.50						
Maintenance mechanics			Truckdrivers, medium truck	946	10.54	Janitors, porters, and cleaners		4.96
(motor vehicles)	527	11.23				Manufacturing	1,800	6.42
Manufacturing		9.63	Truckdrivers, tractor-trailer	936	11.16	Nonmanufacturing:		
Nonmanufacturing		11.56	Nonmanufacturing	683	11.91	Transportation and utilities	142	8.12
Transportation and utilities		11.72	01/2		1800			
			Shippers:	000	0.00	Material movement and custodial		
Maintenance pipefitters	483	9.94	Manufacturing	208	6.39	occupations - women		
Manufacturing		9.99	Receivers:	15				100
		1-1-1	Manufacturing	189	6.47	Shipping packers:		See Allen
Maintenance sheet-metal workers		9.80		120		Manufacturing	75	5.36
Manufacturing	77	9.85	Shippers and receivers	446	6.12			
Milliondobba	455	9.10	Manufacturing	243	6.40	Guards		3.92
Millwrights			Nonmanufacturing	203	5.79	Nonmanufacturing	760	3.70
Manufacturing	153	9.11		200	00			
Maintenance trades helpers	86	6.29	Warehousemen	2,289	7.45	Guards I		3.90
Manufacturing		6.02	Nonmanufacturing	432	9.41	Nonmanufacturing	667	3.67
Machine-tool operators (toolroom)	116	9.08	Order fillers	1,347	6.79	Janitors, porters, and cleaners:		
		9.08	Manufacturing	365	7.40		120	6.10
Manufacturing		9.06	Ivia i u i acturi i i y	305	7.40	Manufacturing	120	6.46

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

			All industries				1	Manufacturing	3			Nonmanu	facturing	
Period <sup>s</sup>	Office clerical	Electronic data processing	Industrial nurses	Skilled mainte- nance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Skilled mainte- nance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Unskilled plant
ndexes (August 1977=100):														
August 1980	124.9	125.2	129.8	126.6	126.3	126,2	127.0	128.9	127.0	126.9	124.1	124.6	(6)	126.2
August 1981	138.8	138.8	144.2	139.6	137.8	139.2	141.1	142.6	140.5	140.0	138.5	138.1	(6)	136.4
August 1972 to August 1973	5.5	(6)	6.2	6.6	6.1	5.9	(6)	6.8	6.4	6.3	5.2	(6)	5.1	5.4
August 1973 to August 1974	7.6	6.5	7.5	8.5	9.1	7.2	7.4	8.1	8.1	9.1	7.8	6.1	6.4	9.1
August 1974 to August 1975	8.1	6.3	9.2	7.9	8.2	7.7	7.7	9.9	7.6	8.4	8.3	5.5	7.8	8.2
August 1975 to August 1976	6.9	6.1	7.4	8.6	8.0	8.2	6.9	7.8	9.1	8.5	6.3	5.8	6.7	7.7
August 1976 to August 1977	6.4	5.8	5.9	7.3	6.5	7.1	5.9	6.3	6.6	7.4	6.1	5.8	(6)	6.0
August 1977 to August 1978	6.0	6.7	8.7	7.3	7.1	5.9	7.7	8.5	7.7	5.5	6.0	6.3	(6)	8.2
August 1978 to August 1979	7.9	8.0	8.8	7.6	8.0	8.3	7.9	8.6	7.6	9.5	7.7	8.0	(6)	7.2
August 1979 to August 1980	9.2	8.7	9.7	9.6	9.2	10.0	9.3	9.4	9.6	9.9	8.7	8.5	(6)	8.8
August 1980 to August 1981	11.1	10.9	11.1	10.3	9.1	10.3	11.1	10.6	10.6	10.3	11.6	10.8	(4)	8.1

Table A-8. Pay relationships in establishments with paired office clerical occupations, Boston, Mass., August 1981

								0	ccupatio	on for wi	hich ave	erage ea	arnings	equal 10	00							
Occupation for which earnings are compared		Se	ecretarie	s		Ste- nogra- phers	Тур	ists	F	ile clerk	S	mes- sen-	Switch-	Switch- board opera- tor	100000000000000000000000000000000000000	A	ccountir	ng clerks	,	Payroll clerks	Key e	
	1	11	III	IV	٧	1	-1	11	-1	11	111	gers	tors	-recep- tionists	1	T-	11	III	IV		1	П
Secretaries I	100	87	80	68	59	(6)	119	103	132	116	108	120	99	106	107	129	108	94	89	101	112	93
Secretaries II	115	100	86	73	63	126	129	116	142	125	125	133	110	107	114	129	114	97	89	100	119	106
Secretaries III	125	116	100	84	74	(6)	145	127	162	140	140	157	125	125	122	151	128	112	103	113	135	118
Secretaries IV	147	137	118	100	88	151	160	145	191	167	148	183	145	140	(6)	174	146	129	121	132	155	135
Secretaries V	171	160	134	114	100	167	190	150	216	187	160	203	164	141	(6)	216	157	175	132	144	169	154
Stenographers I	(6)	80	(6)	66	60	100	(6)	104	131	(6)	(6)	129	105	105	(6)	(6)	112	87	82	88	100	94
Typists I	84	77	69	62	53	(6)	100	87	117	106	100	114	85	91	79	100	82	79	68	85	98	83
Typists II	97	86	79	69	67	96	114	100	137	116	(6)	126	98	95	101	(6)	95	140	75	89	99	92
File clerks 1	76	70	62	52	46	76	86	73	100	88	75	94	81	79	(6)	(6)	80	66	61	74	82	74
File clerks II	86	80	71	60	53	(6)	94	87	114	100	89	109	78	84	(6)	92	84	73	(6)	78	89	82
File clerks III	92	80	72	67	62	(6)	100	(6)	133	112	100	118	85	87	(6)	(6)	93	80	(6)	75	98	91
Messengers	83	75	64	55	49	78	88	80	107	92	85	100	79	81	77	97	80	94	57	72	77	79
Switchboard operators	101	91	80	69	61	96	117	102	124	128	117	127	100	94	103	117	97	115	80	89	107	96
receptionists	95	94	80	71	71	95	110	105	127	120	115	124	106	100	98	116	99	83	72	90	104	93
Order clerks I	93	88	82	(6)	(6)	(6)	127	99	(6)	(6)	(8)	130	97	102	100	123	94	95	(e)	93	106	97
Accounting clerks I	77	77	66	58	46	(6)	100	(6)	(6)	108	(6)	104	85	86	82	100	85	76	68	93	93	85
Accounting clerks II	93	87	78	68	64	90	122	105	125	118	108	124	103	101	106	117	100	104	74	92	107	94
Accounting clerks III	106	103	90	77	57	116	127	72	153	137	126	107	87	121	105	132	96	100	85	104	95	105
Accounting clerks IV	112	112	97	82	76	122	147	134	164	(6)	(6)	176	125	138	(6)	147	135	118	100	110	139	117
Payroll clerks	99	100	89	76	69	114	117	112	136	129	134	138	113	111	108	108	109	96	91	100	113	105
Key entry operators I	89	84	74	65	59	100	102	101	122	112	102	130	94	96	95	108	94	105	72	89	100	83
Key entry operators II	107	95	84	74	65	106	121	109	136	122	110	126	105	108	103	118	106	95	86	95	120	10

NOTE: This matrix table shows the average (mean) relationship of earnings in establishments between any two occupations compared. Earnings for an occupation in the table stub are expressed as a percent of the earnings for an occupation in the column heading at the point where the data lines for the two intersect. For example, reading across the Secretaries II row, the 115 in the Secretaries I column indicates that Secretaries II average 115 percent of (or 15 percent

more than) the earnings of Secretaries I.

See appendix A for method of computation.

Also see footnotes at end of tables.

Table A-9. Pay relationships in establishments with paired professional and technical occupations, Boston, Mass., August 1981

								Occupat	ion for wh	ich average	earnings e	qual 100							
Occupation for which earnings are compared		nputer syst lysts (busir		Compute	r program ness)	mers (busi-	Con	nputer ope	rators	Peripher- al equip-	Comput- er data			Drafters				ics techni- ans	Regis- tered in
	1	11	111	1	11	III	1	H	III	ment op- erators	librarians	1.	- 11	III	IV	V	н	III	dustria nurses
Computer systems analysts					- 4		N	-	tile.		F118 81			3.5		- 1			2.0
(business) I	100	83	67	109	94	73	153	121	90	(6)	132	(6)	143	120	(4)	(6)	94	76	00
Computer systems analysts				-			100	12.	- 00	()	102	(1)	145	120	(6)	(6)	94	10	92
(business) II	120	100	83	157	130	108	186	158	127	208	201	194	174	144	121	102	129	110	125
Computer systems analysts										200	201	104	17.4	144	121	102	129	110	125
(business) III	149	121	100	184	151	124	224	188	156	(6)	239	250	210	181	149	118	163	134	146
Computer programmers		1		1	1 8	-	3.9345		100	17	200	200	2.0	10.	140	110	103	104	140
(business) I	92	64	54	100	80	65	128	110	88	(6)	137	162	139	111	94	76	99	(6)	91
Computer programmers					100					1 ''		102	100		04	10	00	(7)	31
(business) II	106	77	66	124	100	81	148	132	103	156	161	(6)	155	129	107	83	101	91	101
Computer programmers			-									''	1	1.00		00	101	0.	101
(business) III	137	92	81	155	123	100	179	162	129	(6)	206	(6)	198	155	122	102	122	111	120
Computer operators I	65	54	45	78	67	56	100	80	68	116	100	120	107	87	74	56	71	64	71
Computer operators II	83	63	53	91	76	62	125	100	84	139	123	140	122	103	86	68	87	77	85
Computer operators III	111	79	64	114	97	78	147	119	100	(6)	140	170	145	123	97	80	105	90	99
Peripheral equipment operators	(6)	48	(6)	(6)	64	(6)	86	72	(6)	100	96	(6)	(6)	(6)	100	(4)	105	67	
Computer data librarians	76	50	42	73	62	49	100	81	71	104	100	(*)	103	92	76	(0)	(6)		80
Drafters I	(e)	52	40	62	(6)	(6)	84	72	59	(6)	(0)	100	84	70		(0)	84	67	/1
Drafters II	70	57	48	72	65	50	94	82	69		97	119			57	49	(°)	(6)	61
Drafters III	84	70	55	90	77	64	115	97	81	(6)	109		100	81	68	55	73	61	71
Drafters IV	(6)	83	67	106	93	82	135	117	103	(6)		143	123	100	81	67	84	74	87
Drafters V	(e)	98	85	132	120	98	178	148	124	(6)	132	175	148	123	100	83	108	94	105
Electronics technicians II	107	77	61	101	99	82				(6)	(9)	205	181	148	120	100	128	110	125
Electronics technicians III	131	91	75		1000000		140	115	95	(6)	119	(6)	138	120	93	78	100	84	100
Registered industrial nurses	109	7.5	75	(6)	110	90	156	129	111	150	148	(a)	164	136	106	91	118	100	113
See table A-8 for description of these pay relationships and	_	80	68	110	99	83	141	117	101	125	140	165	141	115	95	80	100	88	100

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

Table A-10.Pay relationships in establishments with paired maintenance, toolroom, and powerplant occupations, Boston, Mass., August 1981

						Occupation	for which av	erage earning	s equal 100					
Occupation for which earnings		1- 4-9			Mech	anics		Chart motel		Trades	Machine- tool	Tool and	Stationary	Boiler
are compared	Carpenters	Electricians	Painters	Machinists	Machinery	Motor vehicles	Pipefitters	Sheet-metal workers	Millwrights	Trades helpers	operators (toolroom)	die makers	engineers	tenders
Maintenance carpenters	100	95	105	97	101	100	96	95	99	128	106	89	91	100
Maintenance carpenters	106	100	109	102	103	103	99	100	105	144	117	93	94	108
Maintenance painters	95	92	100	93	96	99	92	92	95	115	99	86	87	97
Maintenance painters	103	98	108	100	103	(6)	97	96	106	155	108	95	91	104
(machinery)		97	104	97	100	103	96	96	93	(6)	115	90	89	104
(motor vehicles)	100	97	101	(8)	97	100	96	(6)	(a)	(6)	(6)	(6)	98	103
Maintenance pipefitters	104	101	108	104	104	104	100	100	102	151	114	94	89	102
Maintenance sheet-metal workers	105	100	109	104	105	(6)	100	100	101	(0)	109	93	90	104
Millwrights	101	95	106	94	108	(6)	98	99	100	122	103	90	87	98
Maintenance trades helpers	78	70	87	64	(6)	(e)	66	(6)	82	100	(6)	68	74	(6)
Machine-tool operators (toolroom)	94	85	101	92	87	(6)	88	91	97	(6)	100	84	88	103
Tool and die makers	112	108	116	105	111	(6)	107	108	111	147	119	100	104	115
Stationary engineers	110	106	115	110	112	102	112	111	115	136	114	96	100	118
Boiler tenders	100	93	104	96	96	97	98	96	102	(6)	97	87	85	100

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

Table A-11.Pay relationships in establishments with paired material movement and custodial occupations, Boston, Mass., August 1981

						Occupation	for which ave	erage earning	s equal 100					
Occupation for which earnings		Truckdrivers				Shippers			Chinaina	Material	Forklift	Gua	ards	Janitors,
are compared	Light truck	Medium truck	Tractor- trailer	Shippers	Receivers	and receivers	Warehouse- men	Order fillers	Shipping packers	handling laborers	operators	1	11	porters, and cleaners
Truckdrivers, light truck Truckdrivers, medium truck	100	92	(6)	95	(6)	(6)	95	(6)	92	99	(6)	97	94	110
Truckdrivers, medium truck	108	100	(6)	100	(6)	94	(6)	(6)	125	(6)	104	(6)	98	122
Truckdrivers, tractor-trailer	(a)	(a)	100	129	(6)	(6)	108	(e)	(e)	138	123	(6)	(6)	141
Shippers	106	100	78	100	95	85	96	153	142	118	99	120	(e)	116
Receivers	(4)	(e)	(e)	105	100	89	106	124	155	122	(6)	123	(6)	127
Shippers and receivers	(6)	106	(6)	117	112	100	90	114	132	121	97	101	(6)	113
Warehousemen	106	(6)	92	104	94	111	100	(6)	119	109	96	121	106	124
WarehousemenOrder fillers	(a)	(e)	(6)	65	81	88	(6)	100	104	88	71	100	(6)	106
Shipping packers	109	80	(6)	70	65	76	84	96	100	(6)	70	90	82	100
Material handling laborers	101	(e)	73	85	82	82	91	113	(6)	100	87	105	(6)	110
Shipping packers Material handling laborers	(6)	96	81	101	(6)	103	104	141	142	115	100	110	117	114
Guards I	103	(e)	(6)	84	82	99	83	100	111	95	91	100	89	107
Guards II	106	102	(6)	(6)	(6)	(4)	94	(6)	122	(6)	85	112	100	114
Janitors, porters, and cleaners	91	82	71	86	79	89	81	94	100	91	88	94	88	100

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

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Boston, Mass., August 1981

	Number	Average		Weekly ea (in dolla		1					Nu	mber of	workers	s receivi	ng straig	ght-time	weekly	earnings	s (in dol	lars) of	-					
division	of workers	weekly hours¹ (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	120 and under 130	130 - 140	140 - 150	150 - 160	160 - 170	170 - 180	180 - 190	190 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 430	430 - 460	460 and over
Secretaries	7,216	39.0	283.00	278.00	238.50- 324.00	16.		_	10	88	74	97	265	504	795	921	938	778	808	725	474	324	176	104	97	3
Manufacturing	3,547	39.5	298.00	294.50	259.00- 330.00	-	-	-	-	-	-	8	16	112	340	425	545	416	551	459		227	80	33	64	14
Nonmanufacturing	3,669	38.0	268.50	259.00	220.00- 309.00	-	_	-	10	88	74	89	249	392	455	496	393	362	257	266			96	71	33	2
Transportation and utilities	216	39.5	360.00	348.50	324.50- 398.00	-	-	-	-	-	-	-	-	-	2	5	3	5	37	33			29	27	19	-
Secretaries I	634	37.5	204.00	200.00	185.00- 225.00			_		72	61	59	117	134	129	44	15	3			-					
Manufacturing	173	40.0	229.00	228.00		-	191	-	_	- 1	_	6	5	45	74	25	15	(3						-5		Aller .
Nonmanufacturing	461	36.5	195.00			-	-	-	-	72	61	53	112	89	55	19	-	-	-	-		-	_	-	_	
Secretaries II	2,298	39.0	258.00	254.00	229.00- 285.00				10	15	0	23	0.5	000	400		440									
Manufacturing	966	40.0	274.00	270.00	246.00- 308.00				10	15	8		85	239	423	441	416	231	302	70		1	1	-	-	E. S.
Nonmanufacturing	1,332							-	-	-	-	2	3	35	143	167	238	94	239	41		-	-	-	-	100
Transportation and utilities	96	38.0 40.0	246.00 325.00	244.00			-	-	10	15	8	21	82	204	280	274	178	137	63	29			1	-	-	
Transportation and utilities	90	40.0	325.00	335.00	307.00- 348.50					-		-	-		-	2	2	4	32	25	29	1	1	-	-	
Secretaries III	2,739	39.0	294.00	292.00	260.50- 326.00	-	-	-	-	_	5	15	39	82	163	342	406	459	402	472	153	89	69	22	16	
Manufacturing	1,684	39.5	301.00	299.00	270.50- 326.00	-	-	-	-	_	-	-	_	8	75	207	269	288	282	334	88		53	8	4	
Nonmanufacturing	1,055	38.0	283.00	282.50	249.00- 320.00	-	-	-	-		5	15	39	74	88	135	137	171	120	138			16	14	12	
Transportation and utilities	45	40.0	373.50	372.00	349.50- 402.00	-	-	-	-	-	-	-		-	-	-	1	-	2	7	10		1	11	6	
Secretaries IV	1,083	39.0	336.50	343.00	309.00- 366.00								14	19	21	62	60	63	67	152	261	000				5
Manufacturing	549	39.5	352.00	351.50	333.50- 366.00								17	10	21	02	16	31				206	64	34	54	(
Nonmanufacturing	534	38.5	320.00	327.00	268.00- 361.00								14	19	21	62	44	32	30	80		158	19	13	37	
Transportation and utilities	38	40.0	384.00	393.00	353.00- 446.00	-	-	-	=	-	-	-	-	-	2	3	-	1	37	72	97	48	45 8	21	17	
Secretaries V	291	38.5	369,50	378.00	317.00- 419.50		_								6	2	28	16	26	28	26	24	33	40	07	
Manufacturing	62	39.5	422.50	428.50	399.00- 447.00		_	_	_		_					-	20	10	20	4	20	6	8	48	27	27
Nonmanufacturing	229	38.5	355.00	349.00	310.00- 400.00	-	-	-	-	-	-	-	-	-	6	2	28	16	26	24	25	18	25	12 36	23	* 8
itenographers	236	39.5	289.00	308.00	246.00- 308.00						4	2			200	00	40		407							
Nonmanufacturing	99	39.5	285.50	268.00	240.00- 357.00	4.50	N 3			4	- 4	2	7	8	20	36	12	6	107	4	31	3	1	-	-	
Transportation and utilities	52	40.0	336.00	357.00	322.00- 357.00				-	-	-	-	4	-	9	20	9	5	3	4	31 31	3	1			901
Stenographers I	76	40.0	291.50	265.00	246.00- 357.00		_		y I	1	1	1		2	12	17	5		2	4	30		1			
	764	39.0	000 50	000.00	175.00 001.50						3 9						701				00					
ypists	351	40.0	209.50 219.50	202.00	175.00- 231.50		11	65	48	40	63	63	47	176	78	80	13	8	39	-	30	-	3	-	-	-
Nonmanufacturing	413	38.0	201.00	188.00	194.00- 241.50 159.00- 224.00	-		-	10	13	20	20	26	115	49	29	12	8	39	-	-	-	1	-	-	-
Transportation and utilities	52	38.5	307.00	341.50	248.50- 352.50	=	11	56	38	27	43	43	21	61	29	51 11	1	-	-	-	30 30	_	2 2	=	-	
Typists I	428	38.5	185.00	180.00	157.50- 205.00		11	65	48	35	50	47	27	85	27	23	2		8	4						
Manufacturing	150	40.0	199.00	200.00	177.00- 212.50	-		9	10	13	17	9	12	50	10	11	1		8	-	-	-	-	-	-	
Nonmanufacturing	278	37.5	177.00	174.00	151.00- 194.50	-	11	56	38	22	33	38	15	35	17	12	1	-	-		-	_				
Typists II	336	39.5	240.50	225.00	202.00- 254.00					5	40	40	200	04	-	-							2			
Manufacturing	201	40.0	234.50	222.00	202.00- 254.00				-	5	13	16	20	91	51	57	11	8	31	-	30	-	3	-	0.00	
Nonmanufacturing	135	38.5	250.00		212.00- 253.50					5	3	11	14	65	39	18	11	8	31			-	1	-	-	
Transportation and utilities	49	38.5	311.50		248.50- 352.50	-	_	-	-	5	10	5	6	26 6	12	39				_	30 30	-	2	-		
la elede	644	00.0	400.00	450.00	440.00 171.51												-					4 50				
ile clerks	611	38.0	162.00	156.00	146.00- 171.50	10	48	168	122	96	33	44	30	53	6	-	-	-	1	-	-	-	-	-	-	
Manufacturing	69 542	39.5 37.5	189.00 158.50	190.00	180.00- 200.00 145.00- 165.00	10	48	168	122	16	32	18	14	18	1 5		-		1	-	-	-	-	-	-	
			-																							
File clerks I	237	38.0 37.5	165.00 164.00	157.00 155.00	148.00- 180.00 146.50- 180.00	10	18	46 46	49	41 25	9	25 17	7 7	27	5	-		-		-	-	-	-	-	-	
File clerks II	179	38.0 37.5	168.50	162.50 157.50	151.50- 186.50 149.50- 165.00	-		37	43	31	13	18	19	17	-	-	-	-	1	-	-	-	- 1	-	-	- 12 4

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Boston, Mass., August 1981 —Continued

		Average		Weekly ea (in dolla							Nu	mber of	workers	receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of	-					
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean <sup>a</sup>	Median <sup>3</sup>	Middle range <sup>2</sup>	120 and under 130	130 - 140	140 - 150	150 - 160	160 - 170	170 - 180	180 - 190	190 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 430	430 - 460	460 and over
Messengers	342	38.0	179.00	165.00	152.00- 192.00	_	2	53	77	42		40	33	18	6		1	23			-		-	-	-	
Manufacturing	72	38.0	207.50	194.00	174.00- 245.00	-	-	4	5	6		6	12	8	2			12	-	-	-					
Nonmanufacturing	270	38.0	171.50	160.00	150.00- 184.50	-	2	49	72	36	29	34	21	10	4	1	1	11							11.0	
Switchboard operators		39.0	228.00				-	-	8	9	17	137	32	56 11	74 36			34 6	12 12	20 15		1			-	
Manufacturing	135	39.5	257.00				-	-	-	-	17	130	29	45	38		24	28	12	5		1		-	-	
Nonmanufacturing	376		217.50				-	-	8	9	17	130	29	2			12	28		5	21	1	_	-	-	
Transportation and utilities	71	39.0	302.00	290.50	290.50- 341.50	-	-				-			2	2		12	20				F 200				
Switchboard operator-											10	15	11	11	25	12	3	7	6					-	_	
receptionists			222.50		189.00- 246.00				_		3	14	5	5				6	6		-	-	-	-		
Manufacturing	63	40.0	230.00	238.00	185.00- 258.50	-					3	14	,			0.1	· ·			W					1	
Order clerks	100		232.50				-	-	-	2	-	-	15 15		19			8	8		-	1	- :			
Manufacturing	92	40.0	234.50	232.50	203.50- 248.00								15	20	14											
Order clerks I	77	39.5	234.00	234.00	208.00- 247.50	_	-	-	-	2	-	- 8	6	21	16		-	3	8	-	-	-	-	-	-	
Manufacturing	69		237.00				-	-	-	-	-	-	6	20	11	21	-	3	8	-	-	-	-			
Accounting clerks	3,462	37.5	234.50	220.00	171.00- 288.00	98	203	266	150	141	137	131	162	442	420			82		84			40			
Manufacturing			261.00				-	-	-	-	5	29	47	141	156			32					20			
Nonmanufacturing	The state of the s		226.00				203	266	150	141	132	102	115	301	264	156	58	50	23	16	473	8	20	47	16	3
Accounting clerks I	836	36.5	155.50	144.00	133.00- 170.00	98	203	182	70			34	31	47	35			-	-		-	-	-	-		-
Nonmanufacturing	802		154.00		133.00- 166.00	98	203	182	70	70	44	18	28	41	31	13	4	-					-			
Accounting clerks II	1,161	38.0	220.00	209.00	175.00- 244.00	-	-	84	80	71	78	68	84		144			14		10		1	-	10 -		-
Manufacturing			231.00	215.00	200.50- 250.50	-	-	-	-	-	-	13	34										-			
Nonmanufacturing			216.50	201.50	168.00- 240.50	-	-	84	80	71	78	55	50	136	101	69	19	6	2		132	1	-			
Accounting clerks III	1,237	38.0	280.00	259.00	225.00- 359.50	-	-	-	-	-	8	25	45					50								-
Manufacturing			273.00	258.00			-	-	-	-	-	-	10										17			
Nonmanufacturing		37.5	284.50	264.50	220.00- 359.50	) -		-		-	8	25	35	122	129	61	21	29	13		329					
Accounting clerks IV	. 89	39.0	336.50	330.00			_	-	-	-	-	-		-	1	11		4		10	7 7	9	3			1
Manufacturing		39.0	352.00	382.50	269.00- 412.00	-	13.	-				-				. 6	12	3		1		4.5		1		
Payroll clerks	. 391	38.5	228.00				21	28	7	21	10		13										100	5		
Manufacturing	. 141						-					7	2						30	14	1	1	1			
Nonmanufacturing		37.5	203.50	201.50	154.00- 236.00	7	21	28	7	21	10	10	11	37	42	2 22	25			1						
Key entry operators	. 1,347	38.5						7	58			108	90										-			2
Manufacturing	070	40.0					-	-	-	2			19												1	_
Nonmanufacturing	. 971		218.50				-	7	58	68	136	91	71	111												
Transportation and utilities	. 131			341.50	305.00- 341.50	-		-					1			3	6	14	18	1	12					
Key entry operators I	. 818	38.0	213.00				-	7	58												0 70	-		-	112	-
Manufacturing		40.0	214.50				-	-		2									1	1100	70					
Nonmanufacturing					174.50- 230.00	-		7	58	64	121	86	57	84	105	5 17	7	11	14	1	/					
Key entry operators II	. 517	39.0	250.50					9		. 4	1 15	5									9 6					2 2
Manufacturing	. 269						-	-	-												4 2					_
Nonmanufacturing	Test series		234.5	0 235.00	214.50- 252.00	) .		-		- 4	1 15	5	14	27	75	6	29		1	,	+ 4	-				

<sup>\*</sup> Workers were distributed as follows: 7 at \$460.00 to \$490.00; and 1 at \$550.00 to \$580.00. Also see footnotes at end of tables.

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Boston, Mass., August 1981

	Number	Average		Weekly e							Nu	mber of	worker	s receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of	-					
Occupation and industry division	of workers	hours¹ (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	140 and under 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 330	330 - 360	360 - 390	390 - 420	420 - 450	450 - 480	480 - 510	510 - 540	540 - 570	570 - 600	600 - 650	650 - 700	700 - 750
Computer systems analysts																										
(business)	1,824	38.0	476.50		397.50- 555.00	-	000	-	-	_	16	15	37	78	104	174	148	172	180	185	188	171	122	147	73	14
Manufacturing	428	40.0	493.00			-	-	-	-	-	-	-	4	15	20	26	18	46	50	52		52			22	
Nonmanufacturing	1,396	37.5	471.50	464.50	389.00- 555.50	-	-	-	-	-	16	15	33	63	84	148	130	126	130	133		119			51	14
Computer systems analysts	6.7							1			4					50.67	V + 170		-					3-5		
(business) I	266	38.0	334.50	340.00	299.00- 368.00		-			1	16	15	37	45	74	48	04	7	1							1000
Nonmanufacturing	209	37.0	331.50			-	-	71.	-	-	16	15	33	30	54	35	24 19	7 7								1
Computer systems analysts	4								8	2.2																
(business) II	819	20.0	457.50				19	. 1		- 1	- 4		235				1	25				- 1	1			1
		38.0	457.50	100000000000000000000000000000000000000		-	-	-	-	-	-	-	-	33	28	125	110	128	114	76	62	51	31	57	4	-
Manufacturing	120 699	40.0	455.50			-	-	-	-	-	-	-	-	-	-	13	12	40	25	10	6	13	1	-	-	-
reonnandactumg	099	37.5	458.00	441.50	390.00- 516.50		-	-	-		-	-	-	33	28	112	98	88	89	66	56	38	30	57	4	-
Computer systems analysts				0 24					1		37			1			1 28			100				1		- 3.5
(business) III	739	38.5	549.00	540.00	497.00- 595.00		_	_	_				100		2		14	37	66	100	100	400	-			
Manufacturing	251	40.0	545.00				_							8 7	-		14	6	25	109	126	120	91	90	69	14
Nonmanufacturing	488	37.5	551.50	550.00	494.00- 603.50	-	-	-	-	_	-	_		-	2	1	13	31	41	42 67	58 68	39 81	39 52		22 47	14
Computer programmers (husiness)	4.540	00.0			10015				- 30		- 4			-							-		02	1	7,	14
Computer programmers (business)  Manufacturing	1,546	38.0	374.00			-	-		-	14	26	90	107	194	292	233	154	215	105	60	38	11	5	2	-	-
Nonmanufacturing	392 1,154	39.5 37.5	402.50 364.00			-	-	-	-		-	5	17	31	82	53	56	54	37	23	21	8	3	2	-	-
, to man to to mig	1,104	37.3	304.00	336.00	311.00- 416.50			-		14	26	85	90	163	210	180	98	161	68	37	17	3	2	-	-	-
Computer programmers					The San San				1			75	203	14		31										
(business) I	351	37.5	300.50	297.50	269.00- 330.00	-	_	-	7	14	26	90	58	74	67	14	5	3		814	100				1 - 1	1
Manufacturing	59	39.5	342.50	345.50	309.00- 364.50	_	-	-		-	-	5	6	8	23	9	5	3		-			-	-	-	-
Nonmanufacturing	292	37.0	292.00	284.00	269.00- 319.50	-	- 0 -	-	-	14	26	85	52	66	44	5	-	-		_		_				
Computer programmers						1						6						1				23	-			1
(business) II	759	38.0	362.50	357.50	222.00 204.00																	13.5			-	
Manufacturing	234	39.5	385.00	383.00		-	-	-	-	-	-	-	49	120	224	203	81	55	14	4	8	1	-	-	-	-
Nonmanufacturing	525	37.5	352.50	350.00		_				_			11	23 97	59 165	41	42	33	12	4	8	1	-	-	-	-
			002.00	000.00	020.00 074.00		70						36	97	105	162	39	22	2	-	-	-	-	-	-	-
Computer programmers										1		-	100				-	Mac )	50 10					The same		
(business) III	436	38.0	453.00	446.00		-	-	-	-	-	-	-	-	-	1	16	68	157	91	56	30	10	5	2		
Manufacturing	99	39.5	479.00	475.00		-	-	-	-	-		-	-		-	3	9	18	25	19	13	7	3	2		201.7
Nonmanufacturing	337	37.5	445.50	444.00	422.50- 469.00	-	-	-	-	-	-	-	-	-	1	13	59	139	66	37	17	3	2	-	-	-
Computer operators	1,328	38.5	285.50	279.00	232.50- 335.00	12	43	62	05	172	100	400										- 18				
Manufacturing	442	40.0	319.50	316.50	265.50- 372.00	12	43	5	95	33	123	162 65	145	134	192	100	60	15	5	4	-	4	-	-	-	-
Nonmanufacturing	886	38.0	268.50	265.50		12	43	57	88	139	83	97	37 108	58 76	130	63	54	12	5	2 2	-	4	-	-	-	-
					Market 188										.00	0,	Ĭ	"	"	-					-	
Computer operators I	490	38.0	240.50	232.50	205.50- 258.50	12	43	52	76	107	82	26	23	14	55	-	-	-	-	-	-					1
Manufacturing	100	40.0	254.00	254.00	232.00- 268.00	-	-	5	7	18	34	18	10	6	2	-	-	-	-	-		_	-			
Nonmanufacturing	390	37.5	237.00	221.00	193.50- 249.50	12	43	47	69	89	48	8	13	8	53	-	-	-	-	-	-	-	-	-	-	-
Computer operators II	509	38.5	288.50	284.50	260.00- 320.00			10	10	05	20	100	100	70	24	-								8		
Manufacturing	184	40.0	310.50	300.00	270.00- 341.00			10	19	65 15	32	103	102	73	64	30	2	-	5	-	-	4	-	-	-	-
Nonmanufacturing	325	37.5	276.50	276.50	244.00- 300.00	-	-	10	19	50	26	43 60	27 75	33	27 37	28	1		5	-	-	4	-	-	-	-
												170							,			3	-	-	-	-
Computer operators III	264	39.5	364.00	364.00	336.00- 394.00	-	-	-	-	-	-	4	3	37	73	70	58	15	-	4	_	_		-	-	
Manufacturing	158	40.0	372.00	378.00	341.00- 396.50	-	-	-	-	-	-	4	-	19	33	35	53	12	-	2	_	_	_	_		del
Nonmanufacturing	106	39.0	352.50	347.50	335.00- 364.00	-	-	-	-	-	-	-	3	18	40	35	5	3	-	2	-	-	-	-	-	-
Peripheral equipment operators	162	36.5	207.00	188.00	159.00- 238.00	43	7	42	15	15	10	8	8		-	5 36	1	-			5 5 3				Est	
oqupmon oporatora	102	30.3	207.00	100.00	100.00- 200.00	43	'	42	15	15	16	8	8	1	7	-	-	-	-	-	-	-	-	-	-	-
			000 00	000 00	10100 010 50	1		04				- 1000			15.00	Mary Land		1 1		221.94	Tel 8 (1)	- Ka	9 3 6	100	-	
Computer data librarians Nonmanufacturing	120	38.0 37.5	223.00 213.00	230.00 199.50	184.00- 249.50	-	20	31	2	28	14	12	6	7	-	-	-	-	_					-		

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Boston, Mass., August 1981 —Continued

		Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng straig	ght-time	weekly	earning	s (in dol	lars) of	-					
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	140 and under 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 330	330 - 360	360 - 390	390 - 420	420 - 450	450 - 480	480 - 510	510 - 540	540 - 570	570 - 600	600 - 650	650 - 700	700 - 750
Drafters	1.786	40.0	383.50	391.50	312.00- 454.00	100	-	22	44	33	82	81	106	162	213	142	268	158	172	124	125	34	20	-	-	
Manufacturing			373.00			-	-	12	34	26	52	40	59	98	139	94	189	82	86	54	65	9	-	-	-	
Nonmanufacturing			397.50			-	-	10	10	7	30	41	47	64	74	48	79	76	86	70	60	25	20	-		
Drafters I	56	40.0	207.00	200.00	195.00- 211.00	-	-	18	29	4	3	2	-	1 1 2	-	-	-	-	-	-	-	-	-	-	-	
Drafters II	160	40.0	263.00	259.00	242.50- 288.50		-	4	15	19		31	13	23	10	-	-	-	-	-	-	-	-	-	- 12	1
Manufacturing			248.00	242.50	228.00- 261.50	-	-	1	9	12	21	11	7	-	-	1	-			1	2 5	Sept.		PAGE.	-	
Drafters III	353	39.5	307.50	303.50	276.00- 339.00	_	-	-	-	10		47	77	79	59	32	15	-	-	-	-	-	-	-	-	A ST
Manufacturing			290.50	290.00	265.00- 318.00	-	-	-	-	10	30	28	43		16	6	-	-	-	-	-		3747	-	-	
Nonmanufacturing			325.00	324.00	295.00- 355.00	-	-	-	100	-	4	19	34	33	43	26	15	-	-			4.5			ole o	
Drafters IV	632	40.0	387.00	394.00			_	-	-	- 80° <u>-</u>	-	1	16		141	82	167	88	68	10	-	-	-	-		
Manufacturing			371.50	375.00	346.00- 394.00		-	-	-	-	-	1	9	51	120	60	115	23	21		9-3					
Drafters V	585	40.0	475.00	480.00			-	-	-	-	-		-	1	3	28	86	70	104	114	125	34	20	-	-	
Manufacturing		40.0	456.50	460.00	417.50- 500.00	-	-	-		-	-		-	1	3	28	74	59	65	54	65	9				
Electronics technicians	1,530	40.0	354.50	348.00			-	-	-	21	47	110	154	264	246		235		33	36	42	-	-	-	-	200
Manufacturing	1,318		346.00				-	-	-	11		100	138		221	251	192		33		42	-	-	-		
Nonmanufacturing		39.5	406.00	411.00	334.50- 487.00	-	-	Se -	-	10		10	16	8	25	17	43	5	3 4	36	42			M.		8-7
Electronics technicians II			349.00				-	-	-	5	-	25	40		154	154	5	2	-	36	-	-	-	-	- 0	
Manufacturing			340.00				-	-	-	-	-	20	40	127	146	137	5	2	2 3	36	-	-	-	100	Frank	
Nonmanufacturing		39.5	406.00	384.00	358.50- 487.00	-	-		-	5	-	5	-	4	8	17	4		NA P	36				Range .	the in	Pa.
Electronics technicians III							-	-	-	-	-	1	21	19			230			-	42	-	-	-	-	
Manufacturing	490	40.0	394.00	397.00	372.00- 417.50	-	-	-	-	-	-	-	7	19	63	114	187	67	33				-			
Registered industrial nurses	154	39.5	367.00				-	-	-	-	-	5	6	21	40				7	1	-	-	-	-	-	1
Manufacturing							-	-	-	-	-	-	1	16		31	5	10	7	1	7	-		1000	District T	100
Nonmanufacturing		38.5	360.00	346.00	329.50- 396.00	-	-	-	-	-	-	5	5	5	16	4	17	1	1770	-	-	-	-	-	- 1	

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Boston, Mass., August 1981

	Number		erage ean²)		Number		verage nean²)	The state of the s			verage mean²)
Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex, <sup>3</sup> occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex, <sup>3</sup> occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars)
Office occupations – men				File clerks II	160	38.0	167.50	Computer systems analysts			
		State of		Nonmanufacturing	131	37.5	160.50	(business) III	454	38.5	555.00
Messengers	170	37.5	172.00	Messengers				Nonmanufacturing	305	37.5	562.00
Nonmanufacturing	123	38.0	163.50		154	38.0	187.50				
				Nonmanufacturing	133	37.5	179.00	Computer programmers (business)		37.5	381.50
Accounting clerks:				Switchboard operators	447	39.0	233.50	Nonmanufacturing	625	37.0	374.50
Accounting clerks III:				Manufacturing	134	40.0	257.50	Computer arrangement			
Manufacturing	64	39.5	293.50	Nonmanufacturing	313	38.5	223.00	Computer programmers (business) I	100		
	04	38.5	293.50	Transportation and utilities	71	39.0	302.00	Nonmanufacturing	168	37.0	298.50
Office occupations -						00.0	002.00	140/ililandiacturing	145	37.0	289.50
women		A Production		Switchboard operator-				Computer programmers		4 4 30	
				receptionists	100	39.0	222.50	(business) II:			
Secretaries	7,148	39.0	283.00	Manufacturing	63	40.0	230.00	Nonmanufacturing	. 258	37.0	361.50
Manufacturing	3,546	39.5	298.00	A	1					07.0	001.00
Nonmanufacturing	3,602	38.0	268.00	Accounting clerks	2,950	37.5	232.50	Computer programmers			
Transportation and utilities	216	39.5	360.00	Manufacturing	682	39.5	258.50	(business) III	. 260	38.0	450.00
Secretaries I	633	37.5	204.00	Nonmanufacturing	2,268	37.0	224.50	Nonmanufacturing	. 222	37.5	444.50
Manufacturing		40.0	229.00	Accounting clerks I	785	36.5	154.00				
Nonmanufacturing		36.5	195.00	Nonmanufacturing	755	36.0	152.50	Computer operators	. 930	38.5	285.00
		50.5	195.00		755	30.0	132.30	Manufacturing	. 313	40.0	331.50
Secretaries II	2.297	39.0	258.00	Accounting clerks II	934	37.5	221.00	Nonmanufacturing	617	37.5	261.50
Manufacturing	966	40.0	274.00	Manufacturing	211	39.5	228.50				
Nonmanufacturing	1,331	38.0	246.00	Nonmanufacturing	723	37.0	219.00	Computer operators I	. 307	38.0	223.00
Transportation and utilities	96	40.0	325.00					Manufacturing		40.0	252.50
				Accounting clerks III	1,093	38.0	283.00	Nonmanufacturing	. 242	37.5	215.00
Secretaries III		39.0	294.00	Manufacturing	395	39.0	269.50				
Manufacturing	1,684	39.5	301.00	Nonmanufacturing	698	37.5	290.50	Computer operators II		38.0	289.00
Nonmanufacturing	1,053	38.0	283.50	Assessment starter IV				Manufacturing		40.0	321.00
Transportation and utilities	45	40.0	373.50	Accounting clerks IV	70	39.0	339.00	Nonmanufacturing	. 232	37.5	271.00
Secretaries IV	1,078	39.0	336.00	Payroll clerks	354	38.5	225.50	Computer operators III	. 207	39.5	074.00
Manufacturing	548	39.5	352.00	Manufacturing	131	39.5	269.00	Manufacturing	119	40.0	371.00
Nonmanufacturing	530	38.5	319.50	Nonmanufacturing	223	37.5	200.00	Nonmanufacturing	. 88	38.5	385.50 351.50
Transportation and utilities	38	40.0	384.00					Trommandatoming	. 00	30.3	351.50
				Key entry operators:			ES. I	Drafters	1,627	40.0	389.00
Secretaries V		38.5	369.00	Manufacturing Nonmanufacturing:	376	40.0	250.50	Manufacturing	929	40.0	379.00
Manufacturing		39.5	422.50	Transportation and utilities	130	00.5	321.00	Nonmanufacturing	698	39.5	402.50
Nonmanufacturing	228	38.5	354.50	Transportation and dulides	130	38.5	321.00				
Stenographers	224	39.5	286.50	Key entry operators I	671	38.0	217.50	Drafters II	. 125	40.0	264.00
Nonmanufacturing		39.5	278.50	Manufacturing	107	40.0	214.50				The said
Transportation and utilities		40.0	331.50	Nonmanufacturing	564	37.5	218.00	Drafters III	310	39.5	306.50
		40.0	001.00					Manufacturing	. 149	40.0	288.50
Stenographers I	65	40.0	282.00	Key entry operators II:  Manufacturing				Nonmanufacturing	. 161	39.5	323.00
				Manutacturing	269	40.0	265.00				
Typists		39.0	206.50	Professional and technical				Drafters IV	. 572	40.0	389.50
Manufacturing	348	40.0	220.00	occupations - men	M. S	18		Manufacturing	350	40.0	373.50
Nonmanufacturing	365	38.0	193.50			12 13	SE BEN	Drofters V			1000
Typists I	411	38.5	183.50	Computer systems analysts	The second	1 1 1 1 1 1 1		Drafters V	572	40.0	476.00
Manufacturing		40.0	200.00	(business)	1,071	38.0	494.50	wandacturing	350	40.0	458.00
Nonmanufacturing	264	37.5	174.50	Nonmanufacturing	839	37.5	490.50	Electronics technicians:		-	
				Computer systems analysts		15		Nonmanufacturing	199	39.5	409.00
Typists II		39.5	237.50	(business) I:	1				.00	00.0	403.00
Manufacturing	. 201	40.0	234.50	Nonmanufacturing	78	37.5	341.00	Electronics technicians II:		14 -7-	
Fit data								Nonmanufacturing	75	39.5	406.00
File clerks	. 529	38.0 40.0	161.00	Computer systems analysts					186	40.00	
Nonmanufacturing	472	37.5	187.50 157.50	(business) II	533	37.5	467.50	Electronics technicians III	539	40.0	404.00
Horimanulacturing	4/2	37.5	157.50	Nonmanufacturing	456	37.5	468.50	Manufacturing	429	40.0	397.50

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Boston, Mass., August 1981 — Continued

			erage lean²)				rerage nean²)		Number		verage nean²)
Sex, <sup>3</sup> occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>	Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) <sup>1</sup>
Professional and technical occupations – women				Computer programmers (business) I	183 147	37.5 37.0	302.00 294.50	Computer data librarians	70 57	38.0 38.0	217.00 205.50
Computer systems analysts (business): Nonmanufacturing  Computer systems analysts	501	37.5	447.50	Computer programmers (business) II: Nonmanufacturing	227	37.5	350.00	Drafters	145 96	40.0 40.0	321.50 319.50
(business) II	239 213	38.0 37.5	447.50 448.50	Computer programmers (business) III: Nonmanufacturing	115	37.5	446.50	Drafters IV	54	40.0	363.50
Nonmanufacturing  Computer programmers (business):	157 489	37.5 37.5	547.50 356.00	Computer operators: Manufacturing	119	40.0	291.00	Registered industrial nurses	144 91 53	39.5 40.0 38.5	365.50 367.00 362.00

Table A-15. Hourly earnings of maintenance, toolroom, and powerplant workers in establishments employing 500 workers or more in Boston, Mass., August 1981

	Number	Н	lourly earn (in dollars								N	umber o	worker	s receiv	ring stra	ight-time	hourly	earning	s (in do	llars) of	-						
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	Under 6.30	6.30 and under 6.60	6.60 - 6.90	6.90 - 7.20	7.20 - 7.50	7.50 - 7.80	7.80 - 8.10	8.10 - 8.40	8.40 - 8.70	8.70 - 9.00	9.00 - 9.30	9.30 - 9.60	9.60 - 9.90	9.90 - 10.20	10.20	10.60	11.00 - 11.40	11.40	11.80	12.20	12.60	13.00	13.40 and over
Maintenance carpenters	347	9.03	9.14	8.45- 9.32	-	9	-	9	4	10	34	19	46	20	106	21	16	7	10	23			. 6	. 4	3	35	
Manufacturing Nonmanufacturing		9.15 8.79		8.67- 9.14 8.00- 9.71	-	9	İ	9	4	5	26 8	16 3	24 22	19	97 9	4 17	1 15	5 2	6 4				2		3		
Maintenance electricians	752	10.09	9.89	9.22-10.60	_	-	-	-		33	1	20	29	35	78	17	176	119	55	63	44	8	A.S.	100	45	29	
Manufacturing	579	10.17	9.89	9.58-10.48	-	-	-	-	-	2	1	13	24	30		11	156	87	53				1		29		
Nonmanufacturing	173	9.83	10.03	8.77-10.95	-	-	-	-	-	31	-	7	5	5			20	32				8			16		
Maintenance painters	233	8.41	8.69	6.99- 9.18	-	27	28	15	9	13	8	14	3	51	14	3	6	2	22	12				118	6	pr V	L 90
Manufacturing	105	8.86	8.75	8.25- 8.88	-	-	227-	6	1	9	8	9	3	50		-	4		8			100		100	6	FIGUR	100
Nonmanufacturing	128	8.04		6.67- 9.45	pos-	27	28	9	8	4	-	5	-	1	13	3	2	2		12	-	-	200		-	-	
Maintenance machinists	432	9.72	9.65	9.20-10.30	_							3	27	43	53	18	168	11	23	69	17		Februar	100			
Manufacturing	432	9.72	9.65	9.20-10.30	-	-	-	-	-	-	-	3	27	43	53			11	23							-	1
Maintenance mechanics					189										1900					- 4		1		1000	No.	arrot a	1
(machinery)	815	9.53	9.81	8.76-10.30	-	13	15	15	27	5	29	27	42	139	13	24	204	16	50	108	83				1.0	5	200
Manufacturing		9.54	9.81	8.76-10.30	-	12	6	15	25	5	18	26	38	139	13			10	50		83					0	100
Nonmanufacturing	72	9.50	10.03	7.80-10.93	-	1	9	-	2	-	11	1	4	-	-	6	-	12	-	21	-				100	5	
Maintenance mechanics					5													1									
(motor vehicles)	253	11.08		9.68-13.23	-	0 -	2	-	-	-	-	1	5	10	29	7	18	-	14	87	-	-	-		. 9	37	* 34
Nonmanufacturing	205	11.39		10.70-13.23	-	-	2	-	-	-	-	1	-	4	6	2	18	-	14		-	-				37	34
Transportation and utilities	203	11.43	10.70	10.70-13.23	-	-	-	-	-		1	1	-	4	6	2	18	-	14	87	-	-			-	37	
Maintenance pipefitters	328	10.22		9.58-10.94	-	-	-	-	2	-		13	14	30	21	34	98	5	6		43				33		6
Manufacturing	312	10.29	9.89	9.58-11.35	-			-	-		-	4	14	30	20	34	98	5	6	19	43	-			33	-	6
Maintenance sheet-metal workers	72	9.85	9.89	9.40- 9.90					1		4		6	6	2	10	29	6	2	-				1			
Manufacturing	68	9.91		9.40- 9.94			_					_	6	6		1	28	6	2	2	6	7		1	-	-	2
					10.00								Ĭ			Ů	20	·	-	-	0				-		2
Millwrights		9.07 9.07		9.14- 9.22 9.14- 9.22		1	- 1	-	3	6		-	16 16	2 2		1		7 7	4	=	5	-				-	
Maintenance trades helpers	95	6.26	6.44	5.54- 6.92	** 45	14		21		25						10.7					-83						
Manufacturing		6.20	5.81	5.25- 6.92		4	4	19	6 5	-	2	-		-	-	3 -	=	-	-	_	-					-	
Machine-tool operators (toolroom)	95	9.13	9.14	8.88- 9.48	_		2	1	1		3		4	16	33	11	7	17							1	121	ME.
Manufacturing	95	9.13		8.88- 9.48		-	2	1	i	-	3	-	4	16	33		7	17	-	-	-				-	-	18.
Tool and die makers	495	10.34	10.37	9.19-10.68	2	-	_	_	_	_	10	9	2	30	74	6	19	6	195	65	4		17	21	37		
Manufacturing	495	10.34	10.37	9.19-10.68	-	-	-	-	-	-	10	9	2		74	6		6	195		4	-	17			-	
Stationary engineers	113 72	9.98 9.91		9.38-10.49 8.70-11.17		-	-	3	1 1	6	1 -		10	-	6	16	29 17	3	12	-	10 10				10	6	
Boiler tenders	92	8.64		8.58- 8.94	-	5	6	-	-	-		-	35	23	5	14	3		1	_	-				_	_	
* All workers were at \$13.40 to \$1	82	8.90	8.87	8.66- 9.14	-	-	1	-	-	-	-	-	35	23	5	14	3	-	1	-	-	-	-	-	-	-	

<sup>\*</sup> All workers were at \$13.40 to \$13.80.

\* Workers were distributed as follows: 21 under \$5.40; 5 at \$5.40 to \$5.70; 15 at \$5.70 to \$6.00; and 4 at \$6.00 to \$6.30. Also see footnotes at end of tables.

Table A-16. Hourly earnings of material movement and custodial workers in establishments employing 500 workers or more in Boston, Mass., August 1981

	Number	Н	ourly earni (in dollars								Nu	imber of	worker	s receiv	ing strai	ght-time	hourly	earnings	s (in doll	lars) of -							
Occupation and industry division	Number of workers	Mean <sup>2</sup>	Median <sup>2</sup>	Middle range <sup>2</sup>	3.30 and under 3.60	3.60	3.90 - 4.20	4.20 - 4.50	4.50 - 4.80	4.80 - 5.10	5.10 - 5.40	5.40 - 5.70	5.70 - 6.00	6.00	6.30 - 6.60	6.60 - 6.90	6.90 - 7.30	7.30 - 7.70	7.70 - 8.10	8.10 - 8.50	8.50 - 8.90	8.90 - 9.30	9.30 - 9.70	9.70 - 10.10	10.10	10.50	10.90 and over
ruckdrivers	1,398	10.21	10.40	9.20-12.71	1		1	6	3	6	22	11	18	10	10	12	7	25	25	25	44	321	9	12	419	2	+ 41
Manufacturing	896	9.39	9.22	9.20-10.40	-	-	-	-	3	6	19	9	9	9	10	5	7	17	3	24	40	311	1	8	415	-	
Truckdrivers, light truck	89 61	5.95 5.98		5.25- 6.64 5.25- 6.64		-	1 -	6	3	3	22 19		17 8	4 4	1 1	3	7 7	12	3		:	:	-		-	-	
Truckdrivers, medium truck	883	10.88	10.40	10.40-12.71	-	-	-	-	-	3	- 1	4	1	5	9	6	-	9	-	-	4	122	6	-	400	1	31
Truckdrivers, tractor-trailer	326	10.02	9.20	9.20-11.18	-	-	16	-	-	-		-	-	-	-	1	-	4		-	6	199	1	8	15	1	9
Shippers	283	7.19	6.72	5.70- 9.58	-	-	-	_	8	22	7	13	51	21	17	15	23	4	15	_	-	-	48	39	-	-	
Manufacturing	114	6.31	6.33					100	-	14	4	13	17	9	11	15	12	4	15		-	-	-	_		-	
Nonmanufacturing	169	7.78		5.70- 9.58		-	18-	-	8	8	3		34	12	6	-	11	-	-	-	-	-	48	39	-	-	
	000	0.00	0.00	0.04 0.00	1				6	12	12	7	44	6	23	21	77	15	16	85	9		310	17	2		
Receivers	663	8.23	8.88					'	6				13	5	6	18	13	12		24	9	L.C.	310	11	-	100	
Manufacturing	128	6.61	6.72			-			0	- 11	11										_		010	17	-	1917	1
Nonmanufacturing	535	8.62	9.38	7.80- 9.58	-		100	1		1	1	2	31	1	17	3	64	3	12	61	9	100	310	17	2		DES.
hippers and receivers	114	6.67	6.70	6.25- 7.24	-	-	-	-	10	- 1	3	5	8	3	15	31	23	3	4	1	-	-	5	2	-	-	
Manufacturing		6.50	6.70		-	-	-	-	10	-	3	5	4	2	2	22	23	3	4	-		-		-	-	-	
Varehousemen	747	8.37	8.66	7.04- 9.53	-	-	-	2	3	16	19		20	28	11	49	38	13	12		161	42	130	56	46	11	1
Manufacturing	262	6.99	6.82	5.96- 8.28	-	-	-	-	-	11	18	17	20	24	10	47	15	9	8	42	41	-	-	-	-	-	
Nonmanufacturing	485	9.12	9.53	8.66- 9.83	-		-	2	3	5	1	4	-	4	1	2	23	4	4	14	120	42	130	56	46	11	1
Order fillers	561	6.90	6.75	5.60- 8.36	-	-	6	16	13	33	40	39	21	35	61	46	11	6	3	211	8	4	4	4	-	10 N	
Shipping packers	154	6.09	5.67	5.00- 7.77	215	-		6	16	19	20	22	12	6	3	4	4	_	32	10	_	_	-	-	-	_	
Manufacturing	102	6.50			-	-	-	-	8	6	15			2	-		4	-60	32		-	-	-	-	-	-	
Material handling laborers	860	6.45	5.60	4.75- 9.58	24	30	25	48	91	76	105	47	27	36	42	46	11	_	12	_	1	10	223	6	-	-	
Manufacturing		5.71	5.55			-	-	18	28	22	30	18	2	11	32	25	7	_	10	-	-	-	-	-	-	- No.	
Nonmanufacturing	657	6.67	5.63			30	25	30	63	54	75		25	25	10	21	4	-	2	-	1	10	223	6	-	-	
Forklift operators	320	8.46	8.33	7.14- 9.65	481			30.		_	8-2	2	1	7	21	18	51	11	40	26	2		100	8	22	9	1
Manufacturing	194	7.64	7.14			-	-	-	-	-	-	2	1	7	21	18	51	- 11	40		2		2	8	2 -	-	1
Guards	1,836	5.90	6.13	4.10- 7.06	35	312	201	43	57	58	68	52	63	61	33	184	282	201	82	39	29	3		2	1		3
Manufacturing	864	7.10			-	-	-	-	5	31	40		24	30	15		245	157	69		26		-	-	-	-	3
Guerde I	1,558	5.74	5.63	4.00- 7.00	35	312	201	43	54	50	62	31	26	41	18	139	259	157	50	24	26	100	16.7			186	3
Guards I Manufacturing		7.16	7.00		-	-	-	-	5	25	38		14	30	15		245	157	50	24	26		-	-	-	-	3
Guards II	278	6.80	6.63	5.92- 7.49					3	8	6	21	37	20	15	45	23	44	32	15	3	3		2	1		
Nonmanufacturing	194	6.90	6.99			-	-	-	3	2		10	27	20	15		23	44	13		3		-	2	1	-	
anitors, porters, and cleaners	1,862	6.24	6.25	5.00- 7.05	-	10	160	99	107	108	116	94	81	163	154	245	121	67	121	13	151	25	1			26	
Manufacturing	1,095	6.53	6.64			-	8	22	38	77	75		64	104	83	235	98	24	108	-	52		-	-	-	26	
Nonmanufacturing	767	5.84	5.45			10	152	77	69	31	41	33	17	59	71	10	23	43		13	99		1	-	-		
Hommanuactumy	,01	8.21	8.64		1		, ,,,			- 1		- 0			100						99						

<sup>\*</sup> Workers were distributed as follows: 46 at \$10.90 to \$11.30; 5 at \$12.10 to \$12.50; and 359 at \$12.50 to \$12.90.

Also see footnotes at end of tables.

Table A-17. Average hourly earnings of maintenance, toolroom, powerplant, material movement and custodial workers by sex in establishments employing 500 workers or more in Boston, Mass., August 1981

Sex, <sup>3</sup> occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex,3 occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, <sup>3</sup> occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)
Maintenance, toolroom, and			Maintenance trades helpers	82	6.11	Warehousemen	611	8.52
powerplant occupations - men			Manufacturing	69	6.00	Manufacturing	203	6.99
Maintenance carpenters	336	9.01	Machine-tool operators (toolroom)	94	9.13	Nonmanufacturing	408	9.28
Manufacturing	228	9.15	Manufacturing	94	9.13			
Nonmanufacturing	108	8.73	Manufacturing	94	9.13	Shipping packers:		
			Tool and die makers	495	10.34	Manufacturing	86	6.46
Maintenance electricians	742	10.10	Manufacturing	495	10.34			
Manufacturing	579	10.17	i i i a i a i a i a i a i a i a i a i a	400	10.54	Material handling laborers:		
Nonmanufacturing	163	9.85	Stationary engineers	101	10.02	Manufacturing	178	5.70
(1) : [			Manufacturing	72	9.91			
Maintenance painters	224	8.38			0.01	Forklift operators:		
Manufacturing	105	8.86	Boiler tenders	92	8.64	Manufacturing	177	7.67
Nonmanufacturing	119	7.96	Manufacturing	82	8.90			
Maintenance machinists	425	9.72	Material movement and custodial			Guards	1,629	5.92
Manufacturing	425	9.72	occupations - men			Manufacturing	785	7.16
Maintenance mechanics			Truckdrivers	1,389	10.21	Guards I	4.077	5.78
(machinery)	811	9.54	Manufacturing	895	9.40		1,377 704	
Manufacturing	739	9.54	Manufacturing	093	9.40	Manufacturing	704	7.24
Nonmanufacturing	72	9.50	Truckdrivers, light truck	87	5.96		REAL PROPERTY.	P. I LEWIS
			Manufacturing	60	5.98	Guards II	252	6.74
Maintenance mechanics					-	Nonmanufacturing	171	6.85
(motor vehicles)	253	11.08	Truckdrivers, medium truck	877	10.88			and the second
Nonmanufacturing	205	11.39				Janitors, porters, and cleaners	1,491	6.30
Transportation and utilities	203	11.43	Truckdrivers, tractor-trailer	326	10.02	Manufacturing	971	6.54
Maintenance pipefitters	328	10.22	Shippers:			Nonmanufacturing: Transportation and utilities	440	0.40
Manufacturing	312	10.29	Manufacturing	100	6.29	Transportation and utilities	142	8.12
Maintenance sheet-metal workers	72	9.85	Receivers:			Material movement and custodial		
Manufacturing	68	9.91	Manufacturing	120	6.58	occupations - women		100
Millwrights	137	9.07	Shippers and receivers:			Janitors, porters, and cleaners:		
Manufacturing	135	9.07	Manufacturing	63	6.52	Manufacturing	120	6.46
manuacumy	100	0.01	mandataning	03	0.52	Manuacturing	120	0.46

Table B-1. Minimum entrance salaries for inexperienced typists and clerks in Boston, Mass., August 1981

			Inexperien	ced typists					Other inex	perienced cleric	cal workers*		
Minimum weekly straight-time salaries <sup>7</sup>		Manufa	acturing	1	Nonmanufacturir	ng	All	Manuf	acturing		Nonman	ufacturing	
William Woody Stagm and State of	All industries	All schedules	40.00-hour schedules	All schedules	40.00-hour schedules	37.50-hour schedules	industries	All schedules	40.00-hour schedules	All schedules	40.00-hour schedules	37.50-hour schedules	35.00-hou schedule:
Establishments studied	178	58	XXX	120	xxx	XXX	178	58	XXX	120	XXX	XXX	xxx
										and the second			
Establishments having a specified		day - N				the second			- 00	50	27	11	7
minimum	65	28	23	37	14	9	86	30	26	56	21	1.7	
\$120.00 and under \$125.00			3.5-	-		-	2	-	-	2	-	-	1
\$125.00 and under \$130.00	20 - C	-			-	-	2	-	-	2	-	F	1995
\$130.00 and under \$135.00			-	4	3	1	8	-	-	8	5	2	7
\$135.00 and under \$140.00		13 2	-	3	-	1	7	-	-	7	1	2	1
\$140.00 and under \$145.00		1	1	6	2	2	11	1	1	10	5	4	1
\$145.00 and under \$150.00		1	1	1	-	-	4	2	2	2	-	-	8-3-6
\$150.00 and under \$150.00		1	1	6	1	3	6	1	1	5	3	1	1
\$155.00 and under \$160.00		1	1	2		1	4	3	3	1	-	1	-
\$155.00 and under \$160.00	9	5	5	4	2		12	7	6	5	3	-	-
\$160.00 and under \$165.00		2	1	3	1	1	5	2	1	3	2	-	1
\$165.00 and under \$170.00		2	2	2	1	102 63	2	1	1	1	1	-	-
\$170.00 and under \$175.00	The second secon	2	-	1			5	4		5	3		1
\$175.00 and under \$180.00	1	3	2	2	1		3	3	3	-		-	-
\$180.00 and under \$185.00	5	3	A STATE OF THE RESERVE OF THE PARTY OF THE P	2	1		3	1	1	2	1		1
\$185.00 and under \$190.00	1	1	1		-		2		1	1	1		1000
\$190.00 and under \$195.00	1	1	1		-	-	3		1	2	2		
\$195.00 and under \$200.00	4	2	2	2	2		3			2	-	E Ay Tulka	12.00
\$200.00 and under \$205.00	. 1	1	-	-	-		1	1		-			CONTRACTOR
\$205.00 and under \$210.00	1	1	-	-	-	-	1		-	7			
\$210.00 and under \$215.00			-	-	-	-	1	1	1	120 6-120		-	
\$215.00 and under \$220.00		2	2	-	-	-	1	1	1	-	-	-	7
\$220.00 and under \$225.00		1	1	-	-	-	1	1	1	-	-		-
\$225.00 and under \$230.00		1	1		-	-	-	- 13	-	-	-	-	-
\$230.00 and under \$235.00		100		-	-	-	-	-	-	-	-	-	-
\$235.00 and under \$240.00		1		_		-	100	-	-	-	-	-	-
\$235.00 and under \$240.00	1			1	1	-	-		-	-	-	-	-
\$240.00 and under \$245.00					-	_	_		-	-	-	_	-
\$245.00 and under \$250.00		100000					-	-	-		-	-	-
\$250.00 and under \$255.00		7								_	-		-
\$255.00 and under \$260.00	- Carlotte			-			EST EST					1 1 1	
\$260.00 and under \$265.00		-	7									A 3 18 18 18	120 24
\$265.00 and under \$270.00	-	-		-	-	100		A THE STATE	-			April 1	
\$270.00 and under \$275.00		-	-			-	-	77.0					
\$275.00 and under \$280,00				-		-	-	-	-			1000	Market E
\$280.00 and under \$285.00			-	-	-	-	-		The latest to th	-		Tari Tari	1045
\$285.00 and under \$290.00		-	-	-	-	-	-	-	1 7 - 5 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6	to see The		100	7
\$290.00 and under \$295.00			-	-	-	-	2	2	2	-	-		-
\$295.00 and under \$300.00	. 2	2	2	191		- 1	-						
Establishments having no specified		THE LA		F. Albert		100		45	xxx	01	xxx	xxx	xxx
minimum	. 25	10	XXX	15	XXX	XXX	36	15	***	21	^^^	^^^	^^^
Establishments which did not employ			NAM.	-00	VVV	VVV	56	13	xxx	43	xxx	XXX	xxx
workers in this category	. 88	20	XXX	68	XXX	XXX	00	13	^^^	40	AAA	MAA	AAA

Table B-2. Late-shift pay provisions for full-time manufacturing production and related workers in Boston, Mass., August 1981 (All full-time manufacturing production and related workers = 100 percent)

Item	All wor	rkers <sup>a</sup>	Workers on	late shifts
Itelii	Second shift	Third shift	Second shift	Third shift
Percent of workers				
n establishments with late-shift provisions	80.1	75.0	13.6	5.6
With no pay differential for late-shift work	1.5	1.7	.2	.4
Nith pay differential for late-shift work	78.5	73.3	13.5	
Uniform cents-per-hour differential	16.6	16.6		5.2
Uniform percentage differential	54.4		2.9	2.3
Other differential	7.5	49.2 7.5	9.1 1.4	2.6
Average pay differential	1.23.5			
Uniform cents-per-hour differential	400	47.0		
Uniform percentage differential	12.8 9.9	17.6	12.7	16.4
Sillotti percentage uniereriual	9.9	11.8	10.0	11.8
Percent of workers by type and amount of pay differential				
Jniform cents-per-hour:				
10 cents	7.0	1.2	1.4	.4
12 cents		1.7	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	.2
13 cents		.9	.6	.3
14 cents		1.7	_	.1
15 cents	5.0	2.4	.5	2
17 cents	1.3		.4	
19 cents		2.2		6
20 cents	.1	5.1	(10)	
25 cents	.2	.2	1	."
32 cents		1.3		.1
Jniform percentage:				
5 percent	3.4			
7 and under 8 percent		-	.7	-
10 percent	4.7	2.3	1.1	.1
10 percent	42.0	24.0	6.1	1.2
12 and under 13 percent	1.0	6.2	(10)	.4
15 percent	2.1	16.7	.8	.8
20 percent	1.2		.3	-
Other differential:				
Cents-per-hour based on straight-time	the state of the s		A PART AND	
earnings	7.5	7.5	1.4	.4

Table B-3. Scheduled weekly hours and days of full-time first-shift workers in Boston, Mass., August 1981

		Production and	related workers			Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities
Percent of workers by scheduled weekly hours and days								
All full-time workers	100	100	100	100	100	100	100	100
20 hours-5 days	2		5					
25 hours-5 days	1		1	-	-		-	-
2 hours-4 days	(11)		1	-			-	-
4 1/3 hours-5 days	· ·	-	-	-	2		3	-
5 hours-5 days	2	2	3		10	4	13	
6 hours	2	4	1		2	(11)	3	-
3 days	1	2	-	-		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	-	-
4 days	1	2	_			-		1 - 1
4 1/2 days	(11)		1		2	_	3	
5 days	`		10000		(11)	(11)	100 5 6 7 6 2 6 6 9 1	
3 1/4 hours-5 days	1	2	-		7		10	West 5 5
6 1/2 hours-5 days					1		1	
6 2/3 hours-5 days			_		3	The same of	4	
7 hours-5 days	1		2					-
7 1/2 hours-5 days	3	2	4		30	19	35	62
8 hours	1		3		(11)		1	
4 days	(11)		(11)		17			
5 days	1		3		(11)		1	- 1
8 2/3 hours-5 days			3		( )			Part of the same
8 3/4 hours-5 days	3		6		4	3	1	
0 hours	74	83	63	96	40	74	26	38
4 days	17	00	03	30	(11)	1	20	30
	73	82	63	96	40	73	26	38
5 days		02	(11)	2	40	/3	20	30
2 hours-5 days	(11)		(-)	-	(11)		(11)	
2 1/2 hours-5 days	2		-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	()		()	LET DE LET BELLE
4 hours-5 1/2 days	2	6	9					
5 hours	4	0	2			7 3 3 3 3		
5 days	2	4	-			-		
5 1/2 days	2	3	2	-		_	-	
0 hours			2	2		7	-	
5 days	(11)		(11)	2				-
5 1/2 days	17 3.3		2					
Average scheduled weekly hours								
All weekly work schedules	39.4	39.9	38.7	40.3	38.1	39.3	37.6	38.5

Table B-4. Annual paid holidays for full-time workers in Boston, Mass., August 1981

THE LEASE STORY OF THE RESERVE		Production and	related workers		Design of Landson St. 192	Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities
Percent of workers								
All full-time workers	100	100	100	100	100	100	100	100
n establishments not providing								at Marie Co
paid holidays	2		5	-	1	-	1	
n establishments providing								
paid holidays	98	100	95	100	99	100	99	100
Average number of paid holidays								
For workers in establishments								12 7 15 16 16
providing holidays	9.9	10.4	9.2	10.8	10.6	10.6	10.6	10.9
providing nondays	0.0	10.4	0.2	10.0	10.0	10.0	10.6	10.9
Percent of workers by number of paid holidays provided								
or more half days	1		2	_				
holiday	2		4				The state of the state of	
holidays	(11)	_	(11)					
Plus 6 half days	(11)		(11)	-			185	
holidays	(11)		1		1		2	
holidays	1	-	2		(11)		(11)	
holidays	2		4		(11)		(11)	
Plus 2 half days	(11)		(11)		(11)		(11)	
holidays	12	11	13	1	5	7	4	6
holidays	8	2	15	4	7	5	7	1
Plus 1 or more half days	6	11	-		5	14	1	-
0 holidays	24	29	17	23	20	26	18	5
Plus 1 half day	4	7	(11)	-	4	8	3	-
1 holidays	24	22	26	55	29	15	35	71
Plus 1 half day		2	1	-	3	2	3	-
2 holidays	10	10	10	17	20	10	24	14
Plus 1 half day	1		-		3	11		
3 holidays					1	2	(11)	3
4 holidays	1	3	-		(11)			-
5 holidays	(11)	(11)			(11)	1		
Over 19 days	()	()					-	-
Percent of workers by total paid holiday time provided12								
day or more	98	100	95	100	99	100	99	100
days or more	96	100	91	100	99	100	99	100
days or more	95	100	89	100	99	100	99	100
days or more	95	100	88	100	98	100	97	100
days or more	93	100	86	100	98	100	97	100
days or more	92	100	82	100	98	100	97	100
days or more	80	89	69	99	93	93	93	94
1/2 days or more	72	87	54	96	86	88	85	93
0 days or more	69	81	54	96	84	83	85	93
0 1/2 days or more	42	47	37	72	61	49	67	88
1 days or more	38	40	36	72	57	41	63	88
1 1/2 days or more	14	17	10	17	27	26	28	17
2 days or more	13	16	10	17	24	24	24	17
2 1/2 days or more	3	5		-	4	14	(11)	3
3 days or more	2	4			1	3	(11)	3
4 days or more	2	(11)			(11)		-	-
5 days or more	(11)	(-')	_		(11)		-	-

Table B-5. Paid vacation provisions for full-time workers in Boston, Mass., August 1981

		Production and	related workers			Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportatio and utilities
Percent of workers	F							
All full-time workers	100	100	100	100	100	100	100	100
establishments not providing							The state of	
paid vacations			- 1					-
establishments providing								
paid vacations	100	100	100	100	100	100	100	100
Length-of-time payment	92	90	93	91	99	99	99	99
Percentage payment	8	10	7	9	(11)	1	(11)	1
Amount of paid vacation after:13								
6 months of service:				The state of the s				
Under 1 week	17	19	16	1 10	7	4	9 47	1
1 week	30	33	26	40	49 13	53 27	8	27
Over 1 and under 2 weeks	9	13	4		7	4	9	
2 weeks Over 2 and under 3 weeks	2	9	5	26	7	1	9	62
3 weeks	(11)		(11)	-	1	A POLICE	1	-
1 year of service:				10				
1 week	47	41	54 39	19 55	6 78	7 90	6 72	5 33
2 weeks	49	58	6	26	8	2	11	62
Over 2 and under 3 weeks	1		1	20	8	2	11	02
Over 3 and under 4 weeks					(11)	1	(11)	
2 years of service: 1 week	13	18	6		1	2	1	
Over 1 and under 2 weeks	1	2						
2 weeks	79	73	86	74	76	86	72	38
Over 2 and under 3 weeks	6	6	6	26	13	11	14	62
3 weeks	1		2		10	(11)	14	1 -
Over 3 and under 4 weeks					(11)	1	(11)	-
3 years of service:								
1 week	5	4	5		1	1	1	
Over 1 and under 2 weeks	1	2		-	(11)	1		
2 weeks	80	81	78	74	70	78	67	38
Over 2 and under 3 weeks	11	11	10	26	12	12	12	62
3 weeks	4	1	7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	16	8	20	-
Over 3 and under 4 weeks Over 4 and under 5 weeks					(11) (11)	1	(11)	
4 years of service:	5	4	5		1	1	1	
1 week Over 1 and under 2 weeks	1	2	0	14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	(11)			
2 weeks	77	76	78	74	70	76	67	38
Over 2 and under 3 weeks	12	13	10	26	12	13	12	62
3 weeks	5	4	6		16	9	18	
Over 3 and under 4 weeks	1	404 M	1		1		1	The State of the same
Over 4 and under 5 weeks			- 12		(11)	1		
			10 30 1				I Carried Marie	
5 years of service:		The same of the		A STATE OF THE STATE OF				
1 week	3	2	3	-	(11)	(11)	10	de la constantina
2 weeks	46	50	41	26	22	46	12	8
Over 2 and under 3 weeks	18	24	10 44	26 48	14 62	21 33	12 74	62
3 weeks	33	24	1	46	2	33	2	30
Over 3 and under 4 weeks	1				(11)	1	(11)	
Over 4 and under 5 weeks	7	CONTRACTOR OF THE STREET		The state of the s	(-)		(-)	The second second

Table B-5. Paid vacation provisions for full-time workers in Boston, Mass., August 1981 —Continued

		Production and	related workers			Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities
10 years of service:			<b>工作。1000年10日</b>					
1 week	2		3	-				
2 weeks	6	3	9		2	1	2	_
3 weeks	64	72	55	72	66	65	67	29
Over 3 and under 4 weeks	5	4	6	26	8	3	11	62
4 weeks	23	20	26	2	23	31	20	9
Over 4 and under 5 weeks	23	20	20	2		31		9
					(11)		(11)	and the last the sale
Over 5 and under 6 weeks		- Degree 7 19 11			(11)	1		The Residence
12 years of service:							A Committee of the Comm	diese bestäte tale it
1 week	2		3					THE SECOND SECOND
2 weeks	6	3	9				-	1 1 1 1 1 1 1 1 1 1
					2	1	2	the contract of
	57	63	50	55	62	62	63	27
Over 3 and under 4 weeks	8	10	5	26	11	5	13	62
4 weeks	27	22	33	18	25	31	22	11
Over 4 and under 5 weeks	1	1			(11)	1	(11)	
Over 5 and under 6 weeks	-		-	-	(11)	1		
15 years of service:								
1 week	2		3					
2 weeks	6	3	9		2		0	Show here the later
				100000000000000000000000000000000000000		1	2	
3 weeks	29	27	31	11	23	23	23	6
Over 3 and under 4 weeks	4	7	-		2	2	3	-
4 weeks	55	59	51	63	64	72	60	32
Over 4 and under 5 weeks	4	3	6	26	8	1	11	62
5 weeks	1	1	(11)		1	1	1	
Over 5 and under 6 weeks			-		(11)	1	THE RESERVE	3,456.3 (2)
20 years of service:								
1 week	2	100 E	3				-	-
2 weeks	6	3	9	-	2	1	2	-
3 weeks	15	16	13	1	8	10	7	1
4 weeks	61	65	56	27	76	79	75	22
Over 4 and under 5 weeks	5	5	6	26	8	1 10 10 10	11	62
5 weeks	12	10	14	46	7	9	6	15
Over 6 and under 7 weeks	12	10		40	(11)	1	0	15
Over o and under / wooks					( )		Section 19 and 19 and	
25 years of service:								
1 week	2		3	-	-	-	-	-
2 weeks	6	3	9	_	2	1	2	-
3 weeks	15	16	12	1	7	10	6	1
4 weeks	40	36	44		53	34	62	7
Over 4 and under 5 weeks	1	3	10000		(11)		(11)	
	32	40	23	54		55		- 00
5 weeks		40			30	55	20	26
Over 5 and under 6 weeks	2		5	26	7		9	62
6 weeks	2	1	3	18	1	1	1	4
Over 6 and under 7 weeks			1		(11)	1	-	- LA 1765
30 years of service or more:								
1 week	2		3	-			-	-
2 weeks	6	3	9	-	2	1	2	-
3 weeks	15	16	12	1	7	10	6	1
4 weeks	39	34	44	-	53	33	62	7
Over 4 and under 5 weeks	1	3			(11)		(11)	DESTRUCTION OF
5 weeks	26	30	20	44	27	46	19	18
Over 5 and under 6 weeks	2	-	5	26	7	40	9	62
	9	14	4		4	10		
6 weeks	9	14	4	17		10	2	11
Over 6 and under 7 weeks				1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	(11)	1		-
7 weeks	1	-	2	11	(11)	A STATE OF THE PARTY OF THE PAR	(11)	2

Table B-6. Health, insurance, and pension plans for full-time workers in Boston, Mass., August 1981

		Production and	related workers			Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities
Percent of workers	E TOTAL							
All full-time workers	100	100	100	100	100	100	100	100
n establishments providing at least one of the benefits								
shown below <sup>14</sup>	97	100	94	100	100	100	100	100
ife insurance	91	93	89	100	96	90	99	100
Noncontributory plans	73	71	76	93	80	72	83	89
ccidental death and								
dismemberment insurance	68	71	63	83	81	79	81	92
Noncontributory plans	56	55	56	83	59	53	61	92
ickness and accident insurance							00	
or sick leave or both <sup>15</sup>	85	93	76	89	92	94	92	99
insurance	66	84	46	32	57	81	46	8
Noncontributory plans	55	70	38	32	47	66	39	8
Sick leave (full pay and no								
waiting period)	53	51	56	82	78	71	81	98
Sick leave (partial pay or								
waiting period)	4	2	7	W. 100 S. 124	4	1	5	
ong-term disability	32	29	35	50	63	43	71	74
Noncontributory plans	15	9	23	50	38	17	47	74
n establishments providing at least								
one of the health insurance plans								
shown below16	95	100	90	100	99	100	99	100
Noncontributory plans	57	52	63	100	50	51	50	94
Hospitalization insurance	95	100	90	100	99	100	99	100
Noncontributory plans	54	50	58	100	47	47	47	94
Surgical insurance	95	100	90	100	99	100	99	100
Noncontributory plans	54	50	58	100	47	47	47	94
Medical insurance	94	100	87	100	99	100	98	100
Noncontributory plans	54	50	58	100	47	47	47	94
Major medical insurance	90	99	79	100	99	100	99	100
Noncontributory plans	45	47	43	100	46	45	47	94
Dental insurance	49	61	34	85	50	76	39	89
Noncontributory plans	27	31	23	85	27	36	23	89
ealth maintenance organization	41	48	32	15	65	68	63	15
Noncontributory plans	5	3	7	8	10	5	12	7
etirement pension	79	84	72	89	87	90	86	88
Noncontributory plans	68	70	65	89	73	78	71	88

Table B-7. Health plan participation by full-time workers in Boston, Mass., August 1981

		Production and	related workers			Office	workers	
Item	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities	All industries	Manu- facturing	Nonmanu- facturing	Transportation and utilities
Percent of workers								
All full-time workers	100	100	100	100	100	100	100	100
Hospitalization insurance	85	91	78	99	86	92	83	96
Noncontributory plans	51	49	54	99	43	46	42	93
Surgical insurance	85	91	78	99	86	92	83	96
Noncontributory plans	51	49	54	99	43	46	42	93
Medical insurance	84	91	76	99	85	92	82	96
Noncontributory plans	51	49	54	99	43	46	42	93
fajor medical insurance	80	91	68	99	85	91	83	96
Noncontributory plans	43	46	40	99	43	44	42	93
Pental insurance	45	57	30 23	85	45	71	34	89
Noncontributory plans	27	30	23	85	26	36	22	89
Health maintenance organization	2	2	2	(11)	8	3	11	4
Noncontributory plans	(11)	(11)	(11)	(11)	1	(11)	2	(11)

#### **Footnotes**

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

- <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; one-fourth of the workers earn the same or less than the lower of these rates and one-fourth earn the same or more than the higher rate.
- <sup>3</sup> Earnings data relate only to workers whose sex identification was provided by the establishment.
- 4 Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
- <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.
  - Data do not meet publication criteria or data not available.
- <sup>7</sup> Formally established minimum regular straight-time hiring salaries that are paid for standard workweeks. Data are presented for all standard workweeks combined, and for the most common standard workweeks reported.
- <sup>8</sup> Excludes workers in subclerical jobs such as messenger.
- Includes all production and related workers in establishments currently operating late shifts, and establishments whose formal provisions cover late shifts, even though the establishments were not currently operating late shifts.

- 10 Less than 0.05 percent.
- 11 Less than 0.5 percent.
- <sup>12</sup> All combinations of full and half days that add to the same amount; for example, the proportion of workers receiving a total of 10 days includes those with 10 full days and no half days, 9 full days and 2 half days, 8 full days and 4 half days, and so on. Proportions then were cumulated.
- <sup>13</sup> Includes payments other than "length of time," such as percentage of annual earnings or flat-sum payments, converted to an equivalent time basis; for example, 2 percent of annual earnings was considered as 1 week's pay. Periods of service are chosen arbitrarily and do not necessarily reflect individual provisions for progression; for example, changes in proportions at 10 years include changes between 5 and 10 years. Estimates are cumulative. Thus, the proportion eligible for at least 3 weeks' pay after fewer years of service.
- <sup>14</sup> Estimates listed after type of benefit are for all plans for which at least a part of the cost is borne by the employer. "Noncontributory plans" include only those financed entirely by the employer. Excluded are legally required plans, such as workers' disability compensation, social security, and railroad retirement.
- <sup>15</sup> Unduplicated total of workers receiving sick leave or sickness and accident insurance shown separately. Sick leave plans are limited to those which definitely establish at least the minimum number of days' pay that each employee can expect. Informal sick leave allowances determined on an individual basis are excluded.
- <sup>16</sup> Unduplicated total of workers eligible for coverage under an insurance plan providing hospitalization, sugical, medical, major medical, or dental benefits shown separately.

# Appendix A. Scope and Method of Survey

In each of the 71 areas¹ currently surveyed, the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. Small establishments—generally those with fewer than 50 employees—are excluded because they have few incumbents 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, minus establishments which go out of business or are no longer within the industrial scope of the survey, is retained for the following two annual surveys. In most cases, establishments new to the area are not considered in the scope of the survey until the selection of a sample for a personal visit survey.

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

#### Occupations and earnings

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

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

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

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

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

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

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

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

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

#### Wage trends for selected occupational groups

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

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

Occupations used to compute wage trends are:

### Office clerical

Secretaries Stenographers I Typists, I and II File clerks, I, II, and III Messengers Switchboard operators Order clerks, I and II Accounting clerks<sup>2</sup> Payroll clerks Key entry operators, I and II

#### Electronic data processing

Computer systems analysts, I, II, and

Computer programmers, I, II, and III Computer operators, I, II, and III

#### Industrial nurses

#### Registered industrial nurses

#### Skilled maintenance

Carpenters Electricians Painters Machinists Mechanics (machinery) Mechanics (motor vehicle) Pipefitters

Tool and die makers

#### Unskilled plant

Janitors, porters, and cleaners

Material handling laborers

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

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

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

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

# Pay relationships in establishments

Tables A-8 through A-11 compare average pay of occupations in individual establishments. These comparisons, expressed as pay relatives (pay for one of the occupations equals 100), yield different results than comparisons of overall survey averages, such as those shown in tables A-1 through A-6. The latter reflect differences in contributions to the survey averages by establishments with disparate pay levels; the pay relative comparisons are not affected by such differences.

The methods of computing and presenting pay relatives have changed since the last survey in this area. The following procedures are now used to compute relatives in tables A-8 through A-11:

- Establishments employing workers in both of the paired occupations were identified.
- Pay levels (averages) for the two occupations were weighted by the combined employment of both jobs to reflect each establishment's contribution to the totals used in this comparison.
- 3. The weighted pay levels of the two jobs were summed separately; each total was divided by the other and the quotients multiplied by 100 to produce the two pay relatives shown for each job pairing.

#### Establishment practices and supplementary wage provisions

The incidence of selected establishment practices and supplementary wage provisions is studied for full-time production and related workers and office workers. Production and related workers (referred to hereafter as production workers) include working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations. (Cafeteria and route workers are excluded in manufacturing industries but included in nonmanufacturing industries.) In finance and insurance, no workers are considered to be production workers. Office workers include working supervisors and all nonsupervisory workers (including lead workers and trainees) performing clerical or related office functions in such departments as accounting, advertising, purchasing, collection, credit, finance, legal, payroll, personnel, sales, industrial relations, public relations, executive, or transportation. Administrative, executive, professional, and part-time employees as well as construction workers utilized as a separate work force are excluded from both the production and office worker categories.

Minimum entrance salaries (table B-1). Minimum entrance salaries for office workers relate only to the establishments visited. Because of the optimum sampling techniques used and the probability that large establishments are more likely than small establishments to have formal entrance rates above the subclerical level, the table is more representative of policies in medium and large establishments. (The "X's" shown under specific weekly schedules indicate that no meaningful totals are applicable.)

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

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

Differentials for second and third shifts are summarized separately for (1) establishment policies (an establishment's differentials are weighted by all production workers in the establishment at the time of the survey) and (2) effective practices (an establishment's differentials are weighted by production workers employed on the specified shift at the time of the survey).

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

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

Paid holidays (table B-4). Holidays are included if workers who are not required to work are paid for the time off and those required to work receive premium pay or compensatory time off. They are included only if they are granted annually on a formal basis (provided for in written form or established by custom). Holidays are included even though in a particular year they fall on a nonworkday and employees are not granted another day off. Paid personal holiday plans, typically found in the automobile and related industries, are included as paid holidays.

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

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

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

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

Health, insurance, and pension plans (table B-6). Health, insurance, and pension plans include plans for which the employer pays either all or part of the cost. The benefits may be underwritten by an insurance company, paid directly by an employer or union, or provided by a health maintenance organization. This year, for the first time in this

area, provisions for health maintenance organizations (HMO's) are treated separately from insurance provisions. Workers provided the option of an insurance plan or an HMO are reported under both types of plans. A plan is included even though a majority of the employees in an establishment do not choose to participate in it because they are required to bear part of its cost (provided the choice to participate is available to a majority). Legally required plans such as social security, railroad retirement, workers' disability compensation, and temporary disability insurance<sup>3</sup> are excluded.

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

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

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

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

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

Hospitalization, surgical, and medical insurance plans reported in these surveys provide full or partial payment for basic services rendered. Hospitalization insurance covers hospital room and board and may cover other hospital expenses. Surgical insurance covers surgeons' fees. Medical insurance covers doctors' fees for home, office, or hospital calls. Plans restricted to post-operative medical care or a doctor's care for minor ailments at a worker's place of employment are not considered to be medical insurance.

Major medical insurance coverage applies to services which go beyond the basic services covered under hospitalization, surgical, and medical insurance. Major medical insurance typically (1) requires that a "deductible" (e.g., \$100) be met before benefits begin, (2) has a coinsurance feature that requires the insured to pay a portion (e.g., 20 percent) of certain expenses, and (3) has a specified dollar maximum of benefits (e.g., \$10,000 a year).

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

An HMO provides comprehensive health care services to a specified group for fixed periodic payments rather than indemnification or reimbursement for medical, surgical,

and hospital expenses.

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

Health plan participation (table B-7). Estimates are presented on the percent of production and office workers participating in selected health insurance and HMO plans. When an establishment was unable to supply the number of plan participants, approximations (imputations) were made, where possible, by using information from other establishments offering a similar plan. Imputations were never made for more than one-third of the production or clerical workers in an industry group (all industries, manufacturing, nonmanufacturing, and transportation and utilities); when imputations were made, they were usually for considerably less than one-third of the workers. Participation rates were estimated and published if participant numbers (including imputations) were available for 90 percent or more of the production or office workers in an industry group; consequently, a published estimate may not relate to a group total.

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

<sup>2</sup> A revised 4-level job description for accounting clerks, being introduced in this survey, is not comparable to the previous 2-level description. Earnings of workers that could be compared to the previous overall level were used in wage trend computations.

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

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

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

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

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

Appendix table 1. Establishments and workers within scope of survey and number studied in Boston, Mass., August 1981

Industry division <sup>a</sup>		Number of es	Number of establishments		Workers in establishments				
	Minimum employment in establish- ments in scope of survey	Within scope of surveys	Studied	Within scope of survey					
				Total <sup>4</sup>		Full-time Full-time		Studied <sup>4</sup>	
				Number	Percent	related workers	office workers		
All establishments	44 -								
All divisions		1,733	177	542,619	100	197,348	111,948	215,786	
	100	519	57	206,600	38	106,040	33,121	92,882	
fanufacturing		1,214	120	336,019	62	91,308	78,827	122,904	
onmanufacturing		1,214	120	000,010		- 1,000			
ether public utilities	100	69	18	47,295	9	16,905	11,793	36,838	
other public utilities <sup>s</sup>	50	186	11	17,506	3	(6)	(6)	2,512	
Retail trade		199	18	96,673	18	(6)	(6)	31,417	
Finance, insurance, and real estate		291	28	78,178	14	(6)	(6)	32,302	
Services <sup>7</sup>	50	469	45	96,367	18	(6)	(6)	19,835	
Large establishments									
All divisions		202	73	325,025	100	104,153	72,514	197,386	
fanufacturing	500	73	28	128,118	39	56,635	23,454	86,229	
onmanufacturing		129	45	196,907	61	47,518	49,060	111,157	
other public utilitiess	500	18	12	39,231	12	14,659	10,622	35,734	
Wholesale trade	500	1	1	1,496	1	(6)	(6)	1,496	
Retail trade		49	12	73,215	23	(6)	(6)	30,433	
Finance, insurance, and real estate	500	23	10	45,509	14	(6)	(6)	29,714	
Services <sup>7</sup>	500	38	10	37,456	12	(6)	(6)	13,780	

<sup>1</sup> The Boston, Mass. Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Suffolk County, 16 communities in Essex County, 34 in Middlesex County, 26 in Norfolk County, and 12 in Plymouth County. The "workers within scope of survey" 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>a</sup> The 1972 edition of the Standard Industrial Classification Manual was used to classify establishments by industry division. All government operations are excluded from the scope of the survey.

3 includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of nonmanufacturing companies are considered as one establishment when located within the same industry division. 4 Includes executive, professional, part-time, seasonal, and other workers excluded from the separate production and office categories.

\* Abbreviated to "transportation and utilities" in the A- and B-series tables. Formerly referred to as "public utilities". Taxicabs and services incidental to water transportation are excluded. Boston's transit system is municipally operated and is excluded by definition from the scope of the survey.

<sup>6</sup> Separate data for this division are not presented in the A- and B-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 table 2. Percent of workers covered by labor-management agreements, Boston, Mass., August 1981

ents, boston, mass., August 1961	Production and related workers	Office workers
Industry division	retated workers	workers
All industries	49	14
Manufacturing	51	12
Nonmanufacturing Transportation and	47	15
utilities	94	87

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

# Appendix table 3. Industrial composition in manufacturing, Boston, Mass., August 1981

(Percent of all manufacturing workers)

Electric and electronic equipment	24
Communication equipment	11
Electronic components and accessories	7
Instruments and related products	21
Measuring and controlling devices	6
Photographic equipment and supplies	9
Machinery, except electrical	13
Office and computing machines	6
Transportation equipment	9
Fabricated metal products	6
Printing and publishing	6
Food and kindred products	5

NOTE: This information is based on estimates of total employment derived from universe materials compiled before actual survey.

# Appendix B. Occupational Descriptions

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

Listed below are several occupations for which revised descriptions or titles are being introduced in this survey:

Stenographer Typist Accounting clerk Drafter Stationary engineer Boiler tender

The Bureau has discontinued collecting data for tabulating-machine operator, bookkeeping-machine operator, and machine biller.

# Office

#### SECRETARY

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

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

- Positions which do not meet the "personal" secretary concept described above:
- b. Stenographers not fully trained in secretarial-type duties;
- 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;
- 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

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

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

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

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

#### LR-1

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

- a. Answers telephones, greets personal callers, and opens incoming mail.
- b. Answers telephone requests which have standard answers. May reply to requests by sending a form letter.
- 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:

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

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

	LR-1	LR-2
LS-1	I	II
LS-2	II	III
LS-3	III	IV
LS-4	IV	V

#### **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 as the principal office assistant performing more responsible and discretionary tasks.

#### Stenographer I.

Takes and transcribes dictation under close supervision and detailed instructions. May maintain files, keep simple records, or perform other relatively routine clerical tasks.

#### Stenographer II.

Takes and transcribes dictation determining the most appropriate format. Performs stenographic duties requiring significantly greater independence and responsibility than Stenographer I. Supervisor typically provides general instructions. Work requires a thorough working knowledge of general business and office procedures and of the specific business operations, organizations, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining follow up files; assembling material for reports, memoranda, and letters; composing simple letters from general instructions; reading and routing incoming mail; answering routine questions, etc.

#### TRANSCRIBING-MACHINE TYPIST

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

#### **TYPIST**

Uses a manual, electric, or automatic typewriter to type various materials. Included are automatic typewriters that are used only to record text and update and reproduce previously typed items from magnetic cards or tape. 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.

Excluded from this definition is work that involves:

- a. Typing directly from spoken material that has been recorded on disks, cylinders, belts, tapes, or other similar media;
- b. The use of varitype machines, composing equipment, or automatic equipment in preparing material for printing; and

c. Familiarity with specialized terminology in various keyboard commands to manipulate or edit the recorded text to accomplish revisions, or to perform tasks such as extracting and listing items from the text, or transmitting text to other terminals, or using "sort" commands to have the machine reorder material. Typically requires the use of automatic equipment which may be either computer linked or have a programmable memory so that material can be organized in regularly used formats or preformed paragraphs which can then be coded and stored for future use in letters or documents.

#### Typist I

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.

#### Typist II

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.

#### **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:

#### File Clerk I

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.

#### File Clerk II

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 III

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.

#### MESSENGER

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

#### **SWITCHBOARD OPERATOR**

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

#### SWITCHBOARD OPERATOR-RECEPTIONIST

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

#### **ORDER CLERK**

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

Positions are classified into levels according to the following definitions:

#### Order Clerk I

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.

#### Order Clerk II

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.

#### **ACCOUNTING CLERK**

Performs one or more accounting tasks such as posting to registers and ledgers; balancing and reconciling accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents; assigning prescribed accounting

distribution codes; examining and verifying the clerical accuracy of various types of reports, lists, calculations, postings, etc.; preparing journal vouchers; or making entries or adjustments to accounts.

Levels I and II require a basic knowledge of routine clerical methods and office practices and procedures as they relate to the clerical processing and recording of transactions and accounting information. Levels III and IV require a knowledge and understanding of the established and standardized bookkeeping and accounting procedures and techniques used in an accounting system, or a segment of an accounting system, where there are few variations in the types of transactions handled. In addition, some jobs at each level may require a basic knowledge and understanding of the terminology, codes, and processes used in an automated accounting system.

#### **Accounting Clerk I**

Performs very simple and routine accounting clerical operations, for example, recognizing and comparing easily identified numbers and codes on similar and repetitive accounting documents, verifying mathematical accuracy, and identifying discrepancies and bringing them to the supervisor's attention. Supervisor gives clear and detailed instructions for specific assignments. Employee refers to supervisor all matters not covered by instructions. Work is closely controlled and reviewed in detail for accuracy, adequacy, and adherence to instructions.

#### **Accounting Clerk II**

Performs one or more routine accounting clerical operations, such as: Examining, verifying, and correcting accounting transactions to ensure completeness and accuracy of data and proper identification of accounts, and checking that expenditures will not exceed obligations in specified accounts; totaling, balancing, and reconciling collection vouchers; posting data to transaction sheets where employee identifies proper accounts and items to be posted; and coding documents in accordance with a chart (listing) of accounts. Employee follows specific and detailed accounting procedures. Completed work is reviewed for accuracy and compliance with procedures.

### **Accounting Clerk III**

Uses a knowledge of double entry bookkeeping in performing one or more of the following: Posts actions to journals, identifying subsidiary accounts affected and debit and credit entries to be made and assigning proper codes; reviews computer printouts against manually maintained journals, detecting and correcting erroneous postings, and preparing documents to adjust accounting classifications and other data; or reviews lists of transactions rejected by an automated system, determining reasons for rejections, and preparing necessary correcting material. On routine assignments, employee selects and applies established procedures and techniques. Detailed instructions are provided for difficult or unusual assignments. Completed work and methods used are reviewed for technical accuracy.

# **Accounting Clerk IV**

Maintains journals or subsidiary ledgers of an accounting system and balances and reconciles accounts. Typical duties include one or both of the following: Reviews invoices and statements (verifying information, ensuring sufficient funds have been obligated, and if questionable, resolving with the submitting unit, determining accounts involved, coding transactions, and processing material through data processing for

application in the accounting system); and/or analyzes and reconciles computer printouts with operating unit reports (contacting units and researching causes of discrepancies, and taking action to ensure that accounts balance). Employee resolves problems in recurring assignments in accordance with previous training and experience. Supervisor provides suggestions for handling unusual or nonrecurring transactions. Conformance with requirements and technical soundness of completed work are reviewed by the supervisor or are controlled by mechanisms built into the accounting system.

NOTE: Excluded from level IV are positions responsible for maintaining either a general ledger or a general ledger in combination with subsidiary accounts.

#### **PAYROLL CLERK**

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

#### **KEY ENTRY OPERATOR**

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

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

# **Key Entry Operator I**

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.

# **Key Entry Operator II**

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

NOTE: Excluded are operators above level II 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.

# **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:

#### Computer Systems Analyst I

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 Systems Analyst II**

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

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

# **Computer Systems Analyst III**

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 follow-up 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.

#### **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:

#### **Computer Programmer I**

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 Programmer II**

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 level III) 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.

#### Computer Programmer III

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

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

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

#### COMPUTER OPERATOR

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

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

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

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

# **Computer Operator I**

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

#### **Computer Operator II**

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.

#### **Computer Operator III**

In addition to work assignments described for Computer operator II (see above) the work of Computer operator III involves at least one of the following:

- a. 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.
- b. Tests new programs, applications, and procedures.
- c. Advises programmers and subject-matter experts on setup techniques.
- d. 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.

#### PERIPHERAL EQUIPMENT OPERATOR

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

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

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

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

#### **COMPUTER DATA LIBRARIAN**

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

#### DRAFTER

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

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

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

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

#### Drafter I

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

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

#### **Drafter II**

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

#### **Drafter III**

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

#### **Drafter IV**

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

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

#### **Drafter V**

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

#### **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:

#### **Electronics Technician I**

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.

#### **Electronics Technician II**

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 level III 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.

#### **Electronics Technician III**

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.

#### **REGISTERED INDUSTRIAL NURSE**

A registered nurse gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises

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

# Maintenance, Toolroom, and Powerplant

#### **MAINTENANCE CARPENTER**

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

#### **MAINTENANCE ELECTRICIAN**

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

#### MAINTENANCE PAINTER

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

#### **MAINTENANCE MACHINIST**

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment operated in an establishment. Work involves most of the

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

#### MAINTENANCE MECHANIC (MACHINERY)

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

#### **MAINTENANCE MECHANIC (MOTOR VEHICLE)**

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

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

#### **MAINTENANCE PIPEFITTER**

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

training and experience. Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.

#### MAINTENANCE SHEET-METAL WORKER

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

#### **MILLWRIGHT**

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

#### **MAINTENANCE TRADES HELPER**

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

#### MACHINE-TOOL OPERATOR (TOOLROOM)

Specializes in operating one or more than one type of machine tool (e.g., jig borer, grinding machine, engine lathe, milling machine) to machine metal for use in making or maintaining jigs, fixtures, cutting tools, gauges, or metal dies or molds used in shaping or forming metal or nonmetallic material (e.g., plastic, plaster, rubber, glass). Work typically involves: Planning and performing difficult machining operations which require complicated setups or a high degree of accuracy; setting up machine tool or tools (e.g., install cutting tools and adjust guides, stops, working tables, and other controls to handle the size of stock to be machined; determine proper feeds, speeds, tooling, and operation sequence or select those prescribed in drawings, blueprints, or layouts); using a variety of precision measuring instruments; making necessary adjustments during machining operation to achieve requisite dimensions to very close tolerances. May be

required to select proper coolants and cutting and lubricating oils, to recognize when tools need dressing, and to dress tools. In general, the work of a machine-tool operator (toolroom) at the skill level called for in this classification requires extensive knowledge of machine-shop and toolroom practice usually acquired through considerable on-the-job training and experience.

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

#### **TOOL AND DIE MAKER**

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

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

#### STATIONARY ENGINEER

Operates and maintains one or more systems which provide an establishment with such services as heat, air-conditioning (cool, humidify, dehumidify, filter, and circulate air), refrigeration, steam or high-temperature water, or electricity. Duties involve: Observing and interpreting readings on gauges, meters, and charts which register various aspects of the system's operation; adjusting controls to insure safe and efficient operation of the system and to meet demands for the service provided; recording in logs various aspects of the system's operation; keeping the engines, machinery, and equipment of the system in good working order. May direct and coordinate activities of other workers (not stationary engineers) in performing tasks directly related to operating and maintaining the system or systems.

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

#### **BOILER TENDER**

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

repairs to boilerroom equipment; and, following prescribed methods, treat boiler water with chemicals and analyze boiler water for such things as acidity, causticity, and alkalinity.

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

# **Material Movement and Custodial**

#### TRUCKDRIVER

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

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

Truckdriver, light truck
(straight truck, under 1 1/2 tons, usually 4 wheels)
Truckdriver, medium truck
(straight truck, 1 1/2 to 4 tons inclusive, usually 6 wheels)
Truckdriver, heavy truck
(straight truck, over 4 tons, usually 10 wheels)
Truckdriver, tractor-trailer

#### SHIPPER AND RECEIVER

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

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

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

For wage study purposes, workers are classified as follows:

Shipper Receiver Shipper and receiver

#### WAREHOUSEMAN

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

Exclude workers whose *primary* duties involve shipping and receiving work (see Shipper and receiver and Shipping packer), order filling (see Order filler), or operating power trucks (see Power-truck operator).

#### **ORDER FILLER**

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

#### SHIPPING PACKER

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

#### **MATERIAL HANDLING LABORER**

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

#### **POWER-TRUCK OPERATOR**

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

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

Forklift operator Power-truck operator (other than forklift)

#### GUARD

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

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

For wage study purposes, guards are classified as follows:

#### Guard I

Carries out instructions primarily oriented toward insuring that emergencies and security violations are readily discovered and reported to appropriate authority. Intervenes directly only in situations which require minimal action to safeguard

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

#### **Guard II**

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

#### 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.

# Appendix C. Job Conversion Table

Beginning in 1981, multilevel jobs are identified by numeric instead of alphabetic designations. A conversion table for the affected occupations follows:

Occupation	Numeric designation (currently used)	Alphabetic designation
Secretary	(currently used)	(previously used) E
	п	
	III	D C
	IV	
	v	B A
Stenographer	I	General
	II	Senior
Typist	I	В
	II	Α
File clerk	I	С
	II	В
	III	Α
Order clerk	I	В
	II	A
Accounting clerk	I	
	II	(not
	III	comparable)
	IV	
Key entry operator	I	В
	II	A

Occupation	Numeric designation	Alphabetic designation
	(currently used)	(previously used)
Computer systems analyst (business)	I I	C C
	Î	В
	iii	
		Α
Computer programmer (business)	I	C
	II	В
	III	A
Computer operator	I	С
	II	В
	III	Ā
Drafter	I	
	II	(not
	III	comparable)
	IV	comparatic)
	v	
Electronics technician	I	C
	II	В
	iii	A
		^
Guard	I	В
	II	A
		4.1

# **Area Wage Survey Summaries**

The following areas are surveyed periodically for use in administering the Service Contract Act of 1965. Survey results are published in summaries 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. Antelope Valley, Calif. Asheville, N.C. Atlantic City, N.J. 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. Chevenne, Wyo. Clarksville-Hopkinsville, Tenn.-Ky. Colorado Springs, Colo. 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. Frederick-Hagerstown-Chambersburg, Md.-Pa. 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-Favette, Kv. Lima, Ohio Little Rock-North Little Rock, Ark. Logansport-Peru, Ind. 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) Montgomery, Ala. Nashville-Davidson, Tenn. New Bern-Jacksonville, N.C. New Hampshire (statewide) North Dakota (statewide) Northern New York Northwest Texas Orlando, Fla. Oxnard-Simi Valley-Ventura, Calif. Peoria, Ill. Phoenix, Ariz. Pine Bluff, Ark. Portsmouth-Chillicothe-Gallipolis, Ohio 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.-Wilmington, Del.-N.J.-Md. Yakima-Richland-Kennewick-Pendleton, Wash.-Oreg.

#### ALSO AVAILABLE-

An annual report on salaries for accountants, auditors, public accountants, chief accountants, attorneys, job analysts, directors of personnel, buyers, chemists, engineers, engineering technicians, drafters, computer operators, and clerical employees is available. Order as BLS Bulletin 2081, National Survey of Professional, Administrative, Technical and Clerical Pay, March 1980, \$4.00 a copy, from any of the BLS regional sales offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

# **Area Wage Surveys**

A list of the latest bulletins available is presented below. Bulletins may be purchased from any of the BLS regional offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. Make checks payable to Superintendent of Documents. A directory of occupational wage surveys, covering the years 1974 through 1979, is available on request.

Area		Bulletin number and price*	
Area	ana pr	ice*	
Albany-Schenectady-Troy, N.Y., Sept. 1980 <sup>1</sup>	3000-45	\$2.25	
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1980	3000-62	\$2.00	
Atlanta, Ga., May 1981	3010-24	\$3.25	
Baltimore, Md., Aug. 1981 <sup>1</sup>	3010-39	\$3.00	
Billings, Mont., July 1981	3010-25	\$2.25	
Boston, Mass., Aug. 1981 <sup>1</sup>	3010-48	\$3.25	
Buffalo, N.Y., Oct. 1980	3000-52	\$2.25	
Chattanooga, Tenn.—Ga., Sept. 1981'	3010-42	\$3.25	
Chicago, Ill., May 1980	3010-19	\$2.75	
Cincinnati, Ohio—Ky.—Ind., July 1981	3010-30	\$2.75	
Cleveland, Ohio, Sept. 1981 <sup>1</sup>	3010-44	\$3.25	
Columbus, Ohio, Oct. 1980	3000-48	\$2.00	
Corpus Christi, Tex., July 1981	3010-22	\$2.25	
Dallas—Fort Worth, Tex., Dec. 19801	3000-67	\$3.25	
Davenport—Rock Island—Moline, Iowa—Ill., Feb. 1981	3010- 7	\$2.25	
Dayton, Ohio, Dec. 1980 <sup>1</sup>	3000-64	\$2.25	
Daytona Beach, Fla., Aug. 1981	3010-38	\$2.25	
Denver—Boulder, Colo., Dec. 1980 <sup>1</sup>	3000-68	\$3.25	
Detroit, Mich., Apr. 1981	3010-12	\$2.75	
Fresno, Calif., June 1981	3010-27	\$2.25	
Gainesville, Fla., Sept. 1981	3010-45	\$2.50	
Gary—Hammond—East Chicago, Ind., Nov. 19801	3000-56	\$1.75	
Green Bay, Wis., July 1981 <sup>1</sup>	3010-26	\$2.75	
Greensboro-Winston-Salem-High Point, N.C., Aug. 1981	3010-43	\$2.75	
Greenville—Spartanburg, S.C., June 1981	3010-23	\$2.25	
Hartford, Conn., Mar. 1981	3010-21	\$2.50	
Houston, Tex., May. 1981	3010-14	\$2.75	
Huntsville, Ala., Feb. 1981	3010- 5	\$2.25	
Indianapolis, Ind., Oct. 1980	3000-47	\$2.25	
Jackson, Miss., Jan. 1981	3010- 4	\$1.75	
Jacksonville, Fla., Dec. 1980	3000-66	\$1.75	
Kansas City, Mo.—Kans., Sept. 1981	3010-47	\$3.00	
Los Angeles—Long Beach, Calif., Oct. 1980	3000-63	\$2.25	
Louisville, Ky.—Ind., Nov. 1980 <sup>1</sup>	3000-65	\$2.25	

	Bulletin ni	umber
Area	and pric	
Memphis, Tenn.—Ark.—Miss., Nov. 1980		\$1.75
Miami, Fla., Oct. 1980	3000-51	\$2.25
Milwaukee, Wis., May 1981 <sup>1</sup>		\$3.25
Minneapolis—St. Paul, Minn.—Wis., Jan. 1981 <sup>1</sup>	3010- 1	\$3.75
Nassau—Suffolk, N.Y., June 1981 <sup>1</sup>		\$3.00
Newark, N.J., Jan. 1981	3010- 3	\$2.25
New Orleans, La., Oct. 1981 <sup>1</sup>	3010-46	\$3.25
New York, N.Y.—N.J., May 1981 <sup>1</sup>	3010-41	\$3.25
Norfolk—Virginia Beach—Portsmouth, Va.—N.C., May 1981	3010-17	\$2.25
Northeast Pennsylvania, Aug. 1981	3010-40	\$2.25
Oklahoma City, Okla., Aug. 1981	3010-37	\$2.25
Omaha, Nebr.—Iowa, Oct. 1980 <sup>1</sup>	3000-57	\$2.25
Paterson—Clifton—Passaic, N.J., June 1981	3010-35	\$2.25
Philadelphia, Pa.—N.J., Nov. 1980	3000-53	\$2.25
Pittsburgh, Pa., Jan. 1981	3010- 2	\$2.25
Portland, Maine, Dec. 1980	3000-61	\$1.75
Portland, Oreg.—Wash., June 1981	3010-29	\$2.75
Poughkeepsie, N.Y., June 1981	3010-28	\$2.25
Poughkeepsie—Kingston—Newburgh, N.Y., June 1981	3010-32	\$2.25
Providence—Warwick—Pawtucket, R.I.—Mass., June 1981	3010-36	\$2.50
Richmond, Va., June 1981	3010-18	\$2.50
St. Louis, Mo.—Ill., Mar. 1981	3010- 8	\$2.75
Sacramento, Calif., Dec. 1980 <sup>1</sup>	3000-70	\$2.25
Saginaw, Mich., Nov. 1980	3000-54	\$1.75
Salt Lake City—Ogden, Utah, Nov. 1980	3000-60	\$2.00
San Antonio, Tex., May 1981	3010-15	\$2.25
San Diego, Calif., Nov. 1980 <sup>1</sup>	3000-71	\$2.25
San Francisco—Oakland, Calif., Mar. 1981'	3010-13	\$3.00
San Jose, Calif., Mar. 1981'	3010-10	\$3.00
Seattle—Everett, Wash., Dec. 1980	3000-69	\$1.75
South Bend, Ind., Aug. 1981	3010-33	\$2.25
Toledo, Ohio—Mich., June 1981 <sup>1</sup>	3010-20	\$2.75
Trenton, N.J., Sept. 1980	3000-43	\$1.75
Washington, D.C.—Md.—Va., Mar. 1981 <sup>1</sup>	3010- 6	\$3.00
Wichita, Kans., Apr. 1981	3010-11	\$2.25
Worcester, Mass., Apr. 1981	3010-34	\$2.25
York, Pa., Feb. 1981	3010-9	\$2.75

- \* 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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