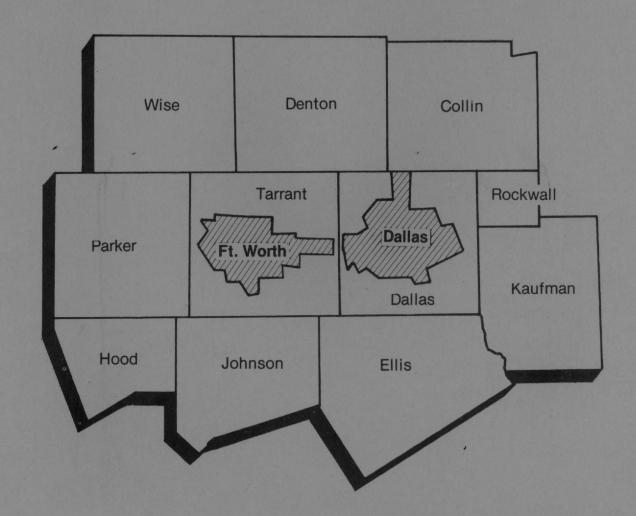
Area Wage Survey

Dallas-Fort Worth, Texas, Metropolitan Area December 1981



U.S. Department of Labor Bureau of Labor Statistics

Bulletin 3010-69



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Preface

This bulletin provides results of a December 1981 survey of occupational earnings in the Dallas-Fort Worth, Tex., 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 Dallas, Tex., under the general direction of Boyd B. O'Neal, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

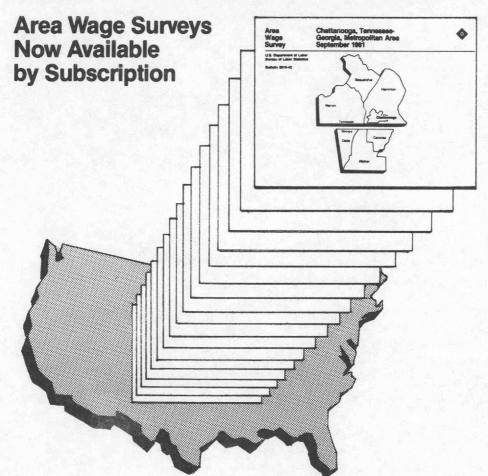
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Note:

Reports on occupational earnings and supplementary wage provisions in the Dallas-Fort Worth area are available for the department store (June 1981), machinery manufacturing (January 1981), nursing and personal care facilities (May 1981), and contract cleaning services (July 1981) industries. A report on occupational earnings only is available for the moving and storage industry (December 1981). 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 wages and supplementary benefits for municipal government workers is available for the city of Dallas. Free copies of these are available from the Bureau's regional offices. (See back cover for addresses.)

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Area Wage Survey

Dallas-Fort Worth, Texas, Metropolitan Area December 1981



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

Bureau of Labor Statistics Janet L. Norwood, Commissioner

March 1982

Bulletin 3010-69

Contents

			Page
Intro	duc	etion	. 2
Tabl	es:		
Earn	ings	s, all establishments:	
A-	1.	Weekly earnings of office workers	. 3
A-	2.	50 CH (1980)	
		technical workers	. 6
Α-	3.	Average weekly earnings of office, professional, and technical workers,	
		by sex	. 8
A-	4.	Hourly earnings of maintenance, toolroom, and powerplant workers.	. 10
A-	5.		
A-	6.	Average hourly earnings of maintenance, toolroom, powerplant, material movement,	
	-	and custodial workers, by sex	. 12
A-	7.	Indexes of earnings and percent increases	40
۸	8.	for selected occupational groups	. 13
Α-	0.	Pay relationships in establishments with paired office clerical occupations	. 13
A-	9.	Pay relationships in establishments with paired professional and technical occupations	
A-	10.	Pay relationships in establishments with paired maintenance, toolroom, and	. 14
		powerplant occupations	. 15

		Page
Tables-	-Continued	
A-11.	Pay relationships in establishments with paired mataerial movement and custodial occupations	1
Earnings	s, large establishments:	
A-12.	Weekly earnings of office workers	16
	Weekly earnings of professional and	
	technical workers	18
A-14.	Average weekly earnings of office, professional, and technical workers,	
	by sex	20
A-15.	Hourly earnings of maintenance, toolroom,	
A-16.	and powerplant workers	2
A-10.	Hourly earnings of material movement and custodial workers	20
A-17.	Average hourly earnings of maintenance,	22
	toolroom, powerplant, material	
	movement, and custodial workers,	
	by sex	23
Appendix	xes:	
A. Sc	cope and method of survey	25
B. Oc	ccupational descriptions	28
C. Jo	bb conversion table	40

Introduction

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

Each year after all individual area wage surveys have been completed, two summary 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.

Appendixes

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

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

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 Dallas-Fort Worth, Tex., December 1981

	Number	Average weekly		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	of workers	hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	130 and under 140	140 - 150	150 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 500	500 and over
Secretaries	9,409	40.0	294.50	286.00	250.50- 330.00		_	- 1	48	203	563	904	1414	1243	1273	1022	747	577	446	284	264	173	113	61	26	48
Manufacturing	3,169	40.0	309.00	296.00	261.00- 345.50	-	-	-	-	2	103	212	435	486	428	350	284	206	170	126	154	77	83	23	12	18
Nonmanufacturing	6,240	39.5	287.00	279.00	243.00- 321.00	-	-	-	48	201	460	692	979		845	672	463	371	276	158	110	96	30	38	14	30
Transportation and utilities	982	39.5	352.00	352.00	304.00- 397.50	-	-	-	-	-	8	35	68	65	57	79	95	142	99	91	78		16	35	12	24
Secretaries I	1,403	40.0	247.50	240.00	213.50- 267.50		-		39	119	290	231	305	141	99	57	50	39	19	7	7				-	
Manufacturing	545	40.0	284.00	279.00	252.00- 312.00	-	-	-	-	2	28	49	105	91	91	57	50	39	19	7	7	///				
Nonmanufacturing	858	39.5	224.00	221.00			-	-	39	117		182	200		8	-	-	-	-	-	-	-		_	_	
Secretaries II	2,477	39.5	280.50	267.50	244.00- 304.00				4	24	88	354	613	443	307	213	99	110	48	61	43	27	28	14		
Manufacturing	885	40.0	286.00	268.00	247.00- 307.00	-	_	_	-	4	19	108	243		80	52	31	30	23	27	20		24	2		7.7
Nonmanufacturing	1,592	39.5	277.50				-		4	24	69	246	370	241	227	161	68	80	25	34						-
Transportation and utilities	344	39.5	324.50				-	-	-	-	8	4	52	48	12	32	23	79	21	31	23 20		4	12 12	1	F
Secretaries III	3,536	40.0	301.00	295.50	265.00- 331.00	7 1	- 1	1	3	29	139	217	382	525	718	490	331	156	191	106	115	75	32	11		
Manufacturing	1,212	40.0	320.50				-		_		26	49	60		215	195	133	49	62	73	104	27			4	12
Nonmanufacturing	2,324	39.5	291.00						3	29		168	322		503	295	198	107					25	10	4	4
Transportation and utilities	311	39.5	353.00					-	-	-	-	7	8		32	29	42	32	129 49	33 21	11	48 48	7 7	1	_	8
Secretaries IV	1,363	39.5	334.00	334.00	288.00- 370.50					25	31	77	74	95	108	135	209	179	139	75	50	56	38	34	40	26
Manufacturing	418	40.0	352.50			_	146		_	_	30	6	10		27	29	56	58	64	16	23	23	32		12	
Nonmanufacturing	945	39.5	326.00						L V	25	1	71	64	81	81	106	153	121	75	59	27	33		11	6	13
Transportation and utilities	213	39.5	374.00			-	-	-	-	-		24	8	-	4	8	26	25	14	29	6		6 2	23 22	6	13
Secretaries V	439	39.5	351.00	345.50	308.00- 387.50		13 2						17	12	30	102	42	79	34	29	44	14	15	2		10
Manufacturing	109	40.0	322.50	336.00		_	_	-					17	3	15	17	14	30	2	3	44	3	2	2	9	
Nonmanufacturing	330	39.5	360.00	349.50	312.00- 402.50			_			_			9	15	85	28	49	32	26	44	11	13	2	2 7	1
Transportation and utilities	114	40.0	390.50	402.50	357.00- 406.00	-	-	-	-	-	-	-	-	-	9	10	4	6	15	10	41	- 11	7	-	6	9
Stenographers	730	39.5	309.00	329.00	239.00- 358.50				46	59	54	26	25	33	45	42	54	184	26	26	85	25	9 1	16.		
Nonmanufacturing	510	39.5	291.00		207.50- 358.50			_	46	59	54	23	18		16	36	36	151	1	18	8	25		-	-	
Transportation and utilities	369	40.0	326.50	358.50		-	-	-	-	9	27	19	14	17	8	36	36	151	1	18	8		-		_	
Stenographers I	614	39.5	304.00	329.00	230.50- 358.50			119	46	55	45	20	25	28	29	29	43	178	25	14	77				64	
Nonmanufacturing	402	39.5	278.50	288.50	201.50- 358.50	-	-	-	46	55	45	17	18	14	8	23	25	145	-	6	-	_	-	_		. P. C
Stenographers II	116	40.0	333.50	323.50	284.50- 405.00					4	9	6		5	16	13	11	6	1	12	8	25			E PIE	
Nonmanufacturing	108	40.0	337.00	331.50	291.00- 414.50	-	- 1	_		4	9	6		5	8	13	11	6	1	12	8	25	- 7		100	-
Transportation and utilities	108	40.0	337.00	331.50		-	-	-	-	4	9	6	-	5	8	13	11	6	1	12	8	25	_	_	.03	_
Transcribing-machine typists Nonmanufacturing	257 242	39.0 39.0	223.00 226.00		207.50- 231.00 213.00- 231.00	1	,-	3 -	3 -	15 6	110 110	72 72	49 49	3	2 2	-	-		-	-	-		-	-	-	
Typists	1,746	39.5	218.50	210.00	190.00- 230.00			20	202	388	546	268	137	82	25	14	1		1		37	,	1	7-3	40	
Manufacturing	321	40.0	225.00	224.50	193.00- 235.00			6	23	72	53	92	23	34	3	4	3	4.5	1		3/	4	726 T	-	18	
Nonmanufacturing	1,425	39.5	217.50	207.50	190.00- 226.00	100		14	179	316	493	176	114	48	22	10	3		-		33	4	- 7	-	-	-
Transportation and utilities	199	39.5	296.50	261.00		-	-	-	6	16	26	20	29	17	22	10	1		1	_	33		-	_	18 18	1
Typists I	971	39.5	214.00	200.50	182.00- 218.50			20	148	272	299	114	31	36						8	33	E.		4	40	
Manufacturing	140	40.0	207.00	200.00	184.00- 230.00	-	_	6	23	36	22	38	1	14		2.4					33	00	8.0		18	_
Nonmanufacturing	831	39.5	215.00	200.50		-	-	14	125	236	277	76	30	22	_						33				10	_
Transportation and utilities	66	39.5	388.50	411.00		-	-	-	-	5	10	-	-	-	-	-	-	18	-	-	33	-	-	1	18	
Typists II		39.5	224.50	218.00	201.00- 243.50	3.00		-	54	115	246	154	106	46	25	14	4	_	1		4	4				
Manufacturing		40.0	238.50	229.00	213.00- 251.00	-	-	-	-	36	31	54	22	20	3	4	3	_	_	- Y-	4	4	36.			
Nonmanufacturing	592	39.0	220.50	214.50		-	-	-	54	79	215	100	84	26	22	10	1		1	-	-	-				
Transportation and utilities	133	39.0	250.50	247.50	228.50- 284.00	_	-		6	11	16	20	29	17	22	10	4	A 1-				1 9				

Table A-1. Weekly earnings of office workers in Dallas-Fort Worth, Tex., December 1981 —Continued

		Average		Weekly ea (in dolla							Nui	mber of	workers	receivii	ng straig	ght-time	weekly	earnings	s (in dol	lars) of	-					
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range ²	130 and under 140	140 - 150	150 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 500	500 and over
ile clerks	2,195	39.0	184.00	180.00	161.50- 200.50	107	169	207	605	417	462	129	40	37	4		11/1-	-	3	12		-	-	-	3	
Manufacturing	227	40.0	198.00	180.00	165.00- 220.00	6	-	14	87	45	17	29	12	4	-	-	- 10	-	3	10		-	-	-	-	
Nonmanufacturing	1,968	39.0	182.50	180.00	161.00- 200.50	101	169	193	518	372	445	100	28	33	4	-	-	-	-	2		-	300	-	3	199
Transportation and utilities	189	39.0	195.50	184.50	165.00- 207.50	-	32	-	40	65	11	26	4	6		-		-		2	10	-			3	
File clerks I	1,630	39.0	177.00	175.50	156.00- 200.50	107	141	168	500 78	280 31	388	32	5	9	25	-	-	-	-	-		-	-	- [-	1,191
Manufacturing	119	40.0	170.50	170.00	164.00- 180.00		444	168	422	249	384	32	5	9	du a B					17.78	Maria .			-	-	
Nonmanufacturing	1,511	39.0	177.50	175.50	156.00- 200.50	101	141	108	422	249	364	32	5	9												
File clerks II	531	39.0		196.00	169.00- 222.00 195.50- 240.50	-	28	39 14	98 9	135 14	74 13	82 29	34 12	21	2	-		-	3	12		5			3	
Manufacturing	108	40.0		220.00		100	28	25		121	61	53	22	17	2	100	4			2		Ten in		_	3	
Nonmanufacturing Transportation and utilities	423 72			194.00 196.00	166.50- 217.00 184.00- 220.50		- 20	25	10	33		11	1	1	-	_	-		-	2	4		4	-	3	P. B.
Transportation and utilities	12	30.5	210.50	130.00	104.00- 220.00				- 4"													M.				
ssengers	479	39.5		169.50	158.00- 193.50	8	24	93	203	77	50	3	4	5	2	2	3	2	3		1	-	1	100		133
Manufacturing	98	40.0			172.50- 217.00	-	-	2	29	16		2	-	5	2	2	3	2	3	_		-	- T	COLUMN TO	-	
Nonmanufacturing	381	39.5	171.00	169.00	158.00- 179.50	8	24	91	174	61	18	1	4					-		T. P		Serie		-		
itchboard operators	845	40.0	202.50	190.00	180.00- 212.00	23	20	39	108	331	140	75	43	21	10	7	2	2	7			9	-	-	-	186
Manufacturing	129	40.0	252.00	224.50	207.50- 254.50	-	-	-	-	14	43	22	22		3	4	2	2	1	100	100	9	-	-	-	
Nonmanufacturing	716				178.00- 210.00		20	39	108	317	97	53	21	21	7	3	-	-	6		1	-	-	-	-	15.3
Transportation and utilities	54				220.00- 295.50		-	-	-	4	10	13	9	2	7	3	-	-	5		1	100	-		-	
itchboard operator-	1989						1776	4.1											100				10	,	3	
eceptionists	1,205	39.5	207.50	207.00	180.00- 225.00		46			250		236	78	42	16		4		-	100		3		7	3	
Manufacturing	309	40.0	207.00	202.00	179.00- 220.50		in ordinate	20		72		66	10				4	-	y	1000		3	-	7	3	
Nonmanufacturing	896				180.00- 226.50		46	58	92			170	68		13	1	-		-	10 - 10		10-m	-	7		
Transportation and utilities	42	40.0	275.50	217.50	195.50- 375.50	-	-	-	-	20	9		-	2					i da i				1	1	3	1
der clerks	1,407	39.5	253.00		192.00- 307.00		1	11	173	206		115			86	223	94	-	-	-		37	-	37	-	Floring.
Manufacturing	462	40.0	223.00	210.00	180.00- 276.00	-	- 2	6	98			25	7	71	10			-	-	-		-		-		1
Nonmanufacturing	945	39.0	267.50	258.50	210.00- 313.00	-	1	5	75	95	113	90	129	38	76	175	74	-	-			37		37	-	
Order clerks I	922	39.0	218.00	210.00	180.00- 257.50	-	1	11	173			51	129		-	80	14	-	k i			186	100	-	e 200	
Manufacturing	358	40.0	205.50	185.00	174.00- 210.00	-	Mary -	6	98			15		45		6		-	-			-		-	-300	
Nonmanufacturing	564			210.00	190.00- 258.50	-	1	5	75	95	113	36	129	36		74	-	-					72.			
counting clerks	9,520	39.5	243.50	229.00	200.00- 270.50	10	170	176	717	1079		1357	1230				325		163							
Manufacturing	2,683			234.50	200.00- 270.50	-	18	6	247	392		438	430				76	36								
Nonmanufacturing	6,837	39.5	243.50	226.00	200.00- 270.50	10	152	170				919														
Transportation and utilities	1,209	39.5	319.50	314.00	250.00- 387.50	-		-	6	63	123	37	113	98	80	93	129	37	88	106	101	15	84	32	4	
Accounting clerks I	918	40.0	204.50	207.00	182.00- 218.50	10	100	42				84	50		3	61	-	-	-			-	-		-	
Manufacturing	143						6		15			18			1	50 -	7 11-	-	-		1 8	1 100	1			100
Nonmanufacturing	775	40.0	205.50	207.00	174.00- 225.00	10	94	42	57	119	248	66	49	26	3	61	1	-								
Accounting clerks II	5,237						70					907	715							5	5 7	7	Paties.	-		
Manufacturing	1,428						12					284								1		,	13 -	-	-	1
Nonmanufacturing	3,809		226.00				- 58	125	400			623									4 7			187	1	138
Transportation and utilities	524		285.00	269.00	218.50- 328.00	-		188	1	50	97	13	72	55	34	9	74	4	34		4 7			Total !		
Accounting clerks III	2,913							. 3	13												8 69					
Manufacturing	941	40.0					-	-	1	118									T. 1 195 (5)							
Nonmanufacturing	1,972							- 3	13	64													50			PAR
Transportation and utilities	474	39.5	358.50	378.50	295.00- 410.00	-	13		1		- 11	13	38	21	41	29	45	23	44	8.	3 1		8	1 21		
Accounting clerks IV	436								1		-	3											193			2
Nonmanufacturing	265							-	1	-	-	3										5 10		3 1		4
Transportation and utilities	104	39.0	375.50	0 277 50	322.50- 433.50	1	1		1 .			0 4	. 3	9	5	5	10	10	1 10	71 13	0) 1(11	31 1	1 4	113

Table A-1. Weekly earnings of office workers in Dallas-Fort Worth, Tex., December 1981 —Continued

	Number	Average weekly		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	llars) of	_					
Occupation and industry division	of workers	hours ¹ (stand- ard)	Mean ²	Median ²	Middle range ²	130 and under 140	140 - 150	150 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 500	500 and over
Payroll clerks	1,199	40.0	262.50	253.50	218.50- 295.00			15	39	108	161	202	116	168	130	76	22	53	26	25	25	10	4	14	5	
Manufacturing		40.0	256.50		215.00- 277.00	_	-	6	26		76	85	67	65	31	23		10		14		1	1	11	5	
Nonmanufacturing		40.0	266.00				_	9	13	80		117	49	103	99	53		43	22	11	25	9		3		
Transportation and utilities	103					-	-	-	-	8	42	4	9	-	2	-	3	-	-	11	12		-	3	-	
Key entry operators	3,799	40.0	229.00	226.00	200.00- 243.00	16 5	14	6	259	583	794	970	558	303	97	58	36	23	9	1	73	14	7.7	1		
Manufacturing		40.0	247.50				_		19	99	128	254	111	56	10			12	5	1	44		100	1	1 - 1	
Nonmanufacturing			224.00				14	6	240	484		716		247	87	13		11	4		29	1.7	13.00		-	
Transportation and utilities	195	39.5	270.50				-		-	17	63	14		20	17	7	8	7	1	-	29	-	-		1-20	
Key entry operators I	2,205	39.5	211.00	210.00	190.00- 227.00	_	14	6	252	499	545	613	195	66	10	3	1		1			562	18.792			
Manufacturing		40.0	219.50	226.50			-	-	19	93		213		16		1	1		1						100	100
Nonmanufacturing		39.5	208.00	207.00	188.00- 228.00	36.	14	6	233	406	444	400	131	50	10	2	MANY.	1000		-		and e				Market 1
Transportation and utilities	95	39.5	224.50				-	-	-	14	52	3	8	16	2	1	-	-	-	-	-	-	-	-	-	
Key entry operators II	1,594	40.0	254.00	240.50	224.00- 273.00				7	84	249	357	363	237	87	55	35	23	8	1	73	14		1		
Manufacturing		40.0	294.00				-	-	-	6	27	41	47	40	10		15	12	4	1	44	14	1000	1	E III	
Nonmanufacturing		40.0	244.50		220.00- 260.00	-	-	-	7	78	222	316		197	77	11	20	11	4	1	29	_	_			100
Transportation and utilities	100	39.5	314.00				TOP-	_	-	3	11	11	4	4	15	7	8	7	1		29					18

Table A-2. Weekly earnings of professional and technical workers in Dallas-Fort Worth, Tex., December 1981

	Nombo	Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	lars) of						
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	160 and under 180	180 - 200	200	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660 - 700	700 and over
Computer systems analysts								JI.	i de	The second				70		440	05	404	000	400	450	440	185	100	26	31
(business)	2,649	40.0	492.00				195		-		1	4	27	79	56 21	119 47	85 60	194 87	396 150	429 110	452 94	442 101	60	123 37	12	12
Manufacturing	806	40.0	483.00				-	-			- 7	-	27	15 64	35		25	107	246	319	358	341	125		14	19
Nonmanufacturing Transportation and utilities	1,843 135	40.0 39.0	496.00 547.00				=	-		1	-	-	-	1	-	-	2	2	2	29	39	24	12		9	18
Computer systems analysts															10					07	47	40				
(business) I	499	40.0	391.00				-	-	7	-	- W-	4	26		48		62		58	37	17	10	- 6-	4.50	THE DE	
Nonmanufacturing	277	39.5	388.50	365.00	326.50- 423.00	ATT			8	- 13		4	26	63	33	32	15	22	24	31	17	10	-	100	-	
Computer systems analysts	4.004	40.0	104 50	400.00	400 FO F4F F0	15.		140							7	36	21	104	319	305	253	150	45	15	1	
(business) II	1,261	40.0 40.0	481.50 489.00					100	1 2300	13.40			100	4 -	6		12	20	108	96	64	56	21	4	1	
Manufacturing	392						66		1	1			1		1	36	9		211	209	189		24	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Nonmanufacturing Transportation and utilities	869 64	40.0 39.5	478.00 525.00						70 mg	-	1		- 2		-	-	2	1	-	19	20		5	6	-	
Computer systems analysts									11					e Bari	18	18. 1	195						v in	11.5		
(business) III	877	40.0	566.00	565.00	529.00- 606.50	091	-	-	_	-	-	-	1000	1 -	-	5	1	7	18	84	182	281	139	108	25	27
Manufacturing	192	40.0	574.00					_	- 1- 2	-	-	-	-		-	2	1	7	8	8	30	45	39		11	8
Nonmanufacturing	685	40.0	564.00				-	-	J. 1	-	-	-	-		-	3	-	_	10	76	152	236	100	75	14	19
Transportation and utilities	32	39.0	630.00				-	-	i lu-	-	-	-	-	-	16.5	-	-	-	-		4	3	7	8	9	1
Computer programmers (business)	1,901	40.0	383.00	375.00	320.00- 432.00		6		7	8	156	104	200	121	227		123		298	176	60		28	10	-	
Manufacturing	454	40.0	416.00	421.50	376.50- 460.00	-	_	-	-	6		3	4	46			56		112	68				1	-	
Nonmanufacturing Transportation and utilities	1,447 200	39.5 39.5	372.50 440.50				6	1	7	2	144	101 13		75 1	208 9		67 13		186 25	108 25		22 17			= =	
Computer programmers										1.3		1.000					1									
(business) I	559	40.0	315.00	307.00	268.50- 355.00	- 0_	6	-	7	7	155	89	58	47	73	66	21	16	7	6	1	-	70-	-	-	Ser.
Manufacturing	84	40.0	350.00				-		-	6			2	16	11	9	10	3	6	5	1	-	-	-	-	6.200-
Nonmanufacturing	475		309.00		268.50- 349.00	_	6	-	7	1	143	86	56	31	62	57	11	13	1	1	-	-	-	-	-	
Transportation and utilities	47	40.0	370.50				-		0.9-	-	-	5	-	1	9	15	5	10	1	1	-	-	3-7	-	-	
Computer programmers		A de la					17 17		7 10		1															
(business) II	952		395.50				-	-	-	-	-	11							184	83				-	-	The state of
Manufacturing	286	40.0	412.50				1837	-	-	-	-		2						87	31	11			0 -	-	
Nonmanufacturing	666						-		-	-	-	11	118	13	131	79				52			4	-	-	
Transportation and utilities	82	39.5	425.50	415.50	367.50- 482.50	-	13.5		1		-	8	8	-		7	8	17	10	4	5	11	4	0.15		
Computer programmers	000	00.7	470.50	400 50	107.50 501.00			E QVE				13					9	22	107	86	36	15	24	10		3.3
(business) III	309							100		A REAL PROPERTY.				1	16	19	9	22	19							OF S
Manufacturing	84																9	22								
Nonmanufacturing Transportation and utilities	225	39.5 39.0	474.00 504.50														-	10				6			- 100	
	2,349	40.0	280.50	273.00	235.00- 312.50	51	54	281	231	340	374	308	151	158	171	74	47	35	20	50	1	2	1	146		
Computer operators	586						16														1	2	1	-	-	
Manufacturing	1,763																		11						-	
Nonmanufacturing Transportation and utilities	1,763						3															-	-	-	-	
Computer operators I	670	40.0	233.50	229.50	202.00- 256.50	50	47	184	125	118	85	18	24			1	1	-	2			0	-		-	
Manufacturing	10000						- 16				12	3	1			-	-	1.10-	-	-	-	-	-	-	-	1 33
Nonmanufacturing	512															1	1	-	2		-	-	-	-	-	
Transportation and utilities	. 33							- 2		2					1	1	1	-	2	-	-	-	-	-	-	
Computer operators II							5											20				2	-	-	-	
Manufacturing	. 354							- 3										-	4		1	2	-	-	-	
Nonmanufacturing	. 878						5	91															-	-	-	
Transportation and utilities	. 99	39.5	305.50	323.00	251.50- 328.00) 1	1 3	3 8	3 4	1 10) 4	. 6	11	28	10) 3	7	2	2	-	-	-	-	-	-	

Table A-2. Weekly earnings of professional and technical workers in Dallas-Fort Worth, Tex., December 1981 —Continued

	Number	Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng straiq	ght-time	weekly	earning	s (in dol	llars) of	-					
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range ²	160 and under 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660 - 700	700 and over
Computer operators III	423	40.0	338.50	336.00	292.00- 370.50			194-	8	24	30	91	22	50	67	40	31	15	12	32		meter E	1	-		N. A.
Manufacturing	74	40.0	392.00	373.50	324.00- 484.50	-	-	- 4	_	-	2	6	4	11	5	10	8	2	5	20	100	-	1	-		
Nonmanufacturing	349	40.0	327.50	324.00	290.00- 356.00	-	-	-	8	24	28	85	18	39	62	30	23	13	7	12	_		100	-	2	
Transportation and utilities	36		382.50			-	12 .	-	-	8		-	-	-	Tow :	9	1	6	2	10		-	-	-	-	
Peripheral equipment operators	184	40.0	218.00	207.50	196.00- 226.50	7	48	70	19	24	12	2					_		2				1			
Nonmanufacturing	182		215.00			7	48	70	19	24	12	2		10.5	-	- N	-	-	3	-		-	-	-	-	
Computer data librarians	172	40.0	225.50	203.50	192.50- 246.50	10	51	43	21	18	18	2	1				1		4	3	P.	_				
Nonmanufacturing		40.0	213.00	200.50	190.00- 224.00	10	51	43	9	16	15	1	. 1	-	-	-	1	-	-			-	-	-	Marie -	
Orafters	2,069	40.0	349.00	348.00		49	47	18	63	125	101	151	133	232	242	175	143	189	224	131	22	12	8	4	- 1	15
Manufacturing	1,748	40.0	345.00	344.00	297.50- 399.50	45	39	15	44	105	87	131	109	219	228	158	133	119	193	116	7		-	_	_	4
Nonmanufacturing	321	40.0	372.00	381.00	299.00- 423.00	4	8	3	19	20	14	20	24	13	14	17	10	70	31	15	15	12	8	4		
Transportation and utilities	51	40.0	358.00	308.00	294.50- 430.50	-	-	2	-	2	6	4	15	1	2	1	2	2	7	-	2		-	-	-	
Drafters I	134	40.0	193.50	180.00	170.00- 224.00	49	41	7	22	7	8	-	-	-	-	32	-	-	-	-	-	-		-		
Drafters II	126	40.0	251.50	253.50	234.50- 267.50	sibil-	6	- 11	28	36	23	13	9	-	_	4.4			3	_		_	-		-	
Manufacturing	104	40.0	246.50	251.50	227.50- 263.50	-	6	9	28	30	18	13	-	1	-	-	-	-	-	-	1	-	15	-	-	
Drafters III	469	40.0	294.00	296.00	264.00- 320.00	-	_	_	13	81	62	113	81	79	32	4	1	1	2		_	-	-	- 1988	200	
Manufacturing	410	40.0	295.50	296.00	264.50- 321.50	- 1	-	-	6	67	58	93	71	78	31	3	-	1	2	-	-	-	-	-		
Nonmanufacturing	59	40.0	282.00	299.00	254.50- 299.00	6-5	-	-	7	14	4	20	10	1	1	1	1	-	-	-		-	-	-	-	
Drafters IV	748	40.0	362.00	356.00	336.00- 386.00	_		-		1	8	25	42	127	193	135	94	67	41	11	4	-	E	3412	_	
Manufacturing	672	40.0	359.00	354.50	336.00- 381.50	_		_	3 71-	1	4	25	37	119	184	123	90	54	33	2		-	_	-	-	
Nonmanufacturing	76	40.0	391.00	388.00	340.50- 426.00	- 4	-		-	-	4	-	5	8	9	12	4	13	8	9	4	-	-	design		
Drafters V	592	40.0	432.50	431.00	400.00- 463.00	- 12	_	1	_		. 1		1	26	17	36	48	121	181	120	18	12	8	4	1 (20) 3 (2) =	
Manufacturing	454	40.0	428.50			-	197		V 0.2	_	T	-	1	22	13	32	43		158	114			_		-	1
Nonmanufacturing	138	40.0	446.00	401.00	400.00- 498.50	-	33' -		-	-	-	-	-	4	4	4	5		23	6	11	12	8	4	W	
Electronics technicians	3,997	40.0	381.00	382.00	329.50- 438.00		_	9	155	156	156	141	235	342	368	366	362	534	409	562	175	15	12	-		
Manufacturing	2,523	40.0	390.00	382.00	339.00- 443.00	-		4	_	18	32	97	173	318	308	281	231	207	378	396	73	7	- 12	444	TO NO.	4
Nonmanufacturing	1,474	40.0	365.50	382.00	278.50- 407.00	-	-	5	155	138	124	44	62	24	60	85	131	327	31	166	102	8	12	- N=	or -	
Electronics technicians I	806	40.0	295.00	309.00	259.00- 330.00		100	9	152	42	75	83	146	226	48	18	4	3		_		_	_	1		
Nonmanufacturing	286	40.0	256.50	229.50	229.50- 265.00	-	- 1	5	152	24	49	16	11	7	2	14	3	3	-	-	1	-	-	-	-	
Electronics technicians II	1,798	40.0	368.50	369.50	339.00- 407.00	310			3	114	81	58	89	112	300	271	194	363	45	155	8	5	_		1	
Manufacturing	884	40.0	362.00				-	_	_	_	6	30	38	97	244	243	145	46	35	-		-	-	-	-	1
Nonmanufacturing	914	40.0	375.00			1.5	-	100	3	114	75	28	51	15	56	28	49	317	10	155	8	5	-		-	100
Electronics technicians III	1,393	40.0	447.00	447.00	412.50- 483.00		1	_		_		_	-	4	20	77	164	168	364	407	167	10	12	- 1	15	
Manufacturing	1,119	40.0	447.00	447.00		-	_	-	-	-	-	-	_	2	18	34	85	161	343	396	73	7	_	2 -	-	
Nonmanufacturing	274	40.0	447.50			125	-	-	-	-	-	-	-	2	2	43	79	7	21	11			12	-	-	
Registered industrial nurses	144	40.0	405.00	400.50	354.00- 455.00	_	-			_	_	3	4	23	10	12	17	22	23	21	5	4	1 10			
Manufacturing	112	40.0	409.00			2 2 2	_	_	_	_	_	200	4	17	10	6		15		21		1	_	1 2	111500	

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Dallas-Fort Worth, Tex., December 1981

	Number		erage lean²)		N		verage nean²)				verage nean²)
Sex, ^a occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars)
Office occupations -				Typists II	764	39.5	225.00	Payroll clerks	1,125	40.0	258.00
men				Manufacturing	181	40.0	238.50	Manufacturing	452	40.0	254.00
Managana	170	40.0	104 50	Nonmanufacturing	583	39.0	220.50	Nonmanufacturing	673	40.0	260.50
MessengersNonmanufacturing	173	40.0 40.0	184.50 179.00	Transportation and utilities	133	39.0	250.50	Transportation and utilities	93	40.0	274.00
Accounting clerks:		110	. The state of	File clerks	2,129	39.0	183.00	Key entry operators		40.0	225.50
Accounting clotho.	14		100	Manufacturing	208	40.0	185.00	Manufacturing	718	40.0	235.50
Accounting clerks III:		147.5		Nonmanufacturing	1,921	39.0	182.50	Nonmanufacturing	2,789	39.5	223.00
Nonmanufacturing	97	39.5	297.50	Transportation and utilities	169	39.0	197.00	Transportation and utilities	192	39.5	270.50
Office occupations -		1-14	100	File clerks I	1,615	39.0	177.00	Key entry operators I	2.081	39.5	210.00
women				Manufacturing	119	40.0	170.50	Manufacturing	504	40.0	219.50
		A CHAN	3.00	Nonmanufacturing	1,496	39.0	177.00	Nonmanufacturing	1,577	39.5	207.00
Secretaries	8,446	39.5	292.00			1000	1111111	Transportation and utilities	94	39.5	225.00
Nonmanufacturing	6,125	39.5	287.00	File clerks II	481	39.0	200.50		04	55.5	
Transportation and utilities		39.5	352.00	Manufacturing	89	40.0	204.50	Key entry operators II	1,426	40.0	248.50
	The Carte			Nonmanufacturing	392	39.0	199.50	Nonmanufacturing	1,212	40.0	244.50
Secretaries I	1.370	40.0	245.00		A 1 3			Transportation and utilities	98	39.5	314.00
Manufacturing		40.0	280.50	Messengers	290	39.5	168.50			00.0	0
Nonmanufacturing	857	39.5	224.00	Nonmanufacturing	258	39.5	167.00	Professional and technical occupations - men			
Secretaries II	2,161	39.5	284.00	Switchboard operators	816	40.0	199.00				100
Nonmanufacturing		39.5	277.50	Manufacturing	110	40.0	240.00	Computer systems analysts			
Transportation and utilities		39.5	324.50	Nonmanufacturing	706	40.0	192.50	(business):			
				Transportation and utilities	53	39.5	257.50	Nonmanufacturing	1,359	40.0	498.50
Secretaries III	3,147	40.0	296.50			100		Transportation and utilities	114	39.0	551.50
Nonmanufacturing	2,324	39.5	291.00	Switchboard operator-			The same of	0			
Transportation and utilities	311	39.5	353.00	receptionists		39.5	207.50	Computer systems analysts			
	4 TIET 15	-		Manufacturing	309	40.0	207.00	(business) I:	100		200 50
Secretaries IV	1,249	39.5	329.00	Nonmanufacturing	. 889	39.0	208.00	Nonmanufacturing	189	39.5	389.50
Nonmanufacturing	944	39.5	326.00	Transportation and utilities	. 42	40.0	275.50	Computer systems analysts			
Transportation and utilities	213	39.5	374.00					(business) II	858	40.0	484.50
				Order clerks		39.0	215.00	Nonmanufacturing	686	40.0	480.50
Secretaries V		39.5	350.50	Manufacturing	419	40.0	215.50	Transportation and utilities	56	39.5	525.50
Manufacturing		40.0	321.00	Nonmanufacturing	517	38.5	215.00	Transportation and dunico	50	00.0	525.50
Nonmanufacturing		39.5	360.00					Computer systems analysts			The same of
Transportation and utilities	114	40.0	390.50	Order clerks I		39.0	209.50	(business) III	591	40.0	570.00
				Manufacturing	. 352	40.0	204.00	Nonmanufacturing	476	40.0	569.50
Stenographers:		00.5		Nonmanufacturing	. 486	38.5	213.50	Transportation and utilities	31	39.0	630.00
Nonmanufacturing	506	39.5	291.00			1.11	1				
Transportation and utilities	369	40.0	326.50	Order clerks II	. 98	40.0	264.00	Computer programmers (business)	1,152	40.0	394.50
Stenographers I:	To VI b			Accounting clerks	8,633	39.5	239.00	Nonmanufacturing	946	39.5	387.00
Nonmanufacturing	398	39.5	278.50					Transportation and utilities	153	39.5	444.50
1401111andiacturing	555	35.3	270.00	Nonmanufacturing	6,460	39.5	241.00				
Stenographers II	116	40.0	333.50	Transportation and utilities	1,066	39.5	315.00	Computer programmers	Mary Mary		
Nonmanufacturing	108	40.0	337.00	Accounting clarks I	846	40.0	203.00	(business) I	323	40.0	324.00
Transportation and utilities		40.0	337.00	Accounting clerks I	125	40.0	199.50	Nonmanufacturing Transportation and utilities	291	40.0 40.0	318.50 371.50
				Nonmanufacturing		40.0	203.50		70	40.0	071.30
Transcribing-machine typists	256	39.0	223.00					Computer programmers	L. V. Carrier	The state of	
Nonmanufacturing	241	39.0	226.00	Accounting clerks II		39.5	223.00	(business) II	590	40.0	406.00
Typists	4 707	00.5	040.00	Manufacturing		40.0	217.00	Nonmanufacturing	454	40.0	401.00
		39.5	218.00	Nonmanufacturing	. 3,657	39.0	225.50	Transportation and utilities	49	40.0	443.00
Manufacturing		40.0	225.00	Transportation and utilities	. 507	39.5	285.50		1	100	-
Nonmanufacturing		39.5	216.50					Computer programmers	3 4 7 7 7		
Transportation and utilities	193	39.5	292.50	Accounting clerks III	. 2,600	39.5	271.00	(business) III		39.5	483.50
Typists I	961	39.5	212.50	Nonmanufacturing	. 1,858	39.5	277.00	Nonmanufacturing	. 165	39.5	479.00
Manufacturing		40.0	207.50	Transportation and utilities	. 408	39.5	360.50	Transportation and utilities	61	39.0	497.50
Nonmanufacturing		39.5	213.50	Accounting clerks IV:	1 3 3 3			Computer operators:		1	
Transportation and utilities		39.5	386.00	Nonmanufacturing	208	39.5	333.50	Nonmanufacturing	1.050	00.5	00100
יימווסףטונמנוטוז מווע ענווועפא	00	39.5	300.00	Normanulaciumy	208	39.5	333,50	Normanuracturing	1,053	39.5	284.00

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Dallas-Fort Worth, Tex., December 1981 —Continued

	Number		rerage nean²)		Number		rerage nean²)				verage nean²)
Sex,3 occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	Number of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹
Computer operators I:	Operators :							Computer programmers (business):	A Contract		
Nonmanufacturing	acturing					40.0	255.50	Nonmanufacturing	464	39.5	342.00
Transportation and utilities								Transportation and utilities	47	39.0	427.50
										adill a	
Computer operators II:				Nonmanufacturing	760	40.0	375.50	Computer programmers	The state of		
Nonmanufacturing	491	39.5	285.00					(business) I	203	40.0	294.50
Computer consisters III	214	40.0	000.00					Nonmanufacturing	174	40.0	292.50
Name of the state	314			Nonmanufacturing	274	40.0	447.50		The sec		
Nonmanuracturing								Computer programmers		134	
Transportation and utilities	35	39.5	302.00		La Tarabi	190 Phys	e 150	(business) II:			1 0 0 1 N
Paripharal aguipment aparators	125	20 5	216 50	occupations - women				Nonmanufacturing		39.5	358.00
Normanufacturing	135			0		14. 7	- 1 51 1	Transportation and utilities	33	39.0	399.50
Normanulacturing	135	39.5	210.50			10 / He la					1 1 1 1
Drafters:		1000	F 555 10. 12		470	40.0	100.00	Computer programmers			
Nonmanufacturing	283	40.0	382.50	Nonmanufacturing	472	40.0	486.00	(business) III:			
To management	200	10.0	002.00	Computer quetemo analusta		100		Nonmanufacturing	52	39.5	460.00
Drafters I	132	40.0	193.50	Computer systems analysts			THE PERSON			ALC: N	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
				(business) I:				Computer operators:			1
Drafters IV:	14.00			Nonmanufacturing	88	39.5	385.50	Nonmanufacturing	612	40.0	259.00
Nonmanufacturing	72	40.0	389.50	Community and the contract of				Committee annual la			and the second
	A 344.00	D 1519		Computer systems analysts		10.00		Computer operators I:			
Drafters V:				(business) II:				Nonmanufacturing	222	40.0	222.50
Nonmanufacturing	130	40.0	452.50	Nonmanufacturing	183	40.0	469.00	0			
Floritoria trabaldas.		1 5 1 D.		0				Computer data librarians	126	40.0	226.00
Electronics technicians:	4.004	40.0	005.50	Computer systems analysts				Nonmanufacturing	107	40.0	219.50
Nonmanufacturing	1,304	40.0	365.50	(business) III:						or market	
Transportation and utilities	570	40.0	444.00	Nonmanufacturing	197	40.0	548.00	Registered industrial nurses	120	40.0	409.50

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Dallas-Fort Worth, Tex., December 1981

		Н	lourly earn (in dollars								N	umber of	worker	s receiv	ving strai	ight-tim	e hourly	earning	s (in dol	llars) of		14					
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	5.50 and under 5.75	5.75 - 6.00	6.00 - 6.25	6.25 - 6.50	6.50 - 6.75	6.75 - 7.00	7.00 - 7.25	7.25 - 7.50	7.50 - 7.75	7.75 - 8.00	8.00 - 8.25	8.25 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50	10.00	10.50 - 11.00	11.00 - 11.50	11.50 - 12.00	12.00 - 12.50	12.50	13.00	13.50 and over
Maintenance carpenters Manufacturing		9.95 10.61		8.60-11.42 10.19-11.42		-	-	-		2 -	7 3	12	7 2	-			- 22	3 2	5 2	18 17	5	33 33	6	7 7	1	-	
Maintenance electricians	694 590 104 78	11.17 11.13 11.41 12.42	11.54 12.27	10.12–12.30 10.13–12.30 9.58–12.72 12.27–12.72	-	=	-	-	-	3 3 - -	3 3 -		21 21 -	1 1	29 15 14	19		22 20 2			13 13 -		92 91 1	116 82 34 34	82 39	-	4
Maintenance painters Manufacturing Nonmanufacturing	73	9.82 11.20 7.88	11.24	8.40-11.24 10.78-11.34 7.00- 8.40	-	:	3 -			=	14	-	8 - 8	1 1	4 - 4	14	- 4		3 3 -	12 11 1	15 15 -		- 1	1 1	=	11 11	
Maintenance machinists Manufacturing	239 225	10.76 10.70		8.77-12.30 8.75-12.30	-	-	-	-	-	:		2			43 43				32 32		9 2	6		40 39		-	
Maintenance mechanics (machinery) Manufacturing Nonmanufacturing	1,637	10.03 9.99 10.49	10.45	8.25-11.77 8.25-11.60 8.45-12.72	-	8	22 22 -	27 8 19	14	15 14 1			50 50				4 82				49		220 217 3	161 149 12	178	-	
Maintenance mechanics (motor vehicles)	326		8.56 9.40	8.00-11.67 7.50-10.54 8.00-12.28 8.00-12.95	-		17 15 2 2	4 4	2 - 2 2	14 7 7 5	23 20 3 2	6	88 44 44 44	11 11 -		199		126	6 19	5	8	23 48	68	37 18 19 19	72	83	60 1! 4! 4!
Machine-tool operators (toolroom) Manufacturing	228 228	11.05 11.05		7 10.76–11.77 7 10.76–11.77	-		1			-		-	3		-		- 6	23 23					115 115	8	-	-	
Tool and die makers		11.09 11.09		10.29-11.98 10.29-11.98		-	-		-	-		2 2			14		- 15 - 15			191 191	49 49		93 93	66 66			4 4
Stationary engineers Manufacturing				9.93–11.57 10.45–12.49		4	6	2	1 -	4	10	2	-	8 7	2		2 2	8	15 15			45 45	17 17	5 4	36 36		10

Table A-5. Hourly earnings of material movement and custodial workers in Dallas-Fort Worth, Tex., December 1981

	Nimetra	Н	lourly earni (in dollars								Nu	imber of	workers	receiv	ing strai	ght-time	hourly	earnings	(in doll	ars) of -							
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	3.25 and under 3.50	3.50 - 3.75	3.75 - 4.00	4.00 - 4.25	4.25 - 4.50	4.50 - 4.75	4.75 - 5.00	5.00 - 5.50	5.50 - 6.00	6.00 - 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00	10.50 - 11.00	11.00 - 11.50	11.50 - 12.00	12.00 - 12.50	12.50
Fruckdrivers	7,418	8.25	7.77	5.10-11.29	106	45	30	81	98	747	520	339	248	187	176	1114	50	153	292	690	132	50		1072		3	89
Manufacturing	1,625	7.60	7.21	6.90- 8.18		-	-	12	42	23	9	77	103	66	105	725	42	103	15	14	1	35		219		-	
Nonmanufacturing	5,793	8.44	9.00	4.90-11.40	106	45	30	69	56	724	511	262	145	121	71	389	8	50	277	676	131	15	31	853		3	88
Transportation and utilities	2,542	10.88	11.40	9.10-12.76	-	-	-	- 5	-		6	30	17	20	4	378		3		252		10.		615	329		88
Truckdrivers, light truck	991	4.88	4.90	4.15- 5.30	106	45	30	69	29	142	163	206	90	50	29	-	2	10	8	4	1	6	-	1	-	-	
Manufacturing		6.36				-	_	-	-	100	9	24	34	4	9	-	2	5	7	4	_	6	-	-	-	-	
Nonmanufacturing	887	4.70				45	30	69	29	142	154	182	56	46	20	-	-	5	1	-	1	-	-	- 1	F 3 15	-	
Truckdrivers, medium truck	3,011	8.25	8.60	4.80-11.40	_	-	_	12	69	578	357	111	144	53	22	125	_	21	45	273	36	19	12	497	159	3	47
Manufacturing	410	8.03		5.36-11.14	-	-	-	12	42	23	_	33	56	19	3	28	-	2	6	3	1	16			-	-	100
Nonmanufacturing	2,601	8.29	8.80			-	-	-	27	555	357	78	88	34	19		-	19	39	270	35	3	-	343		3	47
Transportation and utilities	1,329	11.00	11.40	9.10-12.76	-	-	-	-	-	1 P-	6	30	16	2	-	90	-	-	-	224	-	-	-	330	156	Sec	47
Truckdrivers, tractor-trailer	2.821	9.65	9.05	7.77-11.40					64	27		21	13	69	51	509	48	117	239	413	95	25	31	574	173		41
Manufacturing	521	7.89				_	_	_			_	20	13	28	20	217	40	92	2	7	-	13		65		_	1
Nonmanufacturing	2.300	10.05		8.73-11.61		_	_	_	-	27	_	1	-	41	31	292	8	25	237	406	95					-	41
Transportation and utilities	1,205	10.78		7.30-12.76		-	-	-	-	-	-	-	-	14	4	288	-	-	-	28	- E -	-	-	285		-	41
Shinnara	565	6.24	5.85	5.00- 7.28	19.			1	16	17	76	124	68	58	43	74	11	40	3	12	1	2	15	4			
Shippers Manufacturing		6.68					_	-	8	7	70		29	2	5			38	3	12	1				-	_	1
Nonmanufacturing	243	5.67		5.00- 6.25			-	1	8	10		82	39	56	38		1	2	-		-	-	-	-	-	-	1
Receivers	909	6.27	5.67	4.75- 7.05	-	8	14	45	60	23	142		180	95	20	40	4	79	41	14	5		14	1	39	-	
Manufacturing	313	5.85	5.40			6	9		14	8			53	42	4	4	-	2	5	14	5	7	14	-	-	-	
Nonmanufacturing	596	6.49	5.75	4.75- 8.30	-	2	5	12	46	15	79	44	127	53	16	36	4	77	36	-		Marie T	-	1	39	-	
Shippers and receivers	384	6.55	5.92	5.36- 7.56	-	-		-	-	-	60		78	38	28			36	-	2	49		19.5	-	-	-	
Manufacturing	216	6.24	5.70	5.37- 6.52	-	-	-	-	-	-	20		75	9		6			-	2			-	-	-	100	
Nonmanufacturing	168	6.96	6.75	5.18- 8.40	-	-	-	-	-	-	40	7	3	29	7	7	21	28	4.1		26	3	-	-	-		2
Warehousemen	1,707	7.95	8.05	7.10- 8.40	-	-	200	19	26	1	7	24	85	102	138	325		477	36	126	35				_	80	
Manufacturing	437	8.04	8.08	6.33- 9.57	-	-	-	17	17	Tay =	-	13	32	43	31	14		14	31	70	26		1	14		-	
Nonmanufacturing	1,270	7.92				-	-	2	9	1	7	11	53	59	107	311	77	463	5	56	9			2		80	1
Transportation and utilities	378	8.73	7.30	7.30-10.53	-	-	-	-	-	1	1	-	2	1	1	224	2	13	5	.19	9	4	9	2	5	80	and the
Order fillers	3,174	6.90	6.24	4.95- 8.65	7	34	68		58	159			324	347	15		154	378	323	229	-	-	292		-	-	
Manufacturing	1,058	6.16					48		54	48			84	200	9	51	152		14	64	-	-	42		-	-	1
Nonmanufacturing	2,116	7.26	8.30	5.00- 8.65	1	10	20	109	4	111	223	135	240	147	6	6	2	378	309	165	-		250	6			1
Shipping packers		5.46				135	85	55	94	41	218		158	16	10	16	4	-	-	1	1		- SE	123		-	No.
Manufacturing	520	6.47				-	-	18	30	14	146		43	6	40.759	-	-	-	-	. 1	1	-	-	123	-	-	
Nonmanufacturing	688	4.69	4.58	3.75- 5.45	-	135	85	37	64	27	72	113	115	10	10	16	4	-		-	-	-			-	-	-
Material handling laborers						42	2	198	86	336			146	55	147	74		35	1	6	12					-	
Manufacturing		7.46				-		-	14	28		33	28	17	10					2	12	34			1	-	1
Nonmanufacturing	1,620	6.05	5.20	4.50- 7.53	-	42	2	198	72	308	87	158	118	38	137	36	254	34	1	4		1	130		C. Par	27	700
Forklift operators	2,062	8.26	8.40	6.29-10.89	-	-	3	3	29	21	40	185	124	250	164	87		81	370	38	3			167		-	4
Manufacturing	1,336		6.80	5.96-10.66	-		3	3	23	21	40		120	245	154	65		13	63	7	3	41	71	33		-	1
Nonmanufacturing	726			8.60-11.02	-	-	_	-	6	-	-	59	4	5	10	22	-	68	307	31	37 -	-	-	134			4
Transportation and utilities	168		11.40	8.90-12.76	-	-	-	-	-	-	-	2	4	2	-		-	-	56	-	1	Mar.	1	24	35	- mi	4
Guards	3,751	4.83		3.75- 5.15				679	93				221	187	48			32		11	10			82			
Manufacturing	673			5.30-10.58		24	18		-	24			99	51	28					10	9	8	61	82	2	25	
Nonmanufacturing	3,078	4.27	4.00	3.70- 4.50	300	498	533	670	93	272	160	221	122	136	20	15	17	19	-	1	1	-	4 4 4	-	-	-	

Table A-5. Hourly earnings of material movement and custodial workers in Dallas-Fort Worth, Tex., December 1981 —Continued

	Number		ourly earni (in dollars								Nu	umber o	worker	s receiv	ring stra	ight-time	hourly	earning	s (in dol	lars) of	-				5 16.7		
Occupation and industry division	of workers	Mean ²	Median ²	Middle range ²	3.25 and under 3.50	3.50	3.75 - 4.00	4.00 - 4.25	4.25 - 4.50	4.50 - 4.75	4.75 - 5.00	5.00 - 5.50	5.50 - 6.00	6.00 - 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00	-	-	-	12.00 - 12.50	-
Guards I	3,370	4.51	4.00	3.75- 4.85	306	522	551	679	93	296	189	279	179	54	22	29	23	18	36	8	8		36	15	2	25	
Manufacturing	518	6.69	5.85	5.15- 8.55	6	24	18	9	_	24	29		99				12		36	8	8	-	36		2	25	
Nonmanufacturing	2,852	4.12	4.00	3.70- 4.50	300		533	670	93		160		80				11	11	-	-	-	-	-	-		-	-
Guards II	381	7.67	6.45	6.19-10.13	-				-	-	-	29	42	133	26	18	14	14		3	2	8	25	67	Part.		
Janitors, porters, and cleaners	6,890	4.62	3.63	3.35- 5.00	1993	1550	275	482	363	321	181	372	252	207	141	53	97	91	44	53	199	34	49	121	12		
Manufacturing	1,785	6.52	5.71	4.75- 8.24	23	95	19	115	70	119	93		187	148	104					45			29				
Nonmanufacturing	5,105	3.95	3.50	3.35- 4.00	1970	1455	256	367	293	202	88	128	65	59				57	15	8	4	33			12		
Transportation and utilities	239	7.35	7.21	4.83-10.39	-	-	10	4	24	11	19	12	7	19	12	27	-	3	14	8	4	33		-	12		

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Dallas-Fort Worth, Tex., December 1981

Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, ² 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
Maintenance, toolroom, and			Truckdrivers, medium truck	2,636	7.83	Forklift operators	1.993	8.21
powerplant occupations - men			Manufacturing	392	7.92	Manufacturing	1,993	7.70
			Nonmanufacturing	2,244	7.81	Nonmanufacturing	726	9.10
Maintenance carpenters	112	9.76	Transportation and utilities	1,108	10.64	Transportation and utilities	168	10.70
Maintenance electricians	645	11.13						GIGE UT
Manufacturing	541	11.07	Truckdrivers, tractor-trailer	2,810	9.64	Guards	3,107	4.81
Nonmanufacturing	104	11.41	Manufacturing	510	7.82	Nonmanufacturing	2,618	4.34
Transportation and utilities	78	12.42	Nonmanufacturing	2,300	10.05	140/imanulacturing	2,018	4.34
Transportation and dulities	10	12.42	Transportation and utilities	1,205	10.78			
Maintenance painters:		1				Guards I	2,788	4.45
Nonmanufacturing	50	7.82	Shippers	541	6.22	Nonmanufacturing	2.414	4.18
110111101101011111111111111111111111111	00	7.02	Manufacturing	308	6.67			
Maintenance mechanics			Nonmanufacturing	233	5.63	Cuanda II		
(machinery)	1,662	10.01				Guards II	319	7.89
Manufacturing	1,522	9,96	Receivers	754	6.12			1 36 1 2
Nonmanufacturing	140	10.49	Manufacturing	296	5.81	Janitors, porters, and cleaners	4,278	4.93
			Nonmanufacturing	458	6.32	Manufacturing	1,340	6.68
Maintenance mechanics						Nonmanufacturing	2,938	4.13
(motor vehicles)	1,130	9.87	Shippers and receivers	340	6.69	Transportation and utilities	178	7.70
Manufacturing	326	9.07	Manufacturing	174	6.42		.,,	1.10
Nonmanufacturing	804	10.19	Nonmanufacturing	166	6.98	Material movement and custodial		The state of the s
Transportation and utilities	737	10.19						
			Warehousemen	1,498	7.82	occupations - women		
Material movement and custodial			Nonmanufacturing	1,209	7.96			
occupations - men						Order fillers	700	5.56
사이에 된 마을 보세요? 하게 된 생물이 되는 것을 마음이다.			Order fillers	2,474	7.27	Manufacturing	272	5.42
Truckdrivers	6,850	8.19	Manufacturing	786	6.42	Nonmanufacturing	428	5.65
Manufacturing	1,580	7.55	Nonmanufacturing	1,688	7.67		420	0.00
Nonmanufacturing	5,270	8.38		.,	1.01	Objective and the		15 10 15
Transportation and utilities	2,321	10.70	Shipping packers	629	6.05	Shipping packers	534	4.65
			Manufacturing	371	6.90	Manufacturing	149	5.41
Truckdrivers, light truck	824	5.04			0.00			1
Manufacturing	103	6.34	Material handling laborers:			Janitors, porters, and cleaners	2,263	3.86
Nonmanufacturing	721	4.86	Manufacturing	360	7.48	Nonmanufacturing	2,062	3.67

Table A-7. Indexes of earnings and percent increases for selected occupational groups, Dallas-Fort Worth, Tex., selected periods

			All industries					Manufacturing	1			Nonmanu	ufacturing	
Period ^s	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
Indexes (October 1977=100):			74	130		T. Terrain	784 (29)	S. Line	A 45.	100		F-188, C to 187		11260
December 1980.	135.2	133.9	135.8	137.1	136.0	131.0	137.0	133.9	133.3	137.3	137.1	132.3	(6)	135.8
December 1981 Percent increases:	149.1	148.0	150.2	149.7	145.5	146.3	149.2	146.4	147.4	151.0	150.4	146.9	(6)	143.7
October 1974 to October 1975	8.2	9.2	9.3	8.8	8.9	7.4	8.6	9.6	8.6	7.5	8.6	9.2	(6)	9.7
October 1975 to October 1976	6.8	6.6	9.0	7.6	9.6	7.1	7.0	9.1	7.9	8.5	6.7	6.5	(6)	10.2
October 1976 to October 1977	7.0	6.6	8.3	8.9	5.9	7.4	6.9	9.2	8.3	8.1	6.8	6.5	(6)	4.8
October 1977 to October 1978 October 1978 to December 1979	7.5	8.4	10.2	8.4	10.3	7.1	10.1	9.1	8.1	7.8	7.7	7.4	(6)	11.6
14-month increase	10.9	12.8	10.3	12.9	12.6	10.0	11.3	10.1	11.2	12.5	11.2	13.4	(6)	12.5
Annual rate of increase	9.3	10.9	8.8	11.0	10.7	8.5	9.6	8.6	9.5	10.6	9.5	11.4	(6)	10.6
December 1979 to December 1980	13.4	9.5	11.7	12.0	9.5	11.2	11.8	11.5	10.9	13.2	14.4	8.6	(6)	8.1
December 1980 to December 1981	10.3	10.5	10.6	9.2	7.0	11.7	8.9	9.3	10.6	10.0	9.7	11.0	(6)	5.8

Table A-8. Pay relationships in establishments with paired office clerical occupations, Dallas-Fort Worth, Tex., December 1981

									Occup	oation fo	or which	averag	e earnir	ngs equa	al 100								
Occupation for which earnings are compared		Se	ecretarie	es		Stenogr	aphers	Tran- scrib- ing ma-	Турі	ists	File c	lerks	Mes- sen-	Switch-	Switch- board opera- tor	Order clerks	А	ccountir	ng clerks	3	Payroll clerks	Key e	
	1	II	Ш	IV	٧	1	П	chine typists	1	H	1	11	gers	tors	-recep- tionists	1	1	11	III	IV	CIERS	1.	11
Secretaries I	100	88	79	70	65	104	(6)	111	124	111	144	120	127	112	109	108	(6)	106	88	78	92	112	97
Secretaries II	114	100	86	76	67	109	114	118	138	122	147	133	148	118	119	125	131	117	97	84	96	125	107
Secretaries III	127	116	100	86	77	120	112	130	147	136	169	137	157	129	134	137	149	130	109	95	108	138	117
Secretaries IV	143	131	117	100	88	132	120	141	160	158	186	155	181	149	139	170	166	143	125	108	120	151	131
Secretaries V		149	130	113	100	158	124	140	169	165	183	181	190	162	153	158	194	154	137	122	132	161	137
Stenographers I		92	83	76	63	100	82	(6)	(6)	103	(6)	(6)	(6)	(6)	102	(6)	(6)	111	84	79	77	114	98
Stenographers II		88	89	84	81	122	100	(6)	(6)	(6)	(6)	(6)	(6)	108	(6)	(6)	(6)	(6)	93	(6)	(6)	(6)	100
Franscribing-machine typists	90	85	77	71	72	(6)	(e)	100	120	105	133	120	134	109	102	(6)	(6)	102	86	(6)	92	110	91
Typists I	81	72	68	62	59	(6)	(e)	83	100	87	110	95	113	86	100	95	100	94	85	60	76	93	81
Typists II	90	82	73	63	61	97	(6)	95	115	100	129	114	128	96	109	(6)	108	94	77	68	85		88
ile clerks I	69	68	59	54	55	(6)	(6)	75	91	77	100	85	97	80	84	90	87	80	68	(6)	64	103	76
ile clerks II	83	75	73	65	55	(6)	(6)	83	105	88	118	100	118	94	91	(6)	100	90	86	64	76		
Messengers	79	68	64	55	53	(6)	(6)	75	89	78	103	84	100	79	88	91	85	84	71	52	74	91	85
Switchboard operators	89	85	78	67	62	(e)	92	91	117	104	125	107	126	100	105	103	115	95	84	72	84	85 99	72 92
receptionists	92	84	75	72	65	. 98	(6)	98	100	92	120	110	114	96	100	93	101	95	89	67	85	95	92
Order clerks I	93	80	73	59	63	(e)	(e)	(6)	105	(6)	112	(e)	110	98	108	100	(6)	98	91	(6)	86	92	89
Accounting clerks I		76	67	60	52	(e)	(e)	(6)	100	93	114	100	118	87	99	(6)	100	87	71	64	78	96	84
Accounting clerks II	94	86	77	70	65	90	(6)	98	106	106	124	112	119	105	106	102	114	100	84	72	87	102	91
Accounting clerks III	113	103	91	80	73	119	108	116	118	129	148	116	141	119	112	110	141	119	100	87	104	118	106
Accounting clerks IV	128	119	105	93	82	126	(6)	(6)	168	147	(6)	155	193	138	150	(6)	156	138	115	100	110	150	123
Payroll clerks	109	105	93	83	76	129	(6)	108	132	118	156	131	136	119	118	117	128	115	97	01	100	117	115
(ey entry operators I	89	80	73	66	62	87	(6)	91	108	97	124	109	118	101	105	108	104	98		67			
Key entry operators II	103	94	86	76	73	102	100	110	124	114	132	117	138	108	108	112	110	110	85 95	67 81	86 87	100	86

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 114 in the Secretaries I column indicates that Secretaries II average 114 percent of (or 14 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, Dallas-Fort Worth, Tex., December 1981

								Occ	cupation fo	or which ave	erage earni	ngs equ	al 100							
Occupation for which earnings are compared		mputer syst lysts (busir		Computer	r programm ness)	ners (busi-	Con	puter ope	rators	Peripher- al equip-	Comput- er data			Drafters			Electr	ronics tech	nicians	Regis- tered in- dustrial
	1	П	101	1	- 11	III	1	- 11	-111	ment op- erators	librarians	1	- 11	III	IV	٧	1	U	111	nurses
Computer systems analysts		100				1 C C								H.The						
(business) I	100	81	67	126	107	100	167	141	115	(6)	179	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
(business) II	123	100	84	151	123	105	200	169	141	196	204	(6)	(6)	158	137	112	166	136	111	132
(business) III	149	119	100	175	140	123	234	198	169	247	235	(e)	(6)	183	161	135	181	152	129	156
(business) I	80	66	57	100	82	68	136	112	93	(6)	130	(6)	136	116	90	86	112	84	80	82
(business) II	94	81	72	122	100	82	167	134	110	129	154	(6)	157	139	117	101	(6)	102	96	103
(business) III	100	95	81	147	123	100	177	153	129	148	162	(6)	179	165	141	117	(6)	131	110	114
Computer operators I	60	50	43	73	60	56	100	84	70	115	106	(6)	95	81	69	55	(6)	65	54	69
Computer operators II	71	59	51	89	75	65	119	100	83	132	119	(6)	110	101	86	72	92	76	69	84
Computer operators III	87	71	59	108	91	77	142	121	100	140	142	(6)	(6)	123	105	87	(6)	96	85	99
Peripheral equipment operators	(6)	51	40	(6)	77	67	87	76	71	100	99	(6)	(6)	126	(6)	(e)	(6)	79	(6)	68
Computer data librarians	56	49	43	77	65	62	94	84	70	101	100	(6)	114	109	88	86	86	72	77	81
Drafters I	(6)	(6)	(6)	(6)	(6)	(6)	(e)	(6)	(6)	(8)	(e)	100	(6)	71	62	(e)	(e)	(6)	(6)	(6)
Drafters II	(6)	(6)	(6)	74	64	56	105	91	(6)	(6)	88	(6)	100	85	73	59	(6)	93	58	70
Drafters III	(6)	63	55	86	72	61	124	99	81	80	92	140	118	100	81	68	99	84	69	81
Drafters IV	(6)	73	62	111	85	71	146	116	95	(6)	114	161	138	124	100	81	(6)	97	79	94
Drafters V	(6)	89	74	116	99	85	181	139	115	(6)	116	(6)	171	148	123	100	(6)	120	97	115
Electronics technicians I	(6)	60	55	89	(6)	(6)	(6)	109	(6)	(6)	117	(6)	(6)	101	(6)	(6)	100	93	68	(6)
Electronics technicians II	(6)	74	66	120	98	76	153	132	104	127	140	(6)	108	119	103	83	108	100	81	100
Electronics technicians III	(6)	90	78	124	104	91	185	146	118	(6)	130	(6)	172	145	126	103	146	124	100	121
Registered industrial nurses	(6)	76	64	121	97	88	145	119	101	148	123	(6)	143	123	106	87	(6)	100	83	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, Dallas-Fort Worth, Tex., December 1981

				Occupation fo	r which average earni	ngs equal 100			
Occupation for which earnings					Mech	anics	Machine-	Trade and Samuel	Chalianan
are compared	Carpenters	Electricians	Painters	Machinists	Machinery	Motor vehicles	operators (toolroom)	Tool and die mak- ers	Stationary engineers
laintenance carpenters	100	97	101	93	98	100	94	94	98
laintenance electricians	103	100	105	99	102	105	102	97	102
aintenance painters	99	95	100	(6)	97	99	95	94	98
aintenance machinistsaintenance mechanics	107	101	(e)	100	102	107	(6)	98	102
(machinery)aintenance mechanics	102	98	103	98	100	104	100	87	99
(motor vehicles)	100	95	101	94	96	100	95	94	98
achine-tool operators (toolroom)	106	98	105	(6)	100	105	100	(6)	101
achine-tool operators (toolroom)	106	103	107	102	115	106	(6)	100	106
rationary engineers	102	98	102	98	101	102	99	95	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, Dallas-Fort Worth, Tex., December 1981

	Territoria de					Occupation	for which av	erage earning	s equal 100					
Occupation for which earnings		Truckdrivers			Maria L	Shippers	Marchause		Chinning	Material	Forklift	Gu	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	100	(6)	(6)	95	97	95	83	100	106	(6)	98	123	(6)	125
Truckdrivers, medium truck	(6)	100	99	110	115	105	110	94	121	123	100	142	(6)	131
Truckdrivers, tractor-trailer	(6)	101	100	102	(6)	106	107	103	(6)	113	105	142	(6)	115
		91	98	100	104	(6)	99	112	126	111	107	(6)	(6)	112
ShippersReceivers	103	87	(6)	96	100	100	101	105	124	112	102	106	(6)	116
Shippers and receivers	105	95	95	(6)	100	100	104	106	(6)	(6)	101	116	(6)	117
Warehousemen	120	91	94	101	99	96	100	105	104	106	105	112	(6)	126
Warehousemen	100	107	97	90	95	94	95	100	109	102	99	120	(6)	112
Shipping packers	95	83	(6)	79	81	(6)	96	92	100	105	95	(6)	(6)	112
Material handling laborers	(e)	81	88	90	89	(6)	95	98	95	100	93	106	(6)	109
Material handling laborers	102	100	96	94	98	99	95	101	105	107	100	116	(6)	112
Guards I	81	70	71	(6)	94	86	90	83	(6)	94	87	100	(6)	107
Guarde II	(6)	(6)	(6)	(6)	(6)	(6)	(e)	(6)	(e)	(6)	(6)	(6)	100	114
Janitors, porters, and cleaners	80	76	87	89	86	85	79	89	89	91	89	93	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 Dallas-Fort Worth, Tex., December 1981

	Number	Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earning	s (in dol	llars) of	-					
Occupation and industry division	Number of workers	weekly hours¹ (stand- ard)	Mean ²	Median ²	Middle range ²	130 and under 140	140 - 150	150 - 160	160 - 180	180	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 500	500 and over
ecretaries	6,000	40.0	309.50	297.50	264.00- 348.50	_	-		5	67	182	320	770	947	806	706	485	419	388	266	263	159	94	61	25	3
Manufacturing	2,490	40.0				-	-	-	-	2		127	339	365	337	288	221	154	155	126	154	74	69		12	
Nonmanufacturing	3,510						-	-	5	65		193	431	582	469	418	264	265	233				25			
Transportation and utilities	810		363.50			16700	1.40			-	8	5	43	44	32	60	80	132	79		78	78	16	35	12	1
Secretaries I	681	40.0	270.50			-	-	-	-	45		68	110	98	99	57	50	39	19		7	-	-	-	-	18
Manufacturing	539	40.0	285.00			-	-	- 10	-	2		49	105		91	57	50	39	19	7	7	-	-	-	-	
Nonmanufacturing	142	40.0	215.00	209.50		1 1 1	1			43		19	5		8	1 - 7			-	-			-	-		
Secretaries II	1,788	39.5	290.50				-	-	-	8		158	368		207	195	68	110	48		42		24		-	181
Manufacturing	774	40.0	292.00				-	-	-	-	4	76	210		63	52	31	30	23				24		-	100
Nonmanufacturing	1,014	39.5					100		-	8	1	82	158			143	37	80	25				-	12		-
Transportation and utilities	317	39.5	330.00			116	-	9 98			8	4	41	33	12	31	23	79	21	31	20			12		
Secretaries III	2,370		312.50				-	-	3	6	27	64	240		429	348	253	128	160				18		4	
Manufacturing	925	40.0	335.00				-	-	3	6	27	62	24 216	86 300	180 249	169 179	121 132	48 80	62 98				11	10	4	1200
Nonmanufacturing	1,445 224		298.00 363.50						3	0	21	1	210	11	15		32	22	34		11		7	1	- 1	
Transportation and utilities	- 10	100		100			4015		100		- 1															
Secretaries IV	776						-	-		2	1	5	29	32			77 19	115 37	116		50		38		12	
Manufacturing	239								10.00	2	1	5	29	32	50		58	78	49 67				32			
Nonmanufacturing	537 171	39.5 39.5								-	1	5	25	32	4	8	21	25	9				2			
Transportation and utilities		6 110				E POR				HI TO	14.19		5 7			199	Pens				1			W 3	-	-
Secretaries V	204	40.0						18 8		-	1 65	-		2 2	/	20 17	21 21	13	34				14			9
Nonmanufacturing	191	40.0 39.5										- 0	1978	2	1	2	4	6	15				12	2	6	
Transportation and utilities						10-27			1													17	and i	Probability of the Park		
Stenographers	593									9	F 1553	22 19	21 14		12			184 151	26			33000	-			132
Nonmanufacturing Transportation and utilities	369						Part of	61		9		19						151	1					-		
Stenographers I	477	40.0	335.50	358.50	301.00- 358.50	-				5	18	16	21	26	25	29	43	178	25	14	77	-				
	116	To James			284.50- 405.00			1		1	9	6		5	16	13	11	6	1	12	8	25	174			
Stenographers II Nonmanufacturing	108									4	9		-	. 5	8	13	11	6	1	12						
Transportation and utilities	108						-		-	4	9		-	5	8	13		6	1	12				-		-
Typists	612	39.5	242.00	220.00	200.50- 253.00	-	_		- 64	78	162	106	62	40	25	11	4	-	1	-	37	4			18	3
Manufacturing	151				208.50- 243.00	-	1		- 11	16			20			1	3	-	-	-	- 4		-	-		120
Nonmanufacturing	. 461	39.5					-		- 53				42					-	1		- 33		-	-	18	
Transportation and utilities	. 199	39.5	296.50	261.00	228.50- 411.00	-	1	100	- 6	16	26	20	29	17	22	10	1	- 5	1		- 33	-	-		18	3
Typists I	. 270	39.5	249.00	208.50	200.00- 236.00) -	-		- 24	40		35	9	-	-	-	-	-	-		- 33		-	-	18	
Nonmanufacturing	. 224						-		- 13				8	-	-	-	-	-	-		- 33		-	-	18	
Transportation and utilities	. 66	39.5	388.50	411.00	411.00- 498.50	-	100			5	10	1	-	-			-		1	1000	- 33	-	-		18	3
Typists II	. 340	39.5	237.00	230.50			-		- 40				53				4	-	1		- 4	4	-	-		-
Nonmanufacturing	. 235								- 40				34					-	1	- 1	-	-		-		-
Transportation and utilities	. 133	39.0	250.50	247.50	228.50- 284.00	-	1 15		- 6	11	16	20	29	17	22	10	1	-	1		1	-	100	-	-	
File clerks	. 923	39.0	203.00	200.50	184.50- 212.00	6	28	6	1 107	179					4	-	-	-	3			15 12			. 3	3
Manufacturing	. 82			215.00	190.00- 247.50	-	-	-	- 11	17					-	-	-	-	3	De production		-	930-	-		-
Nonmanufacturing	. 841				184.50- 211.00	6	28	6	1 96	162	333	85	28	33	4	-	-	-	1	2	-	1	-	-	3	3
File clerks II	. 308						- 22										2	-	3			-		-	. 3	
Nonmanufacturing	. 258	39.0	204.50	198.00	168.00- 229.00) -	- 22	18	8 45	48			22	17		1				2	-		1	45	3	3
Messengers	. 207													1 5	5 2	2	3	. 2	3	3	-	-	107	-		-
Nonmanufacturing	. 159	39.5	168.50	163.00	157.00- 173.00	8	3 20	32	2 66	10	18	1	4	-	1			- 12				11.5		-		
Switchboard operators	. 432	40.0	214.50	192.00	180.00- 229.00	1	1	7 19	9 43	155			35			3 100	2	2		1		9				-
Manufacturing	. 97			233.50				-	-		- 31				3		2	2			7	- 9	-	-		-
Nonmanufacturing	. 335						1	7 19	9 43	155							-	1 4 5	6		1	-		-		-
Transportation and utilities	. 54	39.5	257.00	241.50	220.00- 295.5	J -			-	- 4	1 10	13	5	9 2	2 7	3		_	5	'					1	

Table A-12. Weekly earnings of office workers in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981 —Continued

	Nombre	Average		Weekly ea (in dolla							Nu	mber of	workers	s receivi	ng strai	ght-time	weekly	earnings	s (in dol	lars) of						
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range ²	130 and under 140	140 - 150	150 - 160	160 - 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 440	440 - 460	460 - 480	480 - 500	500 and over
Switchboard operator-	40,000																						1			
receptionistsNonmanufacturing	259 223	39.0 38.5	224.00 217.00				-	35 35	26 26	33 30	47 40	45 39	17 14	26 22	9	7	4 -	-		- 1	1	3 -	-	3	3	
Order clerks	97	39.5	225.50	236.00	164.00- 270.50	-	1	5	22	11	1	13	7	19	12	6	-	-	-	-	-	-	-		1	
Order clerks I	61	39.5	199.00	182.00	160.00- 236.00	-	1	5	22	11	1	9	3	3	- T	6		-	-	-	-		-	-	-	
Accounting clerks	3,953	39.5	268.00	250.00	214.00- 314.00	10	79	112	173	301	501	450	513	408	269	227	231	90	163	112	127	28	95	51	12	100
Manufacturing	1,198	40.0	271.50				-	-	3	53	138	193	235		92	76	76	34	46	2	13	13		19	8	
Nonmanufacturing	2,755	39.5	266.00				79	112	170		363	257	278		177	151	155	56	117	110		15			4	1
Transportation and utilities	1,015	39.5	339.50	331.00	284.00- 396.50	-	-	E -	6	15	46	13	85	81	80	93	129	37	88	106	101	15	84	32	4	100
Accounting clerks I	400	40.0	211.00	206.00	152.00- 250.00	10	58	42	35	45	54	42	24	26	3	61				_	-	/_	_	_	_	
Nonmanufacturing		40.0	210.00				58	42	35		27	24	23		3	61	-	-	-	*	-	-	-	-	N -	
Accounting clerks II	1,818	39.5	239.50	232.00	200.00- 265.00	-	21	67	125	214	336	287	283	156	81	33	88	9	36	5	77				_	
Manufacturing		40.0	237.50				-	_	3	43	107	151	146		9	17	12	3	-	1		_	_	-		
Nonmanufacturing			240.50				21	67	122	171	229	136	137	99	72		76	6	36	4	77	-	_	-	-	
Transportation and utilities	379	39.5	314.50	322.00	263.50- 370.00	J	-	0-	1	2	29	-	56		34		74	4	34	4	77	-	-	-	E P	186
Accounting clerks III		39.5	301.00					3	13	40	107	115	196	197	165	98	87	37	57	88		18			-	
Manufacturing		40.0	294.50				-		-	-	4	24	87	122	71	31	25	11	10	1	12	13		17	-	1
Nonmanufacturing		39.5	303.50				-	3	13	40	103	91	109		94	67	62	26	47	87	20	5		21	-	
Transportation and utilities	425	39.0	372.00	378.50	322.50- 420.50		-	-			2	2	26	4	41	29	45	23	44	83	19	5	81	21		
Accounting clerks IV	343	39.5	354.00	353.00	317.50- 367.00	-	- 1	-		-	-	3	6	26	20	35	56	44	70	19	18	10	10	13	12	-
Nonmanufacturing	182	39.0	360.50	365.00	322.50- 396.50	-	-	-	Carl-	-	-	3	5	20	8	7	17	24	34	19	17	10	3	11	4	1
Transportation and utilities	104	39.0	375.50	377.50	322.50- 433.50	-	-	-	-	-	2 -	-	3		5	5	10	10	10	19	5	10			4	
Payroll clerks	355	40.0	303.50	296.00	226.00- 361.00	-	-	-	8	14	48	37	22	14	38	27	14	38	26	11	25	10	4	14	5	
Manufacturing	118	40.0	304.50	293.50	240.50- 338.00	-	- 111	-	6	-	14	8	14	7	13	23	5	3	4	-	-	1	4	11	5	
Nonmanufacturing	237	39.5	302.50	297.50	224.50- 362.00	-	-	-	2	14	34	29	8	7	25	4	9	35	22	11	25	9	-	3	-	
Transportation and utilities	42	40.0	391.00	409.00	387.50- 421.50	-	-	-	-	-		1	1	-	2	-	3	-	-	11	12	9		3	-	Fred
Key entry operators	1,264	40.0	251.50	238.50	208.00- 276.00	-	-		39	197	177	233	182	140	88	51	36	23	9	1	73	14	-	1	100	
Manufacturing		40.0	285.50	259.00	236.00- 321.00	-		-	6 42 -	5	43	52	82	35	10	38	16	12	5	1	44	14	18.0	1	100	
Nonmanufacturing	906	39.5	238.00	229.00	199.50- 265.00	-	-	-	39	192	134	181	100	105	78	13	20	11	4	-	29	-	-	-	5000	
Transportation and utilities	144	39.5	290.50	276.50	223.50- 350.00	-	-	100	-	11	23	9	12	20	17	7	8	7	1	-	29	-	-	-	-	
Key entry operators I		40.0	219.00				-	-	39	1000	105	111	94		9	3	1	_	1	-	-	-	-	-		
Manufacturing		40.0	236.00				- 1		-	5	34	42	47		-	1	1	-	1	-	-	V	-	-	-	
Nonmanufacturing	458	39.5	214.00					-	39	171	71	69	47				-	-	-	-	-	-	-	-	-	1
Transportation and utilities	49	39.0	237.50	242.00	209.00- 270.00	-	1.7	-	1	8	12	3	8	16	2	-	-	-	-	-	-	1	-	-	-	
Key entry operators II	666	39.5	281.00					-	-	21	72	122	88		79	48	35	23	8	1	73	14	-	1	1	
Manufacturing	218	40.0	317.50				-	-	-	-	9	10	35		10		15	12	4	1	44	14	-	1	-	
Nonmanufacturing	448	39.5	263.00				15	-	-	21	63	112	53				20	11	4	-	29	-	-	-	-	
Transportation and utilities	95	39.5	318.00	302.00	260.00- 413.00	-	-	-	-	3	11	6	4	4	15	7	8	7	1	-	29	-	-	-	-	

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981

	N	Average		Weekly ea (in dolla							Nu	mber of	worker	s receivii	ng strai	ght-time	weekly	earning	s (in do	llars) of	5				11/45	
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range²	160 and under 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660 - 700	700 and over
Computer systems analysts				MAR																			400			
(business)	1,826	40.0	495.50				-	-	-	-	1	3	5		41	79	74	138	286			325	162	91	26	13
Manufacturing	725	40.0	482.50				-	-	-	- 7	- 5	-	-	15	15		60	81	132			86	54	37	12	
Nonmanufacturing	1,101	40.0	504.00	517.50	441.50- 559.50	-	7965	-	-	-	1	-	5	42	26	32	14	57	154	157	197	239	108	54	14	
Computer systems analysts			WE B					5-3-1		- "			1988	105		1.5										
(business) I	425	40.0	400.00	397.00	361.00- 423.00	-	-	-	_	-	-	-	4	56	39	73	55	80	55	36	17	10	_	-	-	
Nonmanufacturing	203	39.5	407.00				-	-	-	-	-	-	4	41	24		8	20	21	30	17	10	-	-	-	
				40			1									100	100			1	P-1					
Computer systems analysts			107.00	100 50	444.00 500.50								1	6.5			17	50	222	171	133	83	39	15		
(business) II		40.0	487.00				-					1		1	1	May 7	12		93			41	15			
Manufacturing		40.0	489.00				100	-					-		-		5					42				
Nonmanufacturing	420	40.0	485.50				-	-	-	-		_	1	-	-1	1005			129			42				
Transportation and utilities	36	39.0	534.50	526.00	508.50- 580.50	-	-	-	-	-	-						2	1	0.5	6	15		5	6		7
Computer systems analysts				1 4 3		1			1-12			146	1 30	1	5			1 6	- No			100			15.76	
(business) III	652	40.0	569.00	565.50	537.00- 606.50) -	_	-	-	-	-	-	-	- 4	-	5	1	7	8	42	126	231	122	76	25	
Manufacturing		40.0	578.00				-	-	-	-	-	-	-	-	_	2	1	7	5	5	30	45	39	33	11	1
Nonmanufacturing	466	40.0	565.00				-	-	-	-	-	-	-	-	-	3	-	-	3	37	96	186	83	43	14	
Transportation and utilities	32		630.00				-	-	_	-	-	-	-	-	-	-	-	-	-	-	4	3	7	8		1
Transportation and duties	02	00.0	000.00	011100					1	1							12						1			
Computer programmers (business)	983	40.0	404.00				-	-	1	2	37	38			77		65					28	28	10	-	
Manufacturing	263	40.0	438.50	433.00	404.00- 480.00	-	-	-	-	-	-	3		-			22		70			10		1	2.5	
Nonmanufacturing	720	39.5	391.50				-	- H	1	2	37	35	86	75			43								-	
Transportation and utilities	178	39.5	457.00	434.50	400.00- 505.00	-	-	-	-	-	-	-	-	1	9	22	13	36	25	25	9	17	12	9		
Computer programmers	100									1 - 1	- 4	1		7.	-	1.5			1970			13.14				
(business) I	273	40.0	333.50	330.00	297.00- 368.00) -		-	1	1	36	31	58	32	38	32	14	16	7	6	1	-	-	-	-	
Nonmanufacturing	229	40.0						_	1	1	36				27		11	13	1	1	-	1 1	-	-	_	
Transportation and utilities	42		379.00				-	-	-		-	7.	100	1	9					1	-	10	- 9	_	-	
	18.7							1					1			51.7	1					-		-		
Computer programmers			7	- 4				1.5			10		10	47	24	38	44	75	96	52	18	15				
(business) II	396	39.5	420.00				100	100	3 × 17			3	1.3		24							3		- 045	F	10 A
Manufacturing		40.0	433.50				-	1	-	-		-	2											-	J	
Nonmanufacturing	232						1	-	-	-	-	3	8	13	22	33						12		-	1	
Transportation and utilities	65	39.5	455.50	422.00	406.50- 506.00)		-	-	-	1			-	-	1	8	16	10	4	5	11	4	-	54, 87	B.05
Computer programmers				- 1040						-	1					1								10	6-8	
(business) III	233	39.5	485.00	462.50	440.00- 508.50) -		-	-	- 10	-	W 10 10			-	-	3	22	77	66	18	13	24	10	-	-51
Manufacturing	55							-	-	-	-	-			-	-	200	-	12	24	9	7	2	1	-	-
Nonmanufacturing	178							-	-	_					-	-	3	22			9	6	22	9	-	
Transportation and utilities	71						-	100-	-	-	- J	- 2	0	-	-	-		10				6				
											10-			100				0=	20	50		2		31.3		
Computer operators																48						2		1	100	1
Manufacturing							2															2	1		100	
Nonmanufacturing	. 836												58	86								-	-		1	
Transportation and utilities	. 131	39.5	337.00	323.00	302.50- 382.50	1	3	3 2	5	7	12	3	12	29	11	13	9	8	6	10					77.5	11.83
Computer operators I	319	40.0	249.00	241.00	220.00- 264.50) 1	15	51	92	61	42	14	24	9	6	1	1	-	2	-	-	-	-	-	-	13
Manufacturing							- 2							3		-	-	-	-	180-	-	-	-	-	-	144
Nonmanufacturing							13							6	6	1	1	-	2	-	-	-	-	-	-	
Transportation and utilities	. 33							- 2								1	1	-	2		-	-	-	-	-	1 4
	-	00 =	000.00	077.00	050.00 001.01		1			000	100	00	00	54	00	10	14	20	6	18	1	2		300		
Computer operators II							1 5	5 23									14	20	4			2			-	100
Manufacturing									11								1	20			1	2	-	- 2-	-	
Nonmanufacturing							5							41 28					2		1		W.	-	-	1
Transportation and utilities	. 70	39.5	320.00	323.00	303.00- 351.50)	3	-	4	1 5	4	1	1	28	10	3	1	2	1 2	100			-	-	-	

Table A-13. Weekly earnings of professional and technical workers in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981 —Continued

	Tal.	Average		Weekly ea (in dolla							Nu	mber of	worker	s receiv	ing stra	ight-time	weekly	earning	s (in do	llars) of	-					
Occupation and industry division	Number of workers	weekly hours ¹ (stand- ard)	Mean ²	Median ²	Middle range ²	160 and under 180	180 - 200	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320	320 - 340	340 - 360	360 - 380	380 - 400	400 - 420	420 - 460	460 - 500	500 - 540	540 - 580	580 - 620	620 - 660	660 - 700	700 and over
Computer operators III	274	40.0	352.50	342.00	299.50- 387.50	-	-	.	-	16	14	41	20	43			16					E .	1		W.	-
Manufacturing	64	40.0	400.50	390.50	340.00- 491.00	-	-	-	-	-	2	6	4	4	5		8	2	5			-	1	-	G 13.	-
Nonmanufacturing	210		337.50	332.50	294.00- 370.00	-	-	-	-	16	12	35	16	39	29	23	8	13	7			-	-	-	-	-
Transportation and utilities	28		420.50	413.50		-	-	-	-	-	-	-	-	-	-	9	1	6	2	10	-	-	-	-	-	
Peripheral equipment operators	130	39.5	223.50	214.50	202.00- 243.00	5	26	44	15	24	12	2	-	_	134	_	_	-	2	-	-	-	-	-	-	-
Nonmanufacturing	128		220.00	213.50	202.00- 242.00	5	26	44	15	24	12	2	-	-	-	-	-	-	-	-	-	-	-	187	-	
Computer data librarians	103	40.0	229.50	207.50	189.00- 249.50	8	37	20	5		5	2	1	-			1	-	4	3	-	-	15.	-	M. F.	-
Nonmanufacturing			211.00	199.00	188.00- 225.50	8	37	20	5	15	2	1	1	-	-	-	1		-	-	-		-	-		1
Drafters	1,279	40.0	363.00	357.50	311.50- 410.00	_	3	18	38		45	100		142	157		119					5	-	-		13
Manufacturing			363.00	357.50	314.50- 411.00	-	3	15	38	39	39	96			156	92	113		153	116	7	-	-	-		-
Nonmanufacturing	72		359.00	335.50	304.50- 410.00	-	-	3	-	4	6	4	16	5	1	5	6	6	9	-	2	5	-	-		-
Transportation and utilities	50		358.50			-	-	2	-	2	6	4	15	1	1	1	2	2	7	-	2	5	-	100	-	
Drafters II	116	40.0	255.00	255.50	235.00- 270.50	-		11	28		23	13		-	1		-	-	0-					-	1	-
Manufacturing	98	40.0	250.50	253.50	234.50- 264.50	-	-	9	28	30	18	13	-	-	-	-	-	-	-	-	-			-		
Drafters III	247	40.0	306.00	305.00	290.00- 321.50			-	-	10	17	76					1	1	2	-	-			-		-
Manufacturing	231	40.0	306.00	305.00	290.00- 321.50	-	-	-	-	8	17	72	64	54	10	3		1	2	-						
Drafters IV	471	40.0	360.50			-		_	7 -	1	4	- 11								2				-		-
Manufacturing	447	40.0	359.00	356.00	339.00- 382.50	-		-	-	1	4	11	25	73	133	69	70	54	5	5 2	-	1		-		
Drafters V	424		435.00			-		-	335	-	-	-	1	10								. 5	-	-		-
Manufacturing	412	40.0	433.00	439.00	403.00- 465.00	-	-	-	-		-	-	1	10	13	3 20	43	58	146	114	1					
Electronics technicians						-	-	7				105						527 207	375 372					2 -		-
Manufacturing						-	-	4		18		97														
Nonmanufacturing	770	40.0	422.00	407.00	407.00- 491.50	-	-	3	9	12	15	8	12	15	35	5 28	43	320	3	152	95	8	12			
Electronics technicians I	567	40.0	313.50	319.50	299.50- 330.00	-		7	6	24	38	68	146	219	48	3 4	4	3								-
Electronics technicians II	1,469					-		-	3	6	9	37					185				3 1			-01-	1	-
Manufacturing	863	40.0	362.50	361.50	344.00- 380.50	1		-	-	-	6	30	32	85	244	4 243	145	46	32	-		1				
Electronics technicians III	1,218	40.0	455.00	457.00				-	-	-	-	200	-	4	14									2 -		-
Manufacturing		40.0	448.00	448.00	418.50- 482.00	1		-	-	-	-	-	-	2	12	2 28	85	161	340	393	73	3				-
Registered industrial nurses								-	-	-	-	3	4	17								5 4	1		188	-
Manufacturing	. 85	40.0	398.00	389.00	354.50- 425.00	-		-	-	-	-	-	4	11	10) 6	17	15	8	3 6	5 4	4	1	1		-

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981

	Number		erage lean²)		Number		rerage nean²)		Number		verage nean²)
Sex,3 occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex,3 occupation, and industry division	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars)
Office occupations – men				Messengers	116 98	40.0 40.0	166.50 163.00	Computer systems analysts (business) I: Nonmanufacturing	128	39.5	414.50
Messengers:				Switchboard operators	403	40.0	208.50	Normanuracturing	120	39.5	414.50
Nonmanufacturing	61	39.5	177.50	Nonmanufacturing	325	39.5	197.50	Computer systems analysts	100		The ke
0//				Transportation and utilities		39.5	257.50	(business) II:			
Office occupations – women								Nonmanufacturing	307	40.0 39.0	493.50 538.00
Secretaries	5,037	40.0	308.50	Switchboard operator- receptionists	252	39.0	226.00	Computer systems analysts			
Nonmanufacturing		39.5	304.00	Nonmanufacturing	216	38.5	219.00	(business) III:			1
Transportation and utilities		39.5	363.50		189 192		1 - 5 - 6	Nonmanufacturing	299	40.0	572.00
				Order clerks	73	39.5	215.00	Transportation and utilities	31	39.0	630.00
Secretaries I	648	40.0	267.00							7	The state of
Manufacturing		40.0	281.50	Order clerks I	51	39.5	190.50	Computer programmers (business):	1		19 4 6 6 1
Nonmanufacturing	141	40.0	215.00	Atime alastra.	11 -325		201	Nonmanufacturing		39.5	403.50
	- Constant			Accounting clerks: Nonmanufacturing	2,423	39.5	263.00	Transportation and utilities	139	39.5	458.50
Secretaries II:	4044	00.5	290.00	Transportation and utilities	872	39.5	337.00	Computer programmers	1.00		-
Nonmanufacturing		39.5 39.5	330.00	Transportation and dutities	012	33.0	337.00	(business) I:	100	1000	1 7
Transportation and utilities	317	39.5	330.00	Accounting clarks I	328	40.0	208.00	Nonmanufacturing	142	40.0	325.00
Secretaries III	1,981	40.0	307.50	Accounting clerks I	290	40.0	206.50	Transportation and utilities	38	40.0	381.00
Nonmanufacturing	1,445	39.5	298.00	110 martination and a second		10.0	200.00			40.0	001.00
Transportation and utilities		39.5	363.50	Accounting clerks II	1,519	39.5	239.50	Computer programmers	of real T	100	
				Nonmanufacturing		39.5	240.50	(business) II:	14.7		1-6-36
Secretaries IV	662	40.0	361.00	Transportation and utilities		39.5	316.00	Nonmanufacturing	. 122	40.0	430.50
Nonmanufacturing	536	39.5	352.00					Transportation and utilities	. 40	40.0	473.00
Transportation and utilities	171	39.5	401.00	Accounting clerks III	1,108	39.5	297.00		100		
		ter pr		Nonmanufacturing	. 861	39.5	300.50	Computer programmers (business) III:			
Secretaries V		40.0	383.00	Transportation and utilities	. 359	39.0	376.50	Nonmanufacturing	118	39.5	491.50
Nonmanufacturing	191	40.0	382.50					Transportation and utilities	61	39.0	497.50
Transportation and utilities	98	39.5	405.00	Accounting clerks IV:				Transportation and duitido	. 01	00.0	407.00
Stenographers:				Nonmanufacturing	. 125	39.0	344.00	Computer operators:			
Nonmanufacturing	369	40.0	326.50		005	40.0	000 50	Computer operators: Nonmanufacturing	. 553	39.5	289.00
Transportation and utilities		40.0	326.50	Payroll clerks		40.0	293.50 296.50				
			480.00	Nonmanufacturing		39.5	292.00	Computer operators I: Nonmanufacturing			
Stenographers II	116	40.0	333.50	Transportation and utilities		40.0	393.00	Nonmanufacturing	. 141	39.5	241.00
Nonmanufacturing	108	40.0	337.00	Transportation and dulides	. 52	40.0	000.00	Transportation and utilities	. 26	39.0	304.50
Transportation and utilities	108	40.0	337.00	Key entry operators:		1.36		Computer operators III:			
		00.5		Nonmanufacturing:	1 13			Nonmanufacturing	. 155	40.0	339.00
Typists	600	39.5	240.50	Transportation and utilities	. 141	39.5	291.00	Transportation and utilities		39.5	421.50
Manufacturing		40.0 39.5	237.00 242.00							1	
Nonmanufacturing Transportation and utilities		39.5	292.50	Key entry operators I: Manufacturing	105	10.0	000 50	Peripheral equipment operators		39.5	222.50
Transportation and utilities	193	39.5	292.50	Manufacturing	. 135	40.0	236.50	Nonmanufacturing	. 95	39.5	222.50
Typists I	260	39.5	246.00	Transportation and utilities	. 48	39.0	238.50				
Nonmanufacturing	215	39.5	257.00	Transportation and dulidos	1 40	00.0	200.00	Drafters: Nonmanufacturing	61	40.0	373.50
Transportation and utilities		39.5	386.00	Key entry operators II:			1	Normanuracturing	. 01	40.0	3/3.50
		1 2 3	1	Nonmanufacturing	. 379	39.5	265.50	Electronics technicians:			
Typists II		39.5	237.00	Transportation and utilities	. 93	39.5	318.00	Nonmanufacturing	. 604	40.0	437.50
Nonmanufacturing		39.0	228.50		ES FILE			Transportation and utilities	. 570	40.0	444.00
Transportation and utilities		39.0	250.50	Professional and technical occupations – men	1			Professional and technical			
File clerks	871	39.0	200.50			3113	The state of	occupations - women	-	1.019	
Nonmanufacturing		39.0	200.50	Computer systems analysts (business):		100	F4.00	Computer systems analysts			
File clerks II		39.0	210.00	Nonmanufacturing Transportation and utilities	. 742	40.0	511.00 564.00	(business): Nonmanufacturing	. 347	10.5	100
Nonmanufacturing	227	39.0	207.50	Transportation and utilities	. 86	38.5	564.00	Nonmariuracturing	34/	40.0	486.50

Table A-14. Average weekly earnings of office, professional, and technical workers, by sex in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981—Continued

Sex, ³ occupation, and industry division	Number		rerage nean²)			Average (mean²)		
	of workers	Weekly hours ¹ (stand- ard)	Weekly earnings (in dollars) ¹	Sex, ³ occupation, and industry division	Number of workers	Weekly hours¹ (stand- ard)	Weekly earnings (in dollars) ¹	
Computer systems analysts (business) II:				Computer programmers (business) II:				
Nonmanufacturing	113	40.0	464.50	Nonmanufacturing: Transportation and utilities	25	38.5	428.00	
Computer programmers (business):	Red to a		100					
Nonmanufacturing	265	39.5	372.50	Computer programmers			1	
Transportation and utilities	39	38.5	451.50	(business) III: Nonmanufacturing	52	39.5	460.00	
Computer programmers			133712			1784		
(business) I:			Taile Indi	Computer data librarians	73	40.0	227.00	
Nonmanufacturing	77	39.5	321.50	Nonmanufacturing	66	40.0	217.00	

Table A-15. Hourly earnings of maintenance, toolroom, and powerplant workers in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981

	Number		ourly earn (in dollars		Number of workers receiving straight-time hourly earnings (in dollars) of —																						
Occupation and industry division	Middle range ²	5.50 and under 5.75	5.75 - 6.00	6.00 - 6.25	6.25 - 6.50	6.50 - 6.75	6.75 - 7.00	7.00 - 7.25	7.25 - 7.50	7.50 - 7.75	7.75 - 8.00	8.00 - 8.25	8.25 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00	10.50	11.00	11.50 - 12.00	12.00	12.50 - 13.00	13.00	13.50 and over			
Maintenance carpenters Manufacturing		10.04 10.45		8.60-11.42 9.82-11.42		-		-	-	2 -	6	7 7	5 2				13	3 2	3 2	18 17		24 24		7 7	-	-	6
Maintenance electricians	387	11.52 11.42 11.94 12.42	11.62 12.27	10.45-12.69 10.45-12.69 12.27-12.72 12.27-12.72	-	-			=	3 3 - -	3 3 -	5	3 3 -	1 1		5	13 5 8	15 13 2	24 22 2 1	71 71 -	13 13 -		19 18 1		52 39	-	* 48
Maintenance painters	1	10.41 11.26		8.40-11.24 10.78-11.45		-	-		1	-			8 -		3	14	5	-	-	12 11	15 15			1	1	11 11	
Maintenance machinists Manufacturing		11.42 11.40		10.50-12.30		-	-		-	-			-			3	9 9	4 4	4	8 8	9 2	6 6	10			-	
Maintenance mechanics (machinery)		10.65 10.52		9.38-12.30 9.38-12.20		8 8	8	8 8	14 14	-	27 27		10			5 15 5 12					35 35		55 52		214 148		
Maintenance mechanics (motor vehicles) Manufacturing Nonmanufacturing Transportation and utilities	150	10.09 11.73	8.90 11.67	9.75-12.95 8.90-11.78 11.27-12.95 11.65-12.97	-		2 - 2 2	4 4	2 - 2 2	3 - 3 3	8 6 2 2	2	5	1	7 1 3 - 4	5 4 1 1 3 -	67 4 58 9	1	25 6 19	5	5			18	72		15
Machine-tool operators (toolroom) Manufacturing	176 176			10.83-11.77 10.83-11.77		-			-	-			3				- 6	9 9	4	2 2	40				-	-	
Tool and die makers		11.72 11.72		11.15-12.74 11.15-12.74		1			-	-		2					15		14 14	9	35 35		62 62			1	# 42
Stationary engineers		10.62 11.19		9.99-12.04 10.45-12.59		4	5	2	1 -	4	2	2		8	3 2	2	2	8 8	12			36			36 36		16 16

^{*} All workers were at \$13.50 to \$14.00.

All workers were at \$13.50 to \$14.00.

Also see footnotes at end of tables.

^{* *} Workers were distributed as follows: 28 at \$13.50 to \$14.00; 21 at \$14.00 to \$14.50; 10 at \$15.00 to \$15.50; and 1 at \$15.50 to \$16.00.

Table A-16. Hourly earnings of material movement and custodial workers in establishments employing 500 workers or more in Dallas-Fort Worth, Tex., December 1981

	Number	H	lourly earn (in dollars								Nu	umber o	f worker	rs receiv	ing strai	ght-time	e hourly	earning	s (in doll	lars) of	-						
Occupation and industry division	Number of workers	Mean ²	Median ²	Middle range ²	3.25 and under 3.50	3.50 - 3.75	3.75 - 4.00	4.00 - 4.25	4.25 - 4.50	4.50 - 4.75	4.75 - 5.00	5.00 - 5.50	5.50 - 6.00	6.00 - 6.50	6.50 - 7.00	7.00 - 7.50	7.50 - 8.00	8.00 - 8.50	8.50 - 9.00	9.00 - 9.50	9.50 - 10.00	10.00	10.50	11.00 - 11.50	11.50 - 12.00	12.00 - 12.50	12.50
Truckdrivers	2,702	10.60	11.40	9.00-11.61	-		-			3		4	15		30	14	13	153	292	351	89		13		332	3	464
Manufacturing	225	8.67	8.18		-	-	-	-	-	3	3	3	3	5	13	1	5	103		14	1	17	13		-	-	3
Nonmanufacturing Transportation and utilities	2,477 1,419	10.77 11.84	11.40 11.61	9.00-11.61 11.40-12.76	-				=	-	1 -	1	12	17 6	17	13 2		50 3	277	337	88	7	1 1 2	853 615		3 -	461 461
Truckdrivers, light truck	73	7.14	6.80	6.40- 8.37	-	, a.	-	-	-	-	4	3	5	12	23	-	2	10	8	4	1	-	-	1	-	-	-
Truckdrivers, medium truck	1,169	11.50	11.61	11.40-12.76	-	100	-		_	3	N 18 4	-	9	10	2	9	-	21	45	49	36	7	12	343	159	3	461
Nonmanufacturing	1,130	11.60		11.40-12.76		-	-	-	-	-	-	-	6		2	9	-	19		46			94.	343	159	3	461
Transportation and utilities	953	12.06		11.40-12.76		7	-	-	-	-	-	-	2	2	- T	2	-	-	-	-	-	-	3.7	330	156	-	461
Truckdrivers, tractor-trailer	1,452	10.07	10.02	8.80-11.40	-	-	-	_	-	-	-	-	-	-	4	5	11	117	239	298	52	17	1	532	173	-	3
Manufacturing	149	8.95	8.18	8.18-10.23	-	-	-	-	-	-	-	-	-	-	4	1	3			7	-	13	1	23	-	-	3
Nonmanufacturing	1,303	10.19	11.21	9.00-11.40	-	-	-	-	-	7.5	-		-	-	-	4	8	25	237	291	52	4		509	173		-
Shippers	120	6.95	7.06	5.35- 8.01	-	-	-	1	8	6	2		10	4	4	4		26	-	12		2	1	4	-	-	-
Manufacturing	102	7			-	-	- 65		8	-	resident	24	8	13 8	2	4			Files	12	1 43	2	1	4		lanci i	
Receivers	368	7.49				2	8			23			12		17	10	4	79		14			-	1	39		4
Manufacturing						-	3	_		8			-	42	1	1	-	2		14	5	7	-	-	-	-	-
Nonmanufacturing	250	7.94	8.35	6.38- 8.65	-	2	5	4	14	15	3	7	12	2	16	9	4	77	36	-	-	-	- 1	1	39	-	4
Shippers and receivers	122	7.72	7.50	6.75- 9.50	-	1.5	_	-	_	1 2	3	7	14	5	7	13	23	8		2	40			-	100-		Fo.
Manufacturing	50			5.95- 9.50		-	-	1	4-	-	2		11	3	-	6			- A	2			-	-	-	-	-
Warehousemen Nonmanufacturing				6.52-10.42 6.50- 9.45		=	-	2 2		1	7 7		26 16		110 93			39 25		61 19	26 9		76 9	2 2	5 5	80 80	-
Order fillers	1,170	8.70	8.65	8.30- 9.45	-	1	-	15	-	5	-	30	21	136	9	9	42	114	309	229		-	250	-	335	_	
Manufacturing						Cetto"	_	15	1	5		26			3	3			_	64		-		-	-	-	-
Nonmanufacturing	922			8.65-10.95		1	-		-	-	-	4	9		6			114	309	165		-	250	-	-	-	-
Shipping packers	125	8.83	11.01	6.60-11.01	-	-	-	-	-	-		6	14	10	10	16	4	-	-	1	1	-	-	63	-	-	-
Material handling laborers						6	2	63	27	43					139	74			1	6			152			-	-
Manufacturing		7.68				-		-		18		31	28		10	38			-	2		34			-	-	-
Nonmanufacturing	100		6.75	5.61- 7.95	-	6	2		1992	25		1000	81	38	129	JEL S	11	131-151	1	4		-	130				10.0
Forklift operators						-	3	1			1		17		35					38					176	-	45
Manufacturing						-	3	3		6	2					35		13		7	-	23	15		141	-	-
Nonmanufacturing Transportation and utilities				8.60-11.02 8.90-12.76					6	_		3		3 -	10	18		1	307 56	31		1		134	35 35	_	45 45
Guards	1,039					2	9	12	7	44	24	214	178	153	45	47	37	32	36	11	10	8	61	82	2	25	
Manufacturing						-	6			18					28	32	20			10	9	8	61	82	2	25	-
Nonmanufacturing						2	3	8	7	26				102	17			19		1	1	-		-	-	-	-
Guards I	704	6.47	5.62	5.02- 7.25	-	2	9	12	7	44										8	1		36			25	-
Manufacturing		7.19				-	6			18									36	8	8	-	36	15	2	25	-
Nonmanufacturing	275	5.35	5.08	5.00- 5.50	-	2	3	8	7	26	9	142	37	7	7	4	11	11	-	-	-	-	-	-	-	-	-
Guards II	. 335	7.95	6.58	6.29-10.80	-	-	-		-	* =-	-	6	42	110	26	18	14	14	-	3	2	8	25	67	-	-	-
Janitors, porters, and cleaners																53			34	38					12	-	-
Manufacturing	1,145			5.38- 9.74		18				52										30			15		-	-	-
Nonmanufacturing	2,382			3.35- 4.19		254										35		57		8		33			12	-	
Transportation and utilities	. 213	7.49	7.21	5.04-10.39	-	-	10	4	18	6	14	12	7	19	12	27	-	3	4	8	4	33	20	-	12	-	-

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 Dallas-Fort Worth, Tex., December 1981

Sex, ⁵ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, ^a occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)4	Sex, ³ occupation, and industry division	Number of workers	Average (mean²) hourly earnings (in dollars)
Maintenance, toolroom, and		7 E	Truckdrivers, light truck	72	7.12	Forklift operators	1,030	9.25
powerplant occupations - men						Manufacturing	438	8.74
		1 2 7 8	Truckdrivers, tractor-trailer	1,441	10.06	Nonmanufacturing	592	9.62
Maintenance electricians	428	11.49	Manufacturing	138	8.77	Transportation and utilities	160	10.94
Manufacturing	338	11.37	Nonmanufacturing	1,303	10.19			
Nonmanufacturing	90	11.94				Guards	788	6.92
Transportation and utilities	78	12.42	Shippers	102	6.94	Nonmanufacturing	382	5.85
		A Company	Manufacturing	94	7.13			100
Maintenance mechanics	951	10.68				Guards I:		-
(machinery)	849	10.54	Receivers:	116	6.48	Nonmanufacturing	224	5.44
Manufacturing	049	10.54	Manufacturing	116	0.48			
Maintenance mechanics		1 2 4	Shippers and receivers	120	7.76	Guards II	273	8.26
(motor vehicles)	458	11.27	Manufacturing	50	7.54			
Manufacturing	150	10.09	Walland Color of the Color of t		7.01	Janitors, porters, and cleaners	2,091	5.71
Nonmanufacturing	308	11.84	Warehousemen:			Nonmanufacturing	1,313	4.53
Transportation and utilities	249	12.19	Nonmanufacturing	414	8.18	Transportation and utilities	152	7.97
			Transportation and utilities	144	10.81			
Material movement and custodial						Material movement and custodial		
occupations - men			Order fillers	934	9.11	occupations - women		
그는 그들이 얼마나면 가장 가장 그리를 보고 있었다.			Manufacturing	150	7.34			
ruckdrivers	2,315	10.49	Nonmanufacturing	784	9.45	Order fillers	236	7.06
Manufacturing	195	8.36			1	Overde		1
Nonmanufacturing	2,120	10.69	Material handling laborers:	000	7.70	Guards:	70	F 00
Transportation and utilities	1,198	11.68	Manufacturing	332	7.72	Nonmanufacturing	73	5.29

Footnotes

- ¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.
- ² The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the workers receive the same or more and half receive the same or less than the rate shown. The middle range is defined by two rates of pay; one-fourth of the workers earn the same or less than the lower of these rates and one-fourth earn the same or more than the higher rate.
- ³ Earnings data relate only to workers whose sex identification was provided by the establishment.
- ⁴ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
- ⁵ Estimates for periods ending prior to 1976 relate to men only for skilled maintenance and unskilled plant workers. All other estimates relate to men and women.
- 6 Data do not meet publication criteria or data not available.

Appendix A. Scope and Method of Survey

In each of the 71 areas¹ currently surveyed, the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. 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 effects on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. 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 and II Typists, I and II File clerks, I, II, and III Messengers Switchboard operators Order clerks, I and II Accounting clerks, I, II, III, and IV 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

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

Appendix table 1. Establishments and workers within scope of survey and number studied in Dallas-Fort Worth, Tex., December 1981

	Minimum	Number of e	establishments		Workers in establishments					
Industry division ²	employment in establish- ments in scope	Within scope of surveys	Studied		scope irvey ⁴	Studied				
	of survey	Of Survey-	法4 4	Number	Percent					
All establishments										
All divisions		2,122	266	617,204	100	266,285				
flanufacturing	100	581	82	227.022	37	112,890				
Nonmanufacturing		1,541	184	390,182	63	153,395				
other public utilitiess	100	100	31	72,855	12	49,446				
Wholesale trades	50	467	29	58,262	9	9,070				
Retail trades	100	276	35	126,188	20	62,030				
Finance, insurance, and real estates	50	317	30	65,114	11	14,583				
Services ^{6 7}	50	381	59	67,763	- 11	18,266				
Large establishments										
All divisions		214	92	345,694	100	235,044				
Manufacturing	500	68	30	132,699	38	101,313				
Ionmanufacturing	-	146	. 62	212,995	62	133,731				
other public utilities* Wholesale trade*	500	30	17	58,830	17	46,840				
Wholesale trades	500	13	4	11,164	3	5,314				
Retail trade ⁶	500	50	23	90,018	26	59,440				
Finance, insurance, and real estates	500	23	7	28,290	8	10,870				
Services ⁶ 7	500	30	11	24,693	7	11,267				

The Dallas-Fort Worth, Tex. Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties. 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.

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

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

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

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

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

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

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

Appendix B. Occupational Descriptions

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

Office

SECRETARY

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

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

- a. 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;

- 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

- 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
- d. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, over 5,000 persons; or
- e. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) of a company that employs, in all, over 25,000 persons.

LS-4

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

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

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

LR-1

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

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

LR-2

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

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

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

	LR-1	LR-2
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 in a confidential relationship with only one manager or executive and performs more responsible and discretionary tasks as described in the secretary job definition.

Stenographer I

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

Stenographer II

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

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

TRANSCRIBING-MACHINE TYPIST

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

TYPIST

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

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

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 instructions, 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-thejob training and experience.

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

TOOL AND DIE MAKER

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

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

STATIONARY ENGINEER

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

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

BOILER TENDER

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

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

Material Movement and Custodial

TRUCKDRIVER

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

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

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

SHIPPER AND RECEIVER

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

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

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

For wage study purposes, workers are classified as follows:

Shipper Receiver Shipper and receiver

WAREHOUSEMAN

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

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

ORDER FILLER

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

SHIPPING PACKER

Prepares finished products for shipment or storage by placing them in shipping containers, the specific operations performed being dependent upon the type, size, and number of units to be packed, the type of container employed, and method of shipment. Work requires the placing of items in shipping containers and *may involve one or more of the following*: Knowledge of various items of stock in order to verify content; selection

of appropriate type and size of container; inserting enclosures in container; using excelsior or other material to prevent breakage or damage; closing and sealing container; and applying labels or entering identifying data on container. Packers who also make wooden boxes or crates are excluded.

MATERIAL HANDLING LABORER

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

POWER-TRUCK OPERATOR

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

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

Forklift operator Power-truck operator (other than forklift)

GUARD

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

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

For wage study purposes, guards are classified as follows:

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:

ignations. A conversion table for the affect	Numeric	Alphabetic
Occupation	designation	designation
	(currently used)	
Secretary	I	E
	II	D
	III	C
	IV	В
	V	A
Stenographer	I	General
	II	Senior
Typist	I	В
	II	Α
File clerk	I	С
	II	В
	III	Α
Order clerk	I	В
	II	Α
Accounting clerk	I	D
	II	C
	III	В
	IV	Α
Key entry operator	I	В
	II	A

Occupation	Numeric designation	Alphabetic designation
	(currently used)	
Computer systems analyst (business)	I	C
	II	В
,	III	Ā
Commuter magazammen (hyginess)	I	C
Computer programmer (business)	II	В
	III	A
	111	A
Computer operator	I	С
네. 경기가 가장 내려가 나가 그렇게 되었다.	II	В
	III	Α
Drafter	I	Е
	II	D
	III	C
	IV	В
	V	Α
Electronics technician	I	C
	II	В
	III	Α
Guard	I	В
	II	A

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. Cheyenne, 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. Favetteville, 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-Elvria, 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.-Okla. 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 r	
Albany-Schenectady-Troy, N.Y., Sept. 1981	3010-49	\$2.50
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1981	3010-57	\$3.25
Atlanta, Ga., May 1981 ¹	3010-24	\$3.25
Baltimore, Md., Aug. 1981	3010-39	\$3.00
Billings, Mont., July 1981	3010-25	\$2.25
Boston, Mass., Aug. 1981	3010-48	\$3.25
Buffalo, N.Y., Oct. 1981 ¹	3010-61	\$3.25
Chattanooga, Tenn.—Ga., Sept. 1981 ¹	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.	3010-44	\$3.25
Columbus, Ohio, Oct. 1981 ¹	3010-54	\$3.25
Corpus Christi, Tex., July 1981	3010-22	\$2.25
Dallas—Fort Worth, Tex., Dec. 1981	3010-69	\$3.00
Davenport—Rock Island—Moline, Iowa—Ill., Feb. 1981	3010- 7	\$2,25
Dayton, Ohio, Dec. 1981	3010-65	\$2.75
Daytona Beach, Fla., Aug. 1981	3010-38	\$2.25
Denver—Boulder, Colo., Dec. 1981	3010-67	\$3.00
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. 1981	3010-59	\$2.50
Green Bay, Wis., July 1981	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. 1981	3010-56	\$4.25
Jackson, Miss., Jan. 1981	3010- 4	\$1.75
Jacksonville, Fla., Dec. 1981	3010-63	\$2.50
Kansas City, Mo.—Kans., Sept. 1981	3010-47	\$3.00
Los Angeles—Long Beach, Calif., Oct. 1981	3010-66	\$4.25
Louisville, Ky.—Ind., Nov. 1981	3010-60	\$2.75

Area	Bulletin i and pr	
Memphis, Tenn.—Ark.—Miss., Nov. 1981	. 3010-55	\$2.75
Miami, Fla., Oct. 1981	3010-53	\$3.25
Milwaukee, Wis., May 1981 ¹	3010-16	\$3.25
Minneapolis—St. Paul, Minn.—Wis., Jan. 1981 ¹	3010-1	\$3.75
Nassau—Suffolk, N.Y., June 1981	. 3010-31	\$3.00
Newark, N.J., Jan. 1981	3010- 3	\$2.25
New Orleans, La., Oct. 1981	3010-46	\$3.25
New York, N.Y.—N.J., May 1981'	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. 1981	3010-51	\$2.50
Paterson—Clifton—Passaic, N.J., June 1981	3010-35	\$2.25
Philadelphia, Pa.—N.J., Nov. 1981	3010-52	\$3.00
Pittsburgh, Pa., Jan. 1981	3010- 2	\$2.25
Portland, Maine, Dec. 1981	3010-64	\$2.75
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	3000-70	\$2.25
Saginaw, Mich., Nov. 1981	3010-58	\$2.50
Salt Lake City—Ogden, Utah, Nov. 1981	3010-62	\$3.00
San Antonio, Tex., May 1981	3010-15	\$2.25
San Diego, Calif., Nov. 1981	3010-68	\$2.75
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'	3010-20	\$2.75
Trenton, N.J., Sept. 1981	3010-50	\$3.00
Washington, D.C.—Md.—Va., Mar. 1981	3010- 6	\$3.00
Wichita, Kans., Apr. 1981	3010-11	\$2.25
Worcester, Mass., Apr. 1981	3010-34	\$2.25
York, Pa., Feb. 1981 ¹	3010 0	82 75

- * Prices are determined by the Government Printing Office and are subject to change.
- 1 Data on establishment practices and supplementary wage provisions are also presented.

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Region I

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

Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont

Region V

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

Illinois Indiana Michigan Minnesota Ohio Wisconsin

Region II

Suite 3400 1515 Broadway New York, N.Y. 10036 Phone: 944-3121 (Area Code 212)

New Jersey New York Puerto Rico Virgin Islands

Region VI

Second Floor 555 Griffin Square Building Dallas, Tex 75202 Phone: 767-6971 (Area Code 214)

Arkansas Louisiana New Mexico Oklahoma Texas

Region III

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

Delaware District of Columbia Maryland Pennsylvania Virginia West Virginia

Regions VII and VIII

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

VII \ Iowa C Kansas M

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

Region IV

Suite 540 1371 Peachtree St., N.E. Atlanta, Ga. 30367 Phone: 881-4418 (Area Code 404)

Alabama Florida Georgia Kentucky Mississippi North Carolina South Carolina Tennessee

Regions IX and X

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

IX X
Arizona Alaska
California Idaho
Hawaii Oregon
Nevada Washingtor

