

ment declined significantly, dampening the employment opportunities available to young people. The percentage of out-of-school young men working full time in manufacturing fell sharply between October 1979 and October 1986, as shown in the following tabulation:

Age	1979	1986
16 and 17 years	15.1	6.7
18 and 19 years	27.0	13.6
20 and 21 years	29.7	22.2
22 to 24 years	28.0	20.6

The disadvantages of young workers, such as lack of experience and training, would have been especially pronounced in manufacturing, where the lack of employment growth created a substantial pool of available older workers. And, the slow growth in manufacturing employment would have affected young men more than women, because young men made up about two-thirds of the youth work force in manufacturing. This could explain in part why young men were worse off in 1986 relative to their 1979 employment status than were young women.

THE FIRST HALF of the 1980's was the beginning of a period of declining youth population, a development that will continue into the mid-1990's. Although this decline was expected to lead to a better employment situation for youths, no clear improvements are evident. While further decreases in the youth population may yet lead to improvements, the experience of the first half of the decade indicates that youth employment problems are not easily overcome.

—FOOTNOTES—

¹ The data used in the analysis for the most part are annual averages derived from the Current Population Survey (CPS), which is a monthly sample survey of 59,500 households nationwide and the principal source of information on U.S. labor force and employment trends. The CPS is conducted by the Census Bureau for the Bureau of Labor Statistics. Labor force data by school enrollment are from the October supplement to the CPS, which has provided such information since 1959. Monthly estimates of the school enrollment status of youths have been available starting with the data for January 1985. See Anne McDougall Young, "New monthly data series on school age youth," *Monthly Labor Review*, July 1985, pp. 49-50. These data were not used due to the limited historical series.

² *Four Years After High School: A Capsule Description of 1980 Seniors*, CS 86-210 (U.S. Department of Education, Center for Statistics, Office of Educational Research and Improvement, August 1986), p. 9.

³ Martha Brannigan, "A Shortage of Youths Brings Wide Changes to the Labor Market," *The Wall Street Journal*, Sept. 2, 1986, pp. 1 and 21; Dirk Johnson, "Labor Scarcity Is Forcing Up Low Level Pay," *The New York Times*, Mar. 17, 1986, pp. B1-2; and Caroline E. Mayer, "Low Level Jobs Remain Unfilled," *The Washington Post*, Nov. 25, 1985, Washington Business pp. 1 and 126-27.

⁴ If the participation rate of persons 16 to 24 years old had not changed over the period, the increase in the youth labor force would have been only about 50 percent.

⁵ For a discussion of the relation between youth labor force participation and the business cycle, see Kim B. Clark and Lawrence H. Summers, "Demographic Differences in Cyclical Employment Variation," *The Journal of Human Resources*, Winter 1981, pp. 61-77.

⁶ Arvil V. Adams, Garth L. Mangum, and Stephen F. Seninger, *The Lingering Crisis of Youth Unemployment* (Kalamazoo, MI, W.E. Upjohn Institute for Employment Research, June 1978), p. 5.

⁷ David E. Bloom and Richard B. Freeman, "The 'Youth Problem' Age or Generational Crowding?" Working Paper Series No. 1829 (Cambridge, MA, National Bureau of Economic Research, Inc., February 1986); Norman Bowers, "Young and marginal: an overview of youth employment," *Monthly Labor Review*, October 1979, pp. 4-16; and Albert Rees, "An Essay on Youth Joblessness," *Journal of Economic Literature*, June 1986, pp. 613-28.

Weekly earnings in 1986: a look at more than 200 occupations

EARL F. MELLOR

The Bureau of Labor Statistics has updated its series on the weekly earnings of wage and salary workers who usually work full time. This summary presents 1986 usual weekly earnings in 230 occupations and, for many occupations, the female-to-male earnings ratio. It is the only source from which such detailed data are available on an annual basis.

Median earnings vary greatly among occupations. For example, workers in three of the engineering specialties had median weekly earnings of \$700 or more in 1986—about twice the overall median of \$358. This was also the case for such workers as economists, lawyers, and airplane pilots and navigators. By comparison, private household workers and those employed in "food counter, fountain, and related occupations" had median earnings below \$160 a week. These data are shown in table 1, which provides information on wage and salary workers (excluding the incorporated self-employed) who usually work 35 or more hours per week.

Within occupations, there is likely to be a wide range of earnings because each occupation encompasses diverse jobs with differences in educational requirements, skill levels, market demand, and other variables. Also, workers in each specialty may have different duties, responsibilities, workweeks, and job tenure. For example, included under physicians are nearly 100 specific titles, ranging from interns to neurosurgeons.

As was the case in previous years, the 1986 data are limited to occupations in which there are at least 50,000 full-time wage and salary workers. There are not enough observations to compute reliable medians for those occupations with fewer than 50,000 workers. Even for the median earnings shown in table 1, caution must be used in interpreting small differences between groups, particularly when the number of workers in a job category is also relatively small.¹

Information on weekly earnings of wage and salary workers has been collected since 1967 through the Current Population Survey (CPS). Prior to 1979, these earnings data were

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Table 1. Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages
 [Numbers in thousands]

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Total	78,727	\$358	46,233	\$419	32,494	\$290	69.2	41.3
Managerial and professional specialty occupations	20,095	505	11,333	608	8,762	414	68.1	43.6
Executive, administrative, and managerial occupations	9,777	511	5,980	620	3,797	395	63.7	38.8
Administrators and officials, public administration	434	513	259	617	176	414	67.1	40.6
Financial managers	396	584	245	703	150	458	65.1	37.9
Personnel and labor relations managers	109	621	57	759	52	474	62.5	47.7
Purchasing managers	101	633	67	741	33	(1)	(1)	32.7
Managers, marketing, advertising, and public relations	421	680	320	751	101	470	62.6	24.0
Administrators, education and related fields	440	610	255	691	185	495	71.6	42.0
Managers, medicine and health	113	503	45	(1)	67	463	(1)	59.3
Managers, properties and real estate	233	375	109	407	124	343	84.3	53.2
Management-related occupations	3,004	474	1,592	565	1,412	390	69.0	47.0
Accountants and auditors	1,083	478	589	554	493	398	71.8	45.5
Underwriters, and other financial officers	600	500	321	617	279	394	63.9	46.5
Management analysts	102	567	63	673	40	(1)	(1)	39.2
Personnel, training, and labor relations specialists	327	485	148	606	179	411	67.8	54.7
Buyers, wholesale and retail trade, except farm products	177	397	79	501	98	314	62.7	55.4
Inspectors and compliance officers, except construction	181	485	146	508	36	(1)	(1)	19.9
Professional specialty occupations	10,317	500	5,353	599	4,965	428	71.5	48.1
Engineers, architects, and surveyors	1,751	676	1,636	685	115	551	80.4	6.6
Architects	87	577	77	592	10	(1)	(1)	11.5
Engineers	1,644	682	1,540	691	104	580	83.9	6.3
Aerospace engineers	95	708	91	722	4	(1)	(1)	4.2
Chemical engineers	55	721	49	(1)	6	(1)	(1)	10.9
Civil engineers	209	618	202	620	7	(1)	(1)	3.3
Electrical and electronic engineers	511	704	471	715	40	(1)	(1)	7.8
Industrial engineers	191	628	173	647	19	(1)	(1)	9.9
Mechanical engineers	283	687	272	695	11	(1)	(1)	3.9
Mathematical and computer scientists	588	628	375	696	213	521	74.9	36.2
Computer systems analysts and scientists	337	631	219	687	118	537	78.2	35.0
Operations and systems researchers and analysts	203	617	127	695	77	511	73.5	37.9
Natural scientists	339	570	265	603	74	471	78.1	21.8
Chemists, except biochemists	116	601	92	624	24	(1)	(1)	20.7
Biological and life scientists	59	503	37	(1)	22	(1)	(1)	37.3
Health diagnosing occupations	254	653	188	722	66	499	69.1	26.0
Physicians	219	653	160	728	59	505	69.4	26.9
Health assessment and treating occupations	1,464	456	243	497	1,220	449	90.3	83.3
Registered nurses	1,068	460	84	490	984	458	93.5	92.1
Pharmacists	109	607	71	613	38	(1)	(1)	34.9
Dietitians	53	336	3	(1)	50	342	(1)	94.3
Therapists	195	404	58	415	136	400	96.4	69.7
Inhalation therapists	64	386	28	(1)	36	(1)	(1)	56.3
Teachers, college and university	443	600	322	656	122	479	73.0	27.5
Teachers, except college and university	2,884	437	836	501	2,048	411	82.0	71.0
Teachers, prekindergarten and kindergarten	240	274	4	(1)	236	279	(1)	98.3
Teachers, elementary school	1,173	422	172	490	1,001	415	84.7	85.3
Teachers, secondary school	1,076	481	518	508	558	443	87.2	51.9
Teachers, special education	198	424	29	(1)	169	417	(1)	85.4
Counselors, educational and vocational	146	494	72	535	74	471	88.0	50.7
Librarians, archivists, and curators	150	425	27	(1)	123	410	(1)	82.0
Librarians	139	423	21	(1)	118	408	(1)	84.9
Social scientists and urban planners	229	569	131	683	98	470	68.8	42.8
Economists	96	704	59	794	37	(1)	(1)	38.5
Psychologists	100	491	51	581	49	(1)	(1)	49.0
Social, recreation, and religious workers	750	389	413	420	337	350	83.3	44.9
Social workers	423	399	163	451	260	369	81.8	61.5
Recreation workers	60	232	23	(1)	37	(1)	(1)	61.7
Clergy	226	396	210	400	16	(1)	(1)	7.1
Lawyers and judges	342	767	256	812	85	609	75.0	24.9
Lawyers	314	767	234	806	79	624	77.4	25.2
Writers, artists, entertainers, and athletes	979	455	589	504	390	374	74.2	39.8
Designers	292	490	182	574	110	350	61.0	37.7
Actors and directors	55	423	32	(1)	23	(1)	(1)	41.8
Painters, sculptors, craft artists, and artist printmakers	86	385	49	(1)	36	(1)	(1)	41.9
Photographers	59	392	42	(1)	17	(1)	(1)	28.8
Editors and reporters	199	425	107	480	92	373	77.7	46.2
Public relations specialists	130	518	67	698	63	440	63.0	48.5
Technical, sales, and administrative support occupations	24,060	320	8,977	437	15,083	282	64.5	62.7
Technicians and related support occupations	2,821	416	1,597	490	1,224	343	70.0	43.4
Health technologists and technicians	852	328	167	405	685	317	78.3	80.4
Clinical laboratory technologists and technicians	239	388	68	436	170	371	85.1	71.1
Radiologic technicians	94	383	32	(1)	62	367	(1)	66.0
Licensed practical nurses	281	300	9	(1)	272	299	(1)	96.8

See footnotes at end of table.

Table 1. Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Engineering and related technologists and technicians	843	\$447	699	\$471	144	\$356	75.6	17.1
Electrical and electronic technicians	303	477	265	493	38	(1)	(1)	12.5
Drafting occupations	248	412	198	431	50	351	81.4	20.2
Surveying and mapping technicians	74	381	67	375	6	(1)	(1)	8.1
Science technicians	178	423	133	479	45	(1)	(1)	25.3
Chemical technicians	72	459	57	486	16	(1)	(1)	22.2
Technicians, except health, engineering, and science	949	499	598	548	351	424	77.4	37.0
Airplane pilots and navigators	54	754	53	760	1	(1)	(1)	1.9
Computer programmers	503	519	332	559	172	477	85.3	34.2
Legal assistants	145	372	34	(1)	111	361	(1)	76.6
Sales occupations	7,395	351	4,373	447	3,021	239	53.5	40.9
Supervisors	2,103	392	1,436	460	667	282	61.3	31.7
Sales representatives, finance and business services	1,388	453	789	519	599	360	69.4	43.2
Insurance sales	358	418	225	500	133	352	70.4	37.2
Real estate sales	326	457	145	518	181	389	75.1	55.5
Securities and financial services sales	215	608	164	740	52	423	57.2	24.2
Advertising and related sales	107	454	52	502	54	373	74.3	50.5
Sales occupations, other business services	382	397	203	487	178	315	64.7	46.6
Sales representatives, commodities, except retail, including sales engineers	1,226	492	1,017	508	209	382	75.2	17.0
Salesworkers, retail and personal services	2,660	215	1,122	301	1,538	183	60.8	57.8
Salesworkers, motor vehicles and boats	237	424	220	439	17	(1)	(1)	7.2
Salesworkers, apparel	166	192	40	(1)	126	174	(1)	75.9
Salesworkers, furniture and home furnishings	112	302	65	318	47	(1)	(1)	42.0
Salesworkers, radio, television, hi-fi, and appliances	107	304	84	313	24	(1)	(1)	22.4
Salesworkers, hardware and building supplies	135	267	105	292	30	(1)	(1)	22.2
Salesworkers, parts	155	274	140	286	14	(1)	(1)	9.0
Sales counter clerks	76	193	22	(1)	54	170	(1)	71.1
Cashiers	957	181	197	209	760	174	83.3	79.4
Street and door-to-door salesworkers	72	343	32	(1)	40	(1)	(1)	55.6
Administrative support occupations, including clerical	13,844	300	3,006	403	10,838	284	70.5	78.3
Supervisors, administrative support	709	424	296	521	413	385	73.9	58.3
Supervisors, general office	416	404	139	515	278	373	72.4	66.8
Supervisors, financial records processing	91	472	24	(1)	67	413	(1)	73.6
Supervisors, distribution, scheduling, and adjusting clerks	153	447	105	471	48	(1)	(1)	31.4
Computer equipment operators	722	318	236	396	486	296	74.7	67.3
Computer operators	716	318	234	396	482	296	74.7	67.3
Secretaries, stenographers, and typists	3,893	287	65	322	3,828	286	88.8	98.3
Secretaries	3,210	288	34	(1)	3,176	287	(1)	98.9
Typists	651	276	28	(1)	623	276	(1)	95.7
Information clerks	856	255	91	347	766	250	72.0	89.5
Interviewers	123	274	16	(1)	107	266	(1)	87.0
Hotel clerks	60	214	18	(1)	42	(1)	(1)	70.0
Transportation ticket and reservation agents	99	420	29	(1)	70	366	(1)	70.7
Receptionists	459	242	9	(1)	450	242	(1)	98.0
Records processing occupations, except financial	611	288	118	342	492	279	81.6	80.5
Order clerks	174	366	51	404	123	348	86.1	70.7
Personnel clerks, except payroll and timekeeping	53	317	5	(1)	48	(1)	(1)	90.6
Library clerks	54	248	8	(1)	46	(1)	(1)	85.2
File clerks	211	239	32	(1)	179	237	(1)	84.8
Records clerks	101	303	21	(1)	80	292	(1)	79.2
Financial records processing occupations	1,706	290	169	366	1,536	286	78.1	90.0
Bookkeepers, accounting and auditing clerks	1,319	287	127	343	1,193	283	82.5	90.4
Payroll and timekeeping clerks	149	316	14	(1)	135	313	(1)	90.6
Billing clerks	135	294	14	(1)	121	286	(1)	89.6
Cost and rate clerks	71	291	13	(1)	58	276	(1)	81.7
Duplicating, mail, and other office machine operators	60	266	28	(1)	33	(1)	(1)	55.0
Communications equipment operators	191	307	28	(1)	163	296	(1)	85.3
Telephone operators	181	315	25	(1)	157	304	(1)	86.7
Mail and message distributing occupations	754	445	520	465	234	405	87.1	31.0
Postal clerks, except mail carriers	274	479	164	484	110	467	96.5	40.1
Mail carriers, postal service	280	477	229	482	51	429	89.0	18.2
Mail clerks, except postal service	119	268	62	291	58	247	84.9	48.7
Messengers	81	271	65	279	16	(1)	(1)	19.8
Material recording, scheduling, and distributing clerks	1,455	322	908	359	547	285	79.4	37.6
Dispatchers	166	347	82	402	84	307	76.4	50.6
Production coordinators	178	458	100	506	78	346	68.4	43.8
Traffic, shipping, and receiving clerks	421	297	312	317	108	243	76.7	25.7
Stock and inventory clerks	479	315	299	347	180	285	82.1	37.6
Weighers, measurers, and checkers	65	279	39	(1)	26	(1)	(1)	40.0
Expeditors	91	318	37	(1)	54	283	(1)	59.3
Adjusters and investigators	743	321	203	460	540	299	65.0	72.7
Insurance adjusters, examiners, and investigators	238	356	75	487	163	308	63.2	68.5
Investigators and adjusters, except insurance	334	323	89	465	244	301	64.7	73.1
Eligibility clerks, social welfare	64	300	7	(1)	58	291	(1)	90.6
Bill and account collectors	107	284	32	(1)	75	281	(1)	70.1

See footnotes at end of table.

Table 1. Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Miscellaneous administrative support occupations	2,144	\$272	345	\$375	1,800	\$262	69.9	84.0
General office clerks	548	283	123	373	425	267	71.6	77.6
Bank tellers	363	231	34	(1)	329	228	(1)	90.6
Data-entry keyers	290	277	21	(1)	269	273	(1)	92.8
Statistical clerks	88	343	19	(1)	69	327	(1)	78.4
Teachers aides	180	198	9	(1)	171	197	(1)	95.0
Service occupations	8,061	223	3,987	284	4,074	191	67.3	50.5
Private household occupations	334	121	14	(1)	320	119	(1)	95.8
Child care workers, private household	148	91	2	(1)	146	90	(1)	98.6
Private household cleaners and servants	157	147	9	(1)	149	146	(1)	94.9
Protective service occupations	1,589	392	1,433	402	156	292	72.6	9.8
Supervisors, protective service occupations	165	516	158	528	8	(1)	(1)	4.8
Supervisors, police and detectives	89	558	83	575	5	(1)	(1)	5.6
Firefighting and fire prevention occupations	222	455	217	461	4	(1)	(1)	1.8
Firefighting occupations	209	464	205	469	4	(1)	(1)	1.9
Police and detectives	648	431	579	443	69	350	79.0	10.6
Police and detectives, public service	392	478	367	481	24	(1)	(1)	6.1
Sheriffs, bailiffs, and other law enforcement officers	80	401	71	410	10	(1)	(1)	12.5
Correctional institution officers	176	362	142	370	34	(1)	(1)	19.3
Guards	554	266	479	272	75	231	84.9	13.5
Guards and police, except public services	516	272	456	275	59	254	92.4	11.4
Service occupations, except protective and household	6,138	209	2,540	239	3,598	195	81.6	58.6
Food preparation and service occupations	2,288	186	973	205	1,315	173	84.4	57.5
Supervisors, food preparation and service	177	238	68	294	109	212	72.1	61.6
Bartenders	184	214	100	245	84	184	75.1	45.7
Waiters and waitresses	576	172	103	209	472	168	80.4	81.9
Cooks, except short order	817	196	447	212	370	174	82.1	45.3
Food counter, fountain and related occupations	78	152	16	(1)	62	149	(1)	79.5
Kitchen workers, food preparation	64	166	15	(1)	49	(1)	(1)	76.6
Waiters/waitresses' assistants	95	164	65	162	29	(1)	(1)	30.5
Health service occupations	1,277	216	145	252	1,132	213	84.5	88.6
Dental assistants	112	243	0	(1)	112	243	(1)	100.0
Health aides, except nursing	254	242	43	(1)	212	241	(1)	83.5
Nursing aides, orderlies, and attendants	910	206	102	253	808	202	79.8	88.8
Cleaning and building service occupations, except household	1,883	238	1,236	266	647	197	74.1	34.4
Supervisors, cleaning and building service workers	130	313	89	348	42	(1)	(1)	32.3
Maids and housemen	363	189	71	229	292	178	77.7	80.4
Janitors and cleaners	1,338	247	1,029	261	309	207	79.3	23.1
Personal service occupations	691	212	187	255	504	203	79.6	72.9
Hairdressers and cosmetologists	274	208	40	(1)	234	205	(1)	85.4
Attendants, amusement and recreation facilities	63	234	36	(1)	27	(1)	(1)	42.9
Child care workers, except private household	143	182	11	(1)	132	177	(1)	92.3
Precision production, craft, and repair occupations	10,851	408	9,973	418	878	277	66.3	8.1
Mechanics and repairers	3,723	414	3,588	413	136	431	104.4	3.7
Supervisors, mechanics and repairers	219	524	199	523	20	(1)	(1)	9.1
Mechanics and repairers, except supervisors	3,504	408	3,388	408	116	420	102.9	3.3
Vehicle and mobile equipment mechanics and repairers	1,444	375	1,426	375	19	(1)	(1)	1.3
Automobile mechanics	658	324	647	326	10	(1)	(1)	1.5
Bus, truck, and stationary engine mechanics	310	402	307	402	3	(1)	(1)	1.0
Aircraft engine mechanics	96	505	94	508	3	(1)	(1)	3.1
Small engine repairers	52	301	52	301	0	(1)	(1)	.0
Automobile body and related repairers	130	354	129	355	0	(1)	(1)	.0
Heavy equipment mechanics	157	438	156	437	1	(1)	(1)	.6
Industrial machinery repairers	515	415	502	417	13	(1)	(1)	2.5
Electrical and electronic equipment repairers	642	511	584	514	58	486	94.6	9.0
Electronic repairers, communications and industrial equipment	131	450	121	447	9	(1)	(1)	6.9
Data processing equipment repairers	127	514	115	531	11	(1)	(1)	8.7
Telephone line installers and repairers	64	549	60	547	4	(1)	(1)	6.3
Telephone installers and repairers	220	568	191	571	29	(1)	(1)	13.2
Heating, air conditioning, and refrigeration mechanics	214	390	213	389	1	(1)	(1)	.5
Miscellaneous mechanics and repairers	655	403	631	404	23	(1)	(1)	3.5
Office machine repairers	54	376	54	376	0	(1)	(1)	.0
Millwrights	93	501	91	501	2	(1)	(1)	2.2
Construction trades	3,469	401	3,413	401	56	333	83.0	1.6
Supervisors, construction occupations	420	500	413	500	6	(1)	(1)	1.4
Construction trades, except supervisors	3,049	389	2,999	389	50	315	81.0	1.6
Brickmasons and stonemasons	114	412	113	411	0	(1)	(1)	.0
Carpet installers	53	331	52	328	0	(1)	(1)	.0
Carpenters	855	348	846	349	9	(1)	(1)	1.1
Drywall installers	101	374	99	375	2	(1)	(1)	2.0
Electricians	562	473	551	475	12	(1)	(1)	2.1
Electrical power installers and repairers	106	514	104	515	2	(1)	(1)	1.9
Painters, construction and maintenance	267	299	257	301	10	(1)	(1)	3.7

See footnotes at end of table.

Table 1. Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Plumbers, pipefitters, steamfitters, and apprentices	376	\$470	374	\$470	2	(1)	(1)	.5
Concrete and terrazzo finishers	68	343	67	341	1	(1)	(1)	1.5
Insulation workers	53	369	52	363	1	(1)	(1)	1.9
Roofers	120	303	118	303	2	(1)	(1)	1.7
Structural metalworkers	65	467	65	467	0	(1)	(1)	.0
Extractive occupations	155	520	152	517	2	(1)	(1)	1.3
Precision production occupations	3,504	403	2,821	445	684	\$258	58.0	19.5
Supervisors, production occupations	1,308	474	1,127	495	181	297	60.0	13.8
Precision metalworking occupations	862	432	814	441	48	(1)	(1)	5.6
Tool and die makers	151	506	149	508	2	(1)	(1)	1.3
Machinists	468	419	450	422	18	(1)	(1)	3.8
Sheet metal workers	128	408	120	410	8	(1)	(1)	6.3
Precision woodworking occupations	67	285	55	299	11	(1)	(1)	16.4
Precision textile, apparel, and furnishings machine workers	134	242	73	268	61	211	78.7	45.5
Precision workers, assorted materials	471	284	194	329	277	259	78.7	58.8
Electrical and electronic equipment assemblers	311	271	98	305	213	255	83.6	68.5
Precision food production occupations	336	293	254	327	82	208	63.6	24.4
Butchers and meatcutters	241	299	192	338	49	(1)	(1)	20.3
Bakers	69	292	51	316	18	(1)	(1)	26.1
Precision inspectors, testers, and related workers	104	463	86	481	18	(1)	(1)	17.3
Inspectors, testers, and graders	99	468	82	483	17	(1)	(1)	17.2
Plant and system operators	223	493	218	493	5	(1)	(1)	2.2
Stationary engineers	103	493	102	493	1	(1)	(1)	1.0
Operators, fabricators, and laborers	14,342	301	10,784	332	3,558	225	67.8	24.8
Machine operators, assemblers, and inspectors	7,254	293	4,401	354	2,853	223	63.0	39.3
Machine operators and tenders, except precision	4,815	278	2,873	341	1,942	211	61.9	40.3
Metalworking and plastic working machine operators	476	361	392	379	84	271	71.5	17.6
Lathe and turning machine operators	61	383	57	388	4	(1)	(1)	6.6
Punching and stamping press machine operators	140	327	95	352	45	(1)	(1)	32.1
Grinding, abrading, buffing, and polishing machine operators	142	366	124	376	18	(1)	(1)	12.7
Metal and plastic processing machine operators	167	324	126	365	40	(1)	(1)	24.0
Molding and casting machine operators	99	305	67	354	32	(1)	(1)	32.3
Woodworking machine operators	137	258	114	263	22	(1)	(1)	16.1
Sawing machine operators	90	260	77	264	12	(1)	(1)	13.3
Printing machine operators	404	354	303	394	101	282	71.6	25.0
Printing machine operators	274	366	240	381	34	(1)	(1)	12.4
Typesetters and compositors	57	323	17	(1)	40	(1)	(1)	70.2
Textile, apparel, and furnishings machine operators	1,155	195	225	247	930	186	75.3	80.5
Winding and twisting machine operators	82	237	19	(1)	64	220	(1)	78.0
Textile sewing machine operators	676	179	69	205	607	177	86.3	89.8
Pressing machine operators	108	199	33	(1)	75	182	(1)	69.4
Laundering and dry cleaning machine operators	137	194	43	(1)	94	175	(1)	68.6
Machine operators, assorted materials	2,450	305	1,696	343	754	239	69.7	30.8
Packaging and filling machine operators	367	253	141	324	227	230	71.0	61.9
Mixing and blending machine operators	87	342	81	345	6	(1)	(1)	6.9
Separating, filtering, and clarifying machine operators	61	431	53	446	8	(1)	(1)	13.1
Painting and paint spraying machine operators	174	310	141	328	33	(1)	(1)	19.0
Furnace, kiln, and oven operators, except food	109	421	106	425	4	(1)	(1)	3.7
Crushing and grinding machine operators	54	243	42	(1)	12	(1)	(1)	22.2
Slicing and cutting machine operators	216	270	165	288	51	209	72.6	23.6
Photographic process machine operators	60	253	28	(1)	32	(1)	(1)	53.3
Fabricators, assemblers, and hand working occupations	1,659	319	1,131	365	527	251	68.8	31.8
Welders and cutters	534	376	499	382	34	(1)	(1)	6.4
Assemblers	1,001	299	567	350	434	254	72.6	43.4
Production inspectors, testers, samplers, and weighers	780	323	396	421	384	260	61.8	49.2
Production inspectors, checkers, and examiners	653	334	321	438	332	266	60.7	50.8
Production testers	51	420	39	(1)	12	(1)	(1)	23.5
Graders and sorters, except agricultural	70	230	33	(1)	37	(1)	(1)	52.9
Transportation and material moving occupations	3,684	366	3,494	372	190	287	77.2	5.2
Motor vehicle operators	2,577	346	2,426	353	151	275	77.9	5.9
Supervisors, motor vehicle operators	57	462	47	(1)	10	(1)	(1)	17.5
Truckdrivers, heavy	1,539	371	1,516	371	23	(1)	(1)	1.5
Truckdrivers, light	459	281	432	287	27	(1)	(1)	5.9
Drivers-salesworkers	188	395	179	400	9	(1)	(1)	4.8
Bus drivers	201	327	129	389	71	285	73.3	35.3
Taxicab drivers and chauffeurs	107	272	97	274	10	(1)	(1)	9.3
Transportation occupations, except motor vehicles	185	580	181	583	4	(1)	(1)	2.2
Rail transportation occupations	133	589	130	593	3	(1)	(1)	2.3
Locomotive operating occupations	57	625	57	630	1	(1)	(1)	1.8
Water transportation occupations	51	547	51	545	1	(1)	(1)	2.0
Material moving equipment operators	922	375	887	377	36	(1)	(1)	3.9
Operating engineers	155	410	154	410	1	(1)	(1)	.6
Crane and tower operators	85	459	84	458	1	(1)	(1)	1.2
Excavating and loading machine operators	81	368	80	366	1	(1)	(1)	1.2

See footnotes at end of table.

Table 1. Continued—Median weekly earnings of wage and salary workers who usually work full time in occupations employing 50,000 or more, by sex, 1986 annual averages

Occupation	Both sexes		Men		Women		Ratio female/male earnings times 100	Percent female workers
	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings	Number of workers	Median weekly earnings		
Grader, dozer, and scraper operators	90	\$351	87	\$345	3	(1)	(1)	3.3
Industrial truck and tractor equipment operators	381	325	361	327	20	(1)	(1)	5.2
Handlers, equipment cleaners, helpers, and laborers	3,404	263	2,890	271	515	\$226	83.4	15.1
Helpers, construction and extractive occupations	161	240	158	237	4	(1)	(1)	2.5
Helpers, construction trades	143	236	139	233	4	(1)	(1)	2.8
Construction laborers	642	287	624	288	18	(1)	(1)	2.8
Production helpers	59	271	44	(1)	15	(1)	(1)	25.4
Freight, stock, and material handlers	1,020	263	870	272	150	221	81.3	14.7
Garbage collectors	51	286	50	285	1	(1)	(1)	2.0
Stock handlers and baggers	363	214	288	218	75	199	91.3	20.7
Machine feeders and offbearers	86	266	57	282	30	(1)	(1)	34.9
Garage and service station related occupations	185	200	178	202	7	(1)	(1)	3.8
Vehicle washers and equipment cleaners	139	215	116	214	24	(1)	(1)	17.3
Hand packers and packagers	238	233	90	257	149	222	86.4	62.6
Laborers, except construction	921	283	772	291	149	232	79.7	16.2
Farming, forestry, and fishing occupations	1,318	217	1,178	220	140	187	85.0	10.6
Farm operators and managers	67	321	59	325	9	(1)	(1)	13.4
Farm managers	60	329	54	333	7	(1)	(1)	11.7
Other agricultural and related occupations	1,162	211	1,034	215	128	184	85.6	11.0
Farm occupations, except managerial	620	195	552	199	69	167	83.9	11.1
Farm workers	575	192	519	195	57	165	84.6	9.9
Related agricultural occupations	542	235	482	242	59	205	84.7	10.9
Supervisors, related agricultural occupations	94	345	87	360	7	(1)	(1)	7.4
Groundskeepers and gardeners, except farm	396	222	379	223	17	(1)	(1)	4.3
Forestry and logging occupations	65	286	62	290	3	(1)	(1)	4.6

¹ Data not shown where base is less than 50,000.

collected annually, in May. In 1979, collection was expanded considerably, with the data being gathered monthly from one-fourth of the CPS sample. BLS publishes summary results quarterly and disseminates more detailed information based on annual averages after the end of the year.²

Earnings data for detailed occupations were first published for 1981, but unpublished numbers are available back to 1979.³ However, the 1986 data are fully comparable only to those published for 1985 and to unpublished data for 1983 and 1984. They are not strictly comparable to prior years' data for two reasons. First, in 1983, the classification system developed for the 1980 Census of Population was introduced to the CPS. It is markedly different from the previous system.⁴ Second, in 1985, a change in the procedure for computing medians was introduced to reduce both a systematic upward bias in the estimates and the sometimes erratic movements of the medians over time. Both are the result of a tendency of respondents to report rounded numbers.⁵ The data for 1983 and 1984 have been revised using the new procedure and are available from BLS. Because the change in the occupational classification system precludes comparability with pre-1983 data, medians were not revised for the 1979-82 period.

The Bureau of the Census classifies occupations at three levels of detail. The least detailed level consists of only the major occupational groups, for example, the professional specialty occupations. An intermediate level of detail of the professional specialty occupations has such groups as engineers and natural scientists; the most detailed includes such specific job titles as physicians, economists, and chemical engineers. □

¹ For information on the merits and limitations of the data, see *Technical Description of the Quarterly Data on Weekly Earnings from the Current Population Survey*, Bulletin 2113 (Bureau of Labor Statistics, 1982). For information on other data series on earnings from the Current Population Survey and other BLS surveys, see *BLS Measures of Compensation*, Bulletin 2239 (Bureau of Labor Statistics, 1986).

² The Current Population Survey is a monthly nationwide sample survey of about 60,000 households conducted for the Bureau of Labor Statistics by the Bureau of the Census. For information on the survey, particularly with regard to earnings data, see Earl F. Mellor, *Technical Description of the Quarterly Data on Weekly Earnings from the Current Population Survey*, and Earl F. Mellor, "Earnings Statistics from the Current Population Survey," *BLS Measures of Compensation*.

³ Data for 1981 appear in "1981 Weekly Earnings of Men and Women Compared in 100 Occupations," *U.S. Department of Labor News Release 82-86*, Mar. 7, 1982; and in Nancy F. Rytina, "Earnings of men and women: a look at specific occupations," *Monthly Labor Review*, April 1982, pp. 25-31. For 1982, 1983, and 1985 data, see the following *Monthly Labor Review* articles or research summaries by Earl F. Mellor: "Investigating the differences in weekly earnings of women and men," June 1984, pp. 17-28; "Weekly earnings in 1983: a look at more than 200 occupations," January 1985, pp. 54-59; and "Weekly earnings in 1985: a look at more than 200 occupations," September 1986, pp. 28-32. Revised data for 1983 and 1984 are available from the Bureau of Labor Statistics.

⁴ The system evolved from the Standard Occupational Classification System (SOC) which was adopted in 1977 and revised in 1980. See *Standard Occupational Classification Manual* (U.S. Department of Commerce, Office of Federal Statistical Policy and Standards, 1980). The relationship between the 1980 census system and the SOC is shown in *Census of Population: 1980, Classified Index of Industries and Occupations*, Report PHC80-R4, final ed. (Bureau of the Census, 1983). For more information on differences between the 1970- and 1980-based census classification systems, see Gloria Peterson Green and others, "Revisions in the Current Population Survey Beginning in January 1983," *Employment and Earnings*, February 1983, pp. 7-15.

⁵ For information on the effects that differences in the grouping of the data have on medians, see Sandra A. West, "Standard Measures of Central Tendency for Censored Earnings Data from the Current Population Survey," a BLS statistical note, available from the Office of Research and Evaluation, Bureau of Labor Statistics.