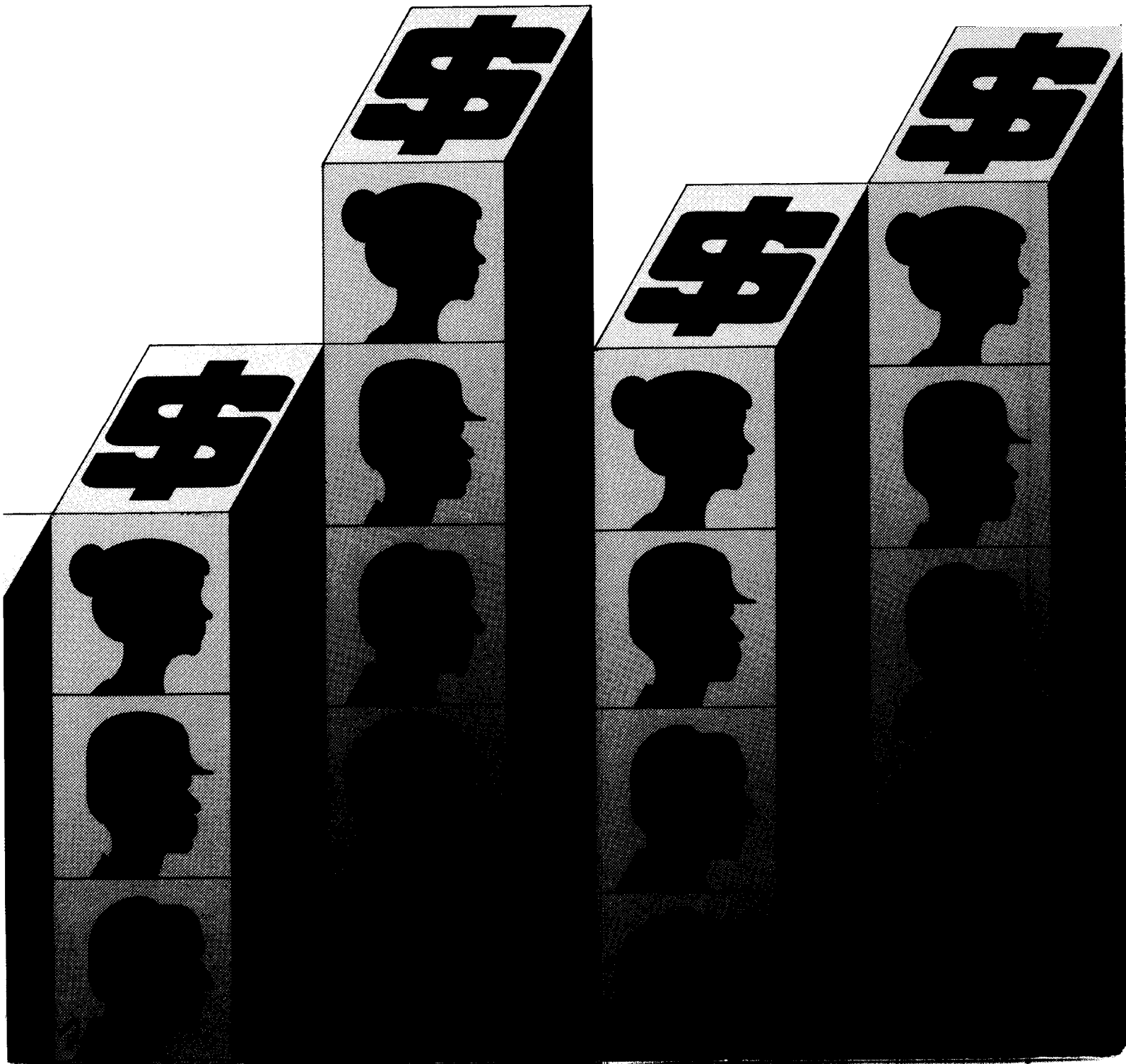


EMPLOYMENT AND EARNINGS

March 1989

U.S. Department of Labor
Bureau of Labor Statistics

In this issue:
1988 annual averages for national
establishment survey data





U.S. DEPARTMENT OF LABOR
Elizabeth Dole, Secretary

BUREAU OF LABOR STATISTICS
Janet L. Norwood, *Commissioner*

Employment and Earnings is prepared in the Office of Employment and Unemployment Statistics in collaboration with the Office of Publications. The data are collected by the Bureau of the Census (Department of Commerce) and State employment security agencies, in cooperation with the Bureau of Labor Statistics. A brief description of the cooperative statistical programs of the BLS with these agencies is presented in the Explanatory Notes. The State agencies are listed on the inside back cover.

Employment and Earnings may be ordered through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Subscription price per year \$25 domestic and \$31.25 foreign. Single copy \$8.50 domestic and \$10.63 foreign. Annual supplement \$14 domestic and \$17.50 foreign. Prices are subject to change by the U.S. Government Printing Office. For ordering information call (202) 783-3238.

Communications on material in this publication should be addressed to: Editors, *Employment and Earnings*, Bureau of Labor Statistics, Washington, DC 20212, or phone: Gloria P. Green (202) 523-1959. Send correspondence on circulation and subscription matters (including address changes) to the Superintendent of Documents.

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ISSN 0013-6840

Calendar of Features

In addition to the monthly data appearing regularly in *Employment and Earnings*, special features appear in most of the issues as shown below.

Household data

Annual averages	Jan.
Union affiliation	Jan.

Revised seasonally adjusted series	Jan., Feb.
------------------------------------	------------

Quarterly averages: Seasonally adjusted data, persons not in labor force, persons of Hispanic origin, Vietnam-era veterans and nonveterans, family relationship data, weekly earnings data, and metropolitan-nonmetropolitan and poverty-nonpoverty area data	Jan., Apr., July, Oct.
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Establishment data

National annual averages:	
Industry divisions (preliminary)	Jan.

Industry detail (final)	Mar.
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Women employees (final)	Mar.
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National data revised to reflect new benchmarks and new seasonal adjustment factors	June
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Revised historical national data	Supplement ¹
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State and area annual averages	May
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Area definitions	May
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State and area labor force data

Annual averages	May
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¹ The latest supplement was published in August 1988.

Employment and Earnings

Vol. 36 No. 3 March 1989

Editors: Gloria Peterson Green, Rosalie K. Epstein

Contents

	<i>Page</i>
List of statistical tables	2
Employment and unemployment developments, February 1989.....	4
Statistical tables:	
Historical—	
Household data	6
Establishment data:	
Employment	43
Hours and earnings	79
Not seasonally adjusted—	
Household data	9
Establishment data:	
Employment:	
National	44
State and area	61
Hours and earnings:	
National	82
State and area	104
State and area labor force data	112
Seasonally adjusted—	
Household data	36
Establishment data:	
Employment	56
Hours and earnings	101
Productivity data	109
Explanatory notes	117

MONTHLY HOUSEHOLD DATA

Page

Employment Status

A- 1.	Employment status of the noninstitutional population 16 years and over, 1955 to date	6
A- 2.	Employment status of the noninstitutional population 16 years and over by sex, 1978 to date	7
A- 3.	Employment status of the civilian noninstitutional population 16 years and over, 1955 to date	8
A- 4.	Employment status of the civilian noninstitutional population by age, sex, and race	9
A- 5.	Employment status of the black-and-other civilian noninstitutional population by age and sex	12
A- 6.	Employment status of the civilian noninstitutional population by race, sex, and age	13
A- 7.	Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin	14
A- 8.	Employment status of male Vietnam-era veterans and nonveterans by age	16
A- 9.	Employed and unemployed full- and part-time workers by sex, age, and race	17
A-10.	Employment status of persons in families by family relationship	18

Characteristics of the Unemployed

A-11.	Unemployed persons by marital status, race, age, and sex	19
A-12.	Unemployed persons by occupation and sex	20
A-13.	Unemployed persons by industry and sex	21
A-14.	Unemployed persons by reason for unemployment, sex, and race	22
A-15.	Unemployed persons by reason for unemployment, sex, age, and duration of unemployment	23
A-16.	Unemployed persons by duration of unemployment	23
A-17.	Unemployed persons by sex, age, race, marital status, and duration of unemployment	24
A-18.	Unemployed persons by occupation, industry, and duration of unemployment	25
A-19.	Unemployed jobseekers by sex, age, race, and jobsearch methods used	26
A-20.	Unemployed jobseekers by sex, reason for unemployment, and jobsearch methods used	26

Characteristics of the Employed

A-21.	Employed civilians in agriculture and nonagricultural industries by age and sex	27
A-22.	Employed civilians by occupation, sex, and age	28
A-23.	Employed civilians by occupation, race, and sex	29
A-24.	Employed civilians by age, sex, and class of worker	30
A-25.	Employed civilians by industry and occupation	31
A-26.	Employed civilians with a job but not at work by reason, sex, and pay status	31
A-27.	Persons at work by hours of work and type of industry	32
A-28.	Persons at work 1 to 34 hours by reason for working less than 35 hours, type of industry, and usual status	32
A-29.	Persons at work in nonagricultural industries by class of worker and full- or part-time status	33
A-30.	Persons at work in nonagricultural industries by sex, age, race, marital status, and full- or part-time status	34
A-31.	Persons at work in nonfarm occupations by sex and full- or part-time status	35

Seasonally Adjusted Employment and Unemployment Data

A-32.	Employment status of the noninstitutional population, including Armed Forces stationed in the United States, by sex, seasonally adjusted	36
A-33.	Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted	37
A-34.	Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin, seasonally adjusted	38
A-35.	Employed civilians by selected social and economic categories, seasonally adjusted	39
A-36.	Employed civilians by sex and age, seasonally adjusted	40
A-37.	Unemployed persons by sex and age, seasonally adjusted	40
A-38.	Unemployment rates by sex and age, seasonally adjusted	41
A-39.	Selected unemployment indicators, seasonally adjusted	41
A-40.	Unemployed persons by duration of unemployment, seasonally adjusted	42
A-41.	Unemployed persons by reason for unemployment, seasonally adjusted	42

MONTHLY ESTABLISHMENT DATA

Page

Employment—National

B- 1.	Employees on nonagricultural payrolls by major industry, 1937 to date .	43
B- 2.	Employees on nonagricultural payrolls by detailed industry	44
B- 3.	Women employees on nonagricultural payrolls by major industry and manufacturing group .	55
B- 4.	Employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted	56
B- 5.	Women employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted	57
B- 6.	Production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted	58
B- 7.	Diffusion indexes of employment change, seasonally adjusted .	59

Employment—States and Areas

B- 8.	Employees on nonagricultural payrolls in States and selected areas by major industry .	61
-------	--	----

Hours and Earnings-National

C- 1.	Average hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls by major industry, 1964 to date	79
C- 2.	Average hours and earnings of production or nonsupervisory workers on private nonagricultural payrolls by detailed industry	82
C- 2a.	Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing	98
C- 3.	Average hourly earnings, excluding overtime, of production workers on manufacturing payrolls .	99
C- 4.	Average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls by major industry, in current and constant (1977) dollars	100
C- 5.	Average weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted	101
C- 6.	Indexes of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted .	102
C- 7.	Average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls, seasonally adjusted .	103

Hours and Earnings-States and Areas

C- 8.	Average hours and earnings of production workers on manufacturing payrolls in States and selected areas .	104
-------	--	-----

PRODUCTIVITY DATA

C- 9.	Hours of wage and salary workers in nonagricultural establishments by major industry, seasonally adjusted	109
C-10.	Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted .	110
C-11.	Percent changes from the preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted annual rates .	111

MONTHLY STATE AND AREA LABOR FORCE DATA

D- 1.	Labor force status by State and selected metropolitan areas .	112
-------	---	-----

Employment and Unemployment Developments, February 1989

Employment continued to increase in February and unemployment declined. Both the overall and the civilian worker unemployment rates were 5.1 percent, down from 5.4 percent in January.

Nonagricultural payroll jobs, as measured by the survey of business establishments, rose by 290,000 in February, with the gains confined to the service-producing industries. Total civilian employment, as measured by the household survey, rose only slightly, following a very large gain in January.

Unemployment

The number of unemployed persons dropped to a seasonally adjusted level of 6.3 million in February. As a result, the civilian worker unemployment rate fell to 5.1 percent, the lowest since May 1974. The rate was 5.3 or 5.4 percent in the prior 5 months. (See table A-33.)

The February decline in unemployment was limited essentially to youth 16-24 years of age. The rate for teenagers dropped by 1.6 percentage points to 14.8 percent, after rising by the same magnitude in January, and the 20-24 young adult rate fell 1.2 points to 8.1 percent. There was little change among adults 25 years and over. The unemployment rate for Hispanics, which often fluctuates from month to month, fell by 1.6 percentage points to 6.8 percent. The rate for white workers (4.3 percent) also declined, while that for blacks (11.9 percent) was about unchanged. (See tables A-33, A-34, and A-38.)

The unemployment decrease in February occurred among persons jobless for more than 5 weeks. The proportion jobless for 27 weeks and over fell to 10 percent of the unemployed, the lowest in nearly 9 years. Both the mean (average) and median duration of unemployment declined—to 12.1 and 5.3 weeks, respectively. The number of unemployed persons who had lost their jobs also dropped over the month to 2.9 million. (See tables A-40 and A-41.)

Civilian employment and the labor force

Following a large increase in January, civilian employment rose only slightly in February, to a seasonally adjusted level of 116.9 million. The proportion of the population with jobs (the employment-population ratio) held at the record high level of 62.9 percent attained in the previous month. (See table A-33.)

The civilian labor force, which had also increased markedly in January, showed a small decline in February. As a result, the labor force participation rate edged down to 66.3 percent. Over the year, the labor force expanded by about 2.0 million. (See table A-33.)

Industry payroll employment

Total nonagricultural employment increased by 290,000 in February, after seasonal adjustment, to a level of 108.3 million. This followed an increase of 415,000 in January. The February gain was confined to the service-producing sector; employment in the goods sector decreased slightly, largely because of a weather-related decline in construction. (See table B-4.)

In the service-producing sector, the services industry led the over-the-month gains with an employment increase of 130,000. Within services, employment in the health services component rose by 45,000, and business services, which had declined in January, rebounded by 40,000. Elsewhere in the sector, retail trade added 75,000 jobs, and wholesale trade, with an increase of 30,000, continued its pattern of strong job growth.

In the goods-producing sector, the construction industry, which posted a very large increase in January, lost 20,000 jobs in February. This swing in construction employment probably reflects the shift in weather conditions from unusually mild to harsh over the 2 months. Employment in manufacturing, which had been increasing since September, showed little movement in February. The only sizable change was a decline of 15,000 in auto employment; this followed a similar increase in the prior month. In mining, employment was also about unchanged over the month.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged down by 0.1 hour to 34.7 hours in February, after seasonal adjustment, while both the factory workweek and overtime were unchanged at 41.0 and 3.9 hours, respectively. (See table C-5.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls, at 127.9 (1977=100), declined by 0.3 percent, seasonally adjusted. The index for manufacturing, at 97.2, showed little change. (See table C-6.)

Hourly and weekly earnings

Both average hourly and average weekly earnings of private production or nonsupervisory workers were little changed in February, after seasonal adjustment, following

large increases in January. Prior to seasonal adjustment, average hourly earnings remained at \$9.54, and average weekly earnings declined by \$1.91 to \$327.22. Hourly earnings rose by 4.0 percent over the past year, and weekly earnings were up 3.4 percent. (See tables C-1 and C-7.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
March	April 7	June	July 7
April	May 5	July	August 4
May	June 2	August	September 1

**HOUSEHOLD DATA
HISTORICAL**

A-1. Employment status of the noninstitutional population 16 years and over, 1955 to date

(Numbers in thousands)

Year and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
1955	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660	
1956	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402	
1957	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336	
1958	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088	
1959	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960	
1960 ¹	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617	
1961	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312	
1962 ²	122,214	72,675	59.5	68,763	2,061	66,702	4,944	61,759	3,911	5.4	49,539	
1963	124,422	73,839	59.3	69,768	2,006	67,762	4,687	63,076	4,070	5.5	50,583	
1964	126,503	75,109	59.4	71,323	2,018	69,305	4,523	64,782	3,786	5.0	51,394	
1965	128,459	76,401	59.5	73,034	1,946	71,088	4,361	66,726	3,366	4.4	52,058	
1966	130,180	77,892	59.8	75,017	2,122	72,895	3,979	68,915	2,875	3.7	52,288	
1967	132,092	79,565	60.2	76,590	2,218	74,372	3,844	70,527	2,975	3.7	52,527	
1968	134,281	80,990	60.3	78,173	2,253	75,920	3,817	72,103	2,817	3.5	53,291	
1969	136,573	82,972	60.8	80,140	2,238	77,902	3,606	74,296	2,832	3.4	53,602	
1970	139,203	84,889	61.0	80,796	2,118	78,678	3,463	75,215	4,093	4.8	54,315	
1971	142,189	86,355	60.7	81,340	1,973	79,367	3,394	75,972	5,016	5.8	55,834	
1972 ²	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091	
1973 ¹	148,870	91,203	61.3	86,838	1,774	85,064	3,470	81,594	4,365	4.8	57,667	
1974	151,841	93,670	61.7	88,515	1,721	86,794	3,515	83,279	5,156	5.5	58,171	
1975	154,831	95,453	61.6	87,524	1,678	85,846	3,408	82,438	7,929	8.3	59,377	
1976	157,818	97,826	62.0	90,420	1,668	88,752	3,331	85,421	7,406	7.6	59,991	
1977	160,689	100,665	62.6	93,673	1,656	92,017	3,283	88,734	6,991	6.9	60,025	
1978 ¹	163,541	103,882	63.5	97,679	1,631	96,048	3,387	92,661	6,202	6.0	59,659	
1979	166,460	106,559	64.0	100,421	1,597	98,824	3,347	95,477	6,137	5.8	59,900	
1980	169,349	108,544	64.1	100,907	1,604	99,303	3,364	95,938	7,637	7.0	60,806	
1981	171,775	110,315	64.2	102,042	1,645	100,397	3,368	97,030	8,273	7.5	61,460	
1982	173,939	111,872	64.3	101,194	1,668	99,526	3,401	96,125	10,678	9.5	62,067	
1983	175,891	113,226	64.4	102,510	1,676	100,834	3,383	97,450	10,717	9.5	62,665	
1984	178,080	115,241	64.7	106,702	1,697	105,005	3,321	101,685	8,539	7.4	62,839	
1985	179,912	117,167	65.1	108,856	1,706	107,150	3,179	103,971	8,312	7.1	62,744	
1986 ¹	182,293	119,540	65.6	111,303	1,706	109,597	3,163	106,434	8,237	6.9	62,752	
1987	184,490	121,602	65.9	114,177	1,737	112,440	3,208	109,232	7,425	6.1	62,888	
1988	186,322	123,378	66.2	116,677	1,709	114,968	3,169	111,800	6,701	5.4	62,944	
Monthly data, seasonally adjusted²												
1988:												
February	185,705	122,901	66.2	116,009	1,736	114,273	3,200	111,073	6,892	5.6	62,804	
March	185,847	122,672	66.0	115,865	1,736	114,129	3,181	110,948	6,807	5.5	63,175	
April	185,964	123,060	66.2	116,392	1,732	114,660	3,187	111,473	6,668	5.4	62,904	
May	186,088	122,917	66.1	116,117	1,714	114,403	3,110	111,293	6,800	5.5	63,171	
June	186,247	123,209	66.2	116,686	1,685	115,001	3,121	111,880	6,523	5.3	63,038	
July	186,402	123,331	66.2	116,707	1,673	115,034	3,060	111,974	6,624	5.4	63,071	
August	186,522	123,692	66.3	116,895	1,692	115,203	3,142	112,061	6,797	5.5	62,830	
September	186,666	123,688	66.3	117,074	1,704	115,370	3,176	112,194	6,614	5.3	62,978	
October	186,801	123,778	66.3	117,260	1,687	115,573	3,238	112,335	6,518	5.3	63,023	
November	186,949	124,215	66.4	117,652	1,705	115,947	3,238	112,709	6,563	5.3	62,734	
December	187,098	124,259	66.4	117,705	1,696	116,009	3,193	112,816	6,554	5.3	62,839	
1989:												
January	187,340	125,124	66.8	118,407	1,696	116,711	3,300	113,411	6,716	5.4	62,216	
February	187,461	124,865	66.6	118,537	1,684	116,853	3,223	113,630	6,328	5.1	62,596	

¹ Not strictly comparable with prior years. For an explanation, see "Historical Comparability" under the Household Data section of the Explanatory Notes.

² The population and Armed Forces figures are not adjusted for

seasonal variation.

NOTE: Revisions of seasonally adjusted monthly and quarterly data (shown in tables A-1 through A-3 and A-32 through A-53) for the most recent 5-year period are made at the end of each calendar year.

A-2. Employment status of the noninstitutional population 16 years and over by sex, 1978 to date

(Numbers in thousands)

Sex, year, and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
MEN												
1978 ¹	76,107	61,151	78.3	58,010	1,531	56,479	2,718	53,761	3,142	5.1	16,956	
1979	79,509	62,215	78.2	59,096	1,489	57,607	2,686	54,921	3,120	5.0	17,293	
1980	80,877	62,932	77.8	58,865	1,479	57,186	2,709	54,477	4,267	6.8	17,945	
1981	82,023	63,486	77.4	58,909	1,512	57,397	2,700	54,697	4,577	7.2	18,537	
1982	83,052	63,979	77.0	57,800	1,529	56,271	2,736	53,534	6,179	9.7	19,073	
1983	84,064	64,580	76.8	58,320	1,533	56,787	2,704	54,083	6,260	9.7	19,484	
1984	85,156	65,386	76.8	60,642	1,551	59,091	2,668	56,423	4,744	7.3	19,771	
1985	86,025	65,967	76.7	61,447	1,556	59,891	2,535	57,356	4,521	6.9	20,058	
1986 ¹	87,349	66,973	76.7	62,443	1,551	60,892	2,511	58,381	4,530	6.8	20,376	
1987	86,476	67,784	76.6	63,884	1,577	62,107	2,543	59,564	4,101	6.1	20,692	
1988	89,404	68,474	76.6	64,620	1,547	63,273	2,493	60,780	3,655	5.3	20,930	
Monthly data, seasonally adjusted²												
1988:												
February	89,099	68,289	76.6	64,567	1,577	63,010	2,505	60,505	3,702	5.4	20,810	
March	89,166	66,194	76.5	64,417	1,573	62,644	2,479	60,365	3,777	5.5	20,974	
April	89,225	66,462	76.7	64,866	1,569	63,297	2,476	60,821	3,596	5.3	20,763	
May	89,287	68,409	76.6	64,672	1,553	63,119	2,452	60,667	3,737	5.5	20,678	
June	89,367	68,436	76.8	64,894	1,523	63,371	2,448	60,923	3,542	5.2	20,931	
July	89,445	68,461	76.5	64,941	1,512	63,429	2,475	60,954	3,520	5.1	20,984	
August	89,504	68,685	76.7	64,931	1,529	63,402	2,491	60,911	3,754	5.5	20,619	
September	89,577	66,604	76.6	65,015	1,540	63,475	2,468	60,987	3,589	5.2	20,973	
October	89,637	68,569	76.5	64,976	1,526	63,450	2,544	60,906	3,593	5.2	21,088	
November	89,716	68,686	76.6	65,074	1,542	63,532	2,533	60,999	3,612	5.3	21,030	
December	89,792	68,638	76.4	65,055	1,534	63,521	2,477	61,044	3,563	5.2	21,154	
1989:												
January	89,914	69,032	76.6	65,322	1,532	63,780	2,501	61,289	3,710	5.4	20,882	
February	89,973	69,113	76.8	65,572	1,521	64,051	2,509	61,542	3,540	5.1	20,860	
Annual averages												
WOMEN												
1978 ¹	65,434	42,731	50.0	39,669	100	39,569	669	38,900	3,061	7.2	42,703	
1979	66,951	44,343	51.0	41,325	108	41,217	661	40,556	3,018	6.8	42,608	
1980	68,472	45,611	51.6	42,241	124	42,117	656	41,461	3,370	7.4	42,861	
1981	69,751	46,829	52.2	43,133	133	43,000	687	42,333	3,696	7.9	42,922	
1982	70,887	47,894	52.7	43,395	139	43,256	665	42,591	4,499	9.4	42,993	
1983	71,827	48,646	53.0	44,190	143	44,047	680	43,367	4,457	9.2	43,161	
1984	72,924	49,855	53.7	46,061	146	45,915	653	45,262	3,794	7.6	43,066	
1985	73,666	51,200	54.5	47,409	150	47,259	644	46,615	3,791	7.4	42,686	
1986 ¹	74,944	52,566	55.4	48,861	155	48,706	652	48,054	3,707	7.1	42,376	
1987	76,013	53,616	56.1	50,494	160	50,334	666	49,668	3,324	6.2	42,195	
1988	76,918	54,904	56.6	51,858	162	51,696	676	51,020	3,046	5.5	42,014	
Monthly data, seasonally adjusted²												
1988:												
February	96,608	54,812	56.5	51,422	159	51,263	695	50,566	3,190	5.8	41,994	
March	96,679	54,478	56.3	51,448	163	51,285	702	50,583	3,030	5.6	42,201	
April	96,739	54,598	56.4	51,526	163	51,363	711	50,652	3,072	5.6	42,141	
May	96,801	54,508	56.3	51,445	161	51,284	658	50,626	3,083	5.6	42,293	
June	96,660	54,773	56.5	51,792	162	51,630	673	50,957	2,981	5.4	42,107	
July	96,957	54,870	56.6	51,766	161	51,605	585	51,020	3,104	5.7	42,067	
August	97,018	55,007	56.7	51,964	163	51,801	651	51,150	3,043	5.5	42,011	
September	97,069	55,064	56.7	52,059	164	51,895	688	51,207	3,025	5.5	42,005	
October	97,164	55,209	56.8	52,284	161	52,123	694	51,429	2,925	5.3	41,955	
November	97,234	55,529	57.1	52,578	163	52,415	705	51,710	2,951	5.3	41,705	
December	97,306	55,621	57.2	52,650	162	52,488	716	51,772	2,971	5.3	41,685	
1989:												
January	97,427	56,091	57.6	53,085	164	52,921	799	52,122	3,006	5.4	41,336	
February	97,466	55,752	57.2	52,965	163	52,802	713	52,089	2,787	5.0	41,736	

¹ Not strictly comparable with prior years. For an explanation, see "Historical Comparability" under the Household Data section of the Explanatory Notes.

² The population and Armed Forces figures are not adjusted for seasonal variation.

**HOUSEHOLD DATA
HISTORICAL**

A-3. Employment status of the civilian noninstitutional population 16 years and over, 1955 to date

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force				Unemployment rates		
		Total	Percent of population	Employed	Unemployed	Total	Men	Women
Annual averages								
1955	109,683	65,023	59.3	62,170	2,852	4.4	4.2	4.9
1956	110,954	66,552	60.0	63,799	2,750	4.1	3.8	4.8
1957	112,265	66,929	59.6	64,071	2,859	4.3	4.1	4.7
1958	113,727	67,639	59.5	63,036	4,602	6.8	6.8	6.8
1959	115,329	68,369	59.3	64,630	3,740	5.5	5.2	5.9
1960 ¹	117,245	69,628	59.4	65,778	3,852	5.5	5.4	5.9
1961	118,771	70,459	59.3	65,746	4,714	6.7	6.4	7.2
1962 ¹	120,153	70,614	58.8	66,702	3,911	5.5	5.2	6.2
1963	122,416	71,833	58.7	67,762	4,070	5.7	5.2	6.5
1964	124,485	73,091	58.7	69,305	3,786	5.2	4.6	6.2
1965	126,513	74,455	58.9	71,088	3,366	4.5	4.0	5.5
1966	128,058	75,770	59.2	72,895	2,875	3.8	3.2	4.8
1967	129,874	77,347	59.6	74,372	2,975	3.8	3.1	5.2
1968	132,028	78,737	59.6	75,920	2,817	3.6	2.9	4.8
1969	134,335	80,734	60.1	77,902	2,832	3.5	2.8	4.7
1970	137,085	82,771	60.4	78,678	4,093	4.9	4.4	5.9
1971	140,216	84,382	60.2	79,367	5,016	5.9	5.3	6.9
1972 ¹	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 ¹	147,096	89,429	60.8	85,064	4,365	4.9	4.2	6.0
1974	150,120	91,949	61.3	86,794	5,156	5.6	4.9	6.7
1975	153,153	93,775	61.2	85,846	7,929	8.5	7.9	9.3
1976	156,150	96,158	61.6	88,752	7,406	7.7	7.1	8.6
1977	159,033	99,009	62.3	92,017	6,991	7.1	6.3	8.2
1978 ¹	161,910	102,251	63.2	96,048	6,202	6.1	5.3	7.2
1979	164,863	104,962	63.7	98,824	6,137	5.8	5.1	6.8
1980	167,745	106,940	63.8	99,303	7,637	7.1	6.9	7.4
1981	170,130	108,670	63.9	100,397	8,273	7.6	7.4	7.9
1982	172,271	110,204	64.0	99,526	10,678	9.7	9.9	9.4
1983	174,215	111,550	64.0	100,834	10,717	9.6	9.9	9.2
1984	176,383	113,544	64.4	105,005	8,539	7.5	7.4	7.6
1985	178,206	115,461	64.8	107,150	8,312	7.2	7.0	7.4
1986 ¹	180,587	117,834	65.3	109,597	8,237	7.0	6.9	7.1
1987	182,753	119,865	65.6	112,440	7,425	6.2	6.2	6.2
1988	184,613	121,669	65.9	114,968	6,701	5.5	5.5	5.6
Monthly data, seasonally adjusted²								
1988:								
February	183,969	121,165	65.9	114,273	6,892	5.7	5.5	5.9
March	184,111	120,936	65.7	114,129	6,807	5.6	5.7	5.6
April	184,232	121,328	65.9	114,660	6,668	5.5	5.4	5.6
May	184,374	121,203	65.7	114,403	6,800	5.6	5.6	5.6
June	184,562	121,524	65.8	115,001	6,523	5.4	5.3	5.5
July	184,729	121,658	65.9	115,034	6,624	5.4	5.3	5.7
August	184,830	122,000	66.0	115,203	6,797	5.6	5.6	5.5
September	184,962	121,984	66.0	115,370	6,614	5.4	5.4	5.5
October	185,114	122,091	66.0	115,573	6,518	5.3	5.4	5.3
November	185,244	122,510	66.1	115,947	6,563	5.4	5.4	5.3
December	185,402	122,563	66.1	116,009	6,554	5.3	5.3	5.4
1989:								
January	185,644	123,428	66.5	116,711	6,716	5.4	5.5	5.4
February	185,777	123,181	66.3	116,853	6,328	5.1	5.2	5.0

¹ Not strictly comparable with prior years. For an explanation, see "Historical Comparability" under the Household Data section of the

Explanatory Notes.

² The population figures are not adjusted for seasonal variation.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-4. Employment status of the civilian noninstitutional population by age, sex, and race

(Numbers in thousands)

Age, sex, and race	February 1989										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
TOTAL											
18 years and over	185,777	121,906	65.6	115,023	6,883	5.8	63,871	27,125	9,588	3,279	23,878
16 to 19 years	14,367	7,199	50.1	6,062	1,137	15.8	7,168	445	6,249	16	459
16 to 17 years	7,040	2,718	38.6	2,201	515	18.9	4,324	119	4,000	2	202
18 to 19 years	7,328	4,484	61.2	3,861	622	13.9	2,844	326	2,248	13	256
20 to 24 years	18,166	13,975	76.9	12,721	1,254	9.0	4,191	1,501	2,087	75	549
25 to 54 years	102,803	85,618	83.3	81,641	3,976	4.6	17,185	11,611	1,235	1,294	3,045
25 to 34 years	42,791	35,867	83.4	33,663	2,005	5.8	7,124	4,908	833	338	1,046
25 to 29 years	21,205	17,898	83.5	16,587	1,110	6.3	3,506	2,332	563	128	484
30 to 34 years	21,587	17,970	83.2	17,075	895	5.0	3,618	2,577	270	209	562
35 to 44 years	35,508	30,291	85.3	29,021	1,270	4.2	5,217	3,601	297	427	892
35 to 39 years	19,125	16,263	85.0	15,540	723	4.4	2,862	2,014	181	193	445
40 to 44 years	16,383	14,028	85.6	13,481	547	3.9	2,355	1,557	116	235	446
45 to 54 years	24,504	19,660	80.2	18,958	701	3.6	4,844	3,102	105	529	1,108
45 to 49 years	13,276	11,050	83.2	10,664	386	3.5	2,227	1,457	78	274	418
50 to 54 years	11,227	8,610	76.7	8,294	316	3.7	2,618	1,645	27	255	690
55 to 64 years	21,475	11,755	54.7	11,361	394	3.4	9,720	4,509	29	755	4,428
55 to 59 years	10,692	7,057	66.0	6,819	238	3.4	3,635	1,992	11	377	1,255
60 to 84 years	10,783	4,699	43.6	4,543	156	3.3	6,085	2,517	18	378	3,171
65 years and over	28,965	3,358	11.6	3,237	122	3.6	25,607	9,060	9	1,139	15,399
65 to 69 years	9,944	2,097	21.1	2,005	93	4.4	7,847	2,820	5	271	4,750
70 to 74 years	7,749	825	10.6	803	23	2.8	6,922	2,561	1	241	4,120
75 years and over	11,272	436	3.9	429	6	1.4	10,837	3,679	3	626	6,529
Men											
16 years and over	88,452	66,752	75.5	62,712	4,040	6.1	21,700	531	4,777	1,802	14,589
16 to 19 years	7,196	3,721	51.7	3,031	690	18.5	3,475	22	3,180	11	262
16 to 17 years	3,583	1,379	38.5	1,092	287	20.8	2,204	9	2,073	1	120
18 to 19 years	3,613	2,342	64.8	1,939	402	17.2	1,271	12	1,107	10	142
20 to 24 years	8,828	7,370	83.5	6,640	729	9.9	1,457	36	1,068	58	295
25 to 54 years	50,262	46,905	93.3	44,630	2,275	4.9	3,357	191	522	847	1,797
25 to 34 years	21,021	19,726	93.8	18,588	1,128	5.7	1,295	64	391	240	601
25 to 29 years	10,405	9,710	93.3	9,062	648	6.7	694	40	296	84	274
30 to 34 years	10,617	10,016	94.3	9,536	480	4.8	601	25	95	155	326
35 to 44 years	17,385	16,424	94.5	15,700	724	4.4	961	70	88	285	517
35 to 39 years	9,399	8,887	94.6	8,466	421	4.7	512	54	53	132	273
40 to 44 years	7,986	7,537	94.4	7,234	303	4.0	449	16	34	154	244
45 to 54 years	11,856	10,755	90.7	10,332	423	3.9	1,101	57	43	322	660
45 to 49 years	6,438	5,953	92.5	5,740	213	3.6	486	26	30	171	259
50 to 54 years	5,418	4,802	88.6	4,592	210	4.4	615	31	13	151	421
55 to 64 years	10,127	8,751	86.7	8,479	272	4.0	3,376	72	6	449	2,849
55 to 59 years	5,098	4,037	79.2	3,869	168	4.2	1,061	26	3	215	817
60 to 64 years	5,029	2,713	54.0	2,610	104	3.8	2,315	46	3	237	2,033
65 years and over	12,041	2,006	16.7	1,932	74	3.7	10,035	210	3	434	9,386
65 to 69 years	4,524	1,207	26.7	1,151	57	4.7	3,317	52	3	142	3,119
70 to 74 years	3,353	505	15.1	491	14	2.8	2,847	65		100	2,663
75 years and over	4,164	293	7.0	290	3	1.2	3,871	93		195	3,583
Women											
16 years and over	97,325	55,154	56.7	52,311	2,843	5.2	42,171	26,595	4,811	1,477	9,289
16 to 19 years	7,172	3,478	48.5	3,031	447	12.8	3,893	423	3,089	5	196
16 to 17 years	3,457	1,336	38.7	1,109	227	17.0	2,120	110	1,927	2	82
18 to 19 years	3,715	2,142	57.7	1,922	220	10.3	1,573	313	1,142	3	115
20 to 24 years	9,339	6,605	70.7	6,081	525	7.9	2,734	1,465	999	17	254
25 to 54 years	52,541	38,712	73.7	37,011	1,701	4.4	13,826	11,420	713	447	1,248
25 to 34 years	21,770	15,941	73.2	15,065	877	5.5	5,829	4,844	442	98	445
25 to 29 years	10,800	7,988	74.0	7,525	462	5.8	2,812	2,292	267	44	210
30 to 34 years	10,970	7,954	72.5	7,539	415	5.2	3,017	2,552	175	54	236
35 to 44 years	18,123	13,867	76.5	13,321	546	3.9	4,257	3,531	210	142	374
35 to 39 years	9,726	7,376	75.8	7,074	302	4.1	2,350	1,989	126	61	172
40 to 44 years	8,397	6,491	77.3	6,247	244	3.8	1,906	1,541	82	81	202
45 to 54 years	12,648	8,905	70.4	8,626	279	3.1	3,743	3,046	62	207	428
45 to 49 years	6,838	5,097	74.5	4,924	173	3.4	1,741	1,431	48	103	159
50 to 54 years	5,809	3,808	65.5	3,702	106	2.8	2,001	1,614	14	104	269
55 to 84 years	11,348	5,005	44.1	4,883	122	2.4	6,344	4,437	23	307	1,577
55 to 59 years	5,594	3,020	54.0	2,950	70	2.3	2,574	1,966	8	162	438
60 to 64 years	5,755	1,985	34.5	1,933	52	2.6	3,770	2,471	15	145	1,139
65 years and over	18,924	1,353	8.0	1,305	48	3.5	15,571	8,850	6	702	6,014
65 to 69 years	5,420	890	16.4	854	36	4.1	4,530	2,768	2	129	1,831
70 to 74 years	4,396	320	7.3	312	9	2.8	4,075	2,496	1	141	1,437
75 years and over	7,108	143	2.0	139	3	2.2	6,966	3,586	3	431	2,946

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-4. Employment status of the civilian noninstitutional population by age, sex, and race—Continued

(Numbers in thousands)

Age, sex, and race	February 1989										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
WHITE											
18 years and over	158,947	104,758	85.9	99,747	5,012	4.8	54,189	23,631	7,470	2,566	20,522
16 to 19 years	11,656	8,162	53.0	5,340	641	13.6	5,474	324	4,832	12	306
18 to 17 years	5,646	2,324	41.2	1,943	361	16.4	3,324	93	3,073	1	157
18 to 19 years	8,007	3,857	64.2	3,397	461	11.9	2,150	231	1,759	10	149
20 to 24 years	15,015	11,797	78.6	10,926	871	7.4	3,217	1,123	1,678	58	360
25 to 54 years	87,432	73,334	83.9	70,444	2,890	3.9	14,098	9,862	930	993	2,293
25 to 34 years	35,961	30,209	84.0	28,798	1,411	4.7	5,752	4,122	815	264	751
25 to 29 years	17,779	14,973	84.2	14,178	796	5.3	2,806	1,932	421	104	347
30 to 34 years	18,183	15,237	83.8	14,822	614	4.0	2,948	2,190	194	160	404
35 to 44 years	30,403	28,080	85.8	25,150	930	3.6	4,323	3,104	235	329	656
35 to 39 years	16,251	13,862	85.3	13,366	496	5.8	2,390	1,742	148	147	342
40 to 44 years	14,152	12,218	86.3	11,765	434	3.8	1,933	1,367	89	182	313
45 to 54 years	21,066	17,045	80.9	16,496	549	3.2	4,023	2,856	80	400	888
45 to 49 years	11,414	9,596	84.1	9,289	327	3.4	1,818	1,254	57	206	312
50 to 54 years	9,654	7,449	77.2	7,227	222	4.4	2,204	1,455	23	194	574
55 to 64 years	18,841	10,454	55.5	10,135	318	3.0	8,387	4,012	24	569	3,783
55 to 59 years	9,323	6,236	66.9	6,050	185	3.0	3,087	1,765	9	273	1,040
60 to 64 years	9,518	4,218	44.3	4,085	133	3.2	5,300	2,247	14	296	2,743
65 years and over	26,004	2,991	11.5	2,901	90	3.0	23,013	8,291	9	934	13,779
65 to 69 years	8,851	1,857	21.0	1,792	64	3.4	6,994	2,544	5	220	4,224
70 to 74 years	6,975	740	10.8	722	20	2.7	6,235	2,338	1	192	3,704
75 years and over	10,179	395	3.9	388	7	1.8	9,784	3,408	3	521	5,851
Men											
18 years and over	76,262	58,115	76.2	55,070	3,045	5.2	18,147	407	3,731	1,418	12,590
16 to 19 years	5,871	3,195	54.4	2,671	524	16.4	2,678	18	2,477	8	174
18 to 17 years	2,889	1,184	41.0	963	221	18.7	1,706	7	1,599	1	98
18 to 19 years	2,982	2,012	67.5	1,709	303	15.1	970	10	878	7	75
20 to 24 years	7,346	6,232	84.8	5,710	522	8.4	1,114	15	883	48	190
25 to 54 years	43,287	40,782	94.2	39,062	1,720	4.2	2,506	136	384	856	1,329
25 to 34 years	17,915	16,981	94.8	16,146	836	4.9	934	44	285	186	418
25 to 29 years	8,828	8,316	94.2	7,825	490	5.9	512	22	222	67	200
30 to 34 years	9,088	8,666	95.4	8,320	345	4.0	422	22	64	119	218
35 to 44 years	15,047	14,337	95.3	13,793	544	3.8	710	51	65	221	373
35 to 39 years	8,070	7,680	95.2	7,387	293	3.8	391	43	41	100	207
40 to 44 years	6,977	6,857	95.4	6,407	251	3.8	319	8	24	122	165
45 to 54 years	10,325	9,463	91.7	9,123	340	3.6	862	41	34	248	539
45 to 49 years	5,810	5,238	93.3	5,043	194	3.7	373	18	22	135	198
50 to 54 years	4,716	4,227	89.6	4,080	147	3.5	488	22	12	113	341
55 to 64 years	8,940	6,093	68.2	5,866	228	3.7	2,846	52	5	338	2,453
55 to 59 years	4,478	3,820	80.9	3,482	137	3.8	858	23	2	157	875
60 to 64 years	4,483	2,473	55.4	2,383	90	3.8	1,990	29	3	179	1,779
65 years and over	10,818	1,813	16.8	1,781	52	2.8	9,005	186	2	373	8,444
65 to 69 years	4,042	1,088	28.9	1,049	38	3.5	2,954	42	3	122	2,787
70 to 74 years	3,024	458	15.1	448	11	2.4	2,566	53	-	81	2,432
75 years and over	3,752	267	7.1	264	3	1.3	3,485	91	-	169	3,225
Women											
18 years and over	82,685	48,643	56.4	44,677	1,967	4.2	36,042	23,224	3,739	1,146	7,931
16 to 19 years	5,784	2,988	51.8	2,689	317	10.8	2,798	307	2,355	4	133
18 to 17 years	2,759	1,141	41.3	981	160	14.0	1,618	88	1,474	-	59
18 to 19 years	3,025	1,845	61.0	1,688	157	8.5	1,180	221	881	4	74
20 to 24 years	7,969	5,565	72.6	5,216	349	8.3	2,103	1,108	813	13	170
25 to 54 years	44,145	32,552	73.7	31,382	1,170	3.6	11,592	9,748	546	337	964
25 to 34 years	18,046	13,228	73.3	12,652	576	4.4	4,818	4,078	330	78	333
25 to 29 years	8,951	6,657	74.4	6,351	306	4.8	2,294	1,910	199	37	147
30 to 34 years	9,095	6,571	72.2	6,302	269	4.1	2,524	2,168	130	41	166
35 to 44 years	15,356	11,743	78.5	11,356	386	3.3	3,813	3,053	170	107	283
35 to 39 years	8,181	6,182	75.6	5,979	203	3.3	1,999	1,712	105	47	135
40 to 44 years	7,175	5,561	77.5	5,378	183	3.3	1,614	1,341	65	80	148
45 to 54 years	10,743	7,582	70.8	7,373	209	2.8	3,161	2,616	46	152	347
45 to 49 years	5,804	4,380	75.1	4,228	133	3.1	1,445	1,224	35	71	114
50 to 54 years	4,938	3,222	65.3	3,147	75	2.3	1,716	1,391	11	81	233
55 to 64 years	9,901	4,360	44.0	4,270	91	2.1	5,541	3,980	19	233	1,330
55 to 59 years	4,848	2,616	54.0	2,566	48	1.8	2,231	1,741	7	116	366
60 to 64 years	5,055	1,745	34.5	1,702	43	2.5	3,310	2,218	12	117	964
65 years and over	15,186	1,179	7.8	1,140	39	3.3	14,008	8,104	8	561	5,335
65 to 69 years	4,809	769	16.0	743	26	3.4	4,040	2,502	2	98	1,437
70 to 74 years	3,951	292	7.1	274	9	3.2	3,669	2,285	1	111	1,272
75 years and over	6,427	128	2.0	124	4	3.0	6,299	3,317	3	352	2,628

HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED

A-4. Employment status of the civilian noninstitutional population by age, sex, and race—Continued

(Numbers in thousands)

Age, sex, and race	February 1969										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
BLACK											
16 years and over	20,905	13,303	63.6	11,655	1,648	12.4	7,602	2,652	1,527	644	2,779
16 to 19 years	2,175	622	37.8	553	269	32.7	1,352	101	1,130	2	120
16 to 17 years	1,108	314	28.3	190	123	39.4	794	17	744	1	32
18 to 19 years	1,067	509	47.7	363	146	28.6	558	84	386	1	88
20 to 24 years	2,499	1,756	70.3	1,413	343	19.5	743	322	236	15	171
25 to 54 years	11,677	9,436	60.6	8,492	943	10.0	2,242	1,202	157	271	611
25 to 34 years	5,288	4,328	81.9	3,799	529	12.2	959	544	109	69	238
25 to 29 years	2,677	2,187	81.7	1,913	276	12.6	490	289	70	20	111
30 to 34 years	2,610	2,140	82.0	1,687	254	11.9	470	256	39	47	128
35 to 44 years	3,825	3,155	82.5	2,868	288	9.1	670	354	34	90	191
35 to 39 years	2,170	1,810	83.4	1,616	194	10.7	359	218	18	44	79
40 to 44 years	1,656	1,345	81.2	1,252	93	6.9	311	136	16	46	112
45 to 54 years	2,564	1,952	76.1	1,825	126	6.5	612	304	14	112	182
45 to 49 years	1,365	1,061	77.7	1,018	43	4.1	304	145	10	59	89
50 to 54 years	1,199	890	74.2	807	83	9.3	308	159	4	54	92
55 to 64 years	2,120	1,003	47.3	938	65	6.4	1,118	399	4	171	543
55 to 59 years	1,103	633	57.4	585	49	7.7	470	162		98	190
60 to 64 years	1,017	369	36.3	354	16	4.3	648	218	3	73	353
65 years and over	2,433	286	11.8	258	29	10.0	2,147	628	-	185	1,334
65 to 69 years	893	184	20.6	157	25	13.6	710	212	-	51	447
70 years and over	1,540	104	6.8	100	4	3.8	1,437	416	-	134	887
Men											
16 years and over	9,386	6,586	70.2	5,713	873	13.3	2,799	89	723	340	1,647
16 to 19 years	1,072	433	40.4	281	152	35.2	638	4	564	1	70
16 to 17 years	558	166	29.7	102	64	38.3	392	2	375		15
18 to 19 years	513	287	52.0	178	89	33.2	246	2	189	1	54
20 to 24 years	1,138	903	79.3	721	182	20.1	236	20	113	12	91
25 to 54 years	5,237	4,610	88.0	4,126	483	10.5	629	32	46	172	379
25 to 34 years	2,395	2,151	89.9	1,891	260	12.1	243	10	38	50	145
25 to 29 years	1,212	1,105	91.2	967	139	12.8	107	9	26	14	57
30 to 34 years	1,182	1,046	88.5	924	122	11.6	136	1	12	35	88
35 to 44 years	1,705	1,517	89.0	1,362	155	10.2	188	11	6	56	115
35 to 39 years	968	887	91.7	775	112	12.6	81	3	2	31	45
40 to 44 years	738	630	85.4	587	43	6.9	108	8	4	25	70
45 to 54 years	1,137	940	82.7	873	67	7.1	197	11	2	66	119
45 to 49 years	607	515	84.9	501	14	2.7	92	5	2	30	54
50 to 54 years	531	425	80.1	372	53	12.6	105	5		36	64
55 to 64 years	956	499	52.1	464	35	7.0	458	16	-	100	341
55 to 59 years	499	317	63.5	290	28	8.7	182	3	-	55	124
60 to 64 years	457	182	39.7	174	7	4.0	276	14	-	45	217
65 years and over	981	142	14.5	121	21	14.9	839	17	-	55	766
65 to 69 years	390	84	21.4	66	17	20.7	306	5	-	20	281
70 years and over	591	59	9.9	55	4	(¹)	532	12	-	35	485
Women											
16 years and over	11,520	6,717	58.3	5,942	775	11.5	4,803	2,564	803	304	1,132
16 to 19 years	1,103	389	35.3	273	117	30.0	714	97	566	1	50
16 to 17 years	550	148	26.8	88	60	40.6	402	15	369	1	17
18 to 19 years	554	242	43.7	185	57	23.5	312	82	197		34
20 to 24 years	1,361	853	62.7	692	161	18.9	507	302	123	3	80
25 to 54 years	6,440	4,826	74.9	4,366	460	9.5	1,613	1,170	111	99	232
25 to 34 years	2,693	2,177	75.2	1,908	269	12.3	717	534	71	19	93
25 to 29 years	1,465	1,082	73.9	946	137	12.6	383	280	44	6	54
30 to 34 years	1,428	1,094	76.6	963	132	12.0	334	255	27	12	40
35 to 44 years	2,120	1,638	77.3	1,506	132	8.1	482	343	28	34	76
35 to 39 years	1,202	923	76.8	841	82	8.9	278	215	16	13	34
40 to 44 years	918	715	77.9	665	50	7.0	203	128	12	21	42
45 to 54 years	1,427	1,011	70.9	952	59	5.8	415	293	12	46	63
45 to 49 years	758	546	72.0	517	29	5.4	212	140	8	29	35
50 to 54 years	668	465	69.6	435	30	6.4	203	154	4	18	28
55 to 64 years	1,164	504	43.3	474	30	5.9	660	383	4	71	202
55 to 59 years	604	316	52.3	295	21	6.7	268	179		43	66
60 to 64 years	560	168	33.5	179	9	4.6	372	204	3	28	136
65 years and over	1,452	144	9.9	137	7	5.1	1,306	611	-	130	568
65 to 69 years	503	100	19.6	91	8	8.2	404	207	-	31	166
70 years and over	949	45	4.7	45	-	(¹)	905	404	-	89	402

¹ Data not shown where base is less than 75,000.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-5. Employment status of the black-and-other civilian noninstitutional population by age and sex

(Numbers in thousands)

Age and sex	February 1989								Not in labor force
	Civilian noninstitutional population	Civilian labor force						Percent of labor force	
		Total	Percent of population	Employed			Number		
				Total	Agriculture	Nonagricultural industries			
TOTAL									
18 years and over	28,830	17,147	63.9	15,278	162	15,114	1,871	10.9	9,682
16 to 19 years	2,712	1,018	37.5	722	1	722	295	29.0	1,694
18 to 17 years	1,392	391	28.1	258	1	256	134	34.1	1,000
18 to 19 years	1,320	627	47.5	465	-	465	162	25.8	694
20 to 24 years	3,151	2,177	69.1	1,795	14	1,781	383	17.6	974
25 to 54 years	15,372	12,284	79.9	11,199	112	11,086	1,086	8.8	3,089
25 to 34 years	6,830	5,458	79.9	4,865	53	4,812	593	10.9	1,372
25 to 29 years	3,426	2,728	79.6	2,412	30	2,382	314	11.5	700
30 to 34 years	3,404	1,424	41.8	2,453	23	2,429	280	19.7	672
35 to 44 years	5,106	4,211	82.5	3,871	29	3,841	340	8.1	895
35 to 39 years	2,874	2,401	83.5	2,175	13	2,163	227	9.5	473
40 to 44 years	2,232	1,810	81.1	1,696	18	1,678	114	6.3	422
45 to 54 years	3,436	2,614	76.1	2,462	30	2,432	152	5.8	822
45 to 49 years	1,863	1,453	78.0	1,395	8	1,387	59	4.1	408
50 to 54 years	1,573	1,161	73.8	1,067	22	1,045	93	8.0	413
55 to 64 years	2,634	1,302	49.4	1,226	21	1,205	76	5.8	1,332
55 to 59 years	1,369	821	60.0	768	8	760	53	6.4	548
60 to 64 years	1,265	480	38.0	457	13	445	23	4.8	784
65 years and over	2,961	387	12.4	335	13	322	32	8.6	2,594
65 to 69 years	1,094	241	22.0	212	2	210	28	11.6	852
70 to 74 years	773	85	11.0	81	10	72	4	4.7	688
75 years and over	1,094	41	3.7	41	1	40	-	(¹)	1,053
Men									
18 years and over	12,190	8,637	70.9	7,642	141	7,501	995	11.5	3,553
16 to 19 years	1,324	528	39.7	360	1	359	166	31.6	799
18 to 17 years	694	196	28.2	129	1	128	87	34.1	498
18 to 19 years	831	330	52.3	231	-	231	99	30.1	301
20 to 24 years	1,480	1,138	76.9	931	9	921	207	18.2	342
25 to 54 years	6,975	6,124	87.8	5,569	102	5,466	555	9.1	852
25 to 34 years	3,106	2,745	88.4	2,452	44	2,408	292	10.6	362
25 to 29 years	1,577	1,395	88.4	1,237	27	1,210	158	11.3	182
30 to 34 years	1,529	1,350	88.3	1,215	17	1,198	135	10.0	179
35 to 44 years	2,338	2,087	89.3	1,907	29	1,878	181	8.6	251
35 to 39 years	1,329	1,207	90.9	1,080	13	1,067	128	10.6	121
40 to 44 years	1,010	680	67.2	627	16	611	53	6.0	130
45 to 54 years	1,531	1,291	84.4	1,209	29	1,180	82	6.4	240
45 to 49 years	829	716	86.4	697	7	690	19	2.7	112
50 to 54 years	702	575	81.9	512	22	490	63	11.0	127
55 to 64 years	1,187	657	55.4	613	15	598	45	6.8	530
55 to 59 years	622	417	67.1	386	5	382	31	7.4	204
60 to 64 years	565	240	42.5	226	11	216	14	5.7	325
65 years and over	1,223	193	15.8	171	14	157	22	11.5	1,030
65 to 69 years	482	120	24.8	101	2	99	18	15.4	362
70 to 74 years	329	47	14.3	43	10	34	4	(¹)	282
75 years and over	412	26	6.3	26	1	24	-	(¹)	386
Women									
16 years and over	14,640	8,511	58.1	7,634	21	7,614	876	10.3	6,129
16 to 19 years	1,388	492	35.5	363	-	363	129	26.3	895
16 to 17 years	898	198	28.0	129	-	129	67	34.2	502
16 to 19 years	690	297	43.0	234	-	234	63	21.1	393
20 to 24 years	1,671	1,040	62.2	864	5	859	175	16.9	631
25 to 54 years	8,397	6,180	73.4	5,630	10	5,620	531	8.6	2,237
25 to 34 years	3,724	2,714	72.9	2,412	9	2,404	301	11.1	1,010
25 to 29 years	1,849	1,331	72.0	1,175	3	1,172	156	11.7	518
30 to 34 years	1,875	1,383	73.7	1,236	6	1,231	145	10.5	493
35 to 44 years	2,768	2,124	76.7	1,964	-	1,964	160	7.5	644
35 to 39 years	1,545	1,194	77.2	1,095	-	1,096	99	8.3	352
40 to 44 years	1,222	930	76.1	869	2	867	61	6.6	292
45 to 54 years	1,905	1,323	69.4	1,253	1	1,252	70	5.3	582
45 to 49 years	1,034	737	71.3	698	1	697	40	5.4	296
50 to 54 years	871	586	67.2	555	-	555	30	5.2	286
55 to 64 years	1,447	644	44.5	613	6	607	31	4.8	803
55 to 59 years	747	404	54.0	362	4	376	22	5.4	343
60 to 64 years	700	240	34.4	231	2	229	9	3.9	459
65 years and over	1,738	174	10.0	165	-	165	9	5.3	1,564
65 to 69 years	612	121	19.8	111	-	111	10	8.3	490
70 to 74 years	444	38	8.6	38	-	36	-	(¹)	406
75 years and over	682	15	2.2	15	-	18	-	(¹)	667

¹ Data not shown where base is less than 75,000.

A-6. Employment status of the civilian noninstitutional population by race, sex, and age

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
TOTAL								
Civilian noninstitutional population	183,969	185,777	80,203	81,256	89,178	90,153	14,588	14,367
Civilian labor force	119,942	121,906	62,205	63,031	50,407	51,675	7,331	7,199
Percent of population	65.2	65.6	77.6	77.6	56.5	57.3	50.2	50.1
Employed	112,460	115,023	58,626	59,681	47,714	49,279	6,120	6,062
Agriculture	2,760	2,795	2,027	2,065	552	578	181	152
Nonagricultural industries	109,700	112,228	56,599	57,616	47,162	48,702	5,939	5,910
Unemployed	7,482	6,883	3,578	3,350	2,693	2,396	1,211	1,137
Unemployment rate	6.2	5.6	5.8	5.3	5.3	4.6	16.5	15.8
Not in labor force	64,026	63,871	17,998	18,225	38,771	38,478	7,258	7,168
White								
Civilian noninstitutional population	157,773	158,947	69,642	70,391	76,246	76,901	11,885	11,656
Civilian labor force	103,398	104,758	54,268	54,920	42,748	43,657	6,381	6,182
Percent of population	65.5	65.9	77.9	78.0	56.1	56.8	53.7	53.0
Employed	97,819	99,747	51,551	52,399	40,780	42,008	5,488	5,340
Agriculture	2,594	2,633	1,887	1,925	529	557	177	151
Nonagricultural industries	95,226	97,113	49,665	50,473	40,250	41,451	5,311	5,189
Unemployed	5,579	5,012	2,717	2,521	1,969	1,649	893	841
Unemployment rate	5.4	4.8	5.0	4.6	4.6	3.8	14.0	13.6
Not in labor force	54,375	54,189	15,374	15,471	33,497	33,244	5,504	5,474
Black								
Civilian noninstitutional population	20,569	20,905	8,161	8,314	10,235	10,416	2,173	2,175
Civilian labor force	12,965	13,303	6,094	6,153	6,114	6,327	757	822
Percent of population	63.0	63.6	74.7	74.0	59.7	60.7	34.8	37.8
Employed	11,288	11,655	5,352	5,432	5,462	5,669	473	553
Agriculture	134	124	120	112	12	12	2	1
Nonagricultural industries	11,154	11,531	5,233	5,321	5,450	5,657	472	553
Unemployed	1,678	1,648	742	721	652	658	284	269
Unemployment rate	12.9	12.4	12.2	11.7	10.7	10.4	37.5	32.7
Not in labor force	7,603	7,602	2,067	2,161	4,120	4,089	1,416	1,352

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-7. Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	February 1989									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time ¹	Part time ¹	Total	Looking for full-time work	Looking for part-time work	
TOTAL ENROLLED										
Total, 16 to 24 years	16,003	7,850	47.8	6,763	1,173	5,590	887	92	795	11.6
16 to 19 years	11,057	4,754	43.0	4,058	328	3,730	696	59	637	14.6
20 to 24 years	4,948	2,896	58.6	2,705	845	1,860	191	34	157	6.6
High school	8,437	3,422	40.6	2,846	180	2,666	576	52	524	16.6
College	7,566	4,228	55.9	3,917	993	2,924	311	40	271	7.4
Full-time students	6,519	3,269	50.1	3,001	373	2,627	269	31	237	8.2
Part-time students	1,047	959	91.6	916	620	296	43	9	33	4.4
Men, 16 to 24 years	8,155	3,897	47.8	3,373	646	2,727	524	57	467	13.5
16 to 19 years	5,613	2,408	42.9	2,012	187	1,824	396	34	362	16.4
20 to 24 years	2,542	1,489	58.6	1,361	459	903	128	23	105	8.6
High school	4,433	1,799	40.6	1,453	111	1,342	346	29	316	19.2
College	3,723	2,098	56.4	1,920	535	1,385	178	28	151	8.5
Full-time students	3,227	1,644	50.9	1,488	232	1,257	156	22	134	9.5
Part-time students	496	454	91.6	432	303	128	23	6	16	5.0
Women, 16 to 24 years	7,848	3,753	47.8	3,390	527	2,863	363	35	328	9.7
16 to 19 years	5,444	2,346	43.1	2,046	140	1,906	300	24	276	12.8
20 to 24 years	2,404	1,407	58.5	1,344	387	957	63	11	52	4.5
High school	4,004	1,623	40.5	1,393	69	1,324	230	23	208	14.2
College	3,844	2,130	55.4	1,997	458	1,539	133	13	120	6.2
Full-time students	3,293	1,625	49.4	1,512	142	1,371	113	10	103	7.0
Part-time students	551	504	91.5	484	316	168	20	3	17	4.0
White										
Total, 16 to 24 years	13,136	6,567	50.0	5,912	1,011	4,901	655	68	587	10.0
16 to 19 years	8,936	4,046	45.3	3,534	268	3,266	512	46	466	12.7
20 to 24 years	4,199	2,521	60.0	2,378	743	1,635	143	22	120	5.7
Men	6,709	3,340	49.8	2,952	561	2,392	387	39	348	11.6
Women	6,427	3,227	50.2	2,960	450	2,509	268	29	239	8.3
High school	6,692	2,895	43.3	2,479	145	2,334	415	44	371	14.3
College	6,444	3,672	57.0	3,433	865	2,567	240	25	215	6.5
Full-time students	5,550	2,848	51.3	2,635	320	2,315	213	21	192	7.5
Part-time students	894	824	92.2	798	545	253	27	3	23	3.2
Black										
Total, 16 to 24 years	2,143	806	37.6	600	136	464	206	22	184	25.5
16 to 19 years	1,666	555	33.3	391	54	337	164	11	153	29.5
20 to 24 years	476	251	52.7	209	82	127	42	11	31	16.6
Men	1,073	416	38.8	293	68	225	123	17	107	29.6
Women	1,070	390	36.4	307	68	239	82	5	77	21.1
High school	1,381	407	29.9	263	31	232	144	7	137	35.3
College	782	399	51.0	337	105	232	62	15	47	15.5
Full-time students	670	302	45.0	254	48	207	47	9	38	15.7
Part-time students	112	97	86.8	82	57	26	15	6	9	15.0
Hispanic origin										
Total, 16 to 24 years	1,274	496	39.0	423	139	284	74	13	60	14.9
16 to 19 years	939	302	32.1	241	51	190	61	12	48	20.1
20 to 24 years	334	195	58.3	182	88	94	13	1	12	6.8
Men	629	263	41.7	223	70	152	40	8	32	15.2
Women	644	234	36.3	200	69	131	34	6	28	14.5
High school	772	213	27.6	165	28	137	48	12	36	22.6
College	502	284	56.6	258	111	147	26	1	25	9.1
Full-time students	356	153	43.1	132	33	100	21	1	20	13.6
Part-time students	145	130	89.6	125	78	47	5	-	5	3.7

See footnotes at end of table.

A-7. Employment status of the civilian noninstitutional population 16 to 24 years of age by school enrollment, years of school completed, sex, race, and Hispanic origin—Continued

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	February 1989									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time ¹	Part time ¹	Total	Looking for full-time work	Looking for part-time work	
TOTAL NOT ENROLLED										
Total, 16 to 24 years	16,530	13,524	81.8	12,020	10,389	1,632	1,503	1,385	119	11.1
16 to 19 years	3,311	2,448	73.9	2,005	1,536	468	441	405	38	18.0
20 to 24 years	13,219	11,076	83.8	10,016	8,853	1,163	1,063	980	83	9.8
Less than 4 years of high school	4,002	2,616	65.4	2,060	1,709	351	557	515	42	21.3
4 years of high school	6,485	7,134	84.1	8,404	5,476	926	730	689	61	10.2
1 to 3 years of college	2,563	2,364	91.5	2,205	1,951	255	159	147	12	6.7
4 years of college or more	1,460	1,408	96.4	1,351	1,253	96	57	53	4	4.0
Men, 16 to 24 years	7,866	7,193	91.4	8,299	5,751	548	895	860	35	12.4
16 to 19 years	1,563	1,313	83.0	1,019	880	159	294	277	16	22.4
20 to 24 years	6,284	5,880	93.6	5,279	4,871	389	601	582	19	10.2
Less than 4 years of high school	2,136	1,777	83.2	1,426	1,236	190	351	339	12	19.7
4 years of high school	4,015	3,753	93.5	3,320	3,074	246	433	412	21	11.5
1 to 3 years of college	1,100	1,072	97.4	992	911	81	80	78	2	7.5
4 years of college or more	615	593	96.4	561	530	31	31	31	-	5.3
Women, 16 to 24 years	6,664	6,330	73.1	5,722	4,638	1,084	609	525	84	9.6
16 to 19 years	1,728	1,132	65.5	985	676	309	147	127	20	13.0
20 to 24 years	6,936	5,198	74.9	4,737	3,962	774	461	398	84	8.9
Less than 4 years of high school	1,666	841	45.1	634	474	161	207	177	30	24.6
4 years of high school	4,469	3,382	75.7	3,084	2,402	682	298	257	40	8.8
1 to 3 years of college	1,463	1,292	87.2	1,214	1,040	174	79	69	9	6.1
4 years of college or more	845	615	96.5	790	723	67	25	22	4	3.1
White										
Total, 16 to 24 years	13,534	11,412	84.3	10,354	8,985	1,359	1,058	972	88	9.3
16 to 19 years	2,719	2,135	78.5	1,806	1,388	418	329	306	23	15.4
20 to 24 years	10,815	9,276	85.8	8,548	7,607	941	728	666	63	7.9
Men	6,508	6,087	93.5	5,429	4,997	431	859	634	25	10.8
Women	7,026	5,324	75.8	4,925	3,998	928	399	338	61	7.5
Less than 4 years of high school	3,184	2,230	70.0	1,839	1,547	292	390	358	32	17.5
4 years of high school	6,955	5,998	86.2	5,467	4,718	788	511	489	42	8.5
1 to 3 years of college	2,120	1,950	92.0	1,843	1,632	210	108	100	7	5.5
4 years of college or more	1,275	1,234	96.7	1,185	1,097	88	48	45	4	3.9
Black										
Total, 16 to 24 years	2,532	1,772	70.0	1,388	1,133	234	408	379	27	22.9
16 to 19 years	509	287	56.6	162	122	40	105	94	11	39.3
20 to 24 years	2,023	1,505	74.4	1,204	1,011	193	301	284	17	20.0
Men	1,137	919	80.8	709	608	100	210	202	8	22.9
Women	1,395	853	61.2	658	524	133	198	178	19	22.9
Less than 4 years of high school	896	327	36.5	172	125	48	154	146	8	47.2
4 years of high school	1,337	998	74.6	794	655	139	204	188	16	20.4
1 to 3 years of college	389	345	88.6	301	284	38	43	40	4	12.8
4 years of college or more	109	103	94.8	99	89	9	4	4	-	4.3
Hispanic origin										
Total, 16 to 24 years	1,984	1,496	75.5	1,301	1,154	147	197	173	24	13.1
16 to 19 years	444	305	68.6	259	210	49	48	42	4	15.0
20 to 24 years	1,540	1,193	77.5	1,042	944	98	151	130	20	12.6
Men	1,041	960	92.3	846	782	63	114	108	7	11.9
Women	943	538	57.0	455	372	84	82	65	18	15.3
Less than 4 years of high school	950	661	69.8	560	499	61	100	90	11	15.2
4 years of high school	786	628	79.8	547	473	74	81	69	11	12.8
1 to 3 years of college	193	162	83.8	150	142	7	12	12	-	7.7
4 years of college or more	52	47	(²)	44	40	4	3	1	2	(²)

¹ Employed persons with a job but not at work and persons at work part time are distributed according to whether they usually work full or part time.

² Data not shown where base is less than 75,000.

NOTE: In the summer months, the educational attainment levels of youth not enrolled in school are increased by the temporary movement of high school and

college students into that group. Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-8. Employment status of male Vietnam-era veterans and nonveterans by age

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Feb. 1988	Feb. 1989	Total		Employed		Unemployed			
			Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Number		Percent of labor force	
							Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,877	7,914	7,243	7,226	6,881	6,936	362	290	5.0	4.0
30 to 44 years	6,033	5,664	5,724	5,371	5,433	5,142	291	229	5.1	4.3
30 to 34 years	781	564	732	515	688	487	44	28	6.0	5.4
35 to 39 years	2,329	1,905	2,223	1,808	2,082	1,701	141	107	6.3	5.9
40 to 44 years	2,923	3,195	2,769	3,048	2,663	2,954	106	94	3.8	3.1
45 years and over	1,844	2,250	1,519	1,855	1,448	1,794	71	61	4.7	3.3
NONVETERANS										
Total, 30 to 44 years	20,071	21,081	18,873	19,870	17,905	18,971	968	899	5.1	4.5
30 to 34 years	9,001	9,255	8,529	8,740	8,027	8,337	502	403	5.9	4.6
35 to 39 years	6,637	7,190	6,223	6,786	5,901	6,491	322	295	5.2	4.3
40 to 44 years	4,433	4,636	4,121	4,344	3,977	4,143	144	201	3.5	4.6

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces; published data

are limited to those 30 to 44 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

A-9. Employed and unemployed full- and part-time workers by sex, age, and race

(In thousands)

Sex, age, and race	February 1989							
	Employed						Unemployed	
	Full time			Part time			Looking for full-time work	Looking for part-time work
	Total	Full-time schedules ¹	Part time for economic reasons, usually work full time	Total	Voluntary ¹	Part time for economic reasons, usually work part time		
TOTAL								
Total, 16 years and over	94,632	92,810	1,822	20,391	17,217	3,174	5,455	1,428
16 to 19 years	1,864	1,789	75	4,198	3,947	251	463	674
16 to 17 years	215	210	5	1,985	1,950	35	78	436
18 to 19 years	1,648	1,579	69	2,214	1,997	217	385	238
20 years and over	92,768	91,021	1,747	16,193	13,270	2,923	4,992	754
20 to 24 years	9,698	9,408	290	3,022	2,491	531	1,014	240
25 years and over	83,069	81,613	1,456	13,171	10,779	2,392	3,978	514
25 to 54 years	72,053	70,828	1,225	9,588	7,526	2,062	3,604	372
55 years and over	11,015	10,785	230	3,582	3,252	330	375	142
Men, 16 years and over	56,086	55,017	1,069	6,625	5,413	1,212	3,388	652
16 to 19 years	1,047	1,017	30	1,983	1,870	113	312	378
20 years and over	55,039	54,000	1,039	4,642	3,543	1,099	3,077	274
20 to 24 years	5,349	5,162	187	1,291	1,061	230	605	124
25 years and over	49,691	48,839	852	3,350	2,481	869	2,472	150
25 to 54 years	42,767	42,033	734	1,863	1,105	758	2,197	78
55 years and over	6,924	6,806	118	1,487	1,376	111	275	71
Women, 16 years and over	38,545	37,792	753	13,766	11,804	1,962	2,067	776
16 to 19 years	817	772	45	2,215	2,077	138	151	296
20 years and over	37,728	37,020	708	11,551	9,727	1,824	1,915	480
20 to 24 years	4,349	4,246	103	1,732	1,430	302	409	116
25 years and over	33,379	32,773	606	9,820	8,297	1,523	1,507	364
25 to 54 years	29,287	28,795	492	7,725	6,421	1,304	1,407	294
55 years and over	4,092	3,979	113	2,096	1,877	219	100	70
White								
Men, 16 years and over	49,279	48,351	928	5,791	4,786	1,005	2,559	486
16 to 19 years	928	899	29	1,744	1,659	85	243	281
20 years and over	48,350	47,451	899	4,048	3,128	920	2,316	205
20 to 24 years	4,630	4,463	167	1,080	888	192	430	92
25 years and over	43,720	42,988	732	2,969	2,240	729	1,886	113
25 to 54 years	37,491	36,853	638	1,571	943	628	1,664	55
55 years and over	6,229	6,135	94	1,397	1,297	100	222	58
Women, 16 years and over	32,389	31,777	612	12,288	10,673	1,615	1,361	605
16 to 19 years	727	683	44	1,941	1,819	122	109	208
20 years and over	31,661	31,094	567	10,347	8,854	1,493	1,252	397
20 to 24 years	3,720	3,639	81	1,496	1,265	231	258	91
25 years and over	27,941	27,454	487	8,851	7,589	1,262	995	306
25 to 54 years	24,381	23,986	395	7,000	5,918	1,082	916	255
55 years and over	3,559	3,467	92	1,851	1,671	180	79	51
Black								
Men, 16 years and over	5,114	4,989	125	600	423	177	730	143
16 to 19 years	98	97	1	182	160	22	66	87
20 years and over	5,015	4,892	123	417	262	155	665	56
20 to 24 years	579	562	17	143	106	37	154	28
25 years and over	4,438	4,330	108	274	156	118	512	29
25 to 54 years	3,924	3,840	84	202	94	108	466	18
55 years and over	513	490	23	72	62	10	46	11
Women, 16 years and over	4,828	4,704	124	1,114	802	312	633	142
16 to 19 years	78	78	-	194	180	14	40	77
20 years and over	4,750	4,626	124	920	622	298	593	65
20 to 24 years	515	497	18	177	109	68	141	20
25 years and over	4,234	4,129	105	742	512	230	453	45
25 to 54 years	3,813	3,729	84	553	359	194	432	29
55 years and over	421	400	21	188	153	35	21	16

¹ Employed persons with a job but not at work are distributed according to whether they usually work full or part time.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-10. Employment status of persons in families by family relationship

(Numbers in thousands)

Family relationship	February 1989									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over ¹	97,888	65.9	92,295	5,593	5.7	50,631	22,055	8,752	2,326	17,498
Husbands	39,705	78.0	38,305	1,399	3.5	11,186	198	243	910	9,834
With employed wife	25,960	91.9	25,107	853	3.3	2,293	65	146	307	1,776
With unemployed wife	900	91.1	796	104	11.5	88	3	-	29	57
With wife not in labor force	12,845	59.3	12,402	443	3.4	8,805	130	98	574	8,002
Wives	29,241	57.5	28,253	988	3.4	21,650	17,230	394	425	3,600
With employed husband	25,903	67.6	25,107	796	3.1	12,402	11,028	315	159	901
With unemployed husband	956	68.3	853	104	10.8	443	379	23	11	29
With husband not in labor force	2,381	21.3	2,293	88	3.7	8,805	5,824	56	255	2,670
Relatives in married-couple families	12,456	60.5	11,077	1,378	11.1	8,128	708	5,817	290	1,314
16 to 19 years	4,533	48.8	3,905	628	13.9	4,747	92	4,426	10	219
20 to 24 years	4,552	74.4	4,142	410	9.0	1,570	110	1,254	26	180
25 years and over	3,370	65.0	3,030	340	10.1	1,811	506	137	254	915
Women who maintain families	6,892	62.6	6,313	579	8.4	4,124	2,807	224	199	894
Relatives in families maintained by women	5,559	59.5	4,680	879	15.8	3,777	705	1,717	331	1,024
16 to 19 years	1,387	46.3	1,055	332	23.9	1,605	101	1,365	4	134
20 to 24 years	1,530	74.8	1,274	257	16.8	514	113	271	25	105
25 years and over	2,641	61.4	2,351	290	11.0	1,658	491	81	302	785
Men who maintain families	2,222	77.2	2,051	171	7.7	656	38	31	90	497
Relatives in families maintained by men	1,815	62.0	1,616	199	10.9	1,112	369	326	81	335
16 to 19 years	314	52.3	258	56	17.7	287	17	236	1	33
20 to 24 years	496	77.9	430	65	13.2	141	44	60	3	33
25 years and over	1,006	59.5	928	78	7.8	684	308	30	77	269

¹ Excludes persons living alone or with nonrelatives, persons in families where the husband, wife, or other person maintaining the family is in the Armed Forces, and persons in unrelated subfamilies.

NOTE: Estimates shown in this table for husbands, wives, and women

who maintain families are somewhat different from marital status estimates shown in other tables in this publication because of differences in definitions and weighting patterns used in aggregating the data.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-11. Unemployed persons by marital status, race, age, and sex

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	4,232	4,040	6.4	6.1	3,250	2,843	6.0	5.2
Married, spouse present	1,702	1,552	4.1	3.7	1,285	1,100	4.3	3.6
Widowed, divorced, or separated	577	572	8.6	8.3	726	652	6.9	5.9
Single (never married)	1,954	1,917	11.1	10.6	1,240	1,090	9.0	7.9
White, 16 years and over	3,196	3,045	5.6	5.2	2,383	1,967	5.2	4.2
Married, spouse present	1,425	1,315	3.8	3.5	1,073	867	4.1	3.2
Widowed, divorced, or separated	431	400	7.7	7.0	529	435	6.3	5.0
Single (never married)	1,340	1,331	9.1	9.0	781	665	7.0	6.0
Black, 16 years and over	898	873	13.9	13.3	780	775	12.0	11.5
Married, spouse present	215	187	6.8	6.2	166	186	6.9	7.8
Widowed, divorced, or separated	129	158	13.3	15.7	186	194	10.1	9.7
Single (never married)	553	528	23.9	20.6	428	394	18.9	16.9
Total, 25 years and over	2,761	2,621	5.0	4.7	2,105	1,871	4.8	4.2
Married, spouse present	1,542	1,436	3.9	3.6	1,062	931	3.9	3.3
Widowed, divorced, or separated	540	529	8.3	8.0	669	597	6.7	5.6
Single (never married)	680	656	8.1	7.4	373	344	6.2	5.5
White, 25 years and over	2,143	1,999	4.5	4.1	1,542	1,300	4.2	3.4
Married, spouse present	1,287	1,208	3.6	3.3	886	725	3.7	2.9
Widowed, divorced, or separated	408	368	7.5	6.7	482	394	6.0	4.7
Single (never married)	447	422	6.5	5.9	174	181	3.8	3.8
Black, 25 years and over	527	539	10.2	10.3	508	497	9.7	9.1
Married, spouse present	198	180	6.5	6.2	140	158	6.3	7.1
Widowed, divorced, or separated	120	149	12.5	15.2	176	180	9.9	9.3
Single (never married)	209	210	17.7	15.4	192	159	15.3	12.1

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-12. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	7,482	6,883	6.2	5.6	6.4	6.1	6.0	5.2
Managerial and professional specialty	586	602	2.0	2.0	2.1	1.8	1.9	2.1
Executive, administrative, and managerial	348	378	2.5	2.5	2.6	2.3	2.3	2.9
Professional specialty	238	224	1.6	1.4	1.5	1.3	1.7	1.6
Technical, sales, and administrative support	1,502	1,478	4.1	4.0	3.3	3.7	4.5	4.2
Technicians and related support	113	102	3.2	2.8	2.8	2.1	3.7	3.5
Sales occupations	648	623	4.6	4.4	2.9	3.4	6.4	5.5
Administrative support, including clerical	741	752	3.9	4.0	4.2	5.0	3.8	3.7
Service occupations	1,311	1,043	8.0	6.3	8.2	6.6	7.8	6.1
Private household	67	35	7.0	3.7	(¹)	(¹)	7.0	3.5
Protective service	85	80	4.3	3.9	3.6	3.5	8.5	6.8
Service, except private household and protective	1,158	928	8.6	6.8	9.8	7.7	7.9	6.3
Precision production, craft, and repair	993	985	6.9	6.8	6.8	6.9	7.9	5.7
Mechanics and repairers	197	169	4.1	3.6	3.9	3.6	10.4	3.4
Construction trades	572	608	10.8	11.4	10.8	11.1	11.4	25.6
Other precision production, craft, and repair	223	208	5.2	4.8	4.6	5.1	7.1	3.7
Operators, fabricators, and laborers	1,977	1,785	10.3	9.2	10.3	9.2	10.2	9.2
Machine operators, assemblers, and inspectors	756	658	8.7	7.5	8.0	6.0	9.7	9.5
Transportation and material moving occupations	451	373	8.8	7.4	8.8	7.6	8.8	5.0
Handlers, equipment cleaners, helpers, and laborers	770	755	14.3	13.6	14.6	14.3	12.7	10.2
Construction laborers	254	205	27.1	22.2	26.8	22.0	(¹)	(¹)
Other handlers, equipment cleaners, helpers, and laborers	515	549	11.6	11.8	11.4	12.4	12.2	9.7
Farming, forestry, and fishing	299	265	9.5	8.5	9.2	8.6	10.8	7.9
No previous work experience	782	696	-	-	-	-	-	-
16 to 19 years	502	427	-	-	-	-	-	-
20 to 24 years	164	142	-	-	-	-	-	-
25 years and over	115	127	-	-	-	-	-	-

¹ Data not shown where base is less than 75,000.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-13. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	7,482	6,883	6.2	5.6	6.4	6.1	6.0	5.2
Nonagricultural private wage and salary workers	5,782	5,332	6.4	5.8	6.8	6.3	6.0	5.3
Mining	71	61	8.5	8.7	8.9	9.3	6.7	4.5
Construction	956	901	15.8	14.6	16.6	15.3	8.0	7.9
Manufacturing	1,322	1,176	6.1	5.3	5.6	4.8	7.2	6.4
Durable goods	810	640	6.3	4.9	6.0	4.8	7.0	5.4
Lumber and wood products	77	57	10.3	7.2	11.0	8.3	6.2	1.9
Furniture and fixtures	49	35	7.9	5.3	7.9	4.2	8.0	7.8
Stone, clay, and glass products	46	36	7.6	5.7	8.3	5.9	4.8	4.7
Primary metal industries	37	59	4.7	6.8	4.5	6.3	6.3	9.9
Fabricated metal products	113	96	7.9	6.8	8.3	6.6	6.7	7.7
Machinery, except electrical	107	105	4.2	3.9	4.4	3.4	3.7	5.4
Electrical machinery, equipment, and supplies	150	91	6.9	4.1	5.4	4.2	8.9	4.0
Transportation equipment	174	85	6.3	3.4	5.7	3.6	8.6	3.0
Automobiles	106	55	8.3	4.3	7.3	4.1	12.5	5.1
Other transportation equipment	69	29	4.7	2.5	4.2	2.9	5.8	.8
Professional and photographic equipment	28	33	4.4	4.8	2.9	1.9	6.5	8.6
Other durable goods industries	29	43	5.2	7.8	4.1	8.3	6.3	7.3
Nondurable goods	512	536	5.8	5.9	4.8	4.9	7.3	7.2
Food and kindred products	184	168	10.3	8.5	9.6	8.0	11.9	9.6
Textile mill products	44	31	5.9	4.5	4.0	4.0	8.0	5.1
Apparel and other textile products	109	107	8.7	8.4	8.7	4.4	8.7	9.6
Paper and allied products	16	39	2.1	5.1	2.0	3.7	2.6	8.5
Printing and publishing	77	72	4.2	3.9	2.9	3.7	5.9	4.2
Chemicals and allied products	29	42	2.2	3.0	1.8	2.5	3.2	4.1
Rubber and miscellaneous plastics products	39	44	4.9	5.4	4.1	3.7	6.3	8.0
Other nondurable goods industries	16	33	4.5	8.6	3.2	8.0	6.0	10.4
Transportation and public utilities	269	264	4.2	4.2	4.6	4.7	3.0	2.9
Transportation	224	230	6.0	6.1	6.4	6.4	4.8	5.1
Communications and other public utilities	45	34	1.6	1.3	1.8	1.8	1.3	.6
Wholesale and retail trade	1,628	1,435	7.2	6.3	6.3	5.9	8.1	6.7
Wholesale trade	207	227	4.7	5.3	4.3	5.1	5.5	6.1
Retail trade	1,421	1,207	7.8	6.5	6.9	6.2	8.5	6.8
Finance, insurance, and real estate	248	242	3.4	3.3	2.9	3.3	3.7	3.3
Service industries	1,287	1,254	5.2	4.8	5.6	5.1	4.9	4.6
Professional services	467	429	3.3	2.9	3.2	2.8	3.4	3.0
Other service industries	820	825	7.6	7.2	7.6	6.9	7.6	7.5
Agricultural wage and salary workers	243	203	14.7	12.6	14.0	11.6	17.1	15.6
Government, self-employed, and unpaid family workers	677	651	2.4	2.3	2.6	2.7	2.2	1.8
No previous work experience	782	696	-	-	-	-	-	-

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-14. Unemployed persons by reason for unemployment, sex, and race

(Numbers in thousands)

Reason for unemployment	Total unemployed		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
NUMBER OF UNEMPLOYED												
Total unemployed	7,482	6,883	3,578	3,350	2,693	2,396	1,211	1,137	5,579	5,012	1,678	1,648
Job losers	3,739	3,382	2,397	2,197	1,106	990	235	195	2,833	2,562	818	735
On layoff	1,181	1,042	843	730	291	262	46	51	984	907	187	128
Other job losers	2,558	2,340	1,554	1,467	815	728	189	144	1,849	1,655	631	607
Job leavers	988	1,005	442	455	388	396	159	154	810	766	146	194
Reentrants	1,974	1,799	644	586	1,016	852	315	361	1,429	1,233	466	501
New entrants	782	696	95	111	184	158	502	427	507	451	248	218
PERCENT DISTRIBUTION												
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	50.0	49.1	67.0	65.6	41.0	41.3	19.4	17.2	50.7	51.1	48.8	44.6
On layoff	15.8	15.1	23.6	21.8	10.8	10.9	3.8	4.5	17.6	18.1	11.2	7.7
Other job losers	34.2	34.0	43.4	43.8	30.2	30.4	15.6	12.7	33.1	33.0	37.6	36.8
Job leavers	13.2	14.6	12.4	13.6	14.4	16.5	13.1	13.5	14.5	15.3	8.7	11.8
Reentrants	26.4	26.1	18.0	17.5	37.7	35.6	26.0	31.8	25.6	24.6	27.8	30.4
New entrants	10.4	10.1	2.7	3.3	6.8	6.6	41.5	37.6	9.1	9.0	14.8	13.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers	3.1	2.8	3.9	3.5	2.2	1.9	3.2	2.7	2.8	2.5	6.3	5.5
Job leavers .....	.8	.8	.7	.7	.8	.8	2.2	2.1	.8	.7	1.1	1.5
Reentrants	1.6	1.5	1.0	.9	2.0	1.6	4.3	5.0	1.4	1.2	3.6	3.8
New entrants .....	.7	.6	.2	.2	.4	.3	6.8	5.9	.5	.4	1.9	1.6

A-15. Unemployed persons by reason for unemployment, sex, age, and duration of unemployment

(Percent distribution)

Reason, sex, and age	February 1989						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over	6,883	100.0	45.3	33.8	20.9	11.2	9.7
Job losers	3,382	100.0	38.0	36.5	25.4	13.3	12.1
On layoff	1,042	100.0	45.0	42.4	12.6	9.6	3.0
Other job losers	2,340	100.0	34.9	33.9	31.1	15.0	16.2
Job leavers	1,005	100.0	50.7	31.6	17.7	10.4	7.3
Reentrants	1,799	100.0	51.7	31.9	16.4	8.7	7.7
New entrants	696	100.0	56.2	29.0	14.8	8.1	6.7
Men, 20 years and over	3,350	100.0	37.5	36.5	26.0	13.2	12.7
Job losers	2,197	100.0	35.3	37.1	27.6	13.7	13.8
On layoff	730	100.0	41.6	44.2	14.1	11.4	2.8
Other job losers	1,467	100.0	32.2	33.6	34.2	14.9	19.3
Job leavers	455	100.0	42.6	31.9	25.5	14.0	11.5
Reentrants	586	100.0	41.7	37.1	21.2	11.0	10.2
New entrants	111	100.0	37.6	40.3	22.1	11.8	10.3
Women, 20 years and over	2,396	100.0	49.6	32.7	17.7	9.6	8.1
Job losers	990	100.0	41.6	35.7	22.7	12.9	9.8
On layoff	262	100.0	49.1	40.5	10.5	6.4	4.1
Other job losers	728	100.0	38.9	34.0	27.1	15.2	11.9
Job leavers	396	100.0	53.1	33.0	13.9	9.0	4.8
Reentrants	852	100.0	55.6	29.3	15.1	6.7	8.4
New entrants	158	100.0	58.8	31.2	10.0	5.4	4.6
Both sexes, 16 to 19 years	1,137	100.0	59.2	28.4	12.4	8.4	4.0
Job losers	195	100.0	50.8	34.2	15.0	10.5	4.5
On layoff	51	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Other job losers	144	100.0	43.2	36.6	20.2	14.0	6.2
Job leavers	154	100.0	68.4	27.3	4.2	3.0	1.2
Reentrants	361	100.0	58.6	29.6	11.8	9.7	2.1
New entrants	427	100.0	60.1	25.2	14.7	8.2	6.5

¹ Data not shown where base is less than 75,000.

A-16. Unemployed persons by duration of unemployment

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	7,482	6,883	100.0	100.0	5,990	5,455	100.0	100.0
Less than 5 weeks	2,973	3,117	39.7	45.3	2,089	2,240	34.9	41.1
5 to 14 weeks	2,602	2,329	34.8	33.8	2,194	1,934	36.6	35.5
5 to 10 weeks	1,964	1,713	26.2	24.9	1,616	1,384	27.0	25.4
11 to 14 weeks	639	617	8.5	9.0	578	550	9.6	10.1
15 weeks and over	1,907	1,436	25.5	20.9	1,707	1,281	28.5	23.5
15 to 26 weeks	977	768	13.1	11.2	866	652	14.5	12.0
27 weeks and over	930	668	12.4	9.7	841	629	14.0	11.5
27 to 51 weeks	343	270	4.6	3.9	321	249	5.4	4.6
52 weeks and over	587	398	7.8	5.8	520	380	8.7	7.0
Average (mean) duration, in weeks	14.3	12.3	-	-	15.6	13.8	-	-
Median duration, in weeks	7.1	6.0	-	-	8.2	7.0	-	-

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-17. Unemployed persons by sex, age, race, marital status, and duration of unemployment

Sex, age, race, and marital status	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
								Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
	February 1989							Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	6,883	3,117	2,329	768	668	12.3	6.0	39.7	45.3	25.5	20.9
16 to 19 years	1,137	673	323	95	46	7.9	4.2	55.4	59.2	14.1	12.4
20 to 24 years	1,254	623	440	117	74	9.2	5.1	43.8	49.7	17.9	15.2
25 to 34 years	2,005	891	723	196	195	11.7	6.2	39.9	44.5	25.6	19.5
35 to 44 years	1,270	499	450	156	165	15.7	7.5	30.4	39.3	31.7	25.3
45 to 54 years	701	233	246	125	97	16.5	8.8	30.5	33.3	36.3	31.6
55 to 64 years	394	144	112	62	76	19.9	8.7	28.2	36.5	40.7	35.1
65 years and over	122	54	36	17	15	13.3	7.4	42.3	44.2	29.1	26.4
Men, 16 years and over	4,040	1,638	1,434	506	463	13.9	6.9	34.6	40.5	28.3	24.0
16 to 19 years	690	382	210	63	35	8.9	4.5	49.1	55.3	17.9	14.2
20 to 24 years	729	345	268	67	50	10.0	5.6	38.5	47.3	20.3	16.0
25 to 34 years	1,128	446	433	123	126	12.8	7.1	36.2	39.5	26.8	22.1
35 to 44 years	724	235	278	100	111	18.0	9.1	25.0	32.5	36.2	29.1
45 to 54 years	423	111	140	96	76	20.4	10.7	25.6	26.3	38.7	40.6
55 to 64 years	272	83	86	48	55	20.7	9.8	23.4	30.5	43.6	37.9
65 years and over	74	36	18	10	9	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	2,843	1,480	896	262	206	10.1	4.8	46.4	52.0	21.9	16.4
16 to 19 years	447	291	113	32	11	6.3	3.8	62.9	65.1	9.6	9.6
20 to 24 years	525	278	172	50	24	8.1	4.7	51.2	53.1	14.5	14.1
25 to 34 years	877	446	289	73	69	10.2	4.9	44.7	50.8	24.1	18.2
35 to 44 years	546	264	172	56	54	12.7	5.4	36.5	48.3	26.5	20.2
45 to 54 years	279	122	106	29	21	10.6	6.1	37.6	43.9	32.9	17.9
55 to 64 years	122	61	26	15	21	18.0	5.1	36.8	49.8	35.6	29.1
65 years and over	48	18	17	7	6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,012	2,271	1,742	550	449	11.7	6.0	40.3	45.3	24.9	19.9
Men	3,045	1,239	1,099	381	327	13.4	6.9	35.0	40.7	28.3	23.2
Women	1,967	1,032	644	169	122	9.2	4.8	47.3	52.5	20.3	14.8
Black, 16 years and over	1,648	744	514	192	198	14.0	6.1	37.3	45.1	28.2	23.7
Men	873	350	292	113	117	15.2	6.9	33.5	40.1	28.7	26.4
Women	775	394	221	79	81	12.6	4.9	41.7	50.8	27.6	20.6
Men, 16 years and over:											
Married, spouse present	1,552	559	584	198	210	15.4	7.9	28.0	36.0	32.5	26.3
Widowed, divorced, or separated	572	197	197	92	86	17.0	8.4	32.0	34.4	30.2	31.1
Single (never married)	1,917	882	653	216	166	11.7	5.8	41.2	46.0	24.0	19.9
Women, 16 years and over:											
Married, spouse present	1,100	550	378	103	69	10.0	5.0	45.3	50.0	22.9	15.6
Widowed, divorced, or separated	652	302	197	69	84	12.9	6.0	38.8	46.4	26.4	23.5
Single (never married)	1,090	627	321	90	52	8.5	4.3	52.0	57.5	18.2	13.0

¹ Data not shown where base is less than 75,000.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-18. Unemployed persons by occupation, industry, and duration of unemployment

Occupation and industry	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
	February 1989							Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
OCCUPATION											
Managerial and professional specialty	602	234	221	73	74	13.8	6.8	32.5	38.8	32.5	24.4
Technical, sales, and administrative support	1,478	740	458	157	122	11.1	5.0	41.1	50.1	27.5	18.9
Service occupations	1,043	486	337	111	109	12.0	5.8	46.9	46.6	23.5	21.1
Precision production, craft, and repair	985	421	324	118	123	14.5	6.7	32.8	42.7	25.8	24.4
Operators, fabricators, and laborers	1,785	722	681	211	172	13.0	6.9	35.3	40.4	26.9	21.5
Farming, forestry, and fishing	265	107	99	40	19	11.7	8.4	32.0	40.5	28.8	22.4
INDUSTRY¹											
Agriculture	203	97	70	24	13	10.9	6.2	36.6	47.5	20.4	17.8
Construction	927	376	373	114	64	10.9	7.1	29.8	40.6	22.8	19.2
Manufacturing	1,176	500	352	174	150	14.9	6.7	37.1	42.5	30.7	27.6
Durable goods	640	223	200	126	91	16.9	8.7	34.7	34.9	33.6	33.9
Nondurable goods	536	277	152	48	59	12.6	4.8	40.7	51.7	26.1	20.0
Transportation and public utilities	301	101	141	26	34	13.9	8.3	34.0	33.4	32.0	19.8
Wholesale and retail trade	1,439	678	497	133	132	11.6	5.6	44.1	47.1	18.6	18.4
Finance and service industries	1,708	806	533	196	173	12.0	5.7	39.2	47.2	31.8	21.6
Public administration	180	64	68	23	25	16.6	7.7	46.4	35.7	33.7	26.5
No previous work experience	696	391	202	57	46	9.4	4.4	52.6	56.2	15.2	14.8

¹ Includes wage and salary workers only.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-19. Unemployed jobseekers by sex, age, race, and jobsearch methods used

Sex, age, and race	February 1989								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total jobseekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	6,883	5,712	24.3	6.4	72.0	38.6	18.3	6.9	1.67
16 to 19 years	1,137	1,074	13.9	3.3	79.7	28.8	14.6	3.8	1.44
20 to 24 years	1,254	1,072	23.1	5.2	74.3	36.3	15.1	6.0	1.60
25 to 34 years	2,005	1,618	28.4	8.2	69.7	44.0	20.3	6.4	1.77
35 to 44 years	1,270	991	26.9	6.8	70.6	42.0	19.9	8.7	1.75
45 to 54 years	701	549	32.4	10.6	66.5	41.2	19.3	11.1	1.81
55 to 64 years	394	305	22.6	5.9	69.2	38.7	20.3	7.5	1.64
65 years and over	122	103	15.5	1.0	53.4	35.9	33.0	15.5	1.54
Men, 16 years and over	4,040	3,179	25.1	6.1	74.8	35.7	19.8	7.8	1.69
16 to 19 years	690	635	14.3	2.7	83.5	26.3	15.3	1.6	1.44
20 to 24 years	729	591	24.9	4.4	75.6	31.8	19.5	8.0	1.64
25 to 34 years	1,128	628	29.7	6.0	74.5	43.7	21.6	7.4	1.85
35 to 44 years	724	531	30.1	7.2	71.4	39.5	23.4	10.2	1.82
45 to 54 years	423	324	30.2	9.6	68.2	35.5	17.9	13.6	1.75
55 to 64 years	272	204	21.6	6.4	72.5	35.3	19.1	9.3	1.64
65 years and over	74	66	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	2,843	2,532	23.2	6.8	68.5	42.3	16.5	5.8	1.63
16 to 19 years	447	439	13.2	4.1	74.3	32.3	13.7	7.1	1.45
20 to 24 years	525	461	21.0	6.2	72.8	41.6	10.0	3.5	1.55
25 to 34 years	877	789	27.0	6.4	64.8	44.5	19.0	5.4	1.69
35 to 44 years	546	460	23.3	6.3	69.8	44.8	15.9	7.0	1.67
45 to 54 years	279	225	36.0	12.0	64.0	49.3	21.3	7.6	1.90
55 to 64 years	122	101	25.7	4.0	61.4	45.5	22.8	3.0	1.62
65 years and over	48	37	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,012	4,002	24.5	6.5	72.5	40.4	17.2	7.3	1.68
Men	3,045	2,287	27.3	6.6	74.3	38.1	18.4	8.1	1.73
Women	1,967	1,715	20.8	6.3	70.1	43.4	15.5	6.3	1.62
Black, 16 years and over	1,648	1,500	23.9	6.4	72.3	34.1	21.1	5.5	1.63
Men	673	781	19.6	4.2	78.2	26.7	22.9	6.7	1.60
Women	775	719	28.7	8.8	66.1	40.1	19.1	4.3	1.67

¹ Data not shown where base is less than 75,000.

NOTE: The jobseeker total is less than the total unemployed because it does not include persons on layoff or waiting to begin a new job within

30 days, groups for whom jobseeking information is not collected. The percent using each method will always total more than 100 because many jobseekers use more than one method.

A-20. Unemployed jobseekers by sex, reason for unemployment, and jobsearch methods used

Sex and reason	February 1989								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total jobseekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	6,863	5,712	24.3	6.4	72.0	36.6	18.3	6.9	1.67
Job losers ¹	3,362	2,339	30.9	7.7	75.1	41.2	20.1	6.8	1.62
Job leavers	1,005	999	22.3	7.0	70.6	46.0	16.8	5.6	1.68
Reentrants	1,799	1,692	19.9	5.6	68.5	35.6	16.3	8.3	1.54
New entrants	696	682	15.1	3.2	71.8	26.5	19.6	5.7	1.42
Men, 16 years and over	4,040	3,179	25.1	6.1	74.8	35.7	19.8	7.8	1.69
Job losers ¹	2,356	1,577	29.2	7.0	77.2	36.2	20.7	7.7	1.60
Job leavers	546	516	26.6	6.6	69.8	49.0	19.0	7.8	1.79
Reentrants	787	745	20.1	5.2	71.4	27.2	17.7	10.6	1.52
New entrants	351	341	15.2	2.9	78.3	22.6	21.4	2.3	1.43
Women, 16 years and over	2,843	2,532	23.2	6.8	68.5	42.3	16.5	5.8	1.63
Job losers ¹	1,026	762	34.6	9.2	70.6	47.2	18.9	4.9	1.85
Job leavers	459	483	18.0	7.5	71.4	42.9	14.5	3.5	1.58
Reentrants	1,012	946	19.7	5.8	66.4	42.3	15.1	6.6	1.56
New entrants	345	341	15.0	3.5	65.4	30.2	17.9	8.8	1.41

¹ Data on the number of jobseekers and the jobsearch methods used exclude persons on layoff.

NOTE: The jobseeker total is less than the total unemployed because it does not include persons on layoff or waiting to begin a new job within

30 days, groups for whom jobseeking information is not collected. The percent using each method will always total more than 100 because many jobseekers use more than one method.

A-21. Employed civilians in agriculture and nonagricultural industries by age and sex

(In thousands)

Industry and age	Total		Men		Women	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
All industries	112,460	115,023	61,675	62,712	50,785	52,311
16 to 19 years	6,120	6,062	3,048	3,031	3,072	3,031
16 to 17 years	2,375	2,201	1,192	1,092	1,183	1,109
18 to 19 years	3,745	3,861	1,857	1,939	1,889	1,922
20 to 24 years	13,049	12,721	6,664	6,640	6,385	6,081
25 to 54 years	78,853	81,641	43,524	44,630	35,329	37,011
25 to 34 years	33,211	33,663	18,429	18,598	14,782	15,065
35 to 44 years	27,580	29,021	15,064	15,700	12,516	13,321
45 to 54 years	18,062	18,958	10,031	10,332	8,031	8,626
55 to 64 years	11,341	11,361	6,596	6,479	4,744	4,883
55 to 59 years	6,839	6,819	3,957	3,869	2,882	2,950
60 to 64 years	4,502	4,543	2,640	2,610	1,862	1,933
65 years and over	3,096	3,237	1,841	1,932	1,255	1,305
Agriculture	2,760	2,795	2,168	2,183	592	612
16 to 19 years	181	152	141	118	40	34
16 to 17 years	74	67	54	59	20	8
18 to 19 years	107	85	87	59	20	26
20 to 24 years	304	316	238	237	66	78
25 to 54 years	1,631	1,697	1,246	1,291	386	406
25 to 34 years	719	760	573	586	146	175
35 to 44 years	481	545	358	427	123	118
45 to 54 years	432	391	315	278	117	113
55 to 64 years	398	384	328	320	70	64
55 to 59 years	213	199	171	162	42	37
60 to 64 years	185	185	157	158	28	27
65 years and over	245	246	215	217	30	29
Nonagricultural industries	109,700	112,228	59,506	60,529	50,194	51,699
16 to 19 years	5,939	5,910	2,907	2,913	3,032	2,997
16 to 17 years	2,301	2,134	1,138	1,033	1,163	1,101
18 to 19 years	3,638	3,776	1,770	1,880	1,869	1,896
20 to 24 years	12,745	12,405	6,426	6,403	6,319	6,002
25 to 54 years	77,222	79,945	42,280	43,340	34,942	36,605
25 to 34 years	32,493	32,902	17,857	18,012	14,636	14,890
35 to 44 years	27,099	28,476	14,707	15,273	12,392	13,202
45 to 54 years	17,631	18,567	9,717	10,054	7,914	8,513
55 to 64 years	10,943	10,977	6,268	6,158	4,675	4,819
55 to 59 years	6,626	6,619	3,785	3,706	2,841	2,913
60 to 64 years	4,317	4,358	2,483	2,452	1,834	1,906
65 years and over	2,851	2,990	1,625	1,714	1,225	1,276

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-22. Employed civilians by occupation, sex, and age

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total	112,460	115,023	61,675	62,712	58,626	59,681	50,785	52,311	47,714	49,279
Managerial and professional specialty	28,621	30,106	15,866	16,412	15,768	16,348	12,755	13,694	12,629	13,592
Executive, administrative, and managerial	13,759	14,592	8,372	8,712	8,319	8,689	5,387	5,880	5,336	5,835
Officials and administrators, public administration	547	567	331	367	331	368	216	199	216	199
Other executive, administrative, and managerial	9,421	10,036	6,172	6,469	6,126	6,447	3,249	3,566	3,211	3,531
Management-related occupations	3,791	3,990	1,869	1,875	1,861	1,874	1,922	2,115	1,909	2,105
Professional specialty	14,862	15,514	7,494	7,701	7,449	7,659	7,368	7,814	7,293	7,757
Engineers	1,775	1,805	1,643	1,662	1,642	1,661	132	142	132	142
Mathematical and computer scientists	678	755	462	501	462	500	217	254	214	254
Natural scientists	428	426	335	311	335	311	93	115	93	113
Health diagnosing occupations	759	805	622	675	622	675	136	130	134	130
Health assessment and treating occupations	2,111	2,301	325	351	325	351	1,786	1,950	1,782	1,947
Teachers, college and university	711	741	440	467	438	464	271	274	269	273
Teachers, except college and university	3,931	4,147	1,090	1,180	1,084	1,166	2,841	2,967	2,810	2,940
Lawyers and judges	761	738	601	599	599	599	160	140	158	140
Other professional specialty occupations	3,708	3,796	1,976	1,955	1,942	1,932	1,732	1,841	1,701	1,819
Technical, sales, and administrative support	35,209	35,400	12,485	12,540	11,882	11,918	22,724	22,860	21,069	21,234
Technicians and related support	3,381	3,569	1,766	1,812	1,740	1,798	1,614	1,757	1,602	1,734
Health technologists and technicians	1,123	1,224	169	196	167	196	954	1,028	948	1,019
Engineering and science technicians	1,098	1,166	895	906	880	897	203	260	201	251
Technicians, except health, engineering, and science	1,159	1,179	703	710	693	706	457	469	453	464
Sales occupations	13,376	13,600	6,963	7,008	6,584	6,589	6,413	6,592	5,464	5,618
Supervisors and proprietors	3,569	3,673	2,447	2,432	2,416	2,402	1,122	1,241	1,096	1,213
Sales representatives, finance and business services	2,365	2,390	1,429	1,376	1,412	1,360	936	1,014	901	976
Sales representatives, commodities, except retail	1,534	1,569	1,232	1,261	1,227	1,246	301	308	289	306
Sales workers, retail and personal services	5,850	5,905	1,835	1,924	1,510	1,567	4,015	3,981	3,145	3,080
Sales-related occupations	58	63	20	16	20	14	39	47	33	43
Administrative support, including clerical	18,453	18,231	3,756	3,720	3,558	3,531	14,697	14,512	14,003	13,882
Supervisors	741	757	310	324	311	324	431	433	427	428
Computer equipment operators	869	868	312	286	296	276	556	582	529	561
Secretaries, stenographers, and typists	5,071	4,790	82	69	77	59	4,989	4,721	4,790	4,548
Financial records processing	2,319	2,220	217	203	211	194	2,102	2,017	2,057	1,979
Mail and message distributing	917	1,011	591	664	581	646	326	347	311	327
Other administrative support, including clerical	8,536	8,585	2,243	2,175	2,082	2,032	6,293	6,411	5,888	6,038
Service occupations	15,170	15,537	5,977	6,136	5,148	5,229	9,194	9,401	8,223	8,361
Private household	885	910	25	36	17	28	861	874	717	734
Protective service	1,897	1,950	1,641	1,675	1,603	1,642	257	274	239	261
Service, except private household and protective	12,388	12,678	4,312	4,424	3,528	3,559	8,076	8,254	7,266	7,367
Food service	5,195	5,289	2,040	2,089	1,450	1,440	3,154	3,199	2,569	2,593
Health service	2,033	2,100	250	218	239	204	1,784	1,882	1,717	1,771
Cleaning and building service	2,831	2,891	1,597	1,687	1,462	1,548	1,234	1,204	1,186	1,148
Personal service	2,329	2,398	425	430	376	367	1,904	1,968	1,795	1,855
Precision production, craft, and repair	13,373	13,466	12,243	12,258	11,968	11,957	1,129	1,209	1,101	1,183
Mechanics and repairers	4,558	4,596	4,414	4,422	4,325	4,319	145	175	145	173
Construction trades	4,728	4,705	4,636	4,614	4,520	4,467	92	92	88	88
Other precision production, craft, and repair	4,086	4,165	3,193	3,222	3,122	3,171	893	943	869	922
Operators, fabricators, and laborers	17,237	17,655	12,728	12,995	11,648	11,988	4,509	4,660	4,254	4,451
Machine operators, assemblers, and inspectors	7,914	8,169	4,675	4,827	4,526	4,633	3,239	3,341	3,122	3,256
Manufacturing industries	6,590	6,775	3,846	3,965	3,740	3,824	2,745	2,810	2,653	2,743
Durable goods	3,603	3,710	2,463	2,573	2,408	2,485	1,139	1,136	1,111	1,109
Nondurable goods	2,988	3,065	1,383	1,391	1,332	1,339	1,605	1,674	1,542	1,633
Nonmanufacturing industries	1,324	1,394	829	863	786	809	495	531	469	514
Transportation and material moving occupations	4,696	4,683	4,226	4,225	4,089	4,114	469	458	446	438
Motor vehicle operators	3,564	3,498	3,148	3,082	3,024	2,986	416	417	392	398
Other transportation and material moving occupations	1,132	1,185	1,079	1,144	1,065	1,129	54	41	54	40
Handlers, equipment cleaners, helpers, and laborers	4,627	4,803	3,827	3,943	3,033	3,241	800	861	687	756
Construction laborers	684	719	675	701	613	629	9	18	4	17
Other handlers, equipment cleaners, helpers, and laborers	3,943	4,084	3,152	3,242	2,421	2,612	791	842	683	738
Farming, forestry, and fishing	2,849	2,858	2,375	2,371	2,213	2,241	474	487	437	459
Farm operators and managers	1,225	1,239	1,059	1,059	1,045	1,046	166	179	166	176
Other farming, forestry, and fishing occupations	1,625	1,619	1,316	1,312	1,168	1,195	308	308	271	282

A-23. Employed civilians by occupation, race, and sex

(Percent distribution)

Occupation and race	Total		Men		Women	
	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
TOTAL						
Total, 16 years and over (thousands)	112,460	115,023	61,675	62,712	50,785	52,311
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	25.5	26.2	25.7	26.2	25.1	26.2
Executive, administrative, and managerial	12.2	12.7	13.6	13.9	10.6	11.2
Professional specialty	13.2	13.5	12.2	12.3	14.5	14.9
Technical, sales, and administrative support	31.3	30.8	20.2	20.0	44.7	43.7
Technicians and related support	3.0	3.1	2.9	2.9	3.2	3.4
Sales occupations	11.9	11.8	11.3	11.2	12.6	12.6
Administrative support, including clerical	16.4	15.9	6.1	5.9	28.9	27.7
Service occupations	13.5	13.5	9.7	9.8	18.1	18.0
Private household .....	.8	.8	(¹)	.1	1.7	1.7
Protective service	1.7	1.7	2.7	2.7	.5	.5
Service, except private household and protective	11.0	11.0	7.0	7.1	15.9	15.8
Precision production, craft, and repair	11.9	11.7	19.9	19.5	2.2	2.3
Operators, fabricators, and laborers	15.3	15.3	20.6	20.7	8.9	8.9
Machine operators, assemblers, and inspectors	7.0	7.1	7.6	7.7	6.4	6.4
Transportation and material moving occupations	4.2	4.1	6.9	6.7	.9	.9
Handlers, equipment cleaners, helpers, and laborers	4.1	4.2	6.2	6.3	1.6	1.6
Farming, forestry, and fishing	2.5	2.5	3.9	3.8	.9	.9
White						
Total, 16 years and over (thousands)	97,819	99,747	54,310	55,070	43,509	44,677
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	26.4	27.2	26.7	27.3	26.1	27.1
Executive, administrative, and managerial	12.9	13.3	14.2	14.6	11.2	11.7
Professional specialty	13.6	13.9	12.5	12.7	14.9	15.4
Technical, sales, and administrative support	31.6	31.2	20.4	20.2	45.7	44.7
Technicians and related support	3.0	3.1	2.9	2.9	3.1	3.3
Sales occupations	12.4	12.5	11.9	11.8	13.1	13.3
Administrative support, including clerical	16.2	15.6	5.7	5.5	29.4	28.1
Service occupations	12.3	12.4	8.7	8.9	16.8	16.7
Private household .....	.7	.7	(¹)	.1	1.5	1.5
Protective service	1.6	1.6	2.5	2.5	.5	.5
Service, except private household and protective	10.0	10.1	6.2	6.3	14.9	14.8
Precision production, craft, and repair	12.4	12.1	20.5	20.0	2.2	2.3
Operators, fabricators, and laborers	14.6	14.5	19.7	19.6	8.2	8.2
Machine operators, assemblers, and inspectors	6.7	6.7	7.3	7.4	5.8	5.7
Transportation and material moving occupations	4.0	3.9	6.5	6.4	.9	.9
Handlers, equipment cleaners, helpers, and laborers	3.9	3.9	5.8	5.8	1.5	1.6
Farming, forestry, and fishing	2.7	2.7	4.0	4.0	1.0	1.0
Black						
Total, 16 years and over (thousands)	11,288	11,655	5,560	5,713	5,728	5,942
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	15.9	15.6	14.1	13.3	17.6	17.9
Executive, administrative, and managerial	6.8	7.0	7.1	6.8	6.5	7.2
Professional specialty	9.1	8.6	7.0	6.5	11.1	10.7
Technical, sales, and administrative support	27.9	27.6	17.2	16.6	38.3	38.3
Technicians and related support	2.5	2.6	1.9	1.7	3.0	3.5
Sales occupations	7.0	6.8	5.4	5.3	8.5	8.3
Administrative support, including clerical	18.5	18.2	9.9	9.6	26.8	26.5
Service occupations	23.4	22.5	18.3	17.1	28.4	27.6
Private household	1.7	1.8	.1	.1	3.4	3.4
Protective service	2.7	2.6	4.7	4.3	.8	.9
Service, except private household and protective	18.9	18.1	13.5	12.7	24.2	23.4
Precision production, craft, and repair	8.8	9.4	15.7	16.5	2.2	2.5
Operators, fabricators, and laborers	22.5	23.4	32.1	33.8	13.3	13.5
Machine operators, assemblers, and inspectors	10.0	10.5	10.1	10.8	10.0	10.1
Transportation and material moving occupations	6.2	6.1	11.4	11.2	1.3	1.1
Handlers, equipment cleaners, helpers, and laborers	6.3	6.9	10.6	11.8	2.1	2.2
Farming, forestry, and fishing	1.4	1.4	2.6	2.7	.3	.3

¹ Less than 0.05 percent.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-24. Employed civilians by age, sex, and class of worker

(In thousands)

Age and sex	February 1989								
	Nonagricultural industries						Agriculture		
	Wage and salary workers				Self-employed workers	Unpaid family workers	Wage and salary workers	Self-employed workers	Unpaid family workers
	Total	Private household workers	Government	Other					
Total, 16 years and over	103,644	1,056	17,623	84,965	8,321	262	1,416	1,284	95
16 to 19 years	5,826	165	259	5,402	67	17	126	13	14
16 to 17 years	2,106	107	58	1,941	20	9	55	3	10
18 to 19 years	3,721	57	202	3,462	47	8	71	10	4
20 to 24 years	12,114	98	1,168	10,849	276	15	259	46	10
25 to 34 years	30,959	200	4,322	26,437	1,698	45	488	255	18
35 to 44 years	25,890	168	5,682	20,040	2,516	69	243	284	19
45 to 54 years	16,768	149	3,729	12,890	1,731	68	143	230	18
55 to 64 years	9,666	162	2,057	7,447	1,278	32	101	267	16
55 to 59 years	5,883	80	1,292	4,512	715	21	46	148	6
60 to 64 years	3,783	83	765	2,935	563	11	56	119	10
65 years and over	2,420	114	406	1,900	555	15	56	190	1
Men, 16 years and over	55,121	107	8,187	46,827	5,373	35	1,083	1,072	27
16 to 19 years	2,866	25	93	2,748	33	13	92	12	13
16 to 17 years	1,013	15	20	978	13	6	47	2	9
18 to 19 years	1,853	10	73	1,770	20	7	45	10	4
20 to 24 years	6,241	20	508	5,713	158	4	189	43	5
25 to 34 years	16,788	18	1,988	14,782	1,223	2	373	211	2
35 to 44 years	13,664	20	2,639	11,005	1,604	5	197	228	2
45 to 54 years	8,952	13	1,729	7,210	1,098	4	108	170	-
55 to 64 years	5,272	6	1,043	4,223	885	2	79	235	6
55 to 59 years	3,235	3	642	2,589	470	2	35	127	-
60 to 64 years	2,038	3	401	1,634	414	-	45	108	5
65 years and over	1,336	4	186	1,146	372	6	45	173	-
Women, 16 years and over	48,524	949	9,436	38,139	2,948	227	333	212	68
16 to 19 years	2,960	139	166	2,654	34	4	33	-	-
16 to 17 years	1,092	92	37	963	7	2	8	-	-
18 to 19 years	1,868	47	129	1,692	27	1	26	-	-
20 to 24 years	5,873	77	660	5,136	118	11	70	3	5
25 to 34 years	14,171	182	2,334	11,655	675	44	115	44	16
35 to 44 years	12,226	148	3,044	9,035	912	65	46	56	16
45 to 54 years	7,816	136	1,999	5,681	633	64	36	60	18
55 to 64 years	4,394	157	1,014	3,223	394	31	22	32	10
55 to 59 years	2,649	77	650	1,922	245	19	11	20	6
60 to 64 years	1,745	80	364	1,301	149	11	11	11	5
65 years and over	1,084	110	220	754	183	9	11	17	1

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-25. Employed civilians by industry and occupation

(In thousands)

Industry	February 1989												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service ¹		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture	2,795	63	47	43	20	102	-	12	53	11	34	28	2,382
Mining	665	82	62	36	7	74	-	16	236	25	99	30	-
Construction	7,001	968	155	67	70	398	-	31	3,967	117	439	785	5
Manufacturing	21,431	2,521	1,684	752	718	2,295	-	299	4,196	6,775	865	1,227	90
Durable goods	12,670	1,516	1,139	539	320	1,241	-	162	2,873	3,710	462	626	84
Nondurable goods	8,761	1,005	555	213	397	1,054	-	138	1,324	3,065	403	601	7
Transportation and public utilities	7,994	950	467	284	339	2,175	-	271	1,268	139	1,643	451	8
Wholesale and retail trade	23,383	1,918	362	120	9,664	2,335	-	4,417	1,533	271	962	1,773	28
Wholesale trade	4,392	451	60	38	1,780	767	-	40	288	114	477	365	12
Retail trade	18,991	1,467	301	82	7,884	1,566	-	4,377	1,245	157	485	1,408	16
Finance, insurance, and real estate	7,871	2,120	162	137	1,820	3,098	-	258	154	17	19	32	35
Services	38,513	4,806	11,801	1,940	932	6,309	910	7,947	1,812	787	559	444	266
Private households	1,058	-	10	4	-	16	910	59	3	-	1	30	25
Other service industries	37,455	4,806	11,791	1,936	932	6,293	-	7,888	1,809	787	558	414	242
Professional services	25,053	2,637	10,469	1,572	160	4,596	-	4,486	383	252	326	95	75
Public administration	5,387	1,164	745	189	30	1,446	-	1,378	247	27	62	34	43

¹ Includes protective service, not shown separately.

A-26. Employed civilians with a job but not at work by reason, sex, and pay status

(In thousands)

Reason not working and sex	All industries		Nonagricultural industries					
	Feb. 1988	Feb. 1989	Total		Wage and salary workers ¹			
			Feb. 1988	Feb. 1989	Paid absences		Unpaid absences	
					Feb. 1988	Feb. 1989	Feb. 1988	Feb. 1989
Total, 16 years and over	4,210	4,882	4,012	4,683	1,606	1,936	1,815	2,025
Vacation	1,316	1,568	1,267	1,538	786	985	315	370
Illness	1,518	1,669	1,471	1,635	579	692	754	777
Bad weather	313	383	265	309	(²)	(²)	(²)	(²)
Industrial dispute	20	15	20	15	(²)	(²)	(²)	(²)
All other reasons	1,044	1,246	990	1,186	239	258	746	879
Men, 16 years and over	2,322	2,592	2,164	2,426	862	967	895	988
Vacation	770	847	738	824	458	550	168	174
Illness	785	859	747	832	306	339	366	388
All other reasons ³	767	885	680	769	98	98	361	427
Women, 16 years and over	1,868	2,291	1,847	2,257	744	949	921	1,037
Vacation	546	721	529	714	330	436	147	196
Illness	732	810	724	803	272	353	389	389
All other reasons ³	609	759	594	740	141	160	385	452

¹ Excludes private household workers.

² Pay status not available separately for bad weather and industrial dispute; these categories are included in all other reasons.

³ Includes bad weather and industrial dispute, not shown separately.
NOTE: Estimates for "all other reasons" by pay status may be biased because of high response variance; data should be used with caution.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-27. Persons at work by hours of work and type of industry

Hours of work	February 1989					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	110,140	2,596	107,545	100.0	100.0	100.0
1 to 34 hours	27,625	886	26,739	25.1	34.1	24.9
1 to 4 hours	837	33	804	.8	1.3	.7
5 to 14 hours	4,998	221	4,777	4.5	8.5	4.4
15 to 29 hours	13,817	406	13,411	12.5	15.6	12.5
30 to 34 hours	7,973	226	7,747	7.2	8.7	7.2
35 hours and over	82,515	1,711	80,806	74.9	65.9	75.1
35 to 39 hours	7,149	140	7,010	6.5	5.4	6.5
40 hours	43,477	566	42,912	39.5	21.8	39.9
41 hours and over	31,889	1,005	30,884	29.0	38.7	28.7
41 to 48 hours	11,604	202	11,402	10.5	7.8	10.6
49 to 59 hours	11,836	325	11,511	10.7	12.5	10.7
60 hours and over	8,449	478	7,971	7.7	18.4	7.4
Average hours, total at work	38.9	40.8	38.8	-	-	-
Average hours, workers on full-time schedules	43.4	47.9	43.3	-	-	-

A-28. Persons at work 1 to 34 hours by reason for working less than 35 hours, type of industry, and usual status

(Numbers in thousands)

Reason for working less than 35 hours	February 1989					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over	27,625	8,492	19,132	26,739	8,103	18,636
Economic reasons	4,996	1,822	3,174	4,725	1,674	3,051
Slack work	2,554	1,532	1,022	2,343	1,392	951
Material shortages or repairs to plant and equipment	54	54	-	53	53	-
New job started during week	179	179	-	174	174	-
Job terminated during week	57	57	-	55	55	-
Could find only part-time work	2,153	-	2,153	2,102	-	2,102
Other reasons	22,631	6,673	15,958	22,015	6,431	15,584
Does not want, or unavailable for, full-time work	13,217	-	13,217	12,949	-	12,949
Vacation	1,179	1,179	-	1,159	1,159	-
Illness	2,305	2,133	172	2,282	2,111	171
Bad weather	751	751	-	631	631	-
Industrial dispute	5	5	-	5	5	-
Legal or religious holiday	894	894	-	894	894	-
Full time for this job	1,802	-	1,802	1,771	-	1,771
All other reasons	2,475	1,708	767	2,321	1,628	693
Average hours:						
Economic reasons	21.9	23.8	20.8	21.9	23.9	20.8
Other reasons	21.1	26.1	19.0	21.2	26.2	19.1
Worked 30 to 34 hours:						
Economic reasons	1,650	834	816	1,558	783	775
Other reasons	6,323	3,552	2,771	6,189	3,468	2,721

A-29. Persons at work in nonagricultural industries by class of worker and full- or part-time status

(Numbers in thousands)

Industry	February 1989								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules	
				Total	40 hours or less	41 to 48 hours			49 hours or more
Total, 16 years and over	107,545	4,725	15,584	87,236	56,352	11,402	19,482	38.8	43.3
Wage and salary workers	99,623	4,085	14,220	81,318	53,563	10,860	16,895	38.7	43.0
Mining	605	22	19	564	289	93	182	43.6	45.3
Construction	5,284	364	243	4,677	3,307	549	821	39.2	41.6
Manufacturing	20,342	521	661	19,160	12,309	3,176	3,675	41.8	43.1
Durable goods	12,001	195	289	11,517	7,221	2,028	2,268	42.4	43.3
Nondurable goods	8,341	326	372	7,643	5,088	1,148	1,407	41.0	42.7
Transportation and public utilities	7,270	222	487	6,561	4,221	882	1,458	41.5	43.8
Wholesale and retail trade	20,693	1,201	5,139	14,353	8,784	2,211	3,358	36.3	43.6
Finance, insurance, and real estate	7,005	137	667	6,201	4,234	765	1,202	39.8	42.3
Service industries	33,261	1,578	6,741	24,942	16,822	2,699	5,421	36.9	42.9
Private households	1,005	190	428	387	239	42	106	27.0	46.7
All other industries	32,256	1,388	6,313	24,555	16,583	2,657	5,315	37.2	42.8
Public administration	5,164	40	263	4,861	3,599	485	777	40.8	42.1
Self-employed workers	7,659	633	1,249	5,777	2,715	532	2,530	40.6	47.7
Unpaid family workers	262	9	116	137	70	10	57	35.2	46.8

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-30. Persons at work in nonagricultural industries by sex, age, race, marital status, and full- or part-time status

(Numbers in thousands)

Sex, age, race, and marital status	February 1989							
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
TOTAL								
Total, 16 years and over	107,545	4,725	15,584	87,236	56,352	30,884	38.8	43.3
16 to 19 years	5,704	320	3,724	1,660	1,295	365	23.3	39.9
16 to 17 years	2,034	41	1,817	176	140	36	17.0	38.2
18 to 19 years	3,670	280	1,907	1,483	1,153	330	26.8	40.1
20 years and over	101,841	4,405	11,860	85,576	55,056	30,520	39.7	43.3
20 to 24 years	12,030	776	2,360	8,894	6,421	2,473	36.1	41.8
25 years and over	89,810	3,629	9,500	76,681	48,635	28,046	40.2	43.5
25 to 44 years	59,042	2,449	5,211	51,382	32,104	19,278	40.6	43.6
45 to 64 years	28,046	1,061	3,027	23,956	15,561	8,397	40.2	43.5
65 years and over	2,723	120	1,261	1,342	971	371	29.5	42.0
Men, 16 years and over	58,102	2,084	4,728	51,290	29,398	21,892	41.8	44.8
16 to 19 years	2,789	141	1,730	918	684	234	24.6	40.5
16 to 17 years	981	28	860	93	68	25	18.0	39.5
18 to 19 years	1,808	112	870	826	617	209	28.3	40.6
20 years and over	55,314	1,944	2,998	50,372	28,714	21,658	42.7	44.9
20 to 24 years	6,216	379	1,003	4,834	3,220	1,614	37.7	42.7
25 years and over	49,099	1,565	1,995	45,539	25,494	20,045	43.3	45.2
25 to 44 years	32,173	1,126	712	30,335	16,510	13,825	43.9	45.3
45 to 64 years	15,354	379	612	14,363	8,406	5,957	43.4	44.9
65 years and over	1,571	61	671	839	579	260	30.7	42.3
Women, 16 years and over	49,442	2,641	10,856	35,945	26,954	8,991	35.3	41.1
16 to 19 years	2,916	180	1,994	742	611	131	22.0	39.1
16 to 17 years	1,053	12	957	84	73	11	16.0	36.9
18 to 19 years	1,862	167	1,037	658	538	120	25.4	39.3
20 years and over	46,527	2,461	8,862	35,204	26,343	8,861	36.1	41.1
20 to 24 years	5,814	397	1,356	4,059	3,200	859	34.5	40.6
25 years and over	40,713	2,063	7,504	31,146	23,144	8,002	36.4	41.2
25 to 44 years	26,869	1,323	4,499	21,047	15,596	5,451	36.7	41.1
45 to 64 years	12,691	681	2,416	9,594	7,156	2,436	36.4	41.3
65 years and over	1,152	59	590	503	391	112	27.7	41.4
RACE								
White, 16 years and over	93,127	3,915	13,976	75,236	47,100	28,136	38.9	43.5
Men	50,927	1,756	4,162	45,009	24,847	20,162	42.1	45.1
Women	42,200	2,159	9,814	30,227	22,253	7,974	35.1	41.1
Black, 16 years and over	10,980	714	1,112	9,154	7,184	1,970	38.1	41.5
Men	5,360	283	382	4,695	3,464	1,231	39.9	42.6
Women	5,620	432	730	4,458	3,720	738	36.4	40.4
MARITAL STATUS								
Men, 16 years and over:								
Married, spouse present	37,322	955	1,376	34,991	19,001	15,990	43.8	45.4
Widowed, divorced, or separated	5,720	298	265	5,157	3,009	2,148	42.1	44.6
Single (never married)	15,061	831	3,086	11,144	7,390	3,754	36.6	43.2
Women, 16 years and over:								
Married, spouse present	27,391	1,367	6,150	19,874	15,168	4,706	35.2	40.8
Widowed, divorced, or separated	9,797	606	1,238	7,953	5,688	2,265	37.8	41.7
Single (never married)	12,254	667	3,466	8,119	6,098	2,021	33.4	41.2

A-31. Persons at work in nonfarm occupations by sex and full- or part-time status

(Numbers in thousands)

Occupation and sex	February 1989								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over ¹	107,504	4,730	15,593	87,181	56,304	11,402	19,475	38.8	43.3
Managerial and professional specialty	28,934	505	2,738	25,691	14,023	3,257	8,412	42.2	45.1
Executive, administrative, and managerial	14,047	168	691	13,188	6,705	1,726	4,757	44.3	45.8
Professional specialty	14,887	337	2,047	12,504	7,318	1,531	3,655	40.3	44.4
Technical, sales, and administrative support	34,111	1,216	6,501	26,394	18,394	3,281	4,719	37.2	42.3
Technicians and related support	3,456	63	433	2,959	2,056	426	477	38.9	42.1
Sales occupations	13,100	647	2,877	9,575	5,139	1,363	3,074	38.5	45.3
Administrative support, including clerical	17,556	506	3,191	13,860	11,199	1,492	1,168	35.9	40.2
Service occupations	14,873	1,369	4,314	9,191	6,695	974	1,521	33.5	42.3
Private household	864	150	369	345	210	38	97	27.7	46.5
Protective service	1,856	32	171	1,652	949	244	460	42.8	45.9
Service, except private household and protective	12,154	1,187	3,773	7,193	5,536	692	965	32.5	41.3
Precision production, craft, and repair	12,764	661	430	11,672	7,625	1,771	2,276	40.9	42.8
Operators, fabricators, and laborers	16,823	979	1,611	14,232	9,567	2,119	2,546	39.4	42.8
Machine operators, assemblers, and inspectors	7,866	371	377	7,118	5,062	1,105	951	40.1	41.9
Transportation and material moving occupations	4,413	236	408	3,769	2,064	547	1,159	42.2	45.9
Handlers, equipment cleaners, helpers, and laborers	4,543	372	826	3,345	2,441	467	436	35.5	41.3
Men, 16 years and over ¹	57,948	2,085	4,698	51,166	29,297	7,300	14,569	41.8	44.8
Managerial and professional specialty	15,874	245	761	14,868	6,840	1,901	6,127	45.4	47.1
Executive, administrative, and managerial	8,402	93	260	8,049	3,505	1,028	3,516	46.3	47.5
Professional specialty	7,472	152	501	6,819	3,335	873	2,611	44.3	46.8
Technical, sales, and administrative support	12,116	283	1,339	10,493	5,772	1,561	3,160	41.7	45.2
Technicians and related support	1,759	28	128	1,603	1,059	239	305	40.8	43.1
Sales occupations	6,792	166	718	5,908	2,626	892	2,389	43.8	47.4
Administrative support, including clerical	3,564	89	493	2,982	2,087	430	466	38.2	42.0
Service occupations	5,926	360	1,258	4,307	2,914	501	892	36.9	43.8
Private household	35	4	12	18	17	-	1	(²)	(²)
Protective service	1,601	27	103	1,471	830	214	428	44.0	46.3
Service, except private household and protective	4,290	329	1,143	2,818	2,068	287	463	34.3	42.6
Precision production, craft, and repair	11,619	571	314	10,734	6,925	1,661	2,148	41.2	42.9
Operators, fabricators, and laborers	12,413	625	1,025	10,763	6,846	1,675	2,242	40.4	43.6
Machine operators, assemblers, and inspectors	4,685	137	157	4,391	2,918	740	734	41.6	42.8
Transportation and material moving occupations	3,991	197	241	3,554	1,907	522	1,125	43.3	46.1
Handlers, equipment cleaners, helpers, and laborers	3,736	292	626	2,818	2,021	414	383	36.0	41.5
Women, 16 years and over ¹	49,556	2,646	10,895	36,015	27,007	4,102	4,906	35.3	41.1
Managerial and professional specialty	13,060	260	1,977	10,823	7,183	1,356	2,285	38.5	42.3
Executive, administrative, and managerial	5,645	75	431	5,139	3,200	698	1,241	41.3	43.3
Professional specialty	7,415	185	1,545	5,685	3,983	658	1,044	36.4	41.5
Technical, sales, and administrative support	21,995	933	5,162	15,901	12,622	1,720	1,559	34.7	40.3
Technicians and related support	1,696	35	305	1,356	997	186	173	36.8	40.9
Sales occupations	6,308	481	2,159	3,667	2,512	471	684	32.7	42.0
Administrative support, including clerical	13,991	417	2,697	10,877	9,112	1,063	702	35.3	39.7
Service occupations	8,948	1,009	3,055	4,884	3,781	473	630	31.2	41.0
Private household	829	146	357	327	193	39	96	27.7	46.9
Protective service	254	5	68	181	119	30	32	35.1	42.9
Service, except private household and protective	7,864	858	2,630	4,375	3,469	405	501	31.5	40.5
Precision production, craft, and repair	1,144	90	115	939	700	111	128	37.8	41.0
Operators, fabricators, and laborers	4,410	354	587	3,469	2,721	443	305	36.5	40.5
Machine operators, assemblers, and inspectors	3,181	235	220	2,727	2,144	365	218	38.0	40.4
Transportation and material moving occupations	422	39	167	216	157	25	34	31.9	41.9
Handlers, equipment cleaners, helpers, and laborers	807	80	200	526	420	53	53	33.0	40.0

¹ Excludes farming, forestry, and fishing occupations.

² Data not shown where base is less than 75,000.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-32. Employment status of the noninstitutional population, including Armed forces stationed in the United States, by sex, seasonally adjusted

(Numbers in thousands)

Employment status and sex	1988												1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
TOTAL														
Noninstitutional population ¹	185,705	185,847	185,964	186,088	186,247	186,402	186,522	186,666	186,801	186,949	187,098	187,340	187,461	
Labor force ¹	122,901	122,672	123,060	122,917	123,209	123,331	123,692	123,688	123,778	124,215	124,259	125,124	124,865	
Percent of population ²	66.2	68.0	66.2	66.1	66.2	66.2	66.3	66.3	66.3	66.4	66.4	66.8	66.6	
Total employed ¹	116,009	115,865	116,392	116,117	116,686	116,707	116,895	117,074	117,260	117,652	117,705	118,407	118,537	
Employment-population ratio ³	62.5	62.3	62.6	62.4	62.7	62.6	62.7	62.7	62.8	62.9	62.9	63.2	63.2	
Resident Armed Forces	1,736	1,736	1,732	1,714	1,685	1,673	1,692	1,704	1,687	1,705	1,696	1,696	1,684	
Civilian employed	114,273	114,129	114,660	114,403	115,001	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853	
Agriculture	3,200	3,181	3,187	3,110	3,121	3,060	3,142	3,176	3,238	3,238	3,193	3,300	3,223	
Nonagricultural industries	111,073	110,948	111,473	111,293	111,880	111,974	112,061	112,194	112,335	112,709	112,816	113,411	113,630	
Unemployed	6,892	6,807	6,668	6,800	6,523	6,624	6,797	6,614	6,518	6,563	6,554	6,716	6,328	
Unemployment rate ⁴	5.6	5.5	5.4	5.5	5.3	5.4	5.5	5.3	5.3	5.3	5.3	5.4	5.1	
Not in labor force	62,804	63,175	62,904	63,171	63,038	63,071	62,830	62,978	63,023	62,734	62,839	62,216	62,596	
Men														
Noninstitutional population ¹	89,099	89,168	89,225	89,287	89,367	89,445	89,504	89,577	89,637	89,716	89,792	89,914	89,973	
Labor force ¹	68,289	68,194	68,462	68,409	68,436	68,461	68,685	68,604	68,569	68,686	68,638	69,032	69,113	
Percent of population ²	76.6	76.5	76.7	76.6	76.6	76.5	76.7	76.6	76.5	76.6	76.4	76.8	76.8	
Total employed ¹	64,587	64,417	64,866	64,672	64,894	64,941	64,931	65,015	64,976	65,074	65,055	65,322	65,572	
Employment-population ratio ³	72.5	72.2	72.7	72.4	72.6	72.6	72.5	72.6	72.5	72.5	72.5	72.6	72.9	
Resident Armed Forces	1,577	1,573	1,569	1,553	1,523	1,512	1,529	1,540	1,526	1,542	1,534	1,532	1,521	
Civilian employed	63,010	62,844	63,297	63,119	63,371	63,429	63,402	63,475	63,450	63,532	63,521	63,790	64,051	
Unemployed	3,702	3,777	3,596	3,737	3,542	3,520	3,754	3,589	3,593	3,612	3,583	3,710	3,540	
Unemployment rate ⁴	5.4	5.5	5.3	5.5	5.2	5.1	5.5	5.2	5.2	5.3	5.2	5.4	5.1	
Not in labor force	20,810	20,974	20,763	20,878	20,931	20,984	20,819	20,973	21,068	21,030	21,154	20,882	20,860	
Women														
Noninstitutional population ¹	96,606	96,679	96,739	96,801	96,880	96,957	97,018	97,089	97,164	97,234	97,306	97,427	97,488	
Labor force ¹	54,612	54,478	54,598	54,508	54,773	54,870	55,007	55,084	55,209	55,529	55,621	56,091	55,752	
Percent of population ²	56.5	56.3	56.4	56.3	56.5	56.6	56.7	56.7	56.8	57.1	57.2	57.6	57.2	
Total employed ¹	51,422	51,448	51,526	51,445	51,792	51,766	51,964	52,059	52,284	52,578	52,650	53,085	52,965	
Employment-population ratio ³	53.2	53.2	53.3	53.1	53.5	53.4	53.6	53.6	53.8	54.1	54.1	54.5	54.3	
Resident Armed Forces	159	163	163	161	162	161	163	164	161	163	162	164	163	
Civilian employed	51,263	51,285	51,363	51,284	51,630	51,605	51,801	51,895	52,123	52,415	52,488	52,921	52,802	
Unemployed	3,190	3,030	3,072	3,063	2,981	3,104	3,043	3,025	2,925	2,951	2,971	3,006	2,787	
Unemployment rate ⁴	5.8	5.6	5.6	5.6	5.4	5.7	5.5	5.5	5.3	5.3	5.3	5.4	5.0	
Not in labor force	41,994	42,201	42,141	42,293	42,107	42,087	42,011	42,005	41,955	41,705	41,685	41,336	41,736	

¹ Includes members of the Armed Forces stationed in the United States.

² Labor force as a percent of the noninstitutional population.

³ Total employment as a percent of the noninstitutional population.

⁴ Unemployment as a percent of the labor force (including the resident

Armed Forces).

NOTE: The population and Armed Forces figures are not adjusted for seasonal variation. Detail for the seasonally adjusted data shown in tables A-32 through A-41 will not necessarily add to totals because of the independent seasonal adjustment of the various series.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-33. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted

(Numbers in thousands)

Employment status, sex, and age	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
TOTAL													
Civilian noninstitutional population ¹	183,969	184,111	184,232	184,374	184,562	184,729	184,830	184,962	185,114	185,244	185,402	185,644	185,777
Civilian labor force	121,165	120,936	121,328	121,203	121,524	121,658	122,000	121,984	122,091	122,510	122,563	123,428	123,181
Percent of population	65.9	65.7	65.9	65.7	65.8	65.9	66.0	66.0	66.0	66.1	66.1	66.5	66.3
Employed	114,273	114,129	114,660	114,403	115,001	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853
Employment-population ratio ²	62.1	62.0	62.2	62.0	62.3	62.3	62.3	62.4	62.4	62.6	62.6	62.9	62.9
Unemployed	6,892	6,807	6,668	6,800	6,523	6,624	6,797	6,614	6,518	6,563	6,554	6,716	6,328
Unemployment rate	5.7	5.6	5.5	5.6	5.4	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1
Men, 20 years and over													
Civilian noninstitutional population ¹	80,203	80,260	80,326	80,402	80,526	80,608	80,669	80,751	80,851	80,924	81,001	81,162	81,256
Civilian labor force	62,614	62,532	62,774	62,721	62,669	62,729	62,916	62,884	62,915	62,995	63,002	63,358	63,490
Percent of population	78.1	77.9	78.1	78.0	77.8	77.8	78.0	77.9	77.8	77.8	77.8	78.1	78.1
Employed	59,561	59,468	59,833	59,656	59,780	59,897	59,839	59,979	60,004	59,999	60,049	60,420	60,636
Employment-population ratio ²	74.3	74.1	74.5	74.2	74.2	74.3	74.2	74.3	74.2	74.1	74.1	74.4	74.6
Agriculture	2,279	2,258	2,259	2,238	2,231	2,252	2,273	2,249	2,315	2,313	2,292	2,277	2,320
Nonagricultural industries	57,282	57,210	57,574	57,418	57,549	57,645	57,566	57,730	57,689	57,686	57,757	58,143	58,316
Unemployed	3,053	3,064	2,941	3,065	2,889	2,832	3,077	2,905	2,911	2,996	2,953	2,938	2,853
Unemployment rate	4.9	4.9	4.7	4.9	4.6	4.5	4.9	4.6	4.6	4.8	4.7	4.6	4.5
Not in labor force	17,589	17,728	17,552	17,681	17,857	17,879	17,753	17,867	17,936	17,929	17,999	17,804	17,766
Women, 20 years and over													
Civilian noninstitutional population ¹	89,178	89,261	89,307	89,382	89,502	89,588	89,670	89,735	89,807	89,887	89,954	90,072	90,153
Civilian labor force	50,530	50,510	50,591	50,532	50,690	50,807	50,959	50,991	51,201	51,558	51,587	51,998	51,821
Percent of population	56.7	56.6	56.6	56.5	56.6	56.7	56.8	56.8	57.0	57.4	57.3	57.7	57.5
Employed	47,934	48,060	48,120	48,040	48,205	48,242	48,492	48,535	48,788	49,113	49,165	49,543	49,514
Employment-population ratio ²	53.8	53.8	53.9	53.7	53.9	53.8	54.1	54.1	54.3	54.6	54.7	55.0	54.9
Agriculture	638	641	653	604	626	549	609	638	640	640	646	715	666
Nonagricultural industries	47,296	47,419	47,467	47,436	47,579	47,693	47,883	47,897	48,148	48,473	48,519	48,827	48,849
Unemployed	2,596	2,450	2,471	2,492	2,485	2,565	2,467	2,456	2,413	2,445	2,422	2,455	2,306
Unemployment rate	5.1	4.9	4.9	4.9	4.9	5.0	4.8	4.8	4.7	4.7	4.7	4.7	4.5
Not in labor force	38,648	38,751	38,716	38,850	38,812	38,781	38,711	38,744	38,606	38,329	38,367	38,074	38,332
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹	14,588	14,591	14,598	14,590	14,534	14,533	14,491	14,477	14,456	14,433	14,447	14,410	14,367
Civilian labor force	8,021	7,894	7,963	7,950	8,165	8,122	8,125	8,109	7,975	7,957	7,974	8,071	7,871
Percent of population	55.0	54.1	54.5	54.5	56.2	55.9	56.1	56.0	55.2	55.1	55.2	56.0	54.8
Employed	6,778	6,601	6,707	6,707	7,016	6,895	6,872	6,856	6,781	6,835	6,795	6,748	6,703
Employment-population ratio ²	46.5	45.2	45.9	46.0	48.3	47.4	47.4	47.4	46.9	47.4	47.0	46.8	46.7
Agriculture	283	282	275	268	264	259	260	289	283	285	255	307	237
Nonagricultural industries	6,495	6,319	6,432	6,439	6,752	6,636	6,612	6,567	6,498	6,550	6,540	6,441	6,466
Unemployed	1,243	1,293	1,256	1,243	1,149	1,227	1,253	1,253	1,194	1,122	1,179	1,323	1,168
Unemployment rate	15.5	16.4	15.8	15.6	14.1	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8
Not in labor force	6,567	6,697	6,635	6,640	6,369	6,411	6,366	6,368	6,481	6,476	6,473	6,339	6,496

¹ The population figures are not adjusted for seasonal variation.

population.

² Civilian employment as a percent of the civilian noninstitutional

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-34. Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin, seasonally adjusted

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1988												1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
WHITE														
Civilian noninstitutional population ¹	157,773	157,868	157,943	158,034	158,166	158,279	158,340	158,422	158,524	158,603	158,705	158,865	158,947	
Civilian labor force	104,404	104,172	104,517	104,433	104,716	104,651	105,013	105,036	105,051	105,395	105,411	106,106	105,798	
Percent of population	66.2	66.0	66.2	66.1	66.2	66.1	66.3	66.3	66.3	66.5	66.4	66.8	66.6	
Employed	99,350	99,252	99,663	99,508	99,902	99,761	99,907	100,058	100,199	100,543	100,567	101,183	101,278	
Employment-population ratio ²	63.0	62.9	63.1	63.0	63.2	63.0	63.1	63.2	63.2	63.4	63.4	63.7	63.7	
Unemployed	5,054	4,920	4,854	4,925	4,814	4,890	5,106	4,978	4,852	4,852	4,844	4,923	4,521	
Unemployment rate	4.8	4.7	4.6	4.7	4.6	4.7	4.9	4.7	4.6	4.6	4.6	4.6	4.3	
Men, 20 years and over														
Civilian labor force	54,627	54,541	54,653	54,722	54,658	54,712	54,864	54,839	54,861	54,922	54,898	55,213	55,308	
Percent of population	78.4	78.3	78.4	78.4	78.2	78.2	78.4	78.3	78.3	78.3	78.2	78.5	78.6	
Employed	52,348	52,266	52,478	52,443	52,475	52,557	52,487	52,579	52,612	52,624	52,636	53,007	53,197	
Employment-population ratio ²	75.2	75.0	75.3	75.2	75.1	75.2	75.0	75.1	75.1	75.0	75.0	75.4	75.6	
Unemployed	2,279	2,275	2,175	2,279	2,183	2,155	2,377	2,260	2,249	2,298	2,262	2,205	2,111	
Unemployment rate	4.2	4.2	4.0	4.2	4.0	3.9	4.3	4.1	4.1	4.2	4.1	4.0	3.8	
Women, 20 years and over														
Civilian labor force	42,848	42,767	42,955	42,868	42,955	42,958	43,149	43,191	43,298	43,625	43,644	43,936	43,770	
Percent of population	56.2	56.1	56.3	56.1	56.2	56.2	56.4	56.4	56.5	56.9	56.9	57.2	56.9	
Employed	40,942	41,089	41,233	41,124	41,201	41,124	41,378	41,413	41,583	41,869	41,930	42,201	42,177	
Employment-population ratio ²	53.7	53.9	54.0	53.8	53.9	53.8	54.1	54.1	54.2	54.6	54.6	54.9	54.8	
Unemployed	1,906	1,678	1,722	1,744	1,754	1,834	1,771	1,778	1,715	1,736	1,714	1,734	1,593	
Unemployment rate	4.4	3.9	4.0	4.1	4.1	4.3	4.1	4.1	4.0	4.0	3.9	3.9	3.6	
Both sexes, 16 to 19 years														
Civilian labor force	6,929	6,864	6,909	6,843	7,103	6,981	7,000	7,006	6,892	6,848	6,869	6,958	6,720	
Percent of population	58.3	57.7	58.1	57.6	59.8	58.9	59.2	59.4	58.5	58.3	58.6	59.6	57.7	
Employed	6,060	5,897	5,952	5,941	6,226	6,080	6,042	6,066	6,004	6,030	6,001	5,975	5,904	
Employment-population ratio ²	51.0	49.6	50.1	50.0	52.5	51.3	51.1	51.4	51.0	51.3	51.2	51.1	50.7	
Unemployed	869	967	957	902	877	901	958	940	888	818	868	983	816	
Unemployment rate	12.5	14.1	13.9	13.2	12.3	12.9	13.7	13.4	12.9	11.9	12.6	14.1	12.1	
Men	12.5	15.5	14.4	14.0	13.2	14.3	13.9	14.5	14.4	12.6	13.4	16.4	14.0	
Women	12.6	12.6	13.3	12.3	11.4	11.4	13.5	12.3	11.3	11.3	11.8	11.7	10.2	
BLACK														
Civilian noninstitutional population ¹	20,569	20,596	20,622	20,650	20,683	20,715	20,736	20,762	20,786	20,811	20,842	20,877	20,905	
Civilian labor force	13,138	13,100	13,101	13,102	13,066	13,283	13,236	13,201	13,290	13,330	13,405	13,477	13,476	
Percent of population	63.9	63.6	63.5	63.4	63.2	64.1	63.8	63.6	63.9	64.1	64.3	64.6	64.5	
Employed	11,504	11,461	11,534	11,514	11,543	11,761	11,733	11,758	11,807	11,831	11,856	11,860	11,873	
Employment-population ratio ²	55.9	55.6	55.9	55.8	55.8	56.8	56.6	56.6	56.8	56.8	56.9	56.8	56.8	
Unemployed	1,634	1,639	1,567	1,588	1,523	1,522	1,503	1,443	1,483	1,499	1,549	1,617	1,603	
Unemployment rate	12.4	12.5	12.0	12.1	11.7	11.5	11.4	10.9	11.2	11.2	11.6	12.0	11.9	
Men, 20 years and over														
Civilian labor force	6,140	6,119	6,151	6,107	6,084	6,080	6,131	6,117	6,157	6,146	6,179	6,226	6,199	
Percent of population	75.2	74.9	75.2	74.5	74.1	73.9	74.5	74.2	74.6	74.3	74.6	75.0	74.6	
Employed	5,469	5,444	5,510	5,469	5,480	5,495	5,539	5,563	5,566	5,545	5,561	5,576	5,549	
Employment-population ratio ²	67.0	66.6	67.3	66.7	66.7	66.8	67.3	67.5	67.4	67.1	67.1	67.2	66.7	
Unemployed	671	675	641	638	604	585	592	554	591	601	618	650	650	
Unemployment rate	10.9	11.0	10.4	10.4	9.9	9.6	9.7	9.1	9.6	9.8	10.0	10.4	10.5	
Women, 20 years and over														
Civilian labor force	6,135	6,141	6,112	6,099	6,097	6,286	6,188	6,174	6,234	6,280	6,316	6,369	6,349	
Percent of population	59.9	59.9	59.6	59.4	59.3	61.0	60.0	59.8	60.2	60.6	60.9	61.2	61.0	
Employed	5,490	5,478	5,444	5,453	5,449	5,640	5,571	5,575	5,620	5,663	5,654	5,706	5,697	
Employment-population ratio ²	53.6	53.5	53.1	53.1	53.0	54.7	54.0	54.0	54.3	54.6	54.5	54.9	54.7	
Unemployed	645	663	668	646	648	646	617	599	614	617	662	663	651	
Unemployment rate	10.5	10.8	10.9	10.6	10.6	10.3	10.0	9.7	9.8	9.8	10.5	10.4	10.3	

See footnotes at end of table.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-34. Employment status of the civilian noninstitutional population by race, sex, age, and Hispanic origin, seasonally adjusted—Continued

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	863	840	838	896	885	917	917	910	899	904	910	881	928
Percent of population	39.7	38.6	38.5	41.1	40.6	42.0	42.0	41.7	41.2	41.5	41.7	40.5	42.7
Employed	545	539	580	592	614	626	623	620	621	629	641	577	627
Employment-population ratio ²	25.1	24.7	26.6	27.2	26.1	28.7	28.5	28.4	28.5	28.6	29.4	26.5	26.8
Unemployed	318	301	258	304	271	291	294	290	278	281	269	304	301
Unemployment rate	36.8	35.8	30.8	33.9	30.6	31.7	32.1	31.9	30.9	31.1	29.6	34.5	32.4
Men	39.9	37.8	27.9	33.2	31.5	31.2	32.1	31.9	32.8	32.1	29.8	36.7	33.1
Women	33.8	33.9	33.9	34.8	29.6	32.4	32.0	31.9	28.6	29.9	29.3	32.0	31.6
HISPANIC ORIGIN													
Civilian noninstitutional population ¹	13,153	13,192	13,230	13,268	13,306	13,344	13,381	13,419	13,458	13,495	13,533	13,564	13,606
Civilian labor force	8,987	8,818	8,823	8,910	9,009	8,997	8,963	9,061	9,075	9,148	9,133	9,205	9,219
Percent of population	68.3	66.8	66.7	67.2	67.7	67.4	67.0	67.5	67.4	67.8	67.5	67.9	67.8
Employed	8,241	8,088	8,030	8,128	8,222	8,265	8,214	8,378	8,368	8,419	8,441	8,434	8,596
Employment-population ratio ²	62.7	61.3	60.7	61.3	61.8	61.9	61.4	62.4	62.2	62.4	62.4	62.2	63.2
Unemployed	746	730	793	782	787	732	749	683	707	729	692	771	624
Unemployment rate	8.3	8.3	9.0	8.8	8.7	8.1	8.4	7.5	7.8	8.0	7.6	8.4	6.8

¹ The population figures are not adjusted for seasonal variation.

² Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

A-35. Employed civilians by selected social and economic categories, seasonally adjusted

(In thousands)

Category	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
CHARACTERISTIC													
Total	114,273	114,129	114,660	114,403	115,001	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853
Married men, spouse present	40,488	40,486	40,494	40,317	40,493	40,518	40,511	40,513	40,504	40,407	40,483	40,925	40,928
Married women, spouse present	28,620	28,713	28,772	28,632	28,678	28,669	28,809	28,836	28,890	28,995	29,053	29,589	29,412
Women who maintain families	6,151	6,158	6,091	6,000	6,130	6,170	6,280	6,253	6,344	6,375	6,399	6,416	6,385
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,640	1,610	1,632	1,574	1,583	1,572	1,607	1,612	1,661	1,672	1,698	1,684	1,645
Self-employed workers	1,410	1,416	1,390	1,365	1,375	1,362	1,411	1,421	1,405	1,450	1,349	1,387	1,419
Unpaid family workers	123	146	152	155	161	149	158	137	177	125	149	189	150
Nonagricultural industries:													
Wage and salary workers	102,498	102,339	102,562	102,145	102,953	103,189	103,207	103,501	103,733	103,770	103,904	104,510	104,797
Government	16,961	16,952	17,012	16,946	17,049	17,031	17,111	17,145	17,240	17,387	17,423	17,393	17,311
Private industries	85,537	85,387	85,550	85,199	85,904	86,158	86,096	86,356	86,493	86,383	86,481	87,117	87,486
Private households	1,167	1,167	1,114	1,152	1,146	1,132	1,128	1,119	1,152	1,209	1,210	1,196	1,135
Other industries	84,370	84,220	84,436	84,047	84,758	85,026	84,968	85,237	85,341	85,174	85,271	85,921	86,350
Self-employed workers	8,338	8,395	8,567	8,816	8,536	8,531	8,508	8,570	8,479	8,619	8,602	8,718	8,517
Unpaid family workers	232	250	272	301	297	251	241	230	232	300	266	298	285
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	5,389	5,331	5,212	4,878	5,302	5,341	5,192	5,097	4,963	5,081	5,321	5,097	4,981
Slack work	2,408	2,448	2,264	2,267	2,346	2,471	2,315	2,266	2,220	2,279	2,549	2,302	2,303
Could only find part-time work	2,591	2,548	2,519	2,353	2,586	2,538	2,473	2,389	2,399	2,375	2,410	2,352	2,333
Voluntary part time	14,619	14,654	14,949	14,813	14,612	15,026	14,999	15,270	15,161	15,446	15,363	15,401	15,128
Nonagricultural industries:													
Part time for economic reasons	5,101	5,087	4,953	4,678	5,073	5,102	4,972	4,862	4,727	4,819	5,033	4,837	4,697
Slack work	2,258	2,265	2,131	2,136	2,183	2,334	2,171	2,102	2,095	2,116	2,377	2,144	2,105
Could only find part-time work	2,477	2,482	2,426	2,276	2,504	2,493	2,408	2,317	2,319	2,288	2,307	2,283	2,272
Voluntary part time	14,172	14,203	14,441	14,378	14,180	14,606	14,564	14,819	14,679	14,986	14,928	14,970	14,688

¹ Excludes persons "with a job but not at work" during the survey

period for such reasons as vacation, illness, or industrial dispute.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-36. Employed civilians by sex and age, seasonally adjusted

(In thousands)

Sex and age	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Total, 16 years and over	114,273	114,129	114,660	114,403	115,001	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853
16 to 24 years	20,216	19,948	20,029	19,864	20,338	20,137	20,123	20,050	19,930	19,877	19,852	19,741	19,797
16 to 19 years	6,778	6,601	6,707	6,707	7,016	6,895	6,872	6,856	6,781	6,835	6,795	6,748	6,703
16 to 17 years	2,739	2,685	2,703	2,674	2,797	2,700	2,671	2,669	2,689	2,770	2,686	2,602	2,563
18 to 19 years	4,047	3,944	4,004	4,034	4,203	4,182	4,148	4,195	4,090	4,045	4,150	4,125	4,163
20 to 24 years	13,438	13,347	13,322	13,157	13,322	13,242	13,251	13,194	13,149	13,042	13,057	12,993	13,095
25 years and over	94,055	94,198	94,591	94,450	94,683	94,979	95,145	95,332	95,619	96,062	96,151	96,988	97,020
25 to 54 years	79,366	79,583	79,898	79,953	80,111	80,456	80,608	80,697	80,950	81,242	81,399	82,036	82,160
55 years and over	14,643	14,580	14,673	14,499	14,556	14,514	14,583	14,664	14,690	14,790	14,771	14,924	14,803
Men, 16 years and over	63,010	62,844	63,297	63,119	63,371	63,429	63,402	63,475	63,450	63,532	63,521	63,790	64,051
16 to 24 years	10,442	10,364	10,438	10,385	10,550	10,441	10,475	10,401	10,303	10,379	10,288	10,198	10,377
16 to 19 years	3,449	3,376	3,464	3,463	3,591	3,532	3,563	3,496	3,446	3,533	3,472	3,370	3,415
16 to 17 years	1,400	1,391	1,403	1,383	1,415	1,392	1,395	1,397	1,404	1,433	1,385	1,270	1,298
18 to 19 years	2,052	2,001	2,059	2,080	2,171	2,133	2,126	2,106	2,040	2,105	2,135	2,088	2,134
20 to 24 years	6,993	6,988	6,974	6,922	6,959	6,909	6,912	6,905	6,857	6,846	6,816	6,828	6,962
25 years and over	52,569	52,504	52,831	52,709	52,818	53,016	52,983	53,072	53,136	53,152	53,227	53,573	53,659
25 to 54 years	43,983	43,999	44,278	44,202	44,287	44,509	44,471	44,577	44,669	44,712	44,779	45,001	45,091
55 years and over	8,563	8,492	8,532	8,490	8,529	8,524	8,514	8,502	8,482	8,436	8,470	8,563	8,536
Women, 16 years and over	51,263	51,285	51,363	51,284	51,630	51,605	51,801	51,895	52,123	52,415	52,488	52,921	52,802
16 to 24 years	9,774	9,584	9,591	9,479	9,788	9,696	9,648	9,649	9,627	9,498	9,564	9,543	9,420
16 to 19 years	3,329	3,225	3,243	3,244	3,425	3,363	3,309	3,360	3,335	3,302	3,323	3,378	3,287
16 to 17 years	1,339	1,294	1,300	1,291	1,382	1,308	1,276	1,272	1,285	1,337	1,301	1,332	1,265
18 to 19 years	1,995	1,943	1,945	1,954	2,032	2,049	2,022	2,089	2,050	1,940	2,015	2,037	2,029
20 to 24 years	6,445	6,359	6,348	6,235	6,363	6,339	6,339	6,289	6,292	6,196	6,241	6,165	6,133
25 years and over	41,486	41,694	41,760	41,741	41,865	41,963	42,162	42,260	42,483	42,910	42,924	43,415	43,361
25 to 54 years	35,383	35,584	35,620	35,751	35,824	35,947	36,137	36,120	36,281	36,530	36,620	37,035	37,069
55 years and over	6,080	6,088	6,141	6,009	6,027	5,990	6,069	6,162	6,208	6,354	6,301	6,361	6,267

A-37. Unemployed persons by sex and age, seasonally adjusted

(In thousands)

Sex and age	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Total, 16 years and over	6,892	6,807	6,668	6,800	6,523	6,624	6,797	6,614	6,518	6,563	6,554	6,716	6,328
16 to 24 years	2,531	2,612	2,518	2,513	2,394	2,465	2,476	2,457	2,429	2,363	2,421	2,663	2,316
16 to 19 years	1,243	1,293	1,256	1,243	1,149	1,227	1,253	1,253	1,194	1,122	1,179	1,323	1,168
16 to 17 years	588	578	580	536	527	571	605	650	559	520	535	581	572
18 to 19 years	665	714	658	700	642	628	660	615	629	599	637	751	605
20 to 24 years	1,288	1,319	1,262	1,270	1,245	1,238	1,223	1,204	1,235	1,241	1,242	1,340	1,148
25 years and over	4,377	4,171	4,144	4,253	4,146	4,143	4,334	4,179	4,061	4,193	4,125	4,101	4,026
25 to 54 years	3,887	3,742	3,696	3,765	3,675	3,702	3,828	3,733	3,651	3,739	3,687	3,632	3,559
55 years and over	485	443	460	498	450	457	475	436	419	433	457	474	466
Men, 16 years and over	3,702	3,777	3,596	3,737	3,542	3,520	3,754	3,589	3,593	3,612	3,583	3,710	3,540
16 to 24 years	1,340	1,403	1,321	1,352	1,302	1,331	1,351	1,329	1,376	1,274	1,280	1,494	1,302
16 to 19 years	649	713	655	672	653	688	677	684	682	616	630	772	687
16 to 17 years	300	318	300	291	301	307	301	367	318	300	290	330	317
18 to 19 years	360	399	355	377	363	359	362	329	360	314	333	455	379
20 to 24 years	691	690	666	680	649	643	674	645	694	658	650	722	615
25 years and over	2,369	2,367	2,270	2,348	2,259	2,191	2,417	2,270	2,195	2,331	2,296	2,245	2,246
25 to 54 years	2,071	2,071	1,994	2,051	1,961	1,936	2,088	2,014	1,946	2,050	1,999	1,986	1,943
55 years and over	297	296	281	304	278	278	298	255	266	275	286	269	303
Women, 16 years and over	3,190	3,030	3,072	3,063	2,981	3,104	3,043	3,025	2,925	2,951	2,971	3,006	2,787
16 to 24 years	1,191	1,209	1,197	1,161	1,092	1,134	1,125	1,128	1,053	1,089	1,141	1,169	1,014
16 to 19 years	594	580	601	571	496	539	576	569	512	506	549	551	481
16 to 17 years	288	260	280	245	226	264	304	283	241	220	245	251	255
18 to 19 years	305	315	303	323	279	269	298	286	269	285	304	296	226
20 to 24 years	597	629	596	590	596	595	549	559	541	583	592	618	533
25 years and over	2,008	1,804	1,874	1,905	1,887	1,952	1,917	1,909	1,866	1,862	1,829	1,856	1,780
25 to 54 years	1,816	1,671	1,702	1,714	1,714	1,766	1,740	1,719	1,705	1,689	1,688	1,646	1,616
55 years and over	188	147	179	194	172	179	177	181	153	158	171	205	164

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-38. Unemployment rates by sex and age, seasonally adjusted

(Civilian workers)

Sex and age	1988												1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Total, 16 years and over	5.7	5.6	5.5	5.6	5.4	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1	
16 to 24 years	11.1	11.6	11.2	11.2	10.5	10.9	11.0	10.9	10.9	10.6	10.9	11.9	10.5	
16 to 19 years	15.5	16.4	15.8	15.6	14.1	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8	
16 to 17 years	17.7	17.7	17.7	16.7	15.9	17.5	18.5	19.6	17.2	15.8	16.6	18.3	18.2	
18 to 19 years	14.1	15.3	14.1	14.8	13.3	13.1	13.7	12.8	13.3	12.9	13.3	15.4	12.7	
20 to 24 years	8.7	9.0	8.7	8.8	8.5	8.5	8.4	8.4	8.6	8.7	8.7	9.3	8.1	
25 years and over	4.4	4.2	4.2	4.3	4.2	4.2	4.4	4.2	4.1	4.2	4.1	4.1	4.0	
25 to 54 years	4.7	4.5	4.4	4.5	4.4	4.4	4.5	4.4	4.3	4.4	4.3	4.2	4.2	
55 years and over	3.2	2.9	3.0	3.3	3.0	3.1	3.2	2.9	2.8	2.8	3.0	3.1	3.1	
Men, 16 years and over	5.5	5.7	5.4	5.6	5.3	5.3	5.6	5.4	5.4	5.4	5.3	5.5	5.2	
16 to 24 years	11.4	11.9	11.2	11.5	11.0	11.3	11.4	11.3	11.8	10.9	11.1	12.8	11.1	
16 to 19 years	15.8	17.4	15.9	16.3	15.4	16.3	16.0	16.4	16.5	14.8	15.4	18.6	16.7	
16 to 17 years	17.6	18.6	17.6	17.4	17.5	18.1	17.7	20.8	18.5	17.3	17.3	20.6	19.6	
18 to 19 years	14.9	16.6	14.7	15.3	14.3	14.4	14.5	13.5	15.0	13.0	13.5	17.9	15.1	
20 to 24 years	9.0	9.0	8.7	8.9	8.5	8.5	8.9	8.5	9.2	8.8	8.7	9.6	8.1	
25 years and over	4.3	4.3	4.1	4.3	4.1	4.0	4.4	4.1	4.0	4.2	4.1	4.0	4.0	
25 to 54 years	4.5	4.5	4.3	4.4	4.2	4.2	4.5	4.3	4.2	4.4	4.3	4.2	4.1	
55 years and over	3.4	3.4	3.2	3.5	3.2	3.2	3.4	2.9	3.0	3.2	3.3	3.0	3.4	
Women, 16 years and over	5.9	5.6	5.6	5.6	5.5	5.7	5.5	5.5	5.3	5.3	5.4	5.4	5.0	
16 to 24 years	10.9	11.2	11.1	10.9	10.0	10.5	10.4	10.5	9.9	10.3	10.7	10.9	9.7	
16 to 19 years	15.1	15.2	15.6	15.0	12.6	13.8	14.8	14.5	13.3	13.3	14.2	14.0	12.8	
16 to 17 years	17.7	16.7	17.7	16.0	14.1	16.8	19.2	18.2	15.8	14.1	15.8	15.9	16.8	
18 to 19 years	13.3	14.0	13.5	14.2	12.1	11.6	12.8	12.0	11.6	12.8	13.1	12.7	10.0	
20 to 24 years	8.5	9.0	8.6	8.6	8.6	8.6	8.0	8.2	7.9	8.6	8.7	9.1	8.0	
25 years and over	4.6	4.1	4.3	4.4	4.3	4.4	4.3	4.3	4.2	4.2	4.1	4.1	3.9	
25 to 54 years	4.9	4.5	4.6	4.6	4.6	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.2	
55 years and over	3.0	2.4	2.8	3.1	2.8	2.9	2.8	2.9	2.4	2.4	2.6	3.1	2.5	

A-39. Selected unemployment indicators, seasonally adjusted

(Unemployment rates)

Category	1988												1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
CHARACTERISTIC														
Total (all civilian workers)	5.7	5.6	5.5	5.6	5.4	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1	
Men, 20 years and over	4.9	4.9	4.7	4.9	4.6	4.5	4.9	4.6	4.6	4.8	4.7	4.6	4.5	
Women, 20 years and over	5.1	4.9	4.9	4.9	4.9	5.0	4.8	4.8	4.7	4.7	4.7	4.7	4.5	
Both sexes, 16 to 19 years	15.5	16.4	15.8	15.6	14.1	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8	
White	4.8	4.7	4.6	4.7	4.6	4.7	4.9	4.7	4.6	4.6	4.6	4.6	4.3	
Black and other	11.2	11.3	10.6	10.9	10.3	10.1	10.0	9.5	9.8	10.0	10.0	10.6	10.6	
Black	12.4	12.5	12.0	12.1	11.7	11.5	11.4	10.9	11.2	11.2	11.6	12.0	11.9	
Hispanic origin	8.3	8.3	9.0	8.8	8.7	8.1	8.4	7.5	7.8	8.0	7.6	8.4	6.8	
Married men, spouse present	3.4	3.4	3.1	3.3	3.2	3.1	3.4	3.1	3.1	3.3	3.1	3.1	3.1	
Married women, spouse present	4.0	4.0	3.8	3.9	3.9	4.0	4.0	3.8	3.7	3.8	3.7	3.6	3.4	
Women who maintain families	8.3	7.5	8.5	8.4	7.9	8.5	7.5	8.1	7.9	7.7	8.2	8.0	8.0	
Full-time workers	5.3	5.3	5.1	5.2	5.0	5.0	5.3	5.1	5.0	5.0	5.1	5.0	4.8	
Part-time workers	7.9	7.8	7.5	7.7	7.7	8.0	7.4	7.4	7.4	7.1	7.0	7.9	7.3	
Unemployed 15 weeks and over ¹	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	
Labor force time lost ²	6.6	6.5	6.2	6.4	6.3	6.4	6.4	6.3	6.1	6.2	6.3	6.2	5.9	
INDUSTRY														
Nonagricultural private wage and salary workers	5.7	5.6	5.4	5.6	5.4	5.4	5.6	5.4	5.4	5.5	5.4	5.6	5.1	
Goods-producing industries	6.8	6.5	6.5	6.5	6.2	6.3	6.7	6.4	6.4	6.4	6.4	6.4	6.1	
Mining	7.8	8.2	8.1	9.4	6.8	5.4	7.0	8.6	8.8	8.9	7.7	6.1	8.0	
Construction	10.9	10.6	10.6	10.5	10.3	10.4	10.7	9.6	10.0	10.6	10.4	10.4	10.0	
Manufacturing	5.6	5.2	5.3	5.3	4.9	5.2	5.5	5.4	5.3	5.1	5.2	5.3	4.9	
Durable goods	5.7	5.1	4.8	4.9	4.5	4.9	5.0	5.2	5.0	4.9	5.0	5.0	4.4	
Nondurable goods	5.4	5.4	5.9	5.9	5.5	5.6	6.3	5.8	5.7	5.3	5.5	5.7	5.5	
Service-producing industries	5.2	5.2	4.8	5.2	5.1	5.0	5.1	5.0	4.9	5.1	4.9	5.2	4.7	
Transportation and public utilities	3.8	4.1	3.8	4.2	4.1	3.6	3.8	3.8	3.5	4.0	3.8	3.8	3.9	
Wholesale and retail trade	6.3	6.7	5.9	6.3	6.0	6.2	6.4	6.2	6.0	6.2	6.3	6.3	5.6	
Finance and service industries	4.6	4.3	4.3	4.6	4.6	4.5	4.4	4.4	4.5	4.6	4.1	4.7	4.3	
Government workers	2.9	2.9	3.0	2.9	2.9	3.0	2.9	2.7	2.6	2.5	2.7	2.7	2.7	
Agricultural wage and salary workers	10.5	11.0	11.0	12.4	10.0	11.0	11.0	10.8	10.2	9.3	8.8	9.5	8.9	

¹ Unemployment as a percent of the civilian labor force.

² Aggregate hours lost by the unemployed and persons on part time

for economic reasons as a percent of potentially available labor force hours.

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

A-40. Unemployed persons by duration of unemployment, seasonally adjusted

(Numbers in thousands)

Weeks of unemployment	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
DURATION													
Less than 5 weeks	3,097	3,057	3,093	3,072	3,093	2,985	3,158	3,118	3,059	3,117	3,029	3,181	3,247
5 to 14 weeks	2,093	2,060	1,989	2,088	1,910	2,041	1,958	1,898	1,835	1,935	2,039	2,081	1,885
15 weeks and over	1,732	1,893	1,582	1,814	1,543	1,619	1,636	1,568	1,554	1,502	1,495	1,512	1,304
15 to 26 weeks	842	851	756	789	749	828	831	775	788	787	758	757	865
27 weeks and over	890	842	826	825	794	793	805	793	766	715	737	755	639
Average (mean) duration, in weeks	14.1	13.8	13.5	13.8	13.2	13.5	13.5	13.5	13.4	12.6	12.8	12.7	12.1
Median duration, in weeks	6.3	6.4	5.8	5.9	5.9	8.2	5.9	5.7	5.7	5.8	5.8	5.7	5.3
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	44.7	44.9	46.6	45.5	47.3	44.9	46.8	47.4	47.4	47.8	46.2	47.0	50.6
5 to 14 weeks	30.2	30.2	29.6	30.8	29.2	30.7	29.0	28.8	28.5	29.5	31.1	30.7	29.1
15 weeks and over	25.0	24.9	23.8	23.9	23.8	24.4	24.2	23.8	24.1	22.9	22.8	22.3	20.3
15 to 26 weeks	12.2	12.5	11.4	11.7	11.4	12.4	12.3	11.8	12.2	12.0	11.5	11.2	10.4
27 weeks and over	12.9	12.4	12.4	12.2	12.1	11.9	11.9	12.1	11.9	10.9	11.2	11.1	10.0

A-41. Unemployed persons by reason for unemployment, seasonally adjusted

(Numbers in thousands)

Reasons for unemployment	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
NUMBER OF UNEMPLOYED													
Job losers	3,182	3,131	2,968	3,201	3,070	3,085	3,112	3,079	2,951	3,031	3,066	3,121	2,876
On layoff	877	882	844	806	861	853	880	833	844	814	819	827	774
Other job losers	2,305	2,249	2,124	2,395	2,209	2,232	2,232	2,246	2,107	2,217	2,247	2,294	2,102
Job leavers	969	1,059	985	942	953	923	986	985	984	963	998	985	965
Reentrants	1,916	1,792	1,804	1,804	1,747	1,883	1,843	1,767	1,747	1,766	1,725	1,835	1,740
New entrants	855	871	886	811	800	799	800	761	747	799	799	780	765
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	46.0	45.7	44.7	47.4	46.7	46.1	48.2	46.7	45.9	46.2	46.5	46.4	45.2
On layoff	12.7	12.9	12.7	11.9	13.1	12.6	13.1	12.6	13.1	12.4	12.4	12.3	12.2
Other job losers	33.3	32.8	32.0	35.4	33.6	33.4	33.1	34.1	32.8	33.8	34.1	34.1	33.0
Job leavers	14.0	15.5	14.8	13.9	14.5	13.8	14.6	14.9	15.3	14.7	15.1	14.7	15.5
Reentrants	27.7	26.1	27.2	26.7	26.6	26.1	27.3	26.8	27.2	26.9	26.2	27.3	27.3
New entrants	12.4	12.7	13.3	12.0	12.2	11.9	11.9	11.5	11.6	12.2	12.1	11.8	12.0
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	2.6	2.8	2.4	2.6	2.5	2.5	2.6	2.5	2.4	2.5	2.5	2.5	2.3
On layoff .....	.8	.9	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
Other job losers	1.8	1.5	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.4
Job leavers .....	.7	.7	.7	.7	.7	.7	.7	.6	.6	.7	.7	.6	.6

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

B-1. Employees on nonagricultural payrolls by major industry, 1937 to date

(In thousands)

Year and month	Total	Total private	Goods-producing				Service-producing						Government		
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Federal	State	Local
Annual averages															
1937	31,011	27,255	12,936	1,015	1,127	10,794	18,075	3,134	(1)	(1)	1,417	3,503	(1)	(1)	(1)
1938	29,194	25,311	11,401	891	1,070	9,440	17,793	2,863	(1)	(1)	1,410	3,458	(1)	(1)	(1)
1939	30,603	26,608	12,297	854	1,165	10,278	18,306	2,936	1,762	4,664	1,447	3,502	905	(1)	(1)
1940	32,361	28,159	13,221	925	1,311	10,985	19,140	3,038	1,835	4,914	1,485	3,665	996	(1)	(1)
1941	36,539	31,877	15,963	957	1,814	13,192	20,574	3,274	1,960	5,251	1,525	3,905	1,340	(1)	(1)
1942	40,106	34,624	18,470	992	2,198	15,280	21,636	3,460	1,906	5,212	1,509	4,066	2,213	(1)	(1)
1943	42,434	36,356	20,114	925	1,587	17,602	22,320	3,647	1,822	5,160	1,481	4,130	2,905	(1)	(1)
1944	41,864	35,822	19,328	892	1,108	17,328	22,536	3,829	1,845	5,214	1,461	4,145	2,928	(1)	(1)
1945	40,374	34,431	17,507	836	1,147	15,524	22,867	3,906	1,949	5,365	1,481	4,222	2,808	(1)	(1)
1946	41,652	36,056	17,248	862	1,683	14,703	24,404	4,061	2,291	6,084	1,675	4,697	2,254	(1)	(1)
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,471	6,485	1,728	5,025	1,892	(1)	(1)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,605	6,667	1,800	5,181	1,863	(1)	(1)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,602	6,662	1,828	5,240	1,908	(1)	(1)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,635	6,751	1,888	5,357	1,928	(1)	(1)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,727	7,015	1,956	5,547	2,302	(1)	(1)
1952	48,793	42,185	20,198	898	2,668	16,632	28,595	4,248	2,812	7,192	2,035	5,699	2,420	(1)	(1)
1953	50,202	43,556	21,074	866	2,659	17,549	29,128	4,290	2,854	7,393	2,111	5,835	2,305	(1)	(1)
1954	48,990	42,238	19,751	791	2,646	16,314	29,239	4,084	2,867	7,368	2,200	5,969	2,188	(1)	(1)
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	2,926	7,610	2,298	6,240	2,187	1,168	3,558
1956	52,369	45,091	21,104	822	3,039	17,243	31,266	4,244	3,018	7,840	2,389	6,497	2,209	1,250	3,819
1957	52,853	45,239	20,964	828	2,962	17,174	31,889	4,241	3,028	7,858	2,438	6,708	2,217	1,328	4,071
1958	51,324	43,483	19,513	751	2,817	15,945	31,811	3,976	2,980	7,770	2,481	6,765	2,191	1,415	4,232
1959 ¹	53,268	45,186	20,411	732	3,004	16,675	32,857	4,011	3,082	8,045	2,549	7,087	2,233	1,484	4,366
1960	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	3,143	8,248	2,629	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,133	8,204	2,688	7,620	2,279	1,607	4,708
1962	55,549	46,660	20,451	650	2,948	16,853	35,098	3,906	3,198	8,368	2,754	7,982	2,340	1,668	4,881
1963	56,653	47,429	20,640	635	3,010	16,995	36,013	3,903	3,248	8,530	2,830	8,277	2,358	1,747	5,121
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	3,337	8,823	2,911	8,660	2,348	1,856	5,392
1965	60,765	50,689	21,926	632	3,232	18,062	38,839	4,036	3,466	9,250	2,977	9,036	2,378	1,996	5,700
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	3,597	9,648	3,058	9,498	2,564	2,141	6,080
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	3,689	9,917	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,160	4,318	3,779	10,320	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	3,907	10,798	3,512	11,169	2,758	2,533	6,904
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	3,993	11,047	3,645	11,548	2,731	2,664	7,158
1971	71,214	58,331	22,935	609	3,704	18,623	48,278	4,476	4,001	11,351	3,772	11,797	2,696	2,747	7,437
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	4,113	11,836	3,908	12,276	2,684	2,859	7,790
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	4,277	12,329	4,046	12,857	2,663	2,923	8,146
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	4,433	12,554	4,148	13,441	2,724	3,039	8,407
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	4,415	12,645	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,582	4,546	13,209	4,271	14,551	2,733	3,273	8,865
1977	82,471	67,344	24,346	813	3,851	19,682	58,125	4,713	4,708	13,808	4,467	15,303	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,969	14,573	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	5,204	14,989	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,275	15,035	5,160	17,890	2,866	3,610	9,765
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	5,358	15,189	5,298	18,619	2,772	3,640	9,619
1982	89,566	73,729	23,813	1,128	3,905	18,781	65,753	5,082	5,278	15,179	5,341	19,036	2,739	3,640	9,458
1983	90,200	74,330	23,334	952	3,948	18,434	66,866	4,954	5,268	15,613	5,468	19,694	2,774	3,662	9,434
1984	94,496	78,472	24,727	966	4,383	19,378	69,789	5,159	5,555	16,545	5,689	20,797	2,807	3,734	9,482
1985	97,519	81,125	24,859	927	4,673	19,260	72,660	5,238	5,717	17,356	5,955	22,000	2,875	3,832	9,687
1986	99,525	82,832	24,558	777	4,816	18,965	74,967	5,255	5,753	17,930	6,283	23,053	2,899	3,893	9,901
1987	102,310	85,295	24,784	721	4,998	19,065	77,525	5,385	5,872	18,509	6,549	24,196	2,943	3,963	10,109
1988	106,039	88,653	25,565	733	5,293	19,539	80,475	5,584	6,156	19,206	6,679	25,464	2,971	4,051	10,365
Monthly data, seasonally adjusted															
1988:															
February	104,729	87,475	25,271	731	5,150	19,390	79,458	5,513	6,035	19,045	6,636	24,975	2,972	4,014	10,268
March	105,020	87,700	25,330	733	5,192	19,405	79,690	5,530	6,061	19,050	6,651	25,078	2,970	4,031	10,319
April	105,281	87,973	25,435	737	5,238	19,460	79,846	5,543	6,089	19,093	6,650	25,163	2,963	4,041	10,304
May	105,489	88,139	25,466	739	5,237	19,490	80,023	5,556	6,115	19,130	6,656	25,216	2,957	4,050	10,343
June	106,057	88,678	25,592	740	5,308	19,544	80,465	5,582	6,148	19,205	6,679	25,472	2,951	4,049	10,379
July	106,271	88,941	25,663	740	5,330	19,593	80,608	5,598	6,174	19,261	6,684	25,561	2,951	4,059	10,320
August	106,425	89,066	25,639	739	5,340	19,560	80,786	5,605	6,192	19,279	6,689	25,662	2,956	4,070	10,333
September	106,737	89,205	25,648	734	5,365	19,549	81,089	5,618	6,219	19,291	6,692	25,737	2,989	4,086	10,457
October	106,973	89,481	25,743	729	5,366	19,648	81,230	5,631	6,246	19,327	6,708	25,826	2,989	4,070	10,433
November	107,419	89,855	25,849	722	5,413	19,714	81,570	5,658	6,275	19,401	6,725	25,947	2,989	4,074	10,501
December	107,641	90,100	25,889	719	5,430	19,740	81,752	5,670	6,301	19,429	6,741	26,070	2,990	4,071	10,480
1989:															
January ²	108,056	90,515	26,044	716	5,535	19,793	82,012	5,711	6,332	19,557	6,732	26,139	2,973	4,061	10,507
February ³	108,345	90,739	26,012	714	5,513	19,785	82,333	5,723	6,362	19,631	6,743	26,268	2,975	4,079	10,552

¹ Not available.

² Data include Alaska and Hawaii beginning in 1959. This inclusion resulted in an increase of 212,000 (0.4 percent) in the nonagricultural total for the March 1959 benchmark month.

³ = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1987) and all seasonally adjusted data (beginning January 1984) are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry

(In thousands)

Industry	1972 SIC- Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o
Total		106,039	102,802	108,491	106,523	106,939					
Total private		88,653	85,593	90,654	88,989	89,053	71,692	69,028	73,393	71,723	71,752
Mining		733	722	724	710	703	529	518	522	509	501
Metal mining	10	49.5	45.4	52.2	52.5		38.3	34.7	40.7	41.1	
Iron ores	101	7.2	6.7	7.6	7.6		5.8	5.2	6.2	6.2	
Copper ores	102	14.4	14.2	14.5	14.7		11.2	11.2	11.2	11.4	
Coal mining	11,12	154.3	159.0	150.9	150.2		126.0	130.1	123.6	123.0	
Bituminous coal and lignite mining	12	152.3	157.2	148.9	148.2		124.3	128.5	121.8	121.3	
Oil and gas extraction	13	417.1	418.0	410.0	402.7	396.9	279.4	278.8	273.4	267.1	
Crude petroleum, natural gas, and natural gas liquids ...	131,2	199.5	202.4	196.5	194.8	-	100.1	100.6	98.5	97.8	
Oil and gas field services	138	217.6	215.6	213.5	207.9	-	179.3	178.2	174.9	169.3	
Nonmetallic minerals, except fuels	14	111.7	99.8	110.4	104.3		85.2	74.4	83.9	77.5	
Crushed and broken stone	142	40.9	35.5	40.5	37.5		32.0	27.0	31.6	28.5	
Sand and gravel	144	34.3	29.2	33.1	30.2		-	-	-	-	
Chemical and fertilizer minerals	147	17.4	17.1	17.9	17.9	-	-	-	-	-	
Construction		5,293	4,642	5,376	5,053	4,956	4,133	3,529	4,183	3,861	3,762
General building contractors	15	1,396.1	1,276.6	1,415.6	1,348.3	1,316.2	1,020.6	910.7	1,033.9	964.1	
Residential building construction	152	752.4	677.7	763.8	731.2	-	538.7	470.4	546.3	510.4	
Operative builders	153	52.9	51.5	52.4	50.3		24.3	23.4	23.5	22.5	
Nonresidential building construction	154	590.8	547.4	599.4	566.8		457.6	416.9	464.1	431.2	
Heavy construction contractors	16	776.9	626.7	747.4	661.6		650.1	503.7	618.6	533.5	
Highway and street construction	161	280.9	194.0	252.1	203.3		232.0	148.3	202.8	154.9	
Heavy construction, except highway	162	496.1	432.7	495.3	458.3		418.1	355.4	415.8	378.6	
Special trade contractors	17	3,119.9	2,738.8	3,212.6	3,043.2		2,462.5	2,115.0	2,530.7	2,363.8	
Plumbing, heating, and air conditioning	171	670.2	632.8	696.6	680.0		496.3	463.7	517.2	501.0	
Painting, paper hanging, and decorating	172	179.7	155.9	178.6	167.1		151.0	128.5	149.4	137.2	
Electrical work	173	575.9	547.3	602.0	588.6		447.8	422.5	468.0	453.1	
Masonry, stonework, and plastering	174	521.0	436.9	537.0	507.6		447.9	367.8	460.5	431.5	
Carpentering and flooring	175	188.8	175.0	192.4	184.9		145.5	133.0	147.5	141.6	
Roofing and sheet metal work	176	213.1	177.4	221.0	203.1		168.7	134.3	175.2	158.4	
Manufacturing		19,539	19,231	19,769	19,656	19,654	13,338	13,101	13,507	13,403	13,414
Durable goods		11,516	11,332	11,681	11,626	11,617	7,677	7,531	7,803	7,756	7,756
Lumber and wood products	24	758.1	729.1	759.8	750.2	745.1	631.9	605.6	631.7	622.5	617.4
Logging camps and logging contractors	241	88.7	81.8	89.7	85.3	-	73.9	68.1	74.7	70.5	-
Sawmills and planing mills	242	204.3	199.9	205.8	204.4		179.7	175.3	180.4	178.7	
Sawmills and planing mills, general	2421	166.6	162.0	167.8	166.3		146.5	142.1	147.1	145.5	
Hardwood dimension and flooring	2426	34.3	34.8	34.5	34.7		30.2	30.7	30.3	30.4	
Millwork, plywood, and structural members	243	264.9	257.6	264.0	261.9		217.8	211.4	216.0	214.1	
Millwork	2431	102.7	98.5	101.4	101.6		82.7	78.7	81.3	81.7	
Wood kitchen cabinets	2434	70.4	69.9	70.7	69.8	-	56.3	56.1	56.3	55.5	
Hardwood veneer and plywood	2435	24.5	24.4	24.6	24.5		21.4	21.4	21.5	21.3	
Softwood veneer and plywood	2436	38.2	38.3	38.0	37.5		34.5	34.7	34.1	33.7	
Wood containers	244	43.4	41.0	42.0	41.7		36.8	34.6	35.6	35.3	
Wood buildings and mobile homes	245	72.2	65.5	73.6	71.8		54.6	48.3	56.0	54.5	
Mobile homes	2451	48.9	44.0	50.2	49.8		39.7	35.1	41.0	40.5	
Miscellaneous wood products	249	84.7	83.3	84.7	85.1		69.2	67.9	69.0	69.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o
Durable goods—Continued											
Furniture and fixtures	25	537.5	537.9	545.9	541.8	542.7	429.4	430.0	438.2	434.2	434.7
Household furniture	251	318.5	321.4	323.3	321.1	-	269.5	272.2	274.7	272.3	-
Wood household furniture	2511	144.3	145.0	146.1	144.5	-	126.1	126.5	128.0	126.4	-
Upholstered household furniture	2512	103.1	103.1	104.5	104.1	-	86.5	86.7	87.8	87.2	-
Metal household furniture	2514	27.0	29.3	27.9	28.6	-	21.9	24.1	22.8	23.5	-
Mattresses and bedsprings	2515	29.9	28.8	29.8	29.6	-	23.1	22.1	23.2	23.0	-
Office furniture	252	68.2	69.4	68.4	67.8	-	51.4	52.3	51.7	51.4	-
Public building and related furniture	253	30.4	29.1	31.3	31.3	-	23.6	22.4	24.7	24.5	-
Partitions and fixtures	254	77.6	76.5	78.1	77.5	-	56.2	55.1	56.9	56.3	-
Miscellaneous furniture and fixtures	259	42.8	41.5	44.8	44.1	-	28.6	28.0	30.2	29.7	-
Stone, clay, and glass products	32	586.9	563.1	585.7	571.7	569.5	456.6	433.7	454.8	443.1	441.6
Flat glass	321	14.9	14.8	15.5	15.3	-	11.7	11.6	12.4	12.2	-
Glass and glassware, pressed or blown	322	85.4	84.4	83.8	83.1	-	73.8	72.5	72.3	71.8	-
Glass containers	3221	43.2	42.9	41.5	41.1	-	39.1	38.6	37.5	37.2	-
Pressed and blown glass, nec	3229	42.3	41.5	42.3	42.0	-	34.7	33.9	34.8	34.6	-
Products of purchased glass	323	52.2	51.2	53.1	52.5	-	39.1	37.2	40.7	40.4	-
Cement, hydraulic	324	20.3	20.2	20.2	19.7	-	15.6	15.5	15.3	14.9	-
Structural clay products	325	38.7	37.9	38.7	37.9	-	30.4	29.5	30.5	29.5	-
Pottery and related products	326	38.0	37.3	39.0	38.6	-	30.4	29.8	31.5	30.9	-
Concrete, gypsum, and plaster products	327	210.7	193.6	206.7	197.2	-	162.0	146.5	157.1	149.5	-
Concrete block and brick	3271	20.4	19.1	20.0	18.2	-	13.3	12.4	12.8	11.6	-
Concrete products, nec	3272	71.9	68.1	71.7	70.3	-	54.6	51.1	54.1	53.4	-
Ready-mixed concrete	3273	99.4	87.4	96.0	89.6	-	79.4	68.3	75.5	69.8	-
Misc. nonmetallic mineral products	329	113.3	111.6	114.8	114.0	-	83.3	81.7	84.3	83.7	-
Abrasive products	3291	22.0	21.7	22.5	22.4	-	15.3	15.0	15.8	15.8	-
Asbestos products	3292	8.7	8.6	8.7	8.6	-	6.5	6.6	6.5	6.4	-
Mineral wool	3296	24.4	24.5	24.8	24.2	-	-	-	-	-	-
Primary metal industries	33	782.0	768.8	795.2	796.3	795.4	598.3	584.6	610.9	610.6	610.0
Blast furnaces and basic steel products	331	280.8	279.3	280.4	280.8	281.0	217.3	214.6	217.5	217.9	217.6
Blast furnaces and steel mills	3312	211.8	211.5	211.0	211.3	-	165.3	163.8	165.0	165.3	-
Steel pipe and tubes	3317	25.1	24.4	25.2	25.4	-	19.0	18.3	19.2	19.4	-
Iron and steel foundries	332	139.9	133.7	146.8	147.1	-	112.3	106.2	118.5	118.5	-
Gray iron foundries	3321	85.3	82.4	88.7	88.3	-	69.8	66.9	72.9	72.4	-
Malleable iron foundries	3322	9.2	8.9	9.6	9.7	-	6.9	6.6	7.3	7.4	-
Steel foundries, nec	3325	31.1	28.6	33.5	34.0	-	24.3	21.9	26.4	26.8	-
Primary nonferrous metals	333	41.9	41.3	42.6	42.9	-	30.9	30.1	31.9	31.6	-
Primary aluminum	3334	22.5	22.0	23.1	23.2	-	16.9	16.3	17.8	17.4	-
Nonferrous rolling and drawing	335	184.9	182.9	186.9	186.8	-	132.6	130.9	134.3	133.7	-
Copper rolling and drawing	3351	24.3	24.1	24.4	24.5	-	18.7	18.6	18.8	18.6	-
Aluminum sheet, plate, and foil	3353	27.9	28.0	27.9	28.1	-	19.3	19.7	18.9	19.0	-
Nonferrous wire drawing and insulating	3357	80.3	78.4	82.0	81.5	-	58.0	55.9	60.0	59.5	-
Nonferrous foundries	336	89.9	88.2	92.5	92.7	-	72.2	70.8	74.6	74.6	-
Aluminum foundries	3361	55.1	54.2	55.9	56.0	-	45.1	44.3	45.8	45.8	-
Fabricated metal products	34	1,455.1	1,428.6	1,484.5	1,481.0	1,482.1	1,084.3	1,061.6	1,107.5	1,104.7	1,104.7
Metal cans and shipping containers	341	54.6	54.3	53.3	53.5	-	46.8	46.1	45.9	46.0	-
Metal cans	3411	43.7	43.8	42.3	42.5	-	37.9	37.6	36.8	37.0	-
Cutlery, hand tools, and hardware	342	133.7	134.5	133.0	132.0	-	99.0	99.5	98.6	97.9	-
Hand and edge tools, and hand saws and blades	3423.5	46.4	46.7	46.0	45.8	-	33.9	34.4	33.5	33.3	-
Hardware, nec	3429	76.2	76.9	75.6	74.9	-	57.5	57.7	57.2	56.9	-
Plumbing and heating, except electric	343	63.5	62.3	65.1	64.4	-	45.9	44.7	47.6	46.7	-
Plumbing fittings and brass goods	3432	26.1	25.9	26.7	26.6	-	19.1	18.9	19.7	19.9	-
Heating equipment, except electric	3433	25.5	24.5	26.6	25.8	-	17.6	16.6	18.8	17.6	-
Fabricated structural metal products	344	440.2	429.7	449.6	447.0	-	316.2	307.1	323.5	321.9	-
Fabricated structural metal	3441	79.2	77.8	81.4	81.4	-	57.1	55.5	59.2	59.0	-
Metal doors, sash, and trim	3442	92.7	90.4	91.5	90.6	-	68.0	66.6	66.6	66.1	-
Fabricated plate work (boiler shops)	3443	91.9	88.6	96.1	96.0	-	61.6	58.4	65.2	65.3	-
Sheet metal work	3444	112.9	110.8	114.9	114.2	-	84.7	83.1	85.7	85.3	-
Architectural metal work	3446	31.3	30.3	33.1	32.8	-	23.3	22.6	24.7	24.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Fabricated metal products—Continued											
Screw machine products, bolts, etc	345	97.3	95.0	99.2	99.2		74.7	73.0	76.2	76.2	
Screw machine products	3451	50.1	48.4	51.2	51.3		41.1	39.8	42.0	42.0	
Bolts, nuts, rivets, and washers	3452	47.2	46.6	48.0	47.9		33.6	33.2	34.2	34.2	
Metal forgings and stampings	346	237.0	233.1	245.8	245.9		188.5	185.2	195.7	196.2	
Iron and steel forgings	3462	30.3	30.1	31.7	32.1		23.3	23.1	24.4	24.8	
Automotive stampings	3465	95.5	93.9	100.0	100.0		81.0	79.7	84.9	85.2	
Metal stampings, nec	3469	99.7	97.8	102.7	102.5		75.8	74.2	77.9	77.8	
Metal services, nec	347	119.1	116.2	124.0	123.4		95.6	93.4	99.6	98.5	
Plating and polishing	3471	77.3	75.2	80.5	79.8		62.5	60.9	65.1	64.1	
Metal coating and allied services	3479	41.8	41.0	43.5	43.6		33.1	32.5	34.5	34.4	
Ordnance and accessories, nec	348	78.0	78.6	76.3	76.7		48.8	48.3	47.5	48.0	
Ammunition, except for small arms, nec	3483	42.9	43.8	41.6	42.1		24.0	24.1	23.0	23.6	
Misc. fabricated metal products	349	231.7	224.9	238.2	238.9		168.8	164.3	172.9	173.3	
Valves and pipe fittings	3494	87.3	83.9	90.7	91.1		59.1	56.9	61.0	61.2	
Misc. fabricated wire products	3496	55.5	54.9	56.6	57.3		42.5	42.3	43.5	44.3	
Machinery, except electrical	35	2,137.8	2,084.7	2,193.9	2,196.4	2,204.8	1,278.5	1,245.2	1,318.3	1,323.3	1,333.1
Engines and turbines	351	88.1	88.7	90.3	90.1	-	58.5	58.8	59.9	59.9	-
Turbines and turbine generator sets	3511	22.7	23.2	23.6	23.6		13.2	13.5	13.9	13.9	
Internal combustion engines, nec	3519	65.4	65.5	66.7	66.5		45.3	45.3	46.0	46.0	
Farm and garden machinery	352	104.3	101.7	107.1	108.5		74.2	71.4	77.6	78.9	
Farm machinery and equipment	3523	75.3	72.2	76.8	77.5		51.5	48.2	53.6	54.1	
Construction and related machinery	353	232.4	223.8	237.3	238.1		142.2	135.6	146.4	147.2	
Construction machinery	3531	83.7	80.7	85.2	86.0		52.2	50.0	53.2	53.5	
Mining machinery	3532	18.3	18.1	18.3	18.4		11.2	11.0	11.2	11.3	
Oil field machinery	3533	44.1	41.4	45.1	44.7		26.7	24.8	27.2	27.1	
Conveyors and conveying equipment	3535	33.5	32.7	33.8	33.7		17.9	17.2	18.5	18.7	
Industrial trucks and tractors	3537	26.5	25.9	27.1	27.3		18.3	18.1	18.8	18.9	
Metalworking machinery	354	299.9	293.2	310.6	311.8		215.2	209.8	224.7	226.1	
Machine tools, metal cutting types	3541	46.4	45.5	48.0	48.4		29.5	28.7	31.1	31.4	
Machine tools, metal forming types	3542	17.5	17.1	17.9	17.9		11.3	11.0	11.7	11.8	
Special dies, tools, jigs, and fixtures	3544	142.1	139.5	147.5	147.7		109.0	106.6	113.8	114.2	
Machine tool accessories	3545	55.5	53.5	57.7	58.0		39.6	38.1	41.3	41.6	
Power driven hand tools	3546	20.4	20.2	20.7	20.7		14.9	14.8	15.1	15.0	
Special industry machinery	355	172.4	166.3	178.3	178.5		103.6	99.4	107.8	107.5	
Food products machinery	3551	40.4	39.1	41.1	41.0		24.4	23.6	24.8	24.8	
Textile machinery	3552	21.0	20.6	21.3	21.3		14.0	13.8	14.3	14.1	
Printing trades machinery	3555	28.7	27.6	29.5	29.3		17.3	16.3	17.9	17.6	
General industrial machinery	356	257.4	251.8	262.8	263.1		166.3	162.3	170.8	170.9	
Pumps and pumping equipment	3561	45.5	44.3	46.5	47.0		26.5	25.7	27.2	27.2	
Ball and roller bearings	3562	42.5	41.5	43.6	43.5		33.0	32.1	34.1	34.0	
Air and gas compressors	3563	20.9	20.6	21.0	20.9		12.2	12.1	12.2	12.4	
Blowers and fans	3564	30.4	30.2	30.8	30.9		19.7	19.4	20.3	20.4	
Speed changers, drives, and gears	3566	20.3	19.6	20.8	21.1		14.0	13.4	14.4	14.6	
Power transmission equipment, nec	3568	17.6	17.0	18.1	18.0		11.9	11.5	12.4	12.3	
Office and computing machines	357	512.6	500.6	525.6	522.2		168.2	167.8	171.3	171.9	
Electronic computing equipment	3573	458.0	446.4	470.3	468.0		142.2	141.7	145.1	145.0	
Refrigeration and service machinery	358	181.2	177.3	182.9	183.7		130.7	127.0	132.5	132.5	
Refrigeration and heating equipment	3585	129.7	125.6	131.2	132.1		96.0	92.4	97.6	98.0	
Misc. machinery, except electrical	359	289.5	281.3	299.0	300.4		219.7	213.1	227.3	228.4	
Carburetors, pistons, rings, and valves	3592	31.9	31.7	32.1	32.2		25.3	25.3	25.3	25.4	
Machinery, except electrical, nec	3599	257.7	249.6	266.9	268.2		194.3	187.8	202.0	203.0	
Electrical and electronic equipment	36	2,120.4	2,113.3	2,131.8	2,122.3	2,110.9	1,249.8	1,242.8	1,262.0	1,254.5	1,250.3
Electric distributing equipment	361	110.2	109.1	113.2	112.9	-	78.8	78.2	80.7	80.0	-
Transformers	3612	50.0	49.3	51.4	51.1		36.1	35.5	37.2	36.8	
Switchgear and switchboard apparatus	3613	60.2	59.8	61.8	61.8		42.7	42.7	43.5	43.2	
Electrical industrial apparatus	362	187.0	184.7	189.2	189.3		129.7	127.3	131.6	131.7	
Motors and generators	3621	89.4	88.6	90.1	90.2		69.8	68.3	70.5	70.8	
Industrial controls	3622	62.0	61.4	62.9	62.9		36.1	35.5	37.0	37.0	
Household appliances	363	136.6	138.1	136.9	136.1		109.9	110.7	111.1	110.3	
Household refrigerators and freezers	3632	29.2	30.1	27.5	28.0		23.8	24.7	22.5	22.7	
Household laundry equipment	3633	22.6	22.2	23.0	22.9		18.3	17.8	18.8	18.7	
Electric housewares and fans	3634	36.2	35.1	36.9	36.1		28.6	27.3	29.4	28.8	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Electrical and electronic equipment—Continued											
Electric lighting and wiring equipment	364	193.0	193.1	195.7	196.2	-	139.9	140.2	142.3	142.3	-
Electric lamps	3641	25.3	25.3	25.1	25.3	-	21.6	21.6	21.3	21.4	-
Current-carrying wiring devices	3643	75.2	75.7	75.1	75.4	-	49.3	49.9	48.9	49.1	-
Noncurrent-carrying wiring devices	3644	15.7	15.7	16.2	16.4	-	11.6	11.5	12.1	12.2	-
Residential lighting fixtures	3645	27.7	27.5	28.7	28.4	-	20.9	20.8	21.8	21.5	-
Radio and TV receiving equipment	365	83.2	81.7	87.4	87.0	-	57.5	55.6	61.8	61.5	-
Radio and TV receiving sets	3651	62.9	62.1	66.9	66.5	-	42.1	41.5	45.9	45.7	-
Communication equipment	366	597.1	607.9	582.2	579.5	-	249.9	254.0	240.2	240.2	-
Telephone and telegraph apparatus	3661	117.1	117.6	113.6	112.7	-	69.3	68.0	68.0	68.3	-
Radio and TV communication equipment	3662	480.0	490.3	468.6	466.8	-	180.6	186.0	172.2	171.9	-
Electronic components and accessories	367	660.8	647.8	671.2	665.4	-	376.1	370.3	382.9	377.3	-
Electronic tubes	3671-3	38.4	38.0	38.4	38.4	-	24.7	24.2	24.7	24.9	-
Semiconductors and related devices	3674	264.4	255.2	270.7	268.2	-	104.3	99.6	107.5	105.7	-
Electronic components, nec	3679	280.8	279.8	283.3	280.9	-	189.6	190.5	191.8	188.8	-
Misc. electrical equipment and supplies	369	152.7	150.9	156.0	155.9	-	107.9	106.5	111.4	111.2	-
Storage batteries	3691	29.5	28.6	30.3	29.7	-	22.5	22.2	23.1	22.7	-
Engine electrical equipment	3694	67.1	67.2	68.9	68.9	-	51.3	50.9	53.1	52.9	-
Transportation equipment	37	2,042.0	2,032.2	2,071.6	2,061.6	2,055.9	1,275.1	1,274.0	1,297.1	1,287.9	1,282.7
Motor vehicles and equipment	371	849.7	831.1	872.8	862.0	858.9	662.2	644.4	683.7	672.4	668.0
Motor vehicles and car bodies	3711	357.5	348.0	371.5	363.9	-	268.7	259.0	281.4	273.8	-
Truck and bus bodies	3713	43.1	41.6	42.1	41.8	-	33.6	32.1	32.8	32.4	-
Motor vehicle parts and accessories	3714	396.9	393.5	406.5	404.3	-	318.7	316.1	327.6	325.3	-
Truck trailers	3715	32.3	29.8	32.5	31.8	-	25.5	23.0	26.0	25.1	-
Aircraft and parts	372	698.7	707.6	701.5	702.6	-	341.0	352.6	342.9	342.9	-
Aircraft	3721	368.8	369.3	373.4	374.8	-	162.2	165.9	164.4	164.5	-
Aircraft engines and engine parts	3724	149.6	155.0	148.1	148.3	-	74.1	79.0	74.9	75.4	-
Aircraft equipment, nec	3728	180.3	183.3	180.0	179.5	-	104.7	107.7	103.6	103.0	-
Ship and boat building and repairing	373	193.3	195.6	192.1	191.8	-	144.9	149.7	139.8	140.8	-
Ship building and repairing	3731	127.1	131.2	127.6	126.2	-	90.6	97.2	86.0	85.7	-
Boat building and repairing	3732	66.2	64.4	64.5	65.6	-	54.3	52.5	53.8	55.1	-
Railroad equipment	374	31.8	28.5	35.9	36.1	-	23.3	20.4	26.9	27.1	-
Guided missiles, space vehicles, and parts	376	205.7	206.5	206.5	205.9	-	61.5	64.3	61.6	61.6	-
Guided missiles and space vehicles	3761	153.9	154.6	154.9	154.3	-	43.9	47.1	43.8	43.7	-
Miscellaneous transportation equipment	379	51.1	50.8	50.4	50.3	-	34.1	34.2	33.5	33.9	-
Travel trailers and campers	3792	20.3	19.5	20.3	20.4	-	15.8	15.2	15.8	16.1	-
Instruments and related products	38	713.2	702.9	728.0	728.1	728.2	393.9	385.9	404.6	403.3	403.9
Engineering and scientific instruments	381	86.0	84.5	88.1	88.4	-	39.9	39.1	41.4	41.8	-
Measuring and controlling devices	382	235.9	235.5	238.3	238.3	-	134.3	132.5	136.8	136.6	-
Environmental controls	3822	41.6	41.9	41.5	41.4	-	27.5	27.4	27.9	27.8	-
Process control instruments	3823	53.4	52.6	55.1	55.1	-	28.7	28.2	29.6	29.5	-
Instruments to measure electricity	3825	100.7	100.8	100.7	100.7	-	50.7	49.5	51.4	51.4	-
Optical instruments and lenses	383	34.9	34.0	36.1	37.0	-	17.7	16.9	18.7	19.3	-
Medical instruments and supplies	384	199.1	193.3	206.2	205.9	-	120.8	117.2	125.1	124.2	-
Surgical and medical instruments	3841	97.4	94.5	100.2	100.6	-	56.4	54.4	58.4	58.4	-
Surgical appliances and supplies	3842	87.0	84.5	90.8	90.2	-	56.0	54.7	58.1	57.2	-
Ophthalmic goods	385	38.2	37.7	38.0	37.7	-	26.2	25.9	26.0	25.9	-
Photographic equipment and supplies	386	108.2	106.4	110.2	109.9	-	46.7	45.7	48.1	47.3	-
Watches, clocks, and watchcases	387	11.0	11.5	11.1	10.9	-	8.2	8.6	8.5	8.2	-
Miscellaneous manufacturing	39	382.9	371.1	384.3	376.6	382.2	278.9	267.7	277.8	271.6	277.1
Jewelry, silverware, and plated ware	391	55.7	54.4	57.5	55.2	-	39.1	37.7	40.6	38.8	-
Jewelry, precious metal	3911	39.2	38.2	40.6	39.2	-	27.4	26.3	28.6	27.5	-
Musical instruments	393	12.5	12.5	12.7	12.6	-	10.4	10.4	10.4	10.4	-
Toys and sporting goods	394	104.7	98.9	103.3	101.4	-	78.3	73.6	75.5	73.9	-
Dolls, games, toys, and children's vehicles	3942,4	47.2	43.8	44.7	42.6	-	34.2	31.1	30.9	29.2	-
Sporting and athletic goods, nec	3949	57.5	55.1	58.6	58.8	-	44.1	42.5	44.6	44.7	-
Pens, pencils, office, and art supplies	395	33.4	32.9	32.9	32.8	-	23.5	22.8	23.0	22.7	-
Costume jewelry and notions	396	39.6	38.1	39.2	38.3	-	30.4	28.5	29.9	29.3	-
Costume jewelry	3961	20.8	20.3	21.1	20.8	-	15.9	15.3	16.1	15.6	-
Miscellaneous manufactures	399	137.1	134.3	138.7	136.3	-	97.3	94.7	98.4	96.5	-
Signs and advertising displays	3993	60.4	59.6	61.9	60.7	-	41.7	40.9	43.1	42.0	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a
Nondurable goods		8,023	7,899	8,088	8,030	8,037	5,662	5,570	5,704	5,647	5,658
Food and kindred products	20	1,645.3	1,597.9	1,646.5	1,614.4	1,603.0	1,166.3	1,123.4	1,168.0	1,138.8	1,128.7
Meat products	201	397.7	392.0	409.1	402.1	-	336.6	331.3	346.0	339.5	-
Meat packing plants	2011	142.2	140.6	145.6	145.0	-	119.1	118.2	121.8	121.3	-
Sausages and other prepared meats	2013	80.3	79.3	82.8	81.6	-	59.0	58.2	60.7	59.4	-
Poultry dressing plants	2016	154.6	151.2	159.3	154.2	-	140.1	136.2	144.5	139.8	-
Dairy products	202	164.3	160.8	163.1	160.9	-	99.2	96.5	98.6	97.5	-
Cheese, natural and processed	2022	42.9	41.8	43.8	42.6	-	32.8	31.9	33.5	32.4	-
Fluid milk	2026	80.8	80.0	80.4	79.5	-	40.0	39.4	40.2	40.0	-
Preserved fruits and vegetables	203	242.6	213.6	224.3	215.8	-	198.3	171.2	180.5	171.9	-
Canned specialties	2032	24.5	24.1	25.0	24.9	-	17.4	16.9	18.0	18.0	-
Canned fruits and vegetables	2033	80.6	64.0	67.6	66.4	-	66.7	51.0	54.1	53.0	-
Frozen fruits and vegetables	2037	46.1	37.5	41.2	36.7	-	40.4	31.9	35.8	31.1	-
Grain mill products	204	132.2	129.8	135.0	134.8	-	92.1	89.7	94.7	95.3	-
Flour and other grain mill products	2041	24.0	23.6	24.6	24.8	-	16.6	16.2	17.0	17.4	-
Prepared feeds, nec	2048	44.0	43.3	44.5	44.1	-	27.9	27.3	28.2	28.2	-
Bakery products	205	207.6	207.8	208.4	205.2	-	126.7	126.5	128.8	125.4	-
Bread, cake, and related products	2051	160.9	160.9	160.4	158.0	-	90.6	90.0	91.5	89.2	-
Cookies and crackers	2052	46.7	46.9	48.0	47.2	-	36.1	36.5	37.3	36.2	-
Sugar and confectionery products	206	97.2	97.0	105.9	99.7	-	76.7	76.5	84.3	78.9	-
Cane and beet sugar	2061-3	21.2	23.0	23.7	22.1	-	16.5	18.0	18.8	17.6	-
Confectionery products	2065	56.6	54.3	62.4	57.9	-	47.1	45.0	52.2	48.0	-
Fats and oils	207	34.5	34.4	34.7	34.9	-	25.4	25.5	25.8	25.5	-
Beverages	208	199.0	196.5	196.4	193.8	-	84.4	82.8	83.4	81.1	-
Malt beverages	2082	39.5	39.2	39.2	38.4	-	24.1	24.5	23.6	23.2	-
Bottled and canned soft drinks	2086	117.4	115.8	114.7	113.0	-	39.0	37.9	37.6	37.3	-
Misc. food and kindred products	209	170.3	166.0	169.6	167.2	-	126.9	123.4	125.9	123.7	-
Tobacco manufactures	21	52.9	57.0	56.0	54.3	52.3	39.6	43.9	42.5	40.5	38.7
Cigarettes	211	38.3	38.6	38.1	37.9	-	28.6	28.9	28.1	27.8	-
Textile mill products	22	725.8	728.5	722.9	721.7	721.5	629.6	632.7	626.6	625.1	625.6
Weaving mills, cotton	221	98.8	102.3	94.7	94.4	-	89.4	92.3	85.4	85.0	-
Weaving mills, synthetics	222	92.4	91.0	95.2	95.6	-	81.9	81.1	84.6	84.9	-
Weaving and finishing mills, wool	223	19.4	19.3	19.8	19.7	-	15.8	15.8	16.1	16.1	-
Narrow fabric mills	224	24.7	23.9	25.5	25.3	-	21.2	20.7	21.9	21.7	-
Knitting mills	225	207.5	207.0	205.0	204.1	-	183.2	182.6	180.9	179.5	-
Women's hosiery, except socks	2251	33.4	34.8	32.4	32.9	-	30.4	31.1	29.3	29.8	-
Hosiery, nec	2252	35.1	34.6	34.6	34.7	-	31.6	31.2	31.2	31.1	-
Knit outerwear mills	2253	68.9	67.7	67.8	66.8	-	61.5	60.6	60.5	59.5	-
Knit underwear mills	2254	25.5	25.5	25.3	25.0	-	21.6	21.7	21.5	21.0	-
Circular knit fabric mills	2257	25.6	25.9	25.9	25.9	-	22.4	22.6	22.5	22.6	-
Textile finishing, except wool	226	58.9	60.7	59.1	59.1	-	48.9	50.6	48.8	48.9	-
Finishing plants, cotton	2261	24.0	24.4	24.4	24.5	-	19.8	20.3	20.2	20.2	-
Finishing plants, synthetics	2262	21.3	22.2	21.2	21.1	-	17.2	18.1	17.1	17.1	-
Floor covering mills	227	58.9	58.1	59.8	59.9	-	47.6	47.2	48.8	48.9	-
Yarn and thread mills	228	110.8	112.2	109.2	109.1	-	99.1	100.4	97.4	97.3	-
Yarn mills, except wool	2281	82.1	82.8	81.0	81.0	-	74.3	75.0	73.0	73.0	-
Throwing and winding mills	2282	15.0	15.3	15.0	14.9	-	13.2	13.2	13.2	13.0	-
Miscellaneous textile goods	229	54.6	54.0	54.6	54.5	-	42.6	42.0	42.7	42.8	-
Apparel and other textile products	23	1,096.6	1,096.6	1,095.6	1,088.4	1,099.3	922.9	920.2	922.6	917.7	928.8
Men's and boys' suits and coats	231	58.3	58.0	58.8	58.3	-	50.4	49.9	50.6	50.1	-
Men's and boys' furnishings	232	310.3	312.3	307.3	307.2	-	267.8	269.2	265.0	265.3	-
Men's and boys' shirts and nightwear	2321	84.2	85.4	82.6	82.4	-	72.0	72.8	70.3	70.2	-
Men's and boys' separate trousers	2327	49.6	50.5	49.3	49.1	-	43.2	44.1	42.6	42.5	-
Men's and boys' work clothing	2328	95.4	97.0	93.7	94.1	-	83.4	84.9	81.7	82.5	-
Women's and misses' outerwear	233	345.2	345.7	341.0	341.2	-	287.9	287.0	284.7	285.4	-
Women's and misses' blouses and waists	2331	44.6	45.2	43.5	43.8	-	36.8	37.1	35.6	36.3	-
Women's and misses' dresses	2335	81.4	80.8	79.8	81.4	-	67.5	67.3	66.2	67.8	-
Women's and misses' suits and coats	2337	40.9	37.6	40.3	39.0	-	33.5	30.3	33.2	32.0	-
Women's and misses' outerwear, nec	2339	178.2	182.1	177.4	177.0	-	150.0	152.3	149.7	149.3	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	70.8	71.3	69.8	69.4		58.6	59.0	57.9	57.5	
Women's and children's underwear	2341	57.8	58.3	56.7	56.5		49.6	50.1	48.8	48.5	
Brassieres and allied garments	2342	13.0	13.0	13.1	12.9		9.0	8.9	9.1	9.0	
Children's outerwear	236	56.4	59.1	55.8	54.8		47.5	49.6	46.9	46.2	
Children's dresses and blouses	2361	23.8	25.4	23.5	23.0		20.7	22.1	20.4	20.0	
Misc. apparel and accessories	238	42.2	40.3	42.2	41.4		35.0	33.4	34.9	34.1	
Misc. fabricated textile products	239	195.4	192.8	201.6	197.5		161.5	158.6	167.5	164.2	
Curtains and draperies	2391	25.0	25.2	24.5	23.8		20.5	20.7	20.3	19.7	
House furnishings, nec	2392	54.7	54.2	56.7	54.9		46.4	46.0	47.9	46.2	
Automotive and apparel trimmings	2396	39.6	39.1	41.6	40.5		33.0	32.4	35.4	34.2	
Paper and allied products	26	689.3	682.0	693.4	687.9	687.2	521.6	516.8	523.2	518.4	518.2
Paper and pulp mills	261,2,6	191.9	190.5	191.4	190.0	-	146.0	145.0	145.3	144.2	-
Paper mills, except building paper	262	168.6	167.0	168.5	168.0		127.7	126.6	127.5	126.8	
Paperboard mills	263	53.6	53.7	53.4	53.4		40.8	40.7	40.9	40.9	
Misc. converted paper products	264	235.4	231.8	237.3	234.4		172.8	170.8	172.8	170.7	
Paper coating and glazing	2641	58.7	58.0	59.2	58.5		36.0	36.7	35.0	34.4	
Envelopes	2642	27.4	27.5	27.7	27.8		21.1	21.3	21.4	21.3	
Bags, except textile bags	2643	53.6	52.9	55.1	54.9		42.1	41.7	43.3	43.5	
Paperboard containers and boxes	265	208.5	206.0	211.3	210.1		162.1	160.3	164.2	162.6	
Folding paperboard boxes	2651	45.7	45.3	46.6	45.9		36.4	36.1	37.3	36.7	
Corrugated and solid fiber boxes	2653	112.9	112.2	114.1	114.2		85.2	85.0	85.8	85.7	
Sanitary food containers	2654	23.4	22.7	23.0	23.1		19.9	19.3	19.3	19.3	
Printing and publishing	27	1,564.7	1,536.5	1,598.5	1,595.3	1,598.8	875.9	861.5	895.0	888.3	890.6
Newspapers	271	477.8	476.0	482.4	480.0	-	172.1	173.3	172.8	170.6	-
Periodicals	272	127.7	125.2	131.1	130.7		46.4	47.1	47.4	46.7	
Books	273	113.2	111.9	116.3	116.2		60.3	60.3	61.8	61.9	
Book publishing	2731	84.0	83.3	85.2	86.0		37.0	37.7	37.0	38.1	
Book printing	2732	29.1	28.6	31.1	30.2		23.3	22.6	24.8	23.8	
Miscellaneous publishing	274	82.1	80.3	84.4	84.5		42.3	42.4	43.1	42.5	
Commercial printing	275	553.7	539.5	567.5	566.8		403.9	392.5	413.7	411.4	
Commercial printing, letterpress	2751	171.2	165.4	175.7	174.3		122.7	117.7	126.9	125.4	
Commercial printing, lithographic	2752	352.8	345.0	361.5	362.0		257.5	251.6	262.8	261.7	
Manifold business forms	276	51.4	50.7	52.1	52.2		35.3	35.0	35.8	35.9	
Blankbooks and bookbinding	278	79.0	75.8	82.5	83.0		62.4	60.3	64.9	64.7	
Printing trade services	279	56.0	54.3	57.6	58.0		41.4	40.5	42.9	42.8	
Chemicals and allied products	28	1,062.9	1,040.3	1,074.0	1,074.3	1,076.2	597.8	583.6	602.7	602.4	604.0
Industrial inorganic chemicals	281	133.0	132.8	133.0	133.4	-	67.0	66.8	66.4	66.5	-
Industrial inorganic chemicals, nec	2819	89.3	89.6	88.9	89.4		48.2	48.1	47.2	47.0	
Plastics materials and synthetics	282	169.9	167.8	172.2	173.1		111.5	109.6	113.2	113.9	
Plastics materials and resins	2821	78.5	76.9	79.7	79.9		46.2	44.6	46.9	46.9	
Organic fibers, noncellulosic	2824	63.9	63.3	64.9	65.3		45.3	44.5	46.4	46.8	
Drugs	283	228.5	220.9	233.6	233.3		103.0	101.0	105.0	104.0	
Pharmaceutical preparations	2834	181.4	175.9	185.2	184.7		80.1	79.1	81.6	80.8	
Soap, cleaners, and toilet goods	284	162.8	156.0	164.4	163.3		104.8	99.4	104.2	103.5	
Soap and other detergents	2841	45.1	44.9	45.4	45.0		28.0	27.8	28.1	28.2	
Polishing, sanitation, and finishing preparations	2842,3	43.3	42.2	44.6	45.0		24.9	23.9	25.4	25.7	
Toilet preparations	2844	74.4	68.9	74.4	73.3		52.0	47.7	50.7	49.6	
Paints and allied products	285	61.8	61.1	61.0	60.7		30.6	29.8	30.3	30.4	
Industrial organic chemicals	286	156.2	152.4	159.3	159.8		90.2	87.7	92.4	92.6	
Cyclic crudes and intermediates	2865	29.9	29.0	30.7	30.5		18.5	18.3	18.9	18.8	
Gum, wood, and industrial organic chemicals, nec	2861,9	126.3	123.4	128.6	129.3		71.7	69.4	73.5	73.8	
Agricultural chemicals	287	52.3	51.4	52.1	52.8		33.6	33.1	33.2	33.7	
Miscellaneous chemical products	289	98.4	97.9	98.4	97.9		57.1	56.2	58.0	57.8	
Petroleum and coal products	29	166.9	163.2	166.1	163.9	164.1	108.4	105.5	107.6	105.3	106.0
Petroleum refining	291	127.8	127.4	128.3	128.3	-	81.5	81.7	82.0	81.7	-
Paving and roofing materials	295	26.2	23.4	24.6	22.5		19.8	16.9	18.3	16.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Nondurable goods—Continued											
Rubber and misc. plastics products	30	872.5	852.4	890.4	885.7	891.5	679.2	662.6	695.9	691.8	698.7
Tires and inner tubes	301	86.4	85.8	87.1	86.8	-	62.8	61.1	64.9	65.1	-
Rubber and plastics footwear	302	12.4	12.5	11.8	11.7	-	10.3	10.3	9.8	9.7	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	24.5	23.5	25.8	25.5	-	18.2	17.2	19.2	19.0	-
Fabricated rubber products, nec	306	108.6	106.9	110.2	109.7	-	83.3	82.1	84.6	84.3	-
Miscellaneous plastics products	307	640.6	623.7	655.5	652.0	-	504.7	491.9	517.4	513.7	-
Leather and leather products	31	145.8	144.9	144.7	143.8	143.2	120.4	120.0	119.6	118.8	118.7
Leather tanning and finishing	311	14.3	14.2	14.8	14.7	-	11.9	11.7	12.4	12.3	-
Footwear, except rubber	314	86.1	86.8	85.3	84.8	-	73.3	74.0	72.5	71.8	-
Men's footwear, except athletic	3143	38.5	38.7	38.8	38.8	-	31.0	31.3	31.1	31.0	-
Women's footwear, except athletic	3144	29.7	30.9	28.8	28.7	-	26.2	27.3	25.6	25.4	-
Luggage	316	11.7	11.0	12.0	11.7	-	8.3	7.9	8.8	8.6	-
Handbags and personal leather goods	317	15.8	15.7	14.4	14.9	-	12.3	12.3	11.0	11.4	-
Transportation and public utilities		5,584	5,437	5,716	5,648	5,653	4,635	4,506	4,760	4,690	4,703
Transportation		3,336	3,210	3,470	3,401	3,406	-	-	-	-	-
Railroad transportation	40	300.5	293.3	297.5	292.0	-	-	-	-	-	-
Class I railroads ²	4011	259.3	254.6	255.5	250.0	-	-	-	-	-	-
Local and interurban passenger transit	41	307.1	312.3	322.1	322.2	-	282.1	287.6	295.8	295.9	-
Local and suburban transportation	411	115.0	111.8	117.8	118.0	-	104.7	101.8	106.8	107.0	-
Taxicabs	412	33.0	33.8	32.8	33.0	-	-	-	-	-	-
Intercity highway transportation	413	31.8	30.9	32.5	32.7	-	28.7	28.0	29.2	29.4	-
School buses	415	103.2	114.4	114.5	114.8	-	-	-	-	-	-
Trucking and warehousing	42	1,550.2	1,478.7	1,634.7	1,570.8	-	1,350.6	1,284.3	1,431.0	1,364.3	-
Trucking and trucking terminals	421,3	1,434.0	1,367.3	1,510.9	1,451.0	-	1,252.8	1,190.6	1,326.4	1,263.4	-
Public warehousing	422	116.2	111.4	123.8	119.8	-	97.7	93.7	104.6	100.9	-
Water transportation	44	181.6	173.7	179.7	180.5	-	-	-	-	-	-
Local water transportation	445	27.3	24.9	27.1	26.4	-	-	-	-	-	-
Water transportation services	446	101.6	96.5	99.6	103.4	-	-	-	-	-	-
Transportation by air	45	648.8	622.6	674.3	672.2	-	-	-	-	-	-
Air transportation	451,2	569.4	545.7	591.5	589.4	-	-	-	-	-	-
Air transportation services	458	79.4	76.9	82.8	82.8	-	-	-	-	-	-
Pipe lines, except natural gas	46	16.5	17.9	16.3	16.3	-	11.5	12.9	11.4	11.4	-
Transportation services	47	331.4	311.5	345.8	346.8	-	-	-	-	-	-
Freight forwarding	471	69.0	65.6	72.8	73.2	-	-	-	-	-	-
Communication and public utilities		2,248	2,227	2,246	2,247	2,247	-	-	-	-	-
Communication	48	1,312.2	1,300.3	1,313.0	1,314.9	-	991.7	982.6	995.1	997.6	-
Telephone communication	481	908.3	906.5	902.4	903.6	-	666.6	667.3	662.9	664.0	-
Radio and television broadcasting	483	244.5	240.1	248.2	247.8	-	201.1	196.4	205.4	206.1	-
Radio broadcasting	4832	117.1	115.3	118.8	119.8	-	-	-	-	-	-
Television broadcasting	4833	127.4	124.8	129.4	128.0	-	-	-	-	-	-
Electric, gas, and sanitary services	49	935.7	926.2	933.2	931.7	-	740.0	731.7	736.4	735.7	-
Electric services	491	445.9	443.7	442.8	441.3	-	340.0	338.0	337.2	336.9	-
Gas production and distribution	492	167.0	165.2	166.2	165.8	-	131.9	129.9	130.8	130.5	-
Combination utility services	493	203.0	203.2	201.4	202.3	-	166.5	167.2	164.4	165.1	-
Sanitary services	495	92.2	87.4	95.0	94.7	-	79.8	75.5	82.3	81.8	-
Wholesale trade		6,156	5,965	6,313	6,285	6,306	4,955	4,780	5,081	5,046	5,058
Durable goods	50	3,666	3,537	3,783	3,777	3,792	2,926	2,808	3,024	3,014	-
Motor vehicles and automotive equipment	501	451.7	439.9	458.6	458.6	-	362.8	352.1	369.1	368.5	-
Automobiles and other motor vehicles	5012	118.9	114.9	121.9	122.5	-	-	-	-	-	-
Automotive parts and supplies	5013	302.0	294.9	305.4	305.1	-	-	-	-	-	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Feb. 1989 ^o
Wholesale trade—Continued											
Durable goods—Continued											
Furniture and home furnishings	502	145.6	145.3	148.7	147.6		117.5	117.9	120.3	119.2	
Furniture	5021	65.0	64.4	65.5	65.9		-	-	-	-	
Home furnishings	5023	80.6	80.9	83.2	81.7		-	-	-	-	
Lumber and construction materials	503	273.0	246.7	296.2	293.7		223.2	200.9	242.1	239.1	
Lumber, plywood, and millwork	5031	124.4	113.2	134.5	135.2		-	-	-	-	
Construction materials, nec	5039	148.6	133.5	161.7	158.5		-	-	-	-	
Sporting goods, toys, and hobby goods	504	89.1	86.1	93.8	92.3		72.9	70.6	75.9	73.6	
Metals and minerals, except petroleum	505	145.9	140.3	152.2	152.6		115.6	110.6	120.5	121.1	
Electrical goods	506	525.2	508.6	545.9	544.9		402.9	387.2	420.8	418.9	
Electrical apparatus and equipment	5063	292.1	280.6	304.5	305.5		-	-	-	-	
Electrical appliances, TV and radios	5064	69.2	68.0	71.9	70.3		-	-	-	-	
Electronic parts and equipment	5065	164.0	160.0	169.5	169.1		-	-	-	-	
Hardware, plumbing, and heating equipment	507	271.7	267.0	275.6	275.0		219.5	216.0	222.6	222.7	
Hardware	5072	93.0	92.2	93.9	93.1		-	-	-	-	
Plumbing and hydronic heating supplies	5074	112.6	111.1	114.8	114.9		-	-	-	-	
Machinery, equipment, and supplies	508	1,550.0	1,498.7	1,588.6	1,589.5		1,239.4	1,188.2	1,272.6	1,271.7	
Commercial machines and equipment	5081	578.5	567.1	589.8	588.6		-	-	-	-	
Construction and mining machinery	5082	81.9	79.0	84.2	84.4		-	-	-	-	
Farm machinery and equipment	5083	121.0	113.8	121.8	121.9		-	-	-	-	
Industrial machinery and equipment	5084	323.0	309.0	333.1	332.6		-	-	-	-	
Industrial supplies	5085	137.5	133.2	142.3	142.7		-	-	-	-	
Professional equipment and supplies	5086	190.0	183.4	195.3	196.3		-	-	-	-	
Miscellaneous durable goods	509	214.0	204.3	223.2	222.3		172.6	164.4	180.2	178.7	
Scrap and waste materials	5093	99.0	92.8	104.2	104.1		-	-	-	-	
Nondurable goods	51	2,490	2,428	2,530	2,508	2,514	2,029	1,972	2,057	2,032	
Paper and paper products	511	211.8	208.0	216.4	217.0	-	171.7	168.1	174.8	175.5	
Drugs, proprietaries, and sundries	512	175.9	171.9	182.6	181.5		147.8	144.0	153.8	152.9	
Apparel, piece goods, and notions	513	202.8	197.9	207.2	205.5		156.0	150.3	160.7	158.2	
Groceries and related products	514	800.3	783.5	810.4	800.8		675.7	660.6	680.6	670.7	
Groceries, general line	5141	256.7	252.0	261.2	261.6		-	-	-	-	
Meats and meat products	5147	64.9	65.0	66.5	66.0		-	-	-	-	
Fresh fruits and vegetables	5148	101.7	94.8	103.3	100.4		-	-	-	-	
Chemicals and allied products	516	132.9	130.4	134.8	135.0		98.1	96.4	98.2	97.4	
Petroleum and petroleum products	517	203.9	200.1	206.9	205.9		159.4	155.8	162.0	161.3	
Petroleum bulk stations and terminals	5171	87.5	85.2	89.5	89.4		-	-	-	-	
Petroleum products, nec	5172	116.4	114.9	117.4	116.5		-	-	-	-	
Beer, wine, and distilled beverages	518	155.2	151.5	157.1	155.1		127.3	123.9	128.6	126.0	
Beer and ale	5181	97.3	93.5	97.8	97.0		-	-	-	-	
Wines and distilled beverages	5182	57.9	58.0	59.3	58.1		-	-	-	-	
Miscellaneous nondurable goods	519	480.3	458.4	488.7	485.2		389.6	370.7	396.0	391.3	
Farm supplies	5191	158.7	146.9	157.4	157.7		-	-	-	-	
Retail trade		19,206	18,639	20,070	19,264	19,101	17,019	16,526	17,823	17,032	16,851
Building materials and garden supplies	52	764.2	720.3	756.7	730.5		632.2	592.6	624.9	599.4	
Lumber and other building materials	521	416.8	400.0	409.8	400.6		350.2	334.8	343.3	334.4	
Hardware stores	525	164.5	157.9	168.5	164.4		136.5	130.9	140.0	136.0	
General merchandise stores	53	2,539.6	2,589.2	2,857.2	2,644.5	2,517.2	2,351.8	2,416.5	2,655.5	2,440.3	
Department stores	531	2,113.5	2,171.7	2,365.5	2,200.3	-	1,970.2	2,043.8	2,210.5	2,041.5	
Variety stores	533	247.0	245.8	272.2	250.4		225.5	223.4	250.4	229.5	
Misc. general merchandise stores	539	179.1	171.7	219.5	193.8		156.1	149.3	194.6	169.3	
Food stores	54	3,088.8	2,995.3	3,243.3	3,176.1	3,166.5	2,840.8	2,751.6	2,988.5	2,925.9	
Grocery stores	541	2,725.1	2,646.3	2,842.5	2,803.9	-	2,519.9	2,442.3	2,632.8	2,597.5	
Meat markets and freezer provisioners	542	59.0	58.1	62.4	60.6		-	-	-	-	
Dairy products stores	545	26.2	25.1	32.5	27.6		-	-	-	-	
Retail bakeries	546	178.0	175.6	184.1	178.3		161.0	159.7	166.3	161.1	
Automotive dealers and service stations	55	2,078.5	2,014.9	2,095.1	2,085.2	2,085.4	1,737.3	1,683.7	1,748.9	1,740.3	
New and used car dealers	551.2	1,011.0	986.0	1,019.5	1,017.6	-	837.4	816.0	843.7	844.3	
Auto and home supply stores	553	330.3	323.5	333.8	329.7		267.3	262.1	269.0	264.4	
Gasoline service stations	554	631.0	612.9	637.6	634.3		548.0	532.8	554.3	550.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Retail trade—Continued											
Apparel and accessory stores	56	1,107.2	1,114.7	1,220.2	1,127.7	-	936.9	947.7	1,042.8	951.9	-
Men's and boys' clothing and furnishings	561	104.9	108.5	114.3	106.6	-	85.5	89.4	94.1	86.9	-
Women's ready-to-wear stores	562	383.4	384.1	413.5	386.8	-	323.7	327.0	352.8	325.7	-
Family clothing stores	565	262.1	264.1	308.7	268.6	-	228.6	230.5	272.0	234.3	-
Shoe stores	566	220.9	221.1	235.2	225.6	-	183.8	183.3	197.1	187.4	-
Furniture and home furnishings stores	57	825.5	829.7	854.7	834.0	-	677.3	686.4	704.6	684.1	-
Furniture and home furnishings stores	571	459.5	456.5	476.0	467.8	-	374.8	375.6	389.8	381.6	-
Furniture stores	5712	285.5	283.6	293.5	290.7	-	-	-	-	-	-
Household appliance stores	572	89.5	90.5	85.2	82.9	-	75.7	77.6	71.2	69.2	-
Radio, television, and music stores	573	276.5	282.7	293.5	283.3	-	226.7	233.2	243.6	233.3	-
Radio and television stores	5732	198.4	205.8	208.5	202.8	-	-	-	-	-	-
Music stores	5733	78.1	76.9	85.0	80.5	-	-	-	-	-	-
Eating and drinking places	58	6,360.0	5,968.3	6,390.5	6,168.7	6,213.5	5,789.5	5,417.5	5,808.3	5,594.4	-
Miscellaneous retail	59	2,441.9	2,406.5	2,652.0	2,496.9	-	2,053.2	2,030.1	2,249.0	2,095.7	-
Drug stores and proprietary stores	591	591.8	595.8	609.3	599.6	-	504.2	508.6	519.2	510.5	-
Liquor stores	592	124.7	123.5	130.2	126.7	-	-	-	-	-	-
Miscellaneous shopping goods stores	594	820.8	821.3	954.7	847.9	-	688.0	691.4	816.0	710.3	-
Sporting goods and bicycle shops	5941	145.3	147.2	162.1	152.3	-	-	-	-	-	-
Book stores	5942	80.5	81.4	89.0	84.2	-	-	-	-	-	-
Stationery stores	5943	77.4	76.4	80.1	78.7	-	-	-	-	-	-
Jewelry stores	5944	156.5	155.6	180.3	164.0	-	-	-	-	-	-
Gift, novelty, and souvenir shops	5947	164.9	153.8	185.2	165.4	-	-	-	-	-	-
Sewing, needlework, and piece goods	5949	61.5	61.7	65.3	62.7	-	-	-	-	-	-
Nonstore retailers	596	276.9	277.5	277.1	261.9	-	247.3	248.8	246.9	231.9	-
Mail order houses	5961	129.6	130.5	133.3	123.1	-	-	-	-	-	-
Merchandising machine operators	5962	90.0	90.0	90.7	89.4	-	-	-	-	-	-
Fuel and ice dealers	598	114.5	115.1	123.9	124.6	-	95.4	96.3	104.0	104.3	-
Retail stores, nec	599	422.8	386.6	462.7	443.7	-	342.5	313.4	378.1	358.5	-
Finance, insurance, and real estate³		6,679	6,579	6,720	6,678	6,675	4,843	4,779	4,855	4,813	4,800
Finance		3,305	3,300	3,318	3,313	3,308	-	-	-	-	-
Banking	60	1,736.0	1,732.6	1,744.6	1,743.2	-	1,241.4	1,242.4	1,245.6	1,244.3	-
Commercial and stock savings banks	602	1,560.2	1,560.8	1,564.2	1,562.2	-	1,112.2	1,115.8	1,112.7	1,111.2	-
State banks, Federal Reserve	6022	345.3	345.9	346.4	345.3	-	-	-	-	-	-
State banks, not Federal Reserve	6023,4	374.8	372.7	376.2	377.2	-	-	-	-	-	-
Mutual savings banks	603	85.5	84.8	86.4	87.0	-	-	-	-	-	-
Credit agencies other than banks	61	894.0	892.4	898.8	901.9	-	665.1	662.6	669.2	671.7	-
Savings and loan associations	612	393.9	399.2	393.3	393.5	-	298.6	302.3	297.3	297.4	-
Federal savings and loan associations	6122	221.7	221.4	222.4	222.1	-	-	-	-	-	-
State associations, insured	6123	167.5	172.9	166.3	166.7	-	-	-	-	-	-
Personal credit institutions	614	247.7	241.8	252.5	254.1	-	191.5	186.6	196.0	197.2	-
Business credit institutions	615	65.7	59.6	72.5	73.7	-	-	-	-	-	-
Mortgage bankers and brokers	616	164.2	169.2	158.9	158.9	-	-	-	-	-	-
Security, commodity brokers, and services	62	458.8	464.8	453.2	449.6	-	-	-	-	-	-
Security brokers and dealers	621	353.7	361.5	346.1	342.7	-	-	-	-	-	-
Holding and other investment offices	67	216.1	209.8	221.4	218.1	-	-	-	-	-	-
Insurance		2,075	2,049	2,099	2,093	2,097	-	-	-	-	-
Insurance carriers	63	1,451.0	1,437.3	1,465.0	1,460.1	-	968.2	962.8	975.2	968.3	-
Life insurance	631	593.4	591.3	595.4	595.7	-	355.9	357.7	356.2	354.5	-
Medical service and health insurance	632	204.1	200.7	209.4	209.8	-	165.0	162.0	169.2	170.4	-
Fire, marine, and casualty insurance	633	549.9	543.2	555.3	549.8	-	368.8	366.0	370.3	364.1	-
Title insurance	636	56.4	55.4	56.4	56.2	-	-	-	-	-	-
Insurance agents, brokers, and service	64	623.5	611.5	633.8	632.6	-	-	-	-	-	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Finance, insurance, and real estate—Continued											
Real estate, and combined real estate, insurance, etc		1,299	1,230	1,303	1,272	1,270					
Real estate	65	1,289.0	1,220.0	1,293.7	1,262.1						
Real estate operators and lessors	651	544.0	517.2	551.8	532.2						
Real estate agents and managers	653	553.9	531.1	555.3	547.3						
Subdividers and developers	655	158.2	139.6	153.4	150.0						
Combined real estate, insurance, etc	66	9.9	10.1	9.4	9.4						
Services		25,464	24,378	25,966	25,695	26,005	22,239	21,289	22,662	22,369	22,663
Hotels and other lodging places	70	1,589.2	1,451.8	1,567.6	1,547.2		-	-	-	-	
Hotels, motels, and tourist courts	701	1,537.6	1,415.5	1,526.8	1,506.5		1,371.5	1,258.1	1,357.1	1,335.1	
Personal services	72	1,208.3	1,208.2	1,211.7	1,247.6		-	-	-	-	
Laundry, cleaning, and garment services	721	414.4	408.0	419.3	416.7		368.5	363.2	372.0	369.5	
Photographic studios, portrait	722	55.9	54.8	58.7	52.3		-	-	-	-	
Beauty shops	723	358.0	355.5	360.8	358.6		319.7	319.3	322.0	319.2	
Funeral service and crematories	726	78.1	77.1	79.0	78.8		-	-	-	-	
Business services	73	5,477.6	5,239.4	5,627.3	5,494.8	5,517.6	4,680.4	4,473.1	4,804.2	4,663.7	
Advertising	731	215.1	214.1	219.5	218.3	-	160.1	159.4	163.7	160.9	
Advertising agencies	7311	158.6	157.6	161.3	161.3		-	-	-	-	
Credit reporting and collection	732	95.6	95.8	95.5	96.0		-	-	-	-	
Mailing, reproduction, and stenographic	733	239.0	226.2	257.4	256.5		-	-	-	-	
Services to buildings	734	720.7	701.5	722.2	711.3		652.0	634.1	654.8	642.2	
Personnel supply services	736	1,291.4	1,192.9	1,339.8	1,247.4		-	-	-	-	
Employment agencies	7361	191.4	182.3	195.1	186.2		-	-	-	-	
Temporary help supply services	7362	1,015.8	929.2	1,059.1	976.6		-	-	-	-	
Computer and data processing services	737	728.4	692.6	765.8	771.1		569.3	543.4	595.6	599.0	
Computer programming and software	7372	280.0	264.1	298.1	299.5		-	-	-	-	
Data processing services	7374	327.9	314.2	341.7	345.4		-	-	-	-	
Miscellaneous business services	739	2,177.5	2,107.0	2,216.3	2,183.3		-	-	-	-	
Research development laboratories, nec	7391	199.9	195.9	201.8	201.4		-	-	-	-	
Management and public relations	7392	614.0	595.0	621.3	610.2		-	-	-	-	
Detective and protective services	7393	469.5	453.9	478.8	470.4		-	-	-	-	
Equipment rental and leasing	7394	257.4	245.7	260.7	257.8		-	-	-	-	
Photofinishing laboratories	7395	80.3	78.9	84.1	78.0		-	-	-	-	
Auto repair, services, and garages	75	828.9	798.2	836.1	838.6		685.6	659.5	689.2	690.2	
Automotive rentals, without drivers	751	166.8	156.3	169.1	170.3		-	-	-	-	
Automotive repair shops	753	499.6	480.6	506.0	507.3		411.6	393.6	416.3	417.1	
Miscellaneous repair services	76	339.7	324.8	348.4	346.9		278.8	268.4	284.1	281.3	
Electrical repair shops	762	112.7	105.3	120.0	120.7		-	-	-	-	
Motion pictures	78	235.9	231.2	238.7	239.4		197.2	194.8	199.9	201.0	
Motion picture production and services	781	114.7	115.2	123.3	123.5		90.6	93.4	98.6	99.3	
Motion picture theaters	783	105.5	101.0	99.5	100.4		-	-	-	-	
Amusement and recreation services	79	931.3	782.5	874.1	839.6		795.1	674.2	751.2	718.1	
Health services	80	7,227.7	7,002.6	7,451.1	7,481.7	7,521.1	6,422.7	6,220.2	6,620.2	6,643.8	
Offices of physicians	801	1,138.4	1,093.4	1,185.6	1,194.8	-	933.4	895.6	972.8	979.5	
Offices of dentists	802	491.4	479.1	503.8	504.2		431.4	421.2	441.8	441.7	
Nursing and personal care facilities	805	1,326.7	1,302.2	1,350.2	1,350.7		1,197.9	1,174.6	1,219.3	1,219.7	
Skilled nursing care facilities	8051	888.3	873.2	903.7	903.3		-	-	-	-	
Nursing and personal care, nec	8059	438.4	429.0	446.5	447.4		-	-	-	-	
Hospitals	806	3,335.6	3,238.7	3,419.2	3,433.2		3,048.1	2,956.2	3,123.8	3,137.0	
General medical and surgical hospitals	8062	3,107.9	3,019.2	3,185.0	3,198.1		-	-	-	-	
Psychiatric hospitals	8063	81.7	78.1	83.8	84.0		-	-	-	-	
Specialty hospitals, excluding psychiatric	8069	146.0	141.4	150.4	151.1		-	-	-	-	
Medical and dental laboratories	807	148.7	141.0	157.5	159.2		-	-	-	-	
Outpatient care facilities	808	289.8	270.2	313.1	316.0		-	-	-	-	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry—Continued

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Services—Continued											
Legal services	81	827.0	802.1	846.6	845.7		691.1	671.2	704.1	703.8	
Educational services	82	1,491.6	1,445.5	1,605.0	1,498.3						
Elementary and secondary schools	821	373.9	380.1	388.9	388.5						
Colleges and universities	822	942.1	899.7	1,032.8	930.2						
Correspondence and vocational schools	824	79.9	78.8	82.5	80.6						
Social services	83	1,587.9	1,536.3	1,644.9	1,638.1						
Individual and family services	832	307.4	299.0	313.9	310.2						
Job training and related services	833	227.3	222.4	216.7	215.4						
Residential care	836	374.1	360.5	387.2	387.0						
Museums, botanical and zoological gardens	84	49.9	46.9	48.8	47.6						
Membership organizations	86	1,607.1	1,562.9	1,612.4	1,589.9						
Business associations	861	93.5	91.4	93.5	93.2						
Labor organizations	863	134.4	129.2	140.0	133.3						
Civic and social associations	864	384.2	353.1	384.7	370.4						
Miscellaneous services	89	1,396.4	1,356.0	1,423.6	1,440.0		1,125.2	1,096.6	1,138.2	1,151.6	
Engineering and architectural services	891	758.5	728.8	778.9	778.1		632.4	610.4	645.0	641.9	
Noncommercial research organizations	892	126.5	121.3	129.0	128.8		-	-	-	-	
Accounting, auditing, and bookkeeping	893	482.5	478.7	485.4	503.3		370.5	369.7	368.3	385.5	
Government		17,387	17,209	17,837	17,534	17,886					
Federal Government⁴		2,971	2,953	2,981	2,952	2,957					
Executive, by agency ⁴		2,911.9	2,894.6	2,923.0							
Department of Defense		964.1	980.7	957.6							
Postal Service ⁵		830.5	822.6	857.1							
Other executive agencies		1,117.3	1,091.3	1,108.3							
Legislative		37.9	37.6	37.3							
Judicial		20.8	20.3	21.0							
Federal government, by industry:											
Manufacturing activities		121.9	124.5	121.7	123.5						
Shipbuilding and repairing	3731	74.2	75.4	74.2	74.2						
Transportation and public utilities, except Postal											
Service		41.5	42.8	37.9	38.0						-
Services		427.8	424.9	434.5	431.3						
Hospitals	806	248.4	250.5	247.2	247.6						
State government		4,051	3,975	4,156	4,033	4,177					
Hospitals	806	445.1	440.1	447.3	446.1	-					
Education	82	1,618.1	1,593.0	1,727.4	1,598.3						
General administration, including executive, legislative, and judicial functions		1,439.4	1,405.2	1,438.7	1,445.1						
Local government		10,365	10,281	10,700	10,549	10,752					
Transportation and public utilities		494.6	492.4	496.4	498.3	-					
Hospitals	806	635.0	621.4	644.1	646.4						
Education	82	5,740.4	5,826.9	6,106.0	5,972.4						
General administration, including executive, legislative, and judicial functions		3,142.1	3,017.0	3,102.9	3,082.7						

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² Data relate to line haul railroads with operating revenues of \$50,000,000 or more.

³ Data for nonoffice sales agents are excluded from the nonsupervisory count for all series in this division.

⁴ Prepared by the Office of Personnel Management. Data relate to

civilian employment only and exclude the Central Intelligence Agency and the National Security Agency.

⁵ Includes rural mail carriers.

- Data not available.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1987 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
NOT SEASONALLY ADJUSTED**

B-3. Women employees on nonagricultural payrolls by major industry and manufacturing group

(In thousands)

Industry	Avg. 1988	Dec. 1987	Oct. 1988	Nov. 1988	Dec. 1988
Total	49,286	48,971	50,165	50,634	50,909
Total private	40,342	39,926	40,980	41,293	41,633
Goods-producing	7,100	7,015	7,210	7,224	7,202
Mining	98	96	98	98	98
Construction	570	541	590	590	589
Manufacturing	6,433	6,378	6,522	6,536	6,515
Durable goods	3,095	3,066	3,132	3,145	3,141
Lumber and wood products	123	120	124	124	123
Furniture and fixtures	167	168	169	170	170
Stone, clay, and glass products	118	116	119	119	119
Primary metal industries	107	105	108	109	109
Fabricated metal products	330	326	334	336	336
Machinery, except electrical	477	464	484	487	488
Electrical and electronic equipment	888	886	898	900	896
Transportation equipment	396	401	399	400	403
Instruments and related products	312	307	315	316	319
Miscellaneous manufacturing	178	174	183	183	178
Nondurable goods	3,337	3,312	3,390	3,391	3,374
Food and kindred products	526	518	553	543	528
Tobacco manufactures	18	19	19	19	19
Textile mill products	350	354	350	350	349
Apparel and other textile products	874	882	876	879	875
Paper and allied products	168	167	171	171	170
Printing and publishing	678	663	686	693	697
Chemicals and allied products	310	302	315	314	315
Petroleum and coal products	25	24	26	26	26
Rubber and misc. plastics products	303	297	308	309	310
Leather and leather products	86	87	87	87	85
Service-producing	42,186	41,956	42,955	43,410	43,707
Transportation and public utilities	1,618	1,585	1,649	1,653	1,660
Wholesale trade	1,843	1,796	1,891	1,902	1,913
Retail trade	10,185	10,455	10,304	10,522	10,772
Finance, insurance, and real estate	4,168	4,127	4,180	4,196	4,215
Services	15,428	14,948	15,746	15,796	15,871
Government	8,941	9,045	9,185	9,341	9,276
Federal	1,060	1,057	1,061	1,061	1,062
State	1,981	1,992	2,050	2,066	2,050
Local	5,900	5,996	6,074	6,214	6,164

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1987 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

B-4. Employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted

(In thousands)

Industry	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p	Feb. ^p
Total	104,729	105,020	105,281	105,489	106,057	106,271	106,425	106,737	106,973	107,419	107,641	108,056	108,345
Total private	87,475	87,700	87,973	88,139	88,678	88,941	89,066	89,205	89,481	89,855	90,100	90,515	90,739
Goods-producing	25,271	25,330	25,435	25,466	25,592	25,663	25,639	25,648	25,743	25,849	25,889	26,044	26,012
Mining	731	733	737	739	740	740	739	734	729	722	719	716	714
Oil and gas extraction	415	419	421	425	425	424	423	419	413	406	402	399	398
Construction	5,150	5,192	5,238	5,237	5,308	5,330	5,340	5,365	5,366	5,413	5,430	5,535	5,513
General building contractors	1,377	1,383	1,400	1,394	1,412	1,400	1,401	1,404	1,393	1,406	1,414	1,440	1,435
Manufacturing	19,390	19,405	19,460	19,490	19,544	19,593	19,560	19,549	19,648	19,714	19,740	19,793	19,785
Durable goods	11,404	11,411	11,459	11,477	11,515	11,566	11,547	11,537	11,595	11,637	11,651	11,688	11,674
Lumber and wood products	756	755	758	757	757	756	753	753	760	767	771	776	770
Furniture and fixtures	535	534	535	537	537	541	537	538	540	541	540	540	542
Stone, clay, and glass products	584	585	587	585	587	589	586	585	588	590	592	592	593
Primary metal industries	770	772	773	776	781	789	785	787	794	796	794	796	794
Blast furnaces and basic steel products	280	281	281	281	281	282	281	280	282	282	280	281	281
Fabricated metal products	1,438	1,439	1,444	1,448	1,457	1,464	1,458	1,460	1,469	1,474	1,479	1,487	1,490
Machinery, except electrical	2,091	2,099	2,111	2,121	2,134	2,151	2,156	2,159	2,173	2,185	2,190	2,196	2,203
Electrical and electronic equipment	2,112	2,115	2,117	2,115	2,120	2,122	2,126	2,124	2,126	2,130	2,123	2,120	2,115
Transportation equipment	2,031	2,025	2,045	2,048	2,047	2,052	2,044	2,032	2,045	2,050	2,051	2,066	2,050
Motor vehicles and equipment	837	835	848	851	850	857	855	849	859	860	858	871	857
Instruments and related products	705	705	706	709	713	715	718	716	719	721	726	729	729
Miscellaneous manufacturing	382	382	383	381	382	387	384	383	381	383	385	386	388
Nondurable goods	7,986	7,994	8,001	8,013	8,029	8,027	8,013	8,012	8,053	8,077	8,089	8,105	8,111
Food and kindred products	1,649	1,647	1,648	1,643	1,645	1,631	1,630	1,632	1,654	1,661	1,656	1,664	1,658
Tobacco manufactures	54	54	54	52	53	52	52	51	52	53	53	52	52
Textile mill products	732	729	727	728	727	726	719	722	722	723	722	725	724
Apparel and other textile products	1,104	1,106	1,100	1,100	1,097	1,096	1,089	1,087	1,086	1,093	1,096	1,096	1,100
Paper and allied products	686	687	687	689	691	692	691	688	691	691	692	691	691
Printing and publishing	1,544	1,548	1,554	1,559	1,565	1,567	1,572	1,575	1,581	1,583	1,592	1,597	1,599
Chemicals and allied products	1,049	1,052	1,056	1,060	1,065	1,067	1,070	1,069	1,071	1,073	1,076	1,081	1,082
Petroleum and coal products	165	164	165	166	167	167	167	168	169	169	168	167	168
Rubber and misc. plastics products	856	860	864	870	873	882	878	874	882	887	890	887	892
Leather and leather products	147	147	146	146	146	147	145	146	145	144	144	145	145
Service-producing	79,458	79,690	79,846	80,023	80,465	80,608	80,786	81,089	81,230	81,570	81,752	82,012	82,333
Transportation and public utilities	5,513	5,530	5,543	5,556	5,582	5,598	5,605	5,618	5,631	5,658	5,670	5,711	5,723
Transportation	3,272	3,285	3,298	3,308	3,332	3,345	3,351	3,366	3,380	3,407	3,422	3,453	3,465
Communication and public utilities	2,241	2,245	2,245	2,248	2,250	2,253	2,254	2,252	2,251	2,251	2,248	2,258	2,258
Wholesale trade	6,035	6,061	6,089	6,115	6,148	6,174	6,192	6,219	6,246	6,275	6,301	6,332	6,362
Durable goods	3,573	3,591	3,610	3,635	3,660	3,681	3,696	3,714	3,736	3,758	3,779	3,796	3,815
Nondurable goods	2,462	2,470	2,479	2,480	2,488	2,493	2,496	2,505	2,510	2,517	2,522	2,536	2,547
Retail trade	19,045	19,050	19,093	19,130	19,205	19,261	19,279	19,291	19,327	19,401	19,429	19,557	19,631
General merchandise stores	2,561	2,543	2,546	2,541	2,549	2,545	2,539	2,533	2,520	2,533	2,544	2,580	2,600
Food stores	3,029	3,044	3,049	3,053	3,080	3,097	3,106	3,110	3,143	3,157	3,177	3,195	3,202
Automotive dealers and service stations	2,047	2,055	2,064	2,070	2,076	2,088	2,095	2,095	2,103	2,106	2,106	2,108	2,115
Eating and drinking places	6,291	6,319	6,326	6,336	6,352	6,369	6,377	6,384	6,415	6,440	6,449	6,466	6,493
Finance, insurance, and real estate	6,636	6,651	6,650	6,656	6,679	6,684	6,689	6,692	6,708	6,725	6,741	6,732	6,743
Finance	3,305	3,306	3,302	3,299	3,304	3,300	3,298	3,300	3,308	3,314	3,325	3,320	3,325
Insurance	2,053	2,060	2,065	2,067	2,074	2,077	2,081	2,083	2,089	2,092	2,101	2,095	2,099
Real estate	1,278	1,285	1,283	1,290	1,301	1,307	1,310	1,309	1,311	1,319	1,315	1,317	1,319
Services	24,975	25,078	25,163	25,216	25,472	25,561	25,662	25,737	25,826	25,947	26,070	26,139	26,268
Business services	5,385	5,405	5,420	5,443	5,480	5,500	5,512	5,538	5,553	5,563	5,605	5,578	5,619
Health services	7,056	7,088	7,126	7,153	7,203	7,238	7,271	7,323	7,365	7,414	7,466	7,497	7,544
Government	17,254	17,320	17,308	17,350	17,379	17,330	17,359	17,532	17,492	17,564	17,541	17,541	17,606
Federal	2,972	2,970	2,963	2,957	2,951	2,951	2,956	2,989	2,989	2,989	2,990	2,973	2,975
State	4,014	4,031	4,041	4,050	4,049	4,059	4,070	4,086	4,070	4,074	4,071	4,061	4,079
Local	10,268	10,319	10,304	10,343	10,379	10,320	10,333	10,457	10,433	10,501	10,480	10,507	10,552

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987

benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

B-5. Women employees on nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted

(In thousands)

Industry	1987	1988											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total	48,240	48,396	48,615	48,772	48,865	48,999	49,306	49,371	49,491	49,658	49,739	49,994	50,146
Total private	39,425	39,573	39,767	39,881	39,969	40,075	40,357	40,459	40,549	40,646	40,743	40,941	41,111
Goods-producing	7,007	7,022	7,028	7,040	7,058	7,082	7,103	7,125	7,112	7,116	7,142	7,173	7,190
Mining	96	96	96	96	97	97	99	97	100	98	98	98	98
Construction	543	546	549	552	558	566	569	574	578	581	582	585	591
Manufacturing	6,368	6,380	6,383	6,392	6,403	6,419	6,435	6,454	6,434	6,437	6,462	6,490	6,501
Durable goods	3,056	3,059	3,062	3,067	3,077	3,085	3,096	3,112	3,107	3,106	3,114	3,124	3,130
Lumber and wood products	121	122	122	122	123	123	123	123	123	123	123	125	125
Furniture and fixtures	166	167	166	166	166	167	166	168	166	168	168	168	169
Stone, clay, and glass products	116	116	116	116	117	118	117	119	118	117	117	118	120
Primary metal industries	105	104	105	104	105	106	108	107	107	108	108	109	109
Fabricated metal products	324	325	325	326	327	329	331	333	332	331	332	334	334
Machinery, except electrical	463	466	467	469	471	473	476	480	482	483	485	488	487
Electrical and electronic equipment	881	882	882	885	886	885	890	891	891	890	893	893	890
Transportation equipment	399	396	393	393	396	397	397	398	396	394	397	397	400
Instruments and related products	306	306	308	308	308	309	311	313	314	314	315	315	318
Miscellaneous manufacturing	175	175	178	178	178	178	177	180	178	178	176	177	178
Nondurable goods	3,312	3,321	3,321	3,325	3,326	3,334	3,339	3,342	3,327	3,331	3,348	3,366	3,371
Food and kindred products	521	528	528	526	528	526	526	521	514	519	528	534	531
Tobacco manufactures	18	18	18	17	17	17	17	18	18	17	17	18	18
Textile mill products	354	353	353	352	350	351	351	351	347	347	347	348	348
Apparel and other textile products	883	881	879	880	875	877	874	874	868	867	867	873	875
Paper and allied products	167	167	167	167	167	167	168	169	169	169	169	170	170
Printing and publishing	660	664	666	669	672	673	677	679	683	683	687	689	694
Chemicals and allied products	303	303	304	305	307	309	311	311	313	313	315	315	315
Petroleum and coal products	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Rubber and misc. plastics products	296	296	296	298	300	303	304	307	304	304	305	308	309
Leather and leather products	86	87	86	87	86	86	86	87	85	86	86	85	85
Service-producing	41,233	41,374	41,587	41,732	41,807	41,917	42,203	42,246	42,379	42,542	42,597	42,821	42,956
Transportation and public utilities	1,576	1,580	1,588	1,599	1,602	1,610	1,625	1,625	1,632	1,630	1,634	1,643	1,650
Wholesale trade	1,785	1,795	1,802	1,813	1,813	1,826	1,838	1,848	1,854	1,864	1,874	1,887	1,902
Retail trade	9,972	10,056	10,127	10,123	10,130	10,161	10,192	10,198	10,218	10,232	10,232	10,265	10,279
Finance, insurance, and real estate	4,131	4,139	4,139	4,147	4,141	4,147	4,164	4,167	4,173	4,180	4,193	4,209	4,219
Services	14,954	14,981	15,083	15,159	15,225	15,249	15,435	15,496	15,560	15,624	15,668	15,764	15,871
Government	8,815	8,823	8,848	8,891	8,896	8,924	8,949	8,912	8,942	9,012	8,996	9,053	9,035
Federal	1,062	1,060	1,061	1,061	1,057	1,054	1,050	1,050	1,057	1,067	1,070	1,068	1,066
State	1,945	1,947	1,952	1,960	1,968	1,971	1,978	1,987	1,990	2,007	2,000	2,004	2,002
Local	5,808	5,816	5,835	5,870	5,871	5,899	5,921	5,875	5,895	5,938	5,926	5,981	5,967

This series is not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

B-6. Production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted

(In thousands)

Industry	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ²	Feb. ²
Total private	70,787	70,961	71,170	71,260	71,736	71,948	72,063	72,109	72,328	72,627	72,834	73,180	73,342
Goods-producing	17,798	17,839	17,909	17,925	18,025	18,085	18,058	18,049	18,124	18,210	18,240	18,363	18,331
Mining	527	529	533	535	535	535	536	530	527	519	517	515	512
Construction	4,022	4,059	4,096	4,088	4,149	4,168	4,170	4,187	4,185	4,226	4,242	4,324	4,295
Manufacturing	13,249	13,251	13,280	13,302	13,341	13,382	13,352	13,332	13,412	13,465	13,481	13,524	13,524
Durable goods	7,599	7,598	7,632	7,649	7,676	7,720	7,705	7,689	7,733	7,765	7,776	7,806	7,801
Lumber and wood products	631	631	633	632	634	630	628	626	632	638	641	646	640
Furniture and fixtures	427	426	427	429	429	432	428	430	432	433	433	432	434
Stone, clay, and glass products	454	455	457	455	457	460	457	455	457	459	461	463	463
Primary metal industries	586	588	591	594	599	605	601	603	609	610	610	609	609
Blast furnaces and basic steel products	216	217	219	218	219	220	218	216	218	218	217	218	218
Fabricated metal products	1,071	1,071	1,073	1,079	1,085	1,091	1,087	1,088	1,096	1,100	1,103	1,110	1,111
Machinery, except electrical	1,250	1,256	1,262	1,269	1,273	1,287	1,289	1,289	1,299	1,310	1,316	1,322	1,332
Electrical and electronic equipment	1,241	1,242	1,244	1,244	1,250	1,254	1,256	1,254	1,257	1,261	1,253	1,251	1,252
Transportation equipment	1,271	1,261	1,276	1,278	1,276	1,284	1,284	1,269	1,276	1,277	1,277	1,288	1,273
Motor vehicles and equipment	649	648	658	660	660	671	674	664	672	671	669	679	665
Instruments and related products	388	388	389	391	394	395	396	396	399	400	403	404	404
Miscellaneous manufacturing	280	280	280	278	279	282	279	279	276	277	279	281	283
Nondurable goods	5,650	5,653	5,648	5,653	5,665	5,662	5,647	5,643	5,679	5,700	5,705	5,718	5,723
Food and kindred products	1,172	1,168	1,169	1,164	1,168	1,153	1,151	1,153	1,174	1,181	1,176	1,185	1,179
Tobacco manufactures	41	41	40	39	40	39	38	37	38	40	40	38	39
Textile mill products	636	634	632	632	630	632	622	626	626	626	625	628	628
Apparel and other textile products	928	930	926	925	923	922	916	915	916	922	924	927	930
Paper and allied products	521	521	520	521	523	524	524	520	521	522	522	521	521
Printing and publishing	867	870	871	872	875	876	879	880	883	885	889	890	892
Chemicals and allied products	589	592	593	596	599	600	603	601	603	603	605	608	606
Petroleum and coal products	108	107	107	108	108	108	109	109	110	110	110	108	110
Rubber and misc. plastics products	666	669	670	676	679	687	685	682	688	692	695	693	698
Leather and leather products	122	121	120	120	120	121	120	120	120	119	119	120	120
Service-producing	52,989	53,122	53,261	53,335	53,711	53,863	54,005	54,060	54,204	54,417	54,594	54,817	55,011
Transportation and public utilities	4,574	4,587	4,600	4,611	4,632	4,648	4,661	4,656	4,672	4,701	4,718	4,747	4,765
Wholesale trade	4,848	4,881	4,902	4,924	4,956	4,975	4,990	5,011	5,030	5,054	5,071	5,092	5,114
Retail trade	16,902	16,897	16,949	16,949	17,028	17,070	17,087	17,078	17,109	17,163	17,187	17,309	17,354
Finance, insurance, and real estate	4,827	4,825	4,823	4,828	4,842	4,844	4,851	4,847	4,855	4,865	4,865	4,867	4,863
Services	21,838	21,932	21,987	22,023	22,253	22,326	22,416	22,468	22,538	22,634	22,753	22,802	22,915

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

ESTABLISHMENT DATA
DIFFUSION INDEXES
SEASONALLY ADJUSTED

Table B-7. Diffusion indexes of employment change, seasonally adjusted

(Percent)

Year	Private nonagricultural payrolls, 349 industries ¹											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span												
1977	63.5	60.5	70.3	67.9	68.6	63.8	64.5	61.3	65.9	61.3	67.0	67.9
1978	62.5	64.3	70.2	70.1	64.6	67.6	61.6	62.2	62.0	64.3	70.9	66.6
1979	63.9	61.0	64.8	52.7	61.6	61.3	55.7	53.2	50.7	61.3	54.2	53.9
1980	54.6	53.4	49.7	37.4	40.8	38.0	42.3	59.0	55.7	63.8	59.3	58.6
1981	58.5	52.7	54.0	64.5	57.0	53.3	57.7	51.3	45.8	42.3	40.3	36.0
1982	37.2	47.3	40.1	41.5	49.3	38.1	42.8	39.1	44.7	36.2	40.1	43.6
1983	55.0	47.9	60.2	65.6	66.3	66.5	67.2	68.9	70.1	66.6	67.6	64.6
1984	67.9	71.1	65.0	68.1	62.6	68.9	60.2	60.5	57.7	63.6	59.2	57.4
1985	58.9	52.9	60.3	52.7	59.2	51.4	57.4	60.6	53.0	56.7	57.9	57.7
1986	56.4	51.9	53.3	55.7	54.9	51.4	55.3	56.7	55.3	54.0	59.3	60.2
1987	57.4	58.3	59.9	64.6	61.3	61.6	68.6	60.6	62.3	67.6	63.9	65.0
1988	60.3	64.6	64.0	63.0	58.9	66.6	62.3	56.2	54.0	62.5	68.9	61.7
1989	^p 64.8	^p 57.3										
Over 3-month span												
1977	70.2	74.5	76.4	79.2	74.8	72.1	69.3	72.1	70.5	73.5	73.6	72.5
1978	71.9	73.8	76.9	76.9	74.9	71.1	69.2	65.8	68.3	73.5	74.8	76.2
1979	69.5	71.8	65.8	66.2	62.0	64.0	58.9	53.3	57.6	58.6	62.2	56.2
1980	56.6	51.4	42.0	38.3	35.5	37.4	42.8	50.9	65.3	66.9	68.5	64.3
1981	59.5	55.6	58.9	64.6	63.3	60.7	57.0	52.4	43.3	40.0	34.0	30.9
1982	31.2	34.8	37.7	41.5	40.3	40.3	34.8	38.3	35.4	35.8	34.0	46.6
1983	48.4	57.0	62.6	71.9	72.1	74.4	72.6	77.2	77.2	74.6	71.6	73.9
1984	74.9	75.2	77.7	72.6	73.6	69.2	68.3	64.9	64.0	63.0	61.3	61.2
1985	58.2	58.9	55.7	58.2	54.9	57.7	57.0	58.7	58.3	56.7	59.7	59.3
1986	56.9	53.2	52.7	55.7	54.7	53.4	55.4	58.2	56.7	60.3	61.3	63.6
1987	61.3	62.2	67.3	68.9	69.3	69.8	71.5	72.5	72.1	73.4	74.5	68.2
1988	70.6	68.8	68.3	67.2	69.1	69.8	68.8	61.9	62.6	68.3	71.9	^p 74.4
1989	^p 69.1											
Over 6-month span												
1977	79.1	81.8	78.7	78.4	78.1	79.7	76.2	76.2	77.5	76.6	78.1	78.4
1978	77.8	81.4	81.2	79.8	78.7	76.2	73.6	76.9	75.6	76.8	76.1	77.8
1979	74.6	73.9	71.2	66.8	63.2	57.9	62.9	59.5	57.7	58.6	60.9	57.7
1980	48.6	44.7	41.1	37.4	37.1	37.5	44.4	51.9	61.2	70.9	68.9	66.2
1981	66.5	65.2	62.9	64.9	61.3	58.0	50.3	43.0	39.0	32.2	32.5	28.7
1982	28.5	29.7	33.0	38.8	37.2	36.8	34.5	33.8	34.8	38.1	39.1	43.1
1983	55.2	62.2	67.3	71.1	76.4	78.2	79.4	79.5	78.2	77.4	78.1	77.5
1984	78.7	78.8	80.1	77.5	73.9	72.9	70.1	68.6	64.5	63.5	61.7	63.0
1985	58.3	59.5	57.9	57.3	58.5	57.2	56.9	56.6	60.0	60.3	57.9	55.4
1986	55.6	55.9	52.9	53.6	54.3	55.9	55.0	57.7	62.5	61.2	62.5	62.9
1987	69.2	66.3	66.3	70.1	72.5	75.2	76.9	77.4	78.5	74.2	74.4	75.6
1988	72.2	71.5	70.8	74.2	72.2	69.1	68.8	74.5	71.1	^p 72.6	^p 72.6	
1989												
Over 12-month span												
1977	79.2	80.1	81.8	81.9	84.8	84.7	84.5	83.4	83.7	83.0	82.5	82.1
1978	81.9	82.2	81.8	81.9	83.0	82.8	83.4	81.4	81.7	75.8	78.1	75.5
1979	75.9	75.4	74.8	72.1	68.2	66.0	66.0	63.6	59.7	57.6	52.0	48.7
1980	47.0	46.4	46.8	45.3	43.7	43.8	43.6	42.8	44.3	50.6	57.2	62.2
1981	71.2	68.3	68.1	61.3	53.4	48.0	42.3	38.8	36.4	33.1	34.1	32.2
1982	32.4	31.1	29.7	30.4	30.4	31.4	35.0	35.1	38.8	43.4	46.7	51.4
1983	57.0	61.9	66.5	72.8	75.8	77.2	76.8	80.7	80.4	81.4	83.0	81.9
1984	81.7	79.5	78.7	77.1	76.2	74.1	73.1	70.2	69.1	65.2	63.8	61.5
1985	59.5	59.2	59.2	56.9	56.6	58.5	55.9	55.9	56.7	55.6	55.2	53.7
1986	54.4	54.6	53.9	55.6	55.2	56.3	57.2	59.3	60.0	61.7	61.9	65.2
1987	68.1	70.3	71.1	74.1	76.6	77.2	77.4	77.8	79.1	78.7	77.8	80.5
1988	77.2	78.1	74.2	73.9	75.6	75.6	^p 78.4	^p 76.5				
1989												

See footnotes at end of table.

**ESTABLISHMENT DATA
DIFFUSION INDEXES
SEASONALLY ADJUSTED**

Table B-7. Diffusion indexes of employment change, seasonally adjusted-Continued

(Percent)

Year	Manufacturing payrolls, 143 industries ¹											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span												
1977	66.0	59.9	68.4	70.9	67.0	59.6	60.3	54.3	62.1	57.4	63.1	70.2
1978	63.1	64.5	63.8	65.6	61.0	62.4	56.0	58.5	57.1	62.8	66.3	69.1
1979	60.3	55.0	58.9	50.4	55.7	61.7	50.0	45.0	41.1	57.4	46.8	47.9
1980	48.6	46.1	47.5	28.4	24.8	27.0	28.7	58.2	55.0	63.1	61.7	53.9
1981	53.2	45.0	55.0	63.1	61.3	56.7	56.0	42.2	39.4	30.5	29.4	23.4
1982	27.0	39.4	28.0	31.9	36.2	26.6	34.4	28.4	35.5	26.6	26.2	39.4
1983	53.2	48.6	55.3	67.0	67.4	59.9	68.8	64.9	68.1	70.9	62.4	62.1
1984	62.1	69.5	64.9	62.8	55.0	61.7	57.8	52.8	42.9	53.9	44.3	48.6
1985	47.5	40.4	43.6	36.9	42.9	40.1	48.2	45.7	37.6	45.7	45.0	47.9
1986	49.6	42.6	45.0	43.6	46.1	41.8	41.5	48.2	44.7	46.1	52.8	50.7
1987	46.8	52.5	53.9	56.4	58.9	55.7	67.7	56.0	64.2	64.2	64.2	61.0
1988	58.2	55.7	55.7	60.6	57.4	61.3	60.3	44.0	46.8	61.7	68.1	57.4
1989	^p 61.0	^p 51.8										
Over 3-month span												
1977	70.6	77.0	78.7	78.7	72.0	66.7	62.4	64.9	62.4	67.7	69.1	76.2
1978	77.0	72.3	72.3	69.9	69.1	62.8	61.3	58.2	62.4	67.0	70.9	73.4
1979	64.9	62.8	59.6	59.9	58.5	59.2	50.0	36.5	44.0	43.6	52.5	42.9
1980	44.7	40.4	28.4	20.2	18.4	19.5	27.7	39.7	64.2	67.7	67.4	61.3
1981	51.8	50.4	56.4	64.5	66.7	64.9	55.0	42.6	28.0	25.5	17.7	17.4
1982	17.0	19.1	21.3	22.0	22.0	22.3	18.1	18.8	20.6	18.4	17.7	33.3
1983	46.1	53.9	61.7	71.3	70.9	73.8	70.6	76.2	77.0	74.1	72.0	67.7
1984	71.6	71.3	73.4	65.2	63.8	59.9	59.2	50.7	47.5	42.9	45.7	45.0
1985	43.6	37.9	31.6	31.9	30.5	38.7	39.7	37.6	37.6	36.9	44.7	46.5
1986	42.6	40.4	37.6	39.0	39.4	38.7	39.0	42.9	44.3	48.9	53.2	51.8
1987	50.7	50.7	58.5	63.8	63.5	68.4	69.5	73.8	70.2	74.1	74.5	67.0
1988	66.0	61.0	62.8	64.5	66.7	68.8	61.3	52.1	53.5	65.6	70.9	^p 70.9
1989	^p 62.1											
Over 6-month span												
1977	81.6	81.9	79.1	77.3	75.2	74.8	67.7	68.4	70.9	75.2	80.5	77.7
1978	77.7	79.8	78.0	72.3	73.0	68.8	63.5	68.1	69.9	71.3	67.0	69.9
1979	68.4	66.3	62.1	58.2	52.1	43.6	48.2	41.5	39.7	40.1	42.6	42.9
1980	33.0	27.0	23.4	16.7	17.4	19.1	26.2	39.7	52.8	70.6	67.4	65.2
1981	65.2	62.8	62.8	68.1	61.7	55.3	40.1	29.1	22.3	17.0	18.4	12.4
1982	10.3	10.6	13.5	20.6	15.6	15.2	12.4	12.1	14.5	18.1	21.3	27.3
1983	46.8	59.6	64.9	67.0	75.5	76.2	78.7	77.3	76.2	74.8	75.9	74.8
1984	74.5	72.3	72.0	70.6	62.8	58.5	55.3	52.5	48.6	44.0	40.1	41.8
1985	34.8	34.4	28.4	31.9	32.6	32.3	32.6	33.0	39.4	39.7	37.9	37.2
1986	37.6	38.3	34.8	34.4	34.8	37.2	36.5	41.8	46.8	47.9	50.0	51.4
1987	58.5	57.1	57.1	66.7	69.1	74.5	75.5	76.6	79.4	74.1	72.7	72.3
1988	68.4	67.0	66.0	70.9	66.0	63.8	62.1	68.8	66.0	^p 66.7	^p 69.9	
1989												
Over 12-month span												
1977	77.0	77.7	75.9	76.6	81.2	82.6	84.0	81.9	83.3	80.5	78.0	77.3
1978	75.2	77.7	76.2	77.0	77.0	77.0	75.2	70.6	70.9	65.6	69.1	64.9
1979	67.0	64.2	62.4	57.4	51.8	48.6	48.9	47.5	42.2	36.5	29.1	24.8
1980	20.6	22.3	23.8	25.2	23.0	22.3	21.3	22.7	23.8	30.5	45.7	59.6
1981	72.0	69.1	69.1	52.8	40.4	35.1	27.7	21.6	17.7	15.2	13.8	12.4
1982	12.1	12.4	9.2	11.3	8.2	9.9	13.5	14.2	15.2	21.6	25.5	33.7
1983	43.3	50.0	56.0	66.0	71.6	75.5	76.2	78.4	78.0	78.7	80.1	76.2
1984	77.0	72.3	68.1	66.0	62.4	61.0	57.8	54.6	50.4	44.0	40.1	33.7
1985	31.6	30.9	30.1	28.4	27.7	28.4	29.1	29.8	32.6	30.9	32.6	29.8
1986	30.9	30.1	34.8	34.8	36.2	39.0	38.3	39.7	42.9	45.0	48.2	50.4
1987	59.6	63.5	64.5	68.8	73.0	73.8	75.2	75.2	75.9	75.9	75.2	79.1
1988	74.1	72.3	68.8	70.6	72.0	70.9	^p 72.3	^p 69.9				
1989												

¹ Based on seasonally adjusted data for 1-, 3-, and 6-month spans and unadjusted data for the 12-month span. Data are centered within the span.

^p = preliminary.

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an

equal balance between industries with increasing and decreasing employment.

Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Alabama	1,516.9	1,567.2	1,548.7	11.2	11.3	11.3	71.2	76.5	71.8
Birmingham	392.8	407.1	404.5	5.3	5.0	5.1	23.3	24.5	24.2
Huntsville	124.6	132.4	131.0	.1	.1	.1	4.8	5.7	5.3
Mobile	161.3	165.8	165.2	.7	.7	.7	9.3	10.1	10.0
Montgomery	126.6	130.3	129.8	.1	.1	.1	7.4	8.0	7.9
Tuscaloosa	59.4	62.5	62.2	2.6	2.7	2.7	2.8	3.0	2.8
Alaska	195.2	207.1	199.2	8.1	9.3	9.3	6.8	6.7	6.3
Arizona	1,397.6	1,434.8	1,411.0	11.6	12.1	12.2	92.7	92.6	89.4
Phoenix	924.8	943.0	929.2	.7	.8	.7	63.7	63.6	61.6
Tucson	246.9	252.9	248.9	1.7	1.9	2.0	17.5	16.9	16.2
Arkansas	829.4	873.1	858.9	3.9	4.2	4.1	28.3	33.3	30.6
Fayetteville-Springdale	49.1	51.7	50.1	(¹)	(¹)	(¹)	1.8	1.7	1.7
Fort Smith	75.2	76.3	75.7	1.0	1.0	.9	2.4	2.4	2.4
Little Rock-North Little Rock	228.3	242.7	238.7	.4	.4	.4	8.8	10.2	9.5
Pine Bluff	31.9	33.8	33.1	(¹)	(¹)	(¹)	1.2	1.9	1.5
California	11,767.3	12,378.3	12,194.9	41.9	41.5	40.4	555.8	631.1	604.7
Anaheim-Santa Ana	1,104.3	1,154.3	1,136.1	1.4	1.3	1.3	63.4	67.7	66.0
Bakersfield	160.2	161.7	158.9	14.2	13.7	13.5	9.3	9.6	9.4
Fresno	200.7	212.2	207.4	.6	.6	.6	11.5	12.0	11.5
Los Angeles-Long Beach	4,038.2	4,201.5	4,144.4	9.8	9.7	9.3	141.7	153.5	150.8
Modesto	103.6	112.4	109.4	(¹)	(¹)	(¹)	6.5	7.4	7.2
Oakland	825.0	865.2	852.9	3.3	3.3	3.2	47.0	50.9	48.7
Oxnard-Ventura	209.0	218.6	216.1	2.8	2.8	2.8	13.2	14.0	13.5
Riverside-San Bernardino	617.1	638.6	631.3	1.3	1.3	1.3	48.8	53.4	52.4
Sacramento	549.7	589.2	580.4	.7	.6	.6	29.0	34.3	32.3
San Diego	882.8	942.6	928.3	.8	.8	.8	52.6	60.7	58.7
San Francisco	929.5	965.3	946.4	.9	.9	.9	33.2	37.1	34.8
San Jose	805.3	828.3	819.0	.1	.1	.1	31.7	33.6	32.6
Santa Barbara-Santa Maria-Lompoc	143.1	148.5	147.2	1.4	1.5	1.5	6.3	6.8	6.7
Santa Rosa-Petaluma	124.2	129.4	127.1	.7	.7	.7	7.7	8.1	7.8
Stockton	140.7	148.2	145.9	.1	.1	.1	7.5	8.2	7.7
Vallejo-Fairfield-Napa	124.1	132.0	129.3	.6	.6	.5	8.2	10.3	9.6
Colorado	1,404.8	1,444.9	1,420.2	21.0	20.6	20.3	55.5	56.9	52.4
Boulder-Longmont	105.4	110.1	107.3	.3	.3	.3	3.2	3.5	3.2
Denver	790.2	805.5	793.7	13.5	12.4	12.2	31.5	29.8	28.3
Connecticut	1,642.9	1,709.2	1,671.1	1.4	1.6	1.3	71.9	77.9	70.8
Bridgeport-Milford	199.6	205.8	201.6	(¹)	(¹)	(¹)	8.4	9.3	8.5
Hartford	476.0	494.2	486.6	.2	.4	.2	17.8	21.4	19.6
New Britain	64.2	66.2	65.1	(¹)	(¹)	(¹)	3.9	4.3	3.7
New Haven-Meriden	251.5	266.2	260.0	.3	.4	.3	12.3	14.4	13.6
Stamford	122.9	128.3	125.8	.5	.5	.4	4.8	5.6	5.2
Waterbury	85.7	89.6	87.5	(¹)	(¹)	(¹)	4.3	5.2	4.8
Delaware	317.4	338.0	333.9	.1	.1	.1	18.6	21.9	19.9
Wilmington	273.9	291.2	285.3	.2	.2	.1	16.2	18.6	16.7
District of Columbia	654.7	682.2	670.9	.1	.1	.1	13.2	13.1	12.8
Washington MSA	2,094.6	2,220.4	2,181.4	1.0	1.1	1.1	126.6	143.5	138.7
Florida	4,954.3	5,257.1	5,220.1	8.9	9.3	9.3	341.3	352.9	350.6
Daytona Beach	113.8	118.2	117.7	(¹)	(¹)	(¹)	8.4	8.7	8.6
Fort Lauderdale-Hollywood-Pompano Beach	474.8	500.6	498.2	.3	.3	.3	35.6	37.9	37.3
Fort Myers-Cape Coral	113.7	123.3	123.7	(¹)	(¹)	(¹)	12.7	14.1	14.1
Jacksonville	397.1	418.8	415.1	.6	.7	.6	25.7	27.0	27.2
Melbourne-Titusville-Palm Bay	148.2	156.4	156.2	(¹)	(¹)	(¹)	9.3	9.0	9.1
Miami-Hialeah	839.9	877.9	872.1	.9	.9	.9	39.9	40.2	40.1
Orlando	487.5	514.5	508.3	(¹)	(¹)	(¹)	35.8	38.1	37.5
Pensacola	122.0	126.2	124.6	.3	.3	.4	8.1	8.0	8.0
Sarasota	107.5	113.6	113.6	(¹)	(¹)	(¹)	10.0	10.3	10.4
Tallahassee	110.3	116.8	114.7	(¹)	(¹)	(¹)	5.5	5.7	5.6
Tampa-St. Petersburg-Clearwater	820.0	853.5	851.6	.7	.7	.7	58.4	57.9	57.7
West Palm Beach-Boca Raton-Delray Beach	339.1	363.2	364.5	(¹)	(¹)	(¹)	29.8	31.5	31.6

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Alabama	373.6	380.7	380.2	77.3	79.1	79.1	331.5	355.2	344.4
Birmingham	55.4	57.7	58.5	31.4	32.1	32.1	97.7	103.1	100.3
Huntsville	31.5	33.9	33.4	2.9	2.9	2.9	23.8	25.7	25.0
Mobile	25.9	24.9	24.6	9.7	10.0	10.2	42.6	44.9	44.0
Montgomery	19.3	18.9	19.0	4.9	5.1	5.1	28.9	29.8	29.5
Tuscaloosa	9.8	10.0	10.1	1.9	2.0	2.0	12.4	13.2	12.8
Alaska	9.5	10.9	9.8	16.1	16.8	16.1	38.8	42.4	39.9
Arizona	187.9	189.8	188.8	73.1	73.1	72.2	346.6	359.3	353.1
Phoenix	136.5	138.2	137.8	50.8	50.9	50.3	235.8	242.7	239.0
Tucson	30.9	30.0	29.7	9.2	9.2	9.0	57.1	59.2	57.7
Arkansas	222.5	232.2	231.5	51.4	51.7	51.1	186.4	196.3	191.1
Fayetteville-Springdale	12.2	13.1	13.0	4.9	4.6	4.5	11.4	12.1	11.7
Fort Smith	27.0	26.3	26.0	4.0	4.3	4.3	15.6	15.7	15.5
Little Rock-North Little Rock	33.0	35.8	35.4	16.3	17.3	17.4	55.2	58.5	56.8
Pine Bluff	6.4	6.5	6.6	2.5	2.5	2.5	6.9	7.4	7.1
California	2,105.6	2,163.1	2,141.8	574.9	592.1	581.7	2,805.1	2,998.6	2,915.0
Anaheim-Santa Ana	251.6	259.9	257.5	33.4	34.4	34.0	275.3	293.2	286.1
Bakersfield	10.4	10.6	10.5	7.3	7.3	7.3	38.6	39.2	37.9
Fresno	20.5	21.9	21.5	11.2	11.7	11.5	52.4	54.1	52.4
Los Angeles-Long Beach	899.2	904.5	897.7	202.0	207.0	205.1	930.1	995.9	965.5
Modesto	21.4	23.8	23.1	4.3	4.7	4.6	27.7	30.3	29.0
Oakland	107.3	109.2	108.9	54.7	57.4	56.6	205.2	217.8	213.2
Oxnard-Ventura	29.7	30.2	30.2	11.4	11.1	10.9	51.9	55.6	54.0
Riverside-San Bernardino	81.0	82.3	81.8	30.3	30.5	29.3	156.9	161.6	157.9
Sacramento	39.4	42.0	41.9	24.3	26.0	25.4	134.7	144.2	139.4
San Diego	125.7	129.0	128.4	34.3	35.6	35.1	214.0	224.2	226.8
San Francisco	79.9	81.2	80.9	76.2	77.5	75.7	210.5	232.0	214.3
San Jose	267.2	276.3	274.3	21.3	21.7	21.3	160.4	165.1	161.9
Santa Barbara-Santa Maria-Lompoc	21.3	22.0	22.2	5.0	5.2	5.1	34.0	35.6	35.1
Santa Rosa-Petaluma	19.3	19.8	19.5	5.8	5.8	5.8	32.0	33.9	33.2
Stockton	22.2	23.8	23.5	8.3	9.1	8.9	33.4	35.5	34.6
Vallejo-Fairfield-Napa	11.3	11.9	11.8	4.5	4.7	4.6	30.1	32.7	31.8
Colorado	186.1	191.7	189.6	90.8	91.1	89.8	346.4	359.0	350.6
Boulder-Longmont	29.5	30.0	29.3	2.3	2.3	2.3	22.4	23.4	22.8
Denver	93.4	95.4	94.7	66.7	66.5	65.2	195.6	201.7	199.1
Connecticut	379.4	376.7	375.9	72.1	73.4	72.9	371.6	400.6	382.0
Bridgeport-Milford	58.1	57.0	56.7	8.3	8.5	8.3	45.9	48.8	46.8
Hartford	91.2	90.1	90.2	18.3	19.1	19.2	102.0	108.9	104.5
New Britain	19.5	19.2	19.4	3.2	3.2	3.2	13.2	13.9	13.6
New Haven-Meriden	47.6	48.1	47.6	17.4	17.9	17.9	58.5	63.8	60.5
Stamford	22.8	23.0	22.7	5.3	5.5	5.5	29.8	31.1	29.9
Waterbury	24.0	24.0	24.0	3.2	3.1	3.1	17.0	18.1	17.3
Delaware	67.4	70.9	71.6	13.9	14.2	14.1	69.8	74.6	73.2
Wilmington	57.2	60.3	61.0	14.9	15.2	15.0	58.7	62.0	60.8
District of Columbia	16.2	16.3	16.2	24.8	25.3	25.2	62.5	68.1	64.1
Washington MSA	86.4	87.7	87.1	100.9	111.5	111.3	421.8	448.1	431.7
Florida	538.5	545.3	545.8	254.9	266.9	263.6	1,355.9	1,458.4	1,433.2
Daytona Beach	12.2	11.8	11.9	3.5	3.7	3.7	33.4	35.6	35.4
Fort Lauderdale-Hollywood-Pompano Beach	45.2	47.2	47.1	22.5	24.0	23.8	143.4	152.1	150.7
Fort Myers-Cape Coral	5.7	6.2	6.3	5.0	5.4	5.5	33.8	36.7	36.4
Jacksonville	37.9	39.1	39.2	27.2	27.9	27.7	108.9	117.4	114.7
Melbourne-Titusville-Palm Bay	29.2	29.8	29.9	5.6	6.0	6.0	34.0	37.0	36.5
Miami-Hialeah	92.7	93.8	93.5	69.3	71.0	70.9	230.3	243.3	239.2
Orlando	56.7	57.2	57.3	24.6	26.6	26.1	127.1	136.6	133.6
Pensacola	11.2	11.2	11.1	6.3	6.6	6.7	31.0	32.3	30.9
Sarasota	8.5	8.8	8.8	3.4	3.5	3.4	32.5	34.0	34.0
Tallahassee	4.7	5.0	4.9	2.8	2.8	2.8	23.6	25.0	24.7
Tampa-St. Petersburg-Clearwater	94.3	97.2	97.0	37.9	39.4	39.5	229.1	237.1	235.5
West Palm Beach-Boca Raton-Delray Beach	35.9	34.8	34.7	12.2	12.8	12.8	91.9	101.8	102.0

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Alabama	69.4	70.8	70.3	276.9	284.3	282.1	305.8	309.3	309.5
Birmingham	28.2	28.0	27.7	90.4	94.6	94.8	61.1	62.1	61.8
Huntsville	3.6	3.7	3.7	28.2	30.8	30.5	29.7	29.6	30.1
Mobile	8.0	8.0	8.0	37.2	38.7	38.8	27.9	28.5	28.9
Montgomery	7.5	7.7	7.7	28.7	28.3	28.4	31.8	32.4	32.1
Tuscaloosa	2.1	2.1	2.1	8.6	9.0	9.1	19.2	20.5	20.6
Alaska	10.8	10.4	10.5	40.2	42.4	41.3	64.9	68.2	66.0
Arizona	94.5	91.5	91.2	357.0	363.2	363.2	234.2	253.2	240.9
Phoenix	75.3	72.8	72.6	241.2	244.9	244.5	120.8	129.1	122.7
Tucson	12.3	12.0	12.0	67.6	68.2	68.7	50.6	55.5	53.6
Arkansas	37.3	37.8	37.6	153.3	163.7	161.9	146.3	153.9	151.0
Fayetteville-Springdale	1.4	1.5	1.4	7.4	7.9	7.8	10.0	10.8	10.0
Fort Smith	2.6	2.7	2.7	15.1	16.2	16.1	7.5	7.7	7.8
Little Rock-North Little Rock	15.6	15.8	15.7	53.2	57.2	56.5	45.8	47.5	47.0
Pine Bluff	1.4	1.4	1.4	6.2	6.5	6.5	7.3	7.6	7.5
California	799.8	821.6	816.6	2,971.3	3,141.5	3,112.2	1,912.9	1,988.8	1,982.5
Anaheim-Santa Ana	91.3	92.1	89.4	271.5	284.1	282.8	116.4	121.6	119.0
Bakersfield	6.2	6.4	6.4	33.7	33.1	32.9	40.5	41.8	41.0
Fresno	12.4	12.1	11.9	46.9	52.0	50.6	45.2	47.8	47.4
Los Angeles-Long Beach	281.6	288.2	285.2	1,068.4	1,120.1	1,111.1	505.4	522.6	519.7
Modesto	4.4	4.4	4.4	21.6	23.2	22.8	17.7	18.6	18.3
Oakland	54.9	55.6	55.5	193.4	205.2	202.7	159.2	165.8	164.1
Oxnard-Ventura	10.9	11.3	11.3	49.1	52.4	52.2	40.0	41.2	41.2
Riverside-San Bernardino	26.5	28.2	28.0	147.5	152.1	151.5	124.8	129.2	129.1
Sacramento	34.3	36.4	36.2	118.9	129.2	128.8	168.4	176.5	175.8
San Diego	62.4	64.8	64.4	232.5	249.7	246.8	160.5	167.8	167.3
San Francisco	111.0	111.7	111.3	283.6	297.7	293.0	134.2	137.2	135.5
San Jose	32.2	32.7	32.4	205.0	211.7	209.9	87.4	87.1	86.5
Santa Barbara-Santa Maria-Lompoc	8.6	8.6	8.6	39.1	40.4	40.1	27.4	28.4	27.9
Santa Rosa-Petaluma	8.2	8.6	8.5	28.0	28.8	28.2	22.5	23.7	23.4
Stockton	6.8	8.5	8.5	29.3	31.0	30.7	31.1	32.0	31.9
Vallejo-Fairfield-Napa	4.6	4.6	4.6	27.3	28.9	28.6	37.5	38.3	37.8
Colorado	95.7	94.3	93.4	347.1	356.9	357.4	262.2	274.4	266.7
Boulder-Longmont	4.1	4.1	4.0	22.4	23.4	23.5	21.2	23.1	21.9
Denver	63.4	62.5	61.9	201.5	208.4	206.5	124.6	128.8	125.8
Connecticut	151.9	154.2	153.9	390.8	412.3	406.4	203.8	212.5	207.9
Bridgeport-Milford	12.4	13.0	13.1	46.7	49.1	48.2	19.8	20.1	20.0
Hartford	76.5	75.5	75.8	108.6	115.4	114.0	61.4	63.4	63.1
New Britain	4.2	4.5	4.5	13.7	14.2	14.0	6.5	6.9	6.7
New Haven-Meriden	15.8	16.6	16.7	68.0	72.4	71.1	31.6	32.6	32.3
Stamford	13.4	14.1	14.3	35.5	37.6	36.9	10.8	10.9	10.9
Waterbury	4.4	4.5	4.6	20.2	21.8	21.1	12.6	12.9	12.6
Delaware	28.1	31.1	31.4	72.2	77.0	75.7	47.3	48.2	47.9
Wilmington	25.0	27.4	27.6	63.9	68.5	65.5	37.8	39.0	38.6
District of Columbia	34.6	34.6	34.7	232.7	249.4	244.3	270.6	275.2	273.4
Washington MSA	124.2	128.4	128.5	671.0	717.3	707.3	562.7	582.8	575.7
Florida	359.4	370.2	367.0	1,339.5	1,446.8	1,452.1	755.9	807.3	798.5
Daytona Beach	6.3	6.4	6.4	31.2	32.4	32.1	18.8	19.6	19.6
Fort Lauderdale-Hollywood-Pompano Beach	38.9	40.2	39.7	130.6	135.8	136.6	58.3	63.1	62.7
Fort Myers-Cape Coral	7.9	8.1	8.2	31.7	34.7	35.2	16.8	18.0	17.9
Jacksonville	37.8	39.5	39.4	99.9	106.3	105.7	59.1	60.9	60.6
Melbourne-Titusville-Palm Bay	5.4	5.7	5.7	43.5	47.0	47.3	21.1	21.8	21.6
Miami-Hialeah	69.7	72.2	71.4	227.6	238.3	238.2	109.5	118.2	117.9
Orlando	32.4	33.6	33.2	154.3	163.2	161.5	56.5	59.1	59.0
Pensacola	5.5	5.6	5.6	30.6	32.3	32.3	29.0	29.9	29.6
Sarasota	8.4	8.7	8.6	32.1	34.1	34.2	12.5	14.1	14.1
Tallahassee	4.9	4.9	4.9	22.9	23.8	23.8	45.7	49.3	47.7
Tampa-St. Petersburg-Clearwater	64.5	66.4	66.4	231.7	246.8	247.5	103.4	108.0	107.3
West Palm Beach-Boca Raton-Delray Beach	28.4	28.8	28.9	99.3	107.5	108.6	41.5	45.9	45.8

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Georgia	2,806.8	2,949.9	2,924.4	8.7	9.0	9.0	144.1	144.6	138.4
Athens	63.1	66.6	65.9	.1	.1	.1	2.3	2.5	2.4
Atlanta	1,385.9	1,443.1	1,432.9	1.5	1.5	1.5	67.0	68.7	66.0
Augusta	157.4	160.1	158.0	.5	.5	.5	10.0	10.6	10.3
Columbus	92.5	95.6	94.3	.1	.1	.1	5.0	5.1	5.0
Macon-Warner Robins	118.1	123.5	121.4	.1	.1	.1	4.6	5.2	5.1
Savannah	103.2	106.3	105.5	(^b)	(^b)	(^b)	6.4	6.3	6.1
Hawaii	465.4	490.1	483.0	(^b)	(^b)	(^b)	21.3	24.6	24.4
Honolulu	369.2	387.0	380.7	(^b)	(^b)	(^b)	17.0	19.1	19.0
Idaho	330.0	357.2	348.2	2.7	3.5	3.5	11.3	14.1	12.5
Boise City	87.3	94.8	93.6	(^b)	(^b)	(^b)	4.2	4.9	4.4
Illinois	4,958.9	5,136.7	5,082.8	21.0	20.6	19.7	172.7	207.4	189.2
Aurora-Elgin	138.0	146.4	143.5	(^b)	(^b)	(^b)	5.7	7.3	6.7
Bloomington-Normal	58.0	61.0	60.6	(^b)	(^b)	(^b)	1.4	1.8	1.6
Champaign-Urbana-Rantoul	83.2	89.1	85.2	(^b)	(^b)	(^b)	2.5	2.7	2.5
Chicago	3,051.1	3,157.5	3,108.6	2.1	2.0	2.0	113.5	130.5	120.2
Davenport-Rock Island-Moline	154.6	156.2	155.4	(^b)	(^b)	(^b)	4.3	4.7	4.3
Decatur	50.5	52.9	52.1	(^b)	(^b)	(^b)	2.0	2.7	2.6
Joliet	96.4	99.6	100.4	(^b)	(^b)	(^b)	4.8	5.9	4.9
Kankakee	33.3	33.3	33.4	(^b)	(^b)	(^b)	1.1	1.2	1.1
Lake County	188.1	201.8	199.9	(^b)	(^b)	(^b)	7.6	9.7	8.7
Peoria	136.1	141.5	140.8	(^b)	(^b)	(^b)	4.7	5.9	5.5
Rockford	127.9	130.8	129.7	(^b)	(^b)	(^b)	3.9	4.5	4.0
Springfield	98.7	101.0	99.9	(^b)	(^b)	(^b)	2.4	2.9	2.6
Indiana	2,317.0	2,450.1	2,413.1	8.0	8.2	7.9	91.1	110.7	102.0
Anderson	47.9	49.9	49.4	(^b)	(^b)	(^b)	1.2	1.4	1.4
Bloomington	51.3	55.2	55.3	(^b)	(^b)	(^b)	1.8	2.3	2.1
Elkhart-Goshen	98.2	104.0	103.3	(^b)	(^b)	(^b)	2.5	3.0	2.8
Evansville	124.6	131.5	129.1	2.2	2.1	2.0	6.6	7.2	6.6
Fort Wayne	186.8	195.6	193.2	(^b)	(^b)	(^b)	8.4	9.5	9.1
Gary-Hammond	221.5	234.4	230.5	(^b)	(^b)	(^b)	10.4	13.6	12.6
Indianapolis	603.0	637.4	628.3	.7	.9	.8	28.4	32.2	30.4
Lafayette	64.5	65.5	66.5	(^b)	(^b)	(^b)	2.6	3.3	3.6
Muncie	51.0	53.4	52.4	(^b)	(^b)	(^b)	1.7	2.0	1.9
South Bend-Mishawaka	112.7	118.6	116.5	(^b)	(^b)	(^b)	4.5	5.9	5.5
Terre Haute	53.4	54.6	53.7	.4	.3	.4	1.7	2.1	1.9
Iowa	1,105.9	1,185.6	1,158.3	1.6	2.1	1.8	28.4	36.8	32.2
Cedar Rapids	86.8	90.4	89.2	.1	.1	.1	2.7	3.2	2.9
Des Moines	208.5	219.5	216.2	(^b)	(^b)	(^b)	6.1	6.7	5.8
Dubuque	40.9	42.2	41.7	(^b)	(^b)	(^b)	.8	1.0	.9
Sioux City	50.1	53.0	52.1	(^b)	(^b)	(^b)	1.6	1.6	1.5
Waterloo-Cedar Falls	61.2	65.9	63.8	(^b)	(^b)	(^b)	1.4	2.1	1.8
Kansas	1,001.9	1,052.2	1,030.0	10.7	9.9	9.7	35.5	40.6	37.0
Topeka	86.6	90.2	89.7	(^b)	(^b)	(^b)	3.0	3.1	2.9
Wichita	226.9	240.9	236.0	2.1	2.0	2.0	7.7	9.8	8.1
Kentucky	1,336.6	1,395.4	1,373.2	37.9	34.9	34.5	56.2	63.7	59.1
Lexington-Fayette	179.3	196.2	190.0	.3	.3	.2	10.0	11.7	11.2
Louisville	438.3	456.9	450.6	.7	.9	1.0	20.3	21.5	20.2
Owensboro	33.3	35.0	33.8	.7	.6	.5	1.9	1.9	1.8
Louisiana	1,476.2	1,517.0	1,497.5	55.9	56.7	56.6	75.9	84.8	82.8
Alexandria	45.1	45.3	44.9	.2	.2	.2	2.0	1.9	1.8
Baton Rouge	215.3	223.7	218.4	1.0	1.0	1.0	21.1	23.5	23.4
Houma-Thibodaux	52.4	54.7	53.2	5.7	5.9	5.7	1.7	1.8	1.8
Lafayette	82.6	86.3	84.1	11.2	11.3	11.3	3.1	3.4	3.3
Monroe	54.0	55.1	53.7	.4	.5	.4	2.3	2.2	2.1
New Orleans	508.9	521.3	514.7	15.2	15.3	15.3	21.5	22.6	21.9
Shreveport	128.4	129.2	128.7	3.3	3.2	3.0	5.6	6.4	6.3
Maine	497.1	530.1	514.9	.1	.2	.2	28.9	34.7	31.9
Lewiston-Auburn	39.7	42.0	40.6	(^b)	(^b)	(^b)	2.0	2.4	2.1
Portland	122.1	132.5	128.6	(^b)	(^b)	(^b)	8.4	9.1	8.3

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Georgia	574.9	569.8	567.2	177.6	186.2	186.0	711.1	783.1	764.0
Athens	15.0	15.1	15.0	1.7	1.8	1.8	13.3	14.8	14.4
Atlanta	189.8	179.6	178.2	117.7	122.3	121.8	390.6	416.5	410.9
Augusta	36.0	36.7	36.5	5.1	4.4	4.4	34.6	35.4	34.2
Columbus	20.1	20.5	20.6	3.5	3.5	3.5	20.0	21.4	20.5
Macon-Warner Robins	18.1	18.6	18.5	5.1	5.3	5.3	27.6	28.8	27.2
Savannah	17.3	17.8	17.9	9.3	9.5	9.7	25.3	26.9	26.0
Hawaii	22.0	22.3	22.4	37.7	38.8	39.0	124.8	130.9	128.4
Honolulu	16.4	16.5	16.7	30.8	31.9	32.1	97.8	102.4	100.2
Idaho	54.5	59.8	59.1	17.9	18.9	18.7	83.2	90.8	87.3
Boise City	11.7	13.5	13.6	5.1	5.2	5.3	22.4	24.5	23.6
Illinois	958.8	977.5	975.5	297.5	302.4	301.0	1,227.9	1,287.5	1,269.3
Aurora-Elgin	37.6	38.1	38.1	3.0	3.0	3.0	37.8	40.3	39.1
Bloomington-Normal	5.4	6.5	7.1	2.7	2.7	2.7	13.0	13.2	13.0
Champaign-Urbana-Rantoul	7.8	8.7	8.6	2.3	2.3	2.3	20.0	20.3	20.2
Chicago	561.3	566.4	564.7	188.4	190.4	187.4	766.8	800.9	778.3
Davenport-Rock Island-Moline	32.5	32.5	32.4	7.9	7.9	7.9	42.9	42.8	42.8
Decatur	13.5	13.6	13.6	5.1	5.0	5.1	11.4	12.2	11.7
Joliet	18.7	19.0	19.2	8.2	8.4	8.3	22.9	23.1	23.0
Kankakee	5.1	5.4	5.4	1.4	1.1	1.3	8.3	8.3	8.3
Lake County	43.3	43.4	43.6	6.8	7.1	7.2	53.0	57.5	57.2
Peoria	31.9	34.2	34.2	7.0	7.1	7.1	33.7	34.0	33.7
Rockford	44.9	45.7	45.6	4.8	5.1	5.1	28.8	28.7	28.7
Springfield	3.9	3.9	3.9	4.8	4.9	4.8	22.8	22.6	22.2
Indiana	622.1	638.9	634.6	119.8	127.7	126.2	548.2	593.3	579.4
Anderson	16.9	17.1	17.2	1.4	1.5	1.4	11.0	11.7	11.4
Bloomington	9.2	10.4	10.5	1.6	1.7	1.7	11.4	12.5	12.2
Elkhart-Goshen	53.4	56.1	56.3	2.7	2.9	2.8	18.0	19.1	18.7
Evansville	30.3	31.1	30.9	6.5	6.6	6.6	33.1	35.2	34.1
Fort Wayne	52.0	52.9	52.8	12.1	12.9	12.7	46.2	49.5	48.4
Gary-Hammond	56.3	57.0	56.9	15.0	15.6	15.5	52.2	56.2	54.9
Indianapolis	106.3	106.6	105.9	37.3	39.2	38.9	156.8	166.8	163.0
Lafayette	12.1	12.5	12.7	1.9	1.9	1.9	13.2	13.1	13.6
Muncie	10.8	11.2	11.1	2.3	2.4	2.4	12.5	13.2	12.9
South Bend-Mishawaka	24.0	23.7	23.4	5.2	5.4	5.3	29.3	31.5	30.5
Terre Haute	10.1	10.0	9.9	2.8	3.0	3.0	14.3	15.0	14.7
Iowa	218.6	232.7	231.3	52.1	56.4	54.9	280.5	305.3	296.2
Cedar Rapids	22.8	23.9	23.7	5.3	5.4	5.4	20.9	22.0	21.4
Des Moines	25.1	26.3	26.4	12.2	12.7	12.6	54.4	58.2	57.0
Dubuque	11.9	12.0	12.1	1.6	1.7	1.7	9.5	10.2	9.8
Sioux City	9.6	10.5	10.2	3.0	3.2	3.2	13.0	13.8	13.5
Waterloo-Cedar Falls	14.2	15.6	15.4	1.7	1.9	1.8	14.6	15.9	15.3
Kansas	178.8	182.6	182.1	62.7	65.5	64.1	252.7	265.2	257.9
Topeka	8.8	8.9	8.9	6.6	6.7	6.6	20.4	22.2	22.0
Wichita	60.9	62.6	63.0	10.7	11.4	11.3	53.1	56.3	54.3
Kentucky	268.5	280.2	279.8	71.1	75.6	74.6	320.4	341.7	330.7
Lexington-Fayette	30.6	33.5	34.1	8.2	8.7	8.4	41.4	43.6	42.3
Louisville	87.6	88.4	88.7	27.3	29.4	28.4	110.1	114.4	111.2
Owensboro	5.7	6.3	6.1	2.1	2.1	2.1	8.8	9.4	8.8
Louisiana	165.6	172.3	169.8	104.3	108.8	107.9	355.2	368.1	359.7
Alexandria	3.4	3.2	3.2	2.1	2.1	2.1	11.0	11.0	10.8
Baton Rouge	19.0	19.5	19.2	10.4	10.4	10.5	50.9	55.1	53.5
Houma-Thibodaux	4.1	4.7	4.4	6.0	6.2	6.2	13.5	13.8	13.4
Lafayette	6.9	7.0	7.0	5.6	6.3	6.0	22.5	23.9	23.2
Monroe	7.4	7.5	7.5	2.9	2.8	3.0	14.1	14.4	13.7
New Orleans	42.9	43.6	43.0	42.7	45.0	44.3	132.0	137.4	133.7
Shreveport	17.8	17.5	17.3	8.0	8.1	8.3	31.5	32.0	31.8
Maine	107.1	110.4	109.2	20.0	21.4	21.3	120.9	130.6	124.1
Lewiston-Auburn	10.3	10.0	9.8	1.4	1.4	1.4	9.7	11.1	10.4
Portland	16.7	17.4	17.8	5.4	5.6	5.0	37.1	40.9	39.1

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Georgia	156.9	163.6	162.6	545.4	584.4	586.0	488.2	509.1	511.2
Athens	1.9	2.0	1.9	9.5	10.4	10.4	19.2	19.9	19.9
Atlanta	100.3	104.5	104.2	321.2	342.1	342.6	197.8	208.0	207.8
Augusta	5.0	5.7	5.5	32.2	32.8	32.8	34.1	34.1	33.8
Columbus	6.5	6.5	6.4	16.5	17.8	17.4	20.7	20.7	20.8
Macon-Warner Robins	7.3	7.8	7.8	22.2	23.4	23.2	33.0	34.4	34.1
Savannah	4.5	4.5	4.4	24.5	25.2	25.0	15.8	16.1	16.4
Hawaii	33.9	35.1	35.0	128.8	135.4	135.1	96.9	103.0	98.7
Honolulu	28.6	29.5	29.4	97.3	101.0	100.8	81.3	86.6	82.5
Idaho	18.9	19.7	19.2	68.7	73.5	73.3	72.8	76.9	74.6
Boise City	7.5	8.0	7.6	19.2	21.0	21.1	17.2	17.7	18.0
Illinois	364.5	368.7	368.7	1,188.0	1,230.9	1,226.2	728.5	741.7	733.2
Aurora-Elgin	8.3	8.6	8.6	30.5	33.0	32.5	15.0	16.0	15.4
Bloomington-Normal	9.9	10.0	10.0	12.7	13.2	13.2	12.9	13.6	13.0
Champaign-Urbana-Rantoul	3.4	3.5	3.5	15.7	16.3	16.3	31.5	35.3	31.8
Chicago	265.1	270.9	269.4	793.3	825.5	819.4	360.6	370.9	367.2
Davenport-Rock Island-Moline	8.1	8.2	8.2	32.3	33.0	33.0	26.6	27.1	26.8
Decatur	2.3	2.2	2.2	11.1	11.5	11.5	5.1	5.7	5.4
Joliet	3.8	3.8	3.8	21.3	22.0	23.8	16.4	17.1	17.1
Kankakee	1.5	1.5	1.5	9.0	9.1	9.1	6.8	6.7	6.7
Lake County	7.1	7.1	7.1	40.4	44.4	44.1	29.5	32.2	31.6
Peoria	7.3	7.3	7.4	35.5	36.5	36.5	16.0	16.5	16.4
Rockford	5.1	5.3	5.3	28.4	29.3	29.1	12.0	12.2	11.9
Springfield	7.9	8.0	7.9	25.1	25.4	25.4	31.7	33.2	33.0
Indiana	116.2	120.5	119.8	458.2	481.4	477.5	353.4	369.4	365.5
Anderson	1.6	1.6	1.6	10.0	10.2	10.1	5.8	6.3	6.3
Bloomington	1.9	2.0	2.0	8.2	8.7	8.7	17.1	17.5	18.1
Elkhart-Goshen	2.5	2.8	2.7	13.4	14.2	14.1	5.8	5.9	5.9
Evansville	5.1	5.3	5.3	29.0	31.1	30.8	11.9	13.0	12.8
Fort Wayne	12.2	12.5	12.4	37.9	39.8	39.4	18.0	18.4	18.4
Gary-Hammond	8.1	8.4	8.3	48.8	51.3	50.5	30.8	32.3	31.8
Indianapolis	46.4	48.7	48.4	136.1	147.1	145.6	90.9	95.9	95.1
Lafayette	3.0	3.1	3.2	11.4	10.7	11.5	20.2	20.8	20.1
Muncie	1.6	1.7	1.6	10.5	10.9	10.9	11.4	12.0	11.7
South Bend-Mishawaka	5.9	6.1	6.0	32.2	34.3	34.0	11.7	11.8	11.7
Terre Haute	1.9	2.0	2.0	11.4	11.3	11.1	10.7	10.8	10.8
Iowa	64.7	67.4	67.3	250.5	268.0	264.1	209.5	216.9	210.5
Cedar Rapids	4.6	4.8	4.8	20.1	21.5	21.4	10.3	9.6	9.6
Des Moines	27.7	30.1	30.3	52.7	54.9	54.1	30.1	30.4	29.8
Dubuque	1.4	1.4	1.4	12.2	12.4	12.4	3.4	3.4	3.3
Sioux City	2.5	2.6	2.5	14.0	14.7	14.6	6.4	6.6	6.6
Waterloo-Cedar Falls	2.9	2.9	2.8	14.5	14.7	14.7	11.9	12.7	12.0
Kansas	56.8	58.4	57.4	204.1	216.4	214.1	200.6	213.6	207.7
Topeka	6.2	6.6	6.5	20.7	20.6	20.9	20.8	22.0	21.8
Wichita	11.0	10.9	10.7	54.8	58.5	57.6	26.6	29.4	29.0
Kentucky	58.3	58.0	57.8	281.5	295.1	293.9	242.7	246.2	242.8
Lexington-Fayette	9.1	9.4	9.3	42.1	41.9	41.5	37.6	47.1	43.0
Louisville	26.5	25.8	25.7	105.6	114.0	113.5	60.2	62.5	61.9
Owensboro	1.4	1.4	1.4	7.5	7.9	7.8	5.2	5.4	5.3
Louisiana	83.0	81.8	81.5	322.6	328.1	326.9	313.7	316.4	312.3
Alexandria	2.6	2.6	2.5	11.0	11.5	11.5	12.8	12.8	12.8
Baton Rouge	13.6	13.9	13.6	44.5	45.8	45.9	54.8	54.5	51.3
Houma-Thibodaux	2.3	2.2	2.1	8.8	9.4	9.3	10.3	10.7	10.3
Lafayette	3.8	3.5	3.5	17.6	18.1	17.9	11.9	12.8	11.9
Monroe	4.5	4.3	4.3	11.6	11.9	12.0	10.8	11.5	10.7
New Orleans	33.8	34.0	33.9	133.9	138.3	136.5	86.9	85.1	86.1
Shreveport	6.9	6.4	6.4	29.8	30.3	30.5	25.5	25.3	25.1
Maine	24.9	25.5	25.5	106.0	112.4	112.0	89.2	94.9	90.7
Lewiston-Auburn	2.2	2.3	2.3	10.2	10.8	10.5	3.9	4.0	4.1
Portland	11.8	12.6	11.7	28.1	30.1	30.6	14.6	16.7	16.1

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Maryland	2,022.1	2,139.4	2,078.5	1.6	1.7	1.7	144.3	164.0	153.0
Baltimore MSA	1,082.0	1,141.6	1,108.8	.3	.3	.3	67.8	77.9	72.9
Baltimore City	454.3	476.1	465.8	(¹)	(¹)	(¹)	17.3	20.1	18.6
Suburban Maryland-D.C.	724.4	769.3	750.4	.5	.5	.4	61.6	67.9	64.5
Massachusetts	3,034.7	3,182.3	3,100.2	1.4	1.7	1.7	126.7	144.5	135.0
Boston	1,704.8	1,795.7	1,749.0	.8	1.0	.9	64.7	73.8	68.3
Brockton	72.0	76.2	73.6	(¹)	(¹)	(¹)	3.5	4.2	3.7
Fall River	54.8	57.4	55.2	(¹)	(¹)	(¹)	2.1	3.3	2.7
Fitchburg-Leominster	40.5	42.2	41.3	(¹)	(¹)	(¹)	2.2	2.7	2.3
Lawrence-Haverhill	161.1	167.2	165.0	(¹)	(¹)	(¹)	7.3	7.7	7.3
Lowell	107.0	112.0	109.4	.2	.2	.1	4.7	5.9	5.2
New Bedford	66.7	70.1	68.2	(¹)	(¹)	(¹)	2.8	3.6	3.3
Springfield	237.1	246.8	240.7	.1	.1	.1	8.9	10.5	10.1
Worcester	201.4	215.4	211.3	.1	.1	.1	9.2	11.0	10.0
Michigan	3,706.5	3,890.2	3,806.9	9.6	10.4	10.4	110.4	135.4	123.5
Ann Arbor	167.0	178.6	174.9	(¹)	(¹)	(¹)	5.0	5.9	5.1
Battle Creek	56.6	59.7	58.1	(¹)	(¹)	(¹)	1.4	1.7	1.5
Benton Harbor	63.6	66.6	65.1	(¹)	(¹)	(¹)	1.3	1.5	1.3
Detroit	1,848.5	1,943.1	1,909.2	.7	.8	.8	54.3	64.3	59.8
Flint	161.1	166.4	161.3	(¹)	(¹)	(¹)	4.5	5.1	4.8
Grand Rapids	318.0	340.7	330.7	(¹)	(¹)	(¹)	14.1	17.2	15.9
Jackson	51.7	54.6	53.3	(¹)	(¹)	(¹)	1.3	1.5	1.4
Kalamazoo	105.9	111.5	109.3	(¹)	(¹)	(¹)	3.0	3.6	3.3
Lansing-East Lansing	204.6	214.9	212.9	(¹)	(¹)	(¹)	5.0	6.9	6.1
Muskegon	56.1	58.5	56.4	(¹)	(¹)	(¹)	2.0	2.4	2.1
Saginaw-Bay City-Midland	149.4	159.3	154.7	(¹)	(¹)	(¹)	6.3	7.5	6.7
Minnesota	1,951.2	2,059.2	2,011.4	5.9	6.7	6.4	62.9	74.7	63.3
Duluth	88.3	91.9	90.0	4.4	4.8	4.8	2.5	3.1	2.6
Minneapolis-St. Paul	1,281.5	1,345.1	1,316.8	(¹)	(¹)	(¹)	44.4	51.2	45.0
Rochester	57.4	62.2	61.1	(²)	(²)	(²)	1.7	2.0	1.7
St. Cloud	68.9	74.6	72.8	(²)	(²)	(²)	2.5	3.5	3.1
Mississippi	870.6	910.2	897.4	6.2	6.1	6.0	30.4	36.4	33.0
Jackson	176.5	184.3	181.7	.9	.9	.9	8.0	8.4	8.1
Missouri	2,171.3	2,269.6	2,219.4	5.0	5.1	4.8	84.6	91.4	82.0
Kansas City	736.8	765.9	753.8	.5	.5	.5	30.7	33.1	30.2
St. Louis	1,109.0	1,157.0	1,133.6	3.1	3.3	3.1	49.6	52.4	47.0
Springfield	108.2	114.0	111.6	.1	.1	.1	4.0	4.2	3.9
Montana	270.2	280.8	273.9	5.8	6.0	5.8	6.1	8.0	6.6
Nebraska	665.4	705.4	692.8	1.4	1.5	1.3	20.3	24.8	22.3
Lincoln	112.7	120.8	117.3	(¹)	(¹)	(¹)	3.5	4.0	3.8
Omaha	300.3	317.0	312.0	.2	.2	.2	10.1	11.9	10.7
Nevada	509.5	556.2	549.9	9.5	12.0	12.0	29.2	40.4	38.9
Las Vegas	294.0	319.7	318.3	.2	.2	.2	18.8	25.4	25.2
Reno	130.9	140.8	137.6	1.0	1.4	1.3	6.2	8.3	7.7
New Hampshire	514.1	543.3	530.4	.5	.7	.6	32.7	35.1	31.0
Manchester	85.2	88.5	85.7	(²)	(²)	(²)	5.4	6.1	5.6
Nashua	94.1	97.7	95.8	.1	.1	.1	4.5	4.7	4.4
Portsmouth-Dover-Rochester	106.9	113.6	110.6	.1	.2	.2	5.5	5.9	5.5
New Jersey	3,544.1	3,700.0	3,611.2	2.3	2.5	2.3	150.2	178.3	162.4
Atlantic City	154.0	164.2	161.7	(¹)	(¹)	(¹)	8.8	10.4	10.1
Bergen-Passaic	659.9	686.8	674.0	.1	.2	.2	29.4	33.3	31.2
Camden	422.9	445.7	435.8	.1	.1	.1	21.1	24.5	22.9
Jersey City	238.5	249.6	244.1	(¹)	(¹)	(¹)	6.6	7.0	6.8
Middlesex-Somerset-Hunterdon	515.0	542.6	532.2	.6	.6	.6	21.6	24.5	22.2
Monmouth-Ocean	313.9	330.1	325.1	(¹)	(¹)	(¹)	18.3	21.2	20.3
Newark	935.8	970.3	952.8	.6	.7	.7	35.1	40.8	37.5
Trenton	193.5	201.9	198.0	(¹)	(¹)	(¹)	4.6	5.5	5.1
Vineland-Millville-Bridgeton	55.8	58.2	57.4	.4	.4	.4	1.9	2.2	2.1

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Maryland	206.6	210.1	207.6	92.8	97.6	96.6	519.3	550.8	530.7
Baltimore MSA	132.8	132.5	131.2	53.1	55.2	54.6	266.4	285.3	272.1
Baltimore City	44.3	45.3	44.6	27.3	28.0	27.8	93.4	98.7	95.0
Suburban Maryland-D.C.	34.7	36.2	35.9	26.4	30.0	29.5	197.9	208.3	202.1
Massachusetts	586.8	583.9	582.8	131.5	136.3	134.3	717.1	756.7	726.9
Boston	270.3	269.5	267.4	75.9	77.9	76.1	387.5	405.3	393.0
Brockton	11.1	11.1	11.2	5.2	5.3	5.1	22.1	23.5	22.1
Fall River	16.8	15.6	15.3	1.9	2.0	1.9	14.0	15.4	14.3
Fitchburg-Leominster	11.9	12.2	12.1	1.7	1.7	1.7	10.1	10.8	10.5
Lawrence-Haverhill	50.1	49.6	50.1	6.8	7.2	7.0	36.3	38.6	37.2
Lowell	36.9	36.5	36.6	4.6	5.2	5.1	23.0	24.8	23.8
New Bedford	19.6	18.9	18.8	2.8	3.1	2.9	16.0	16.9	16.1
Springfield	50.9	51.2	50.7	9.6	10.1	10.2	56.2	60.1	57.5
Worcester	44.7	45.7	45.6	9.0	9.9	9.6	49.2	53.2	51.8
Michigan	941.9	962.0	951.0	150.2	156.4	152.4	862.2	926.6	889.3
Ann Arbor	38.9	39.1	38.9	4.4	4.3	4.3	29.4	33.2	31.3
Battle Creek	15.1	15.5	15.4	1.8	1.8	1.8	11.5	12.8	12.1
Benton Harbor	22.3	22.5	22.3	2.2	2.4	2.3	12.9	14.2	13.6
Detroit	453.1	471.4	467.2	85.8	88.3	85.2	439.8	469.1	454.6
Flint	49.8	49.2	47.2	4.2	4.2	3.9	42.5	45.8	44.3
Grand Rapids	97.3	100.1	99.0	11.2	12.2	11.8	82.5	91.5	87.1
Jackson	13.4	13.9	13.9	4.2	4.2	4.2	11.6	12.7	12.1
Kalamazoo	30.2	30.5	30.6	3.2	3.3	3.2	23.9	25.9	24.8
Lansing-East Lansing	33.4	33.2	33.4	5.4	5.3	5.4	43.1	47.3	46.4
Muskegon	16.9	17.0	16.5	2.3	2.3	2.3	12.9	13.9	13.2
Saginaw-Bay City-Midland	42.2	44.3	43.7	6.6	6.9	6.9	35.5	38.2	35.9
Minnesota	379.7	396.4	393.9	99.1	104.6	102.3	491.1	523.6	504.3
Duluth	7.3	7.9	7.9	5.4	5.8	5.5	22.0	22.8	22.1
Minneapolis-St. Paul	257.6	265.8	265.0	69.0	72.6	71.6	321.9	342.0	330.1
Rochester	10.8	11.2	11.2	1.7	1.8	1.7	11.8	13.1	12.6
St. Cloud	12.4	13.3	13.2	3.5	3.7	3.7	20.9	22.2	21.8
Mississippi	233.6	239.9	239.2	42.3	44.2	44.0	184.1	198.0	191.0
Jackson	20.5	21.1	20.9	12.9	13.4	13.2	41.8	44.2	42.5
Missouri	422.9	434.9	432.5	143.4	147.7	146.5	531.9	566.7	546.8
Kansas City	112.4	110.7	110.4	59.7	62.2	61.9	193.4	203.3	198.2
St. Louis	216.4	227.0	226.6	72.9	74.9	74.5	271.4	286.0	277.5
Springfield	21.1	21.7	21.5	6.4	7.1	6.9	30.8	32.4	31.4
Montana	20.7	21.4	21.3	19.0	19.8	19.4	70.5	74.7	71.9
Nebraska	91.8	97.6	97.4	43.0	47.1	46.6	172.2	183.8	180.3
Lincoln	14.0	15.1	15.1	5.9	6.5	6.5	26.7	27.8	26.9
Omaha	34.2	35.6	35.2	23.0	25.8	25.4	76.7	80.7	79.7
Nevada	24.5	25.7	25.6	28.1	29.8	29.3	105.3	115.0	111.6
Las Vegas	9.2	9.9	9.8	15.8	16.9	16.5	62.6	67.5	65.8
Reno	8.8	8.8	8.9	9.2	9.6	9.5	30.4	33.6	32.4
New Hampshire	118.7	120.7	120.7	17.7	17.9	17.8	130.5	143.9	136.6
Manchester	12.3	12.2	12.0	5.2	5.5	5.5	23.8	25.4	23.9
Nashua	36.3	36.6	36.6	2.5	2.8	2.7	22.4	23.5	22.4
Portsmouth-Dover-Rochester	20.8	21.3	21.0	2.9	3.1	3.1	26.6	29.8	28.2
New Jersey	658.2	663.3	657.2	238.6	244.8	241.5	858.0	904.9	864.1
Atlantic City	8.4	8.2	8.2	6.4	6.8	6.7	31.2	34.2	32.4
Bergen-Passaic	155.9	157.9	155.9	28.2	28.3	28.0	190.8	200.5	193.4
Camden	72.3	73.6	73.2	18.9	20.0	20.2	115.8	124.3	118.4
Jersey City	43.9	45.2	44.2	32.1	33.4	32.3	60.9	64.0	61.7
Middlesex-Somerset-Hunterdon	113.5	116.7	116.0	42.5	44.0	44.3	125.4	133.3	128.1
Monmouth-Ocean	29.4	29.7	29.9	17.2	18.3	18.4	85.8	90.9	87.0
Newark	173.3	174.9	173.6	80.1	80.1	80.3	193.4	204.0	195.1
Trenton	31.5	31.6	31.5	6.4	6.7	6.6	31.8	33.0	32.2
Vineland-Millville-Bridgeton	14.8	14.7	14.4	2.2	2.3	2.3	11.5	12.4	12.2

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Maryland	126.9	131.3	130.2	538.2	569.5	555.7	392.4	414.4	403.0
Baltimore MSA	76.2	77.9	77.3	281.9	300.1	292.5	203.5	212.4	207.9
Baltimore City	45.1	46.1	45.7	137.5	145.3	142.8	89.4	92.6	91.3
Suburban Maryland-D.C.	42.2	44.1	44.0	209.6	219.7	216.5	151.5	162.6	157.5
Massachusetts	220.0	227.9	227.0	847.3	917.9	886.8	403.9	413.4	405.7
Boston	151.2	157.7	156.6	550.3	599.0	576.6	204.1	211.5	210.1
Brockton	3.2	3.3	3.3	14.8	16.2	15.8	12.1	12.6	12.4
Fall River	3.1	3.3	3.4	10.2	10.8	10.7	6.7	7.0	6.9
Fitchburg-Leominster	1.7	1.7	1.7	8.2	8.3	8.4	4.7	4.8	4.6
Lawrence-Haverhill	6.4	6.7	6.7	33.6	35.5	34.9	20.6	21.9	21.8
Lowell	3.9	4.0	4.0	20.2	21.4	20.8	13.5	14.0	13.8
New Bedford	2.6	2.6	2.5	13.0	14.3	13.9	9.9	10.7	10.7
Springfield	15.8	15.5	15.5	56.6	60.3	57.9	39.0	39.0	38.7
Worcester	14.2	14.8	14.9	50.5	55.4	54.3	24.5	25.3	25.0
Michigan	183.1	186.4	186.2	825.2	865.5	856.8	623.9	647.5	637.3
Ann Arbor	4.6	4.8	4.8	32.8	36.2	36.3	51.9	55.2	54.1
Battle Creek	3.4	3.5	3.5	12.0	12.4	12.1	11.3	11.9	11.6
Benton Harbor	2.5	2.5	2.5	13.9	14.5	14.4	8.4	8.7	8.6
Detroit	108.4	109.9	109.8	463.0	487.0	482.4	243.3	252.3	249.5
Flint	5.9	6.0	5.8	31.1	32.1	31.8	23.1	23.9	23.4
Grand Rapids	15.0	15.4	15.4	66.2	71.1	69.3	31.4	33.0	32.1
Jackson	1.9	1.9	1.9	9.7	10.2	9.9	9.5	10.0	9.7
Kalamazoo	4.7	5.0	5.0	23.5	24.7	24.4	17.5	18.4	17.9
Lansing-East Lansing	12.1	12.7	12.7	37.9	40.6	40.6	67.4	68.4	67.8
Muskegon	1.4	1.4	1.4	11.4	12.3	11.7	9.1	9.2	9.2
Saginaw-Bay City-Midland	6.1	6.2	6.3	31.7	34.5	34.1	20.8	21.4	20.9
Minnesota	118.6	119.4	119.2	474.5	500.6	491.9	319.4	333.2	330.1
Duluth	3.1	3.2	3.1	21.7	22.1	21.9	22.0	22.3	22.2
Minneapolis-St. Paul	92.2	93.3	93.2	322.8	338.2	332.0	173.2	181.4	179.5
Rochester	1.5	1.5	1.6	23.9	26.0	25.9	6.1	6.5	6.3
St. Cloud	2.2	2.3	2.2	14.7	15.9	15.4	12.5	13.7	13.4
Mississippi	38.3	39.0	38.9	140.1	146.6	145.8	195.6	200.0	199.5
Jackson	14.3	14.7	14.7	38.3	41.1	40.6	39.8	40.5	40.8
Missouri	134.0	135.6	134.2	503.4	526.1	516.5	346.1	362.1	356.1
Kansas City	58.3	58.4	58.5	171.2	181.0	178.2	110.6	116.7	115.9
St. Louis	74.7	75.1	74.6	281.9	294.4	289.6	139.0	143.9	140.7
Springfield	5.0	5.2	5.1	27.0	28.5	28.8	13.8	14.8	13.9
Montana	13.3	13.2	13.3	64.4	67.1	66.0	70.4	70.6	69.6
Nebraska	47.0	48.6	48.5	153.3	161.9	160.2	136.4	140.1	136.2
Lincoln	8.1	8.5	8.4	24.7	27.3	26.6	29.8	31.6	30.0
Omaha	28.2	29.0	29.1	81.8	87.0	85.2	46.1	46.8	46.5
Nevada	23.4	25.3	25.2	224.5	237.7	238.6	65.0	70.3	68.7
Las Vegas	14.5	16.1	16.1	139.6	147.8	149.5	33.3	35.9	35.2
Reno	6.7	6.8	6.8	52.4	54.8	54.3	16.2	17.5	16.7
New Hampshire	31.5	32.2	32.2	114.6	119.9	120.0	67.9	72.9	71.5
Manchester	8.1	8.2	8.1	21.7	22.1	21.7	8.7	9.0	8.9
Nashua	3.7	3.6	3.6	17.6	19.1	18.8	7.0	7.3	7.2
Portsmouth-Dover-Rochester	6.7	7.0	7.1	19.0	20.2	19.8	25.3	26.1	25.7
New Jersey	230.3	238.3	238.4	864.2	906.6	891.9	542.3	561.3	553.4
Atlantic City	7.4	7.5	7.4	67.0	71.9	71.9	24.7	25.1	24.9
Bergen-Passaic	37.8	39.8	40.2	149.6	156.2	155.2	68.1	70.6	69.9
Camden	24.3	25.1	25.4	99.7	104.8	103.4	70.7	73.3	72.2
Jersey City	13.0	14.0	14.0	41.8	43.9	43.2	40.2	42.1	41.9
Middlesex-Somerset-Hunterdon	36.6	38.1	38.3	104.7	111.7	110.4	70.1	73.7	72.3
Monmouth-Ocean	18.0	18.8	18.7	83.8	89.1	88.5	61.2	62.0	62.2
Newark	77.8	79.3	79.5	242.3	252.2	249.3	133.2	138.3	136.8
Trenton	9.7	9.9	9.9	55.0	58.6	56.6	54.5	56.6	56.1
Vineland-Millville-Bridgeton	3.4	3.5	3.5	10.0	10.7	10.6	11.6	12.0	11.9

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
New Mexico	525.5	549.6	539.0	15.3	15.6	15.3	28.2	29.7	27.8
Albuquerque	228.7	239.2	234.8	.2	.1	.1	13.9	14.9	13.9
Las Cruces	39.8	41.5	40.9	.1	.1	.1	2.0	2.1	2.1
Santa Fe	53.2	55.4	54.4	.1	.1	.1	2.3	2.5	2.2
New York	7,977.0	8,335.9	8,116.0	5.0	6.0	5.2	296.5	346.8	312.1
Albany-Schenectady-Troy	401.9	421.5	412.4	.2	.5	.3	16.6	20.3	17.9
Binghamton	120.9	125.9	122.9	(¹)	(¹)	(¹)	4.7	5.9	5.2
Buffalo	431.4	453.5	438.2	.3	.3	.2	13.7	16.4	14.0
Elmira	38.8	41.1	39.9	(¹)	(¹)	(¹)	1.4	1.7	1.6
Nassau-Suffolk	1,109.8	1,168.1	1,131.8	.2	.2	.2	52.4	62.2	55.6
New York PMSA	4,067.9	4,197.3	4,100.2	1.1	1.0	1.0	142.0	157.2	146.4
New York City	3,554.9	3,656.7	3,576.0	.6	.5	.5	112.5	124.4	117.1
Niagara Falls	78.1	83.8	80.6	(¹)	(¹)	(¹)	2.7	3.3	2.9
Orange County	100.8	107.5	105.4	(¹)	(¹)	(¹)	4.7	6.0	5.4
Poughkeepsie	116.5	123.1	118.5	(²)	(²)	(²)	6.1	7.2	6.5
Rochester	463.0	492.2	480.7	.6	.8	.7	15.8	18.6	16.8
Rockland County	96.3	101.7	99.3	(²)	(²)	(²)	4.5	4.7	4.2
Syracuse	293.4	311.1	303.3	.1	.2	.1	12.7	14.8	13.5
Utica-Rome	119.4	126.6	124.0	.1	.1	.1	3.1	3.6	3.1
Westchester County	398.8	420.4	406.7	.2	.2	.2	23.6	26.6	23.8
North Carolina	2,884.5	3,030.8	2,984.9	4.6	5.0	5.0	147.8	167.8	157.6
Asheville	76.2	81.9	79.7	.1	.1	.1	3.7	4.2	4.0
Charlotte-Gastonia-Rock Hill	579.2	602.8	598.1	.4	.3	.3	33.3	36.8	36.1
Greensboro-Winston-Salem-High Point	476.0	489.9	482.8	.3	.3	.3	23.0	24.9	23.9
Raleigh-Durham	383.6	405.0	393.2	.3	.4	.3	19.9	22.1	20.8
North Dakota	248.1	259.0	253.1	4.1	3.9	3.8	7.2	8.7	7.5
Bismarck	36.0	38.0	37.4	.2	.2	.2	1.1	1.3	1.1
Fargo-Moorhead	70.8	74.6	73.2	(¹)	(¹)	(¹)	2.5	3.0	2.7
Grand Forks	29.3	31.4	30.2	(¹)	(¹)	(¹)	1.0	1.1	.9
Ohio	4,546.1	4,781.8	4,671.4	19.4	19.5	18.6	154.1	188.0	166.7
Akron	260.1	279.7	270.3	.6	.7	.7	7.8	10.0	8.6
Canton	155.0	163.0	160.3	.9	.9	.9	4.8	6.4	6.0
Cincinnati	677.2	718.6	703.2	.4	.5	.5	26.8	32.6	30.1
Cleveland	882.7	924.5	902.0	1.0	1.1	1.0	24.0	27.8	24.6
Columbus	658.5	698.6	683.0	.9	1.0	.9	24.5	29.2	26.6
Dayton-Springfield	426.5	448.2	437.9	.3	.4	.3	14.8	18.8	16.5
Toledo	277.2	292.4	286.3	.2	.3	.2	8.7	11.3	10.0
Youngstown-Warren	187.2	196.7	193.8	.6	.7	.6	5.8	7.5	6.4
Oklahoma	1,106.3	1,145.1	1,125.5	45.5	44.1	44.0	30.9	32.3	31.0
Enid	21.5	21.2	21.4	1.1	1.0	1.1	.6	.7	.6
Lawton	33.9	33.6	33.5	.3	.3	.3	1.0	1.2	1.2
Oklahoma City	399.8	410.4	406.2	11.9	11.0	10.7	11.2	11.7	10.7
Tulsa	289.9	299.8	297.3	14.4	14.4	14.3	8.7	9.3	8.7
Oregon	1,101.5	1,183.3	1,157.8	1.2	1.4	1.2	32.7	40.1	36.8
Eugene-Springfield	105.4	112.8	110.4	.1	.2	.2	3.0	3.5	3.2
Portland	559.3	595.8	582.2	(²)	(²)	(²)	18.4	21.5	20.1
Salem	96.3	101.9	99.6	.1	.1	.1	2.9	3.5	3.3
Pennsylvania	4,891.6	5,106.8	4,993.7	29.2	28.7	27.9	195.8	234.6	211.8
Allentown-Bethlehem	268.3	283.4	275.4	.6	.6	.5	12.2	14.7	13.5
Altoona	50.1	51.8	50.2	(²)	(²)	(²)	2.2	2.3	2.0
Beaver County	48.5	49.7	47.9	(²)	(²)	(²)	2.0	1.7	1.4
Erie	110.7	115.5	114.4	.2	.2	.2	2.8	3.3	2.9
Harrisburg-Lebanon-Carlisle	293.1	302.4	298.5	.3	.3	.3	11.6	12.7	11.7
Johnstown	76.7	79.7	79.2	3.1	3.0	3.0	2.2	2.5	2.2
Lancaster	178.3	187.7	184.2	.3	.4	.4	10.4	11.6	11.1
Philadelphia PMSA	2,132.5	2,207.4	2,170.0	1.0	1.0	1.0	93.1	107.0	98.1
Philadelphia City	769.7	789.4	779.1	(²)	(²)	(²)	15.5	17.8	16.2
Pittsburgh	849.9	880.1	860.5	5.0	4.8	4.6	34.7	37.8	33.6

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
New Mexico	38.8	40.4	40.0	28.9	28.9	28.2	126.0	135.6	131.5
Albuquerque	20.1	20.3	20.4	12.5	12.7	12.5	58.8	63.0	61.0
Las Cruces	3.7	3.6	3.6	1.4	1.4	1.4	8.3	9.1	8.9
Santa Fe	1.6	1.7	1.7	1.2	1.2	1.1	10.1	11.2	10.8
New York	1,187.7	1,210.1	1,192.4	405.2	416.9	408.1	1,682.8	1,803.2	1,718.0
Albany-Schenectady-Troy	46.8	47.8	47.5	16.4	16.7	16.3	86.9	94.6	91.1
Binghamton	38.2	38.5	37.6	4.3	4.4	4.3	26.4	27.5	26.7
Buffalo	76.3	78.3	77.1	20.8	22.0	20.9	106.9	113.8	108.7
Elmira	8.2	8.8	8.7	1.4	1.4	1.4	10.5	11.1	10.7
Nassau-Suffolk	170.9	168.1	166.7	48.8	49.7	49.0	299.4	321.6	305.5
New York PMSA	437.6	445.0	435.0	241.3	246.3	242.4	752.5	794.8	756.5
New York City	359.1	362.9	353.6	215.9	220.3	216.4	629.4	663.6	632.5
Niagara Falls	23.5	23.9	23.8	3.5	3.9	3.6	18.3	19.9	18.7
Orange County	14.5	15.4	15.3	5.9	6.1	5.9	26.9	29.5	28.6
Poughkeepsie	30.4	30.5	29.7	3.4	3.7	3.7	22.1	23.4	22.2
Rochester	133.6	138.2	137.5	14.3	14.9	14.7	99.1	106.0	101.6
Rockland County	15.0	15.5	15.3	4.3	4.7	4.7	22.7	24.4	23.5
Syracuse	52.1	53.7	53.3	17.7	18.8	18.5	69.9	75.6	73.5
Utica-Rome	24.2	25.1	25.5	4.3	4.3	4.2	26.1	27.7	26.9
Westchester County	61.8	64.9	64.4	20.5	20.6	20.6	95.8	102.2	95.9
North Carolina	862.8	870.8	868.8	141.8	149.7	147.3	654.2	705.4	686.6
Asheville	18.8	19.2	19.1	3.8	3.9	3.8	18.8	20.0	19.5
Charlotte-Gastonia-Rock Hill	154.6	154.9	154.3	48.0	48.9	48.4	142.3	149.6	148.0
Greensboro-Winston-Salem-High Point	156.0	152.5	152.6	26.7	27.2	27.0	108.3	113.0	110.2
Raleigh-Durham	58.7	61.0	61.3	17.4	17.4	17.4	83.4	87.4	83.8
North Dakota	16.0	16.5	16.5	16.0	17.3	17.0	66.4	69.5	67.0
Bismarck	1.9	2.1	2.1	2.6	2.7	2.6	9.7	10.1	9.9
Fargo-Moorhead	4.9	4.9	4.9	4.3	4.8	4.7	20.7	22.1	21.3
Grand Forks	1.6	1.7	1.7	1.6	1.7	1.6	8.4	9.1	8.7
Ohio	1,094.7	1,115.1	1,113.0	205.3	215.3	208.5	1,095.3	1,180.5	1,135.3
Akron	65.0	86.6	67.0	12.6	13.2	12.9	65.8	71.0	68.7
Canton	44.3	45.7	45.9	5.5	6.0	5.8	38.8	41.5	39.8
Cincinnati	145.7	146.6	145.5	36.5	39.6	39.1	172.9	189.0	182.3
Cleveland	200.4	205.4	204.3	40.3	42.4	40.5	215.4	229.9	220.2
Columbus	102.2	104.0	103.0	28.7	30.8	30.0	168.4	182.2	175.2
Dayton-Springfield	103.4	105.5	105.0	16.3	17.3	16.6	96.4	104.1	99.5
Toledo	61.9	62.4	62.2	12.9	13.3	12.8	68.8	74.4	71.7
Youngstown-Warren	49.4	49.8	51.1	7.3	7.8	7.5	48.4	51.8	50.1
Oklahoma	159.6	165.6	164.7	61.7	61.9	62.1	266.9	281.2	273.1
Enid	1.6	1.4	1.5	2.0	2.2	2.2	6.3	6.2	6.0
Lawton	3.3	3.6	3.7	1.3	1.3	1.3	8.4	8.5	8.3
Oklahoma City	47.8	49.1	49.1	19.4	19.2	19.1	98.9	103.1	101.3
Tulsa	48.9	50.0	49.6	22.9	23.8	23.8	70.2	71.4	70.1
Oregon	206.4	212.7	209.3	58.3	62.3	62.3	275.9	307.2	295.8
Eugene-Springfield	20.0	20.5	20.5	4.1	4.3	4.3	26.3	28.8	27.7
Portland	96.2	97.5	96.7	34.7	36.6	35.8	147.0	159.6	153.4
Salem	13.0	14.2	13.4	2.9	3.0	2.9	21.7	23.5	22.5
Pennsylvania	1,045.8	1,059.5	1,054.7	249.2	256.2	251.6	1,122.9	1,184.8	1,140.9
Allentown-Bethlehem	76.6	77.8	77.4	14.0	14.2	13.9	59.4	63.4	61.0
Altoona	10.9	10.7	10.4	4.5	4.6	4.5	13.0	14.1	13.4
Beaver County	9.7	9.6	9.2	4.9	5.0	4.8	11.3	11.8	11.3
Erie	34.8	35.7	35.8	3.8	3.7	3.6	24.6	26.3	25.9
Harrisburg-Lebanon-Carlisle	52.5	52.1	52.0	18.4	18.6	18.4	67.0	69.0	68.0
Johnstown	13.1	13.6	13.6	5.1	5.2	5.3	16.3	17.7	17.1
Lancaster	59.4	60.0	59.6	6.9	7.4	7.3	42.7	46.1	45.0
Philadelphia PMSA	370.8	368.2	366.1	100.1	102.7	100.4	501.1	524.2	512.1
Philadelphia City	95.3	93.5	93.4	44.7	43.8	42.9	148.0	158.4	154.2
Pittsburgh	124.1	125.0	124.9	47.2	47.1	46.5	215.8	230.2	221.1

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
New Mexico	26.5	27.4	27.0	123.7	129.4	129.8	138.1	142.6	139.4
Albuquerque	14.6	15.1	15.0	64.0	66.3	66.0	44.6	46.8	45.9
Las Cruces	1.6	1.7	1.7	6.4	6.7	6.8	16.3	16.8	16.3
Santa Fe	2.0	1.9	1.9	14.1	14.5	14.4	21.8	22.3	22.2
New York	793.8	799.1	792.6	2,191.3	2,296.6	2,252.6	1,414.6	1,457.3	1,435.0
Albany-Schenectady-Troy	23.2	24.6	24.6	100.9	104.8	103.3	110.9	112.3	111.4
Binghamton	4.1	4.4	4.4	22.4	23.2	23.1	21.0	22.0	21.5
Buffalo	27.2	28.6	28.4	111.9	117.6	114.1	74.2	76.4	74.7
Elmira	1.3	1.4	1.4	9.5	10.1	9.5	6.4	6.7	6.7
Nassau-Suffolk	75.9	79.5	79.1	281.6	299.2	291.6	180.6	187.6	184.0
New York PMSA	580.9	575.5	570.2	1,245.1	1,295.0	1,271.9	667.4	682.4	676.8
New York City	547.5	540.4	535.1	1,103.9	1,145.5	1,125.6	586.0	599.2	595.2
Niagara Falls	1.9	2.1	2.0	15.6	17.6	16.8	12.5	13.0	12.7
Orange County	4.3	4.6	4.6	21.9	22.1	22.2	22.6	23.6	23.3
Poughkeepsie	4.7	5.0	5.0	25.6	28.7	27.0	24.2	24.5	24.3
Rochester	21.9	23.0	22.8	111.8	122.0	120.0	65.8	68.6	66.7
Rockland County	5.1	5.3	5.3	23.9	25.6	25.2	20.9	21.5	21.2
Syracuse	19.8	20.4	20.1	70.1	75.1	72.1	50.8	52.6	52.0
Utica-Rome	6.8	7.3	7.3	25.7	27.5	27.0	29.1	30.8	29.8
Westchester County	27.6	29.2	29.1	112.5	118.9	116.1	56.7	57.7	56.5
North Carolina	126.9	131.4	130.3	494.6	532.1	526.8	451.8	468.6	462.5
Asheville	2.3	2.6	2.5	17.1	19.7	18.8	11.6	12.2	11.9
Charlotte-Gastonia-Rock Hill	37.0	37.2	37.3	101.5	109.3	108.7	62.1	65.8	65.0
Greensboro-Winston-Salem-High Point	23.4	24.4	24.4	85.8	90.6	88.5	52.5	57.0	55.9
Raleigh-Durham	23.0	23.7	23.2	93.6	101.9	98.6	87.3	91.1	87.8
North Dakota	12.2	12.3	12.1	61.9	64.2	63.7	64.3	66.6	65.5
Bismarck	1.6	1.6	1.6	10.6	11.3	11.3	8.3	8.7	8.6
Fargo-Moorhead	4.4	4.4	4.4	19.6	20.8	20.6	14.4	14.6	14.6
Grand Forks	1.1	1.1	1.1	6.6	6.8	6.7	9.0	9.9	9.5
Ohio	244.6	252.4	250.0	1,040.6	1,101.0	1,084.1	692.2	710.0	695.1
Akron	10.5	10.6	10.5	57.6	61.9	61.0	40.2	45.7	41.0
Canton	6.3	6.3	6.2	35.5	37.0	36.4	18.9	19.3	19.2
Cincinnati	41.0	43.0	42.6	166.3	177.2	174.3	87.6	90.0	88.9
Cleveland	55.4	57.8	57.4	230.7	243.1	238.9	115.4	117.0	115.1
Columbus	56.8	58.8	58.5	154.3	164.4	161.7	122.7	128.2	127.1
Dayton-Springfield	17.7	18.2	18.0	103.6	109.2	107.6	74.1	74.8	74.4
Toledo	12.2	12.5	12.4	70.1	74.3	72.7	42.5	43.9	44.3
Youngstown-Warren	8.1	8.3	8.2	43.2	45.7	45.4	24.3	25.0	24.4
Oklahoma	58.7	58.7	58.3	235.0	250.3	244.8	248.0	251.0	247.5
Enid	1.0	1.0	1.0	5.3	5.4	5.3	3.6	3.3	3.7
Lawton	1.5	1.5	1.5	6.2	6.0	5.8	11.9	11.2	11.4
Oklahoma City	24.2	23.7	23.6	91.2	94.1	93.2	95.2	98.5	98.5
Tulsa	16.7	17.4	17.3	70.9	77.2	77.1	37.2	36.3	36.4
Oregon	71.5	74.3	73.5	246.5	268.3	263.9	209.0	217.0	215.0
Eugene-Springfield	5.1	5.3	5.2	23.6	25.8	25.6	23.2	24.4	23.7
Portland	47.2	49.2	48.7	136.9	148.9	145.4	78.5	82.1	81.7
Salem	5.6	5.9	5.9	19.2	20.9	20.6	30.9	30.8	30.9
Pennsylvania	288.6	293.1	291.8	1,274.1	1,345.0	1,325.0	686.0	704.9	690.0
Allentown-Bethlehem	12.7	12.5	12.6	63.3	69.3	66.8	29.5	30.9	29.7
Altoona	1.6	1.8	1.9	10.7	10.9	10.8	7.2	7.4	7.2
Beaver County	1.6	1.6	1.6	11.3	12.0	11.7	7.7	8.0	7.9
Erie	5.2	5.4	5.3	25.9	26.9	26.6	13.4	14.0	14.1
Harrisburg-Lebanon-Carlisle	17.8	19.6	19.6	60.6	63.7	63.0	64.9	66.4	65.5
Johnstown	4.7	4.6	4.7	19.6	20.1	20.1	12.6	13.0	13.2
Lancaster	6.9	7.0	7.3	36.2	39.2	38.4	15.5	16.0	15.1
Philadelphia PMSA	161.3	162.9	162.0	606.5	638.1	627.6	298.6	303.3	302.7
Philadelphia City	71.5	71.0	70.5	251.9	262.7	259.3	142.8	142.2	142.6
Pittsburgh	51.8	52.5	52.4	267.7	275.1	272.5	103.6	107.6	104.9

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Pennsylvania-Continued									
Reading	145.2	154.4	149.9	(^b)	(^b)	(^b)	6.1	7.2	6.6
Scranton-Wilkes-Barre	289.4	301.6	297.0	0.6	0.7	0.6	11.2	14.2	12.4
Williamsport	49.5	51.4	50.4	(^b)	(^b)	(^b)	1.7	2.1	1.8
York	172.0	179.6	177.7	.4	.5	.5	8.7	9.6	9.2
Rhode Island									
Pawtucket-Woonsocket-Attleboro	444.4	464.4	448.7	.1	.2	.1	17.6	21.8	18.8
Providence	127.6	133.3	128.9	.2	.2	.2	4.9	6.1	5.4
	314.7	331.1	319.4	.1	.1	.1	31.7	16.6	14.2
South Carolina									
Charleston	1,393.4	1,479.4	1,457.9	1.8	1.8	1.8	83.5	93.5	90.8
Columbia	187.8	195.4	191.9	(^c)	(^c)	(^c)	12.8	13.1	13.1
Greenville-Spartanburg	225.7	232.0	229.3	(^c)	(^c)	(^c)	13.1	14.2	14.1
	311.3	328.1	321.6	(^c)	(^c)	(^c)	20.5	22.8	21.9
South Dakota									
Rapid City	253.5	265.5	258.0	2.5	2.6	2.5	6.8	8.3	6.8
Sioux Falls	33.2	34.8	33.7	.2	.2	.2	1.4	1.7	1.4
	65.0	68.5	67.0	(^c)	(^c)	(^c)	2.0	2.5	2.2
Tennessee									
Chattanooga	2,011.0	2,073.1	2,045.3	6.5	6.5	6.3	85.6	93.5	86.0
Johnson City-Kingsport-Bristol	190.4	198.8	198.3	.6	.5	.5	7.3	8.6	8.0
Knoxville	159.2	166.8	163.7	.2	.1	.1	6.5	7.0	6.6
Memphis	251.5	253.5	256.2	1.7	1.7	1.7	12.0	12.7	11.3
Nashville	419.6	412.6	436.8	.1	.2	.1	16.4	18.3	18.2
	475.5	487.9	484.9	.7	.7	.7	25.1	26.6	25.8
Texas									
Abilene	6,501.6	6,755.0	6,697.4	186.0	181.7	180.1	317.7	317.0	310.4
Amarillo	48.4	50.0	49.6	2.2	2.0	2.0	1.8	2.1	2.1
Austin	76.1	77.0	76.1	1.4	1.3	1.3	3.3	3.5	3.4
Beaumont-Port Arthur	349.8	355.4	353.3	.8	.7	.7	14.3	13.8	13.7
Brazoria	129.7	133.9	132.6	1.7	1.8	1.8	7.5	8.8	8.6
Brownsville-Harlingen	57.7	60.6	60.3	2.3	1.9	1.9	5.7	7.4	7.4
Bryan-College Station	66.1	69.6	69.6	.1	.1	.1	1.9	2.1	2.1
Corpus Christi	45.8	50.9	47.8	.7	.6	.5	1.6	2.0	2.0
Dallas	121.6	125.5	125.2	4.0	4.4	4.5	7.1	8.3	8.3
El Paso	1,318.8	1,352.3	1,339.8	18.8	18.2	17.8	56.2	50.9	50.0
Ft. Worth-Arlington	189.5	195.9	194.3	.1	.1	.1	8.9	8.6	8.8
Galveston-Texas City	516.2	530.9	527.9	3.6	3.7	4.1	22.6	22.2	22.1
Houston	69.8	71.1	69.9	.5	.5	.5	4.2	4.9	4.8
Killeen-Temple	1,396.9	1,465.9	1,453.3	64.1	67.0	67.1	83.0	87.9	85.2
Laredo	69.3	72.0	71.5	.1	.1	.1	3.2	3.6	3.5
Longview-Marshall	36.7	39.6	39.1	2.1	1.9	1.9	1.2	1.0	1.1
Lubbock	64.7	66.4	65.9	3.6	3.6	3.7	3.0	3.2	3.1
McAllen-Edinburg-Mission	91.2	95.2	93.7	.5	.4	.4	2.8	3.2	3.1
Midland	92.7	100.2	100.0	.9	.9	.9	4.0	4.1	4.1
Odessa	44.1	45.0	44.5	10.4	9.9	9.9	1.2	1.4	1.3
San Angelo	43.4	43.2	42.8	6.3	5.7	5.7	2.1	1.9	1.8
San Antonio	36.4	36.7	36.4	.5	.5	.5	1.6	1.4	1.4
Sherman-Denison	491.5	508.9	503.2	2.6	2.2	2.2	26.8	23.0	22.5
Texas City	37.2	37.0	37.2	.1	.1	.1	1.5	1.6	1.7
Tyler	44.7	45.4	44.9	.1	.1	.1	1.7	1.5	1.5
Victoria	60.5	60.8	60.4	1.9	2.0	1.9	2.0	2.0	2.0
Waco	27.3	27.2	27.0	1.8	1.3	1.3	1.5	1.4	1.6
Wichita Falls	77.3	80.5	79.5	.1	.1	.1	3.3	3.7	3.6
	49.6	51.4	51.0	2.0	1.9	1.9	1.6	2.2	2.1
Utah									
Provo-Orem	636.9	682.7	661.8	8.4	8.0	7.8	20.7	25.6	20.9
Salt Lake City-Ogden	77.2	85.5	83.3	(^c)	(^c)	(^c)	2.0	2.7	2.5
	440.1	467.5	453.4	2.6	2.6	2.5	15.1	17.4	15.0
Vermont									
Barre-Montpelier	248.9	264.3	259.3	.4	.5	.4	14.9	19.3	16.9
Burlington	33.3	35.2	35.1	.1	.2	.1	1.8	2.0	1.9
	75.1	78.5	76.1	(^c)	(^c)	(^c)	4.3	4.3	4.3

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Pennsylvania-Continued									
Reading	47.9	48.8	48.6	6.5	6.8	6.7	32.1	35.0	33.4
Scranton-Wilkes-Barre	70.2	71.5	71.9	15.7	16.2	16.0	66.6	69.0	67.8
Williamsport	16.6	16.3	16.0	1.8	1.9	1.9	11.2	11.7	11.6
York	60.6	62.0	62.3	7.3	7.9	7.8	41.2	43.6	42.1
Rhode Island	113.6	114.2	112.1	15.2	15.9	15.1	100.9	108.0	102.1
Pawtucket-Woonsocket-Attleboro	50.0	50.3	49.1	3.4	3.7	3.6	32.0	34.2	32.8
Providence	71.0	71.2	69.4	11.8	12.9	12.1	68.9	73.6	69.8
South Carolina	380.3	386.2	385.2	60.7	63.9	63.5	305.6	337.9	327.0
Charleston	20.7	21.7	21.6	10.9	11.7	11.5	45.3	46.0	43.8
Columbia	28.7	29.3	29.4	10.5	10.5	10.5	50.0	51.2	49.1
Greenville-Spartanburg	101.2	103.4	103.2	11.7	12.5	12.5	72.0	76.9	74.2
South Dakota	30.1	30.3	29.9	13.2	14.2	13.4	65.8	69.7	67.2
Rapid City	3.1	3.2	3.1	1.8	1.8	1.7	9.6	10.1	10.1
Sioux Falls	8.3	7.8	7.8	5.2	5.4	5.4	18.0	18.7	18.3
Tennessee	502.9	511.3	508.2	105.2	104.6	110.1	475.6	498.5	484.8
Chattanooga	46.9	47.6	47.8	8.4	8.3	9.5	43.5	46.4	45.8
Johnson City-Kingsport-Bristol	52.2	54.1	54.3	6.1	6.3	6.3	36.1	38.5	35.9
Knoxville	52.6	54.1	53.5	9.9	8.8	10.1	62.4	64.8	63.9
Memphis	53.5	54.6	54.1	39.6	40.6	41.7	114.0	124.2	118.0
Nashville	89.1	91.0	90.5	24.0	23.3	24.7	118.9	119.9	119.4
Texas	946.4	966.4	964.0	378.2	396.6	393.2	1,818.1	1,689.7	1,659.9
Abilene	4.7	4.9	4.9	2.4	2.5	2.4	13.2	14.2	13.9
Amarillo	9.8	9.0	9.0	5.6	5.5	5.5	21.6	23.1	22.5
Austin	40.4	41.4	41.4	10.5	10.5	10.5	76.2	77.8	75.8
Beaumont-Port Arthur	25.4	25.0	25.1	9.5	9.5	9.5	31.4	33.2	32.1
Brazoria	15.3	15.7	15.7	2.8	2.6	2.7	11.0	11.3	11.1
Brownsville-Harlingen	9.7	10.0	10.1	2.9	3.1	3.0	17.2	18.4	18.3
Bryan-College Station	3.3	3.5	3.4	1.5	1.5	1.5	10.3	10.7	10.1
Corpus Christi	11.3	11.3	11.3	6.6	6.5	6.5	30.2	31.5	31.4
Dallas	222.3	222.8	222.2	89.2	92.4	92.0	339.4	354.3	348.0
El Paso	39.8	40.6	39.8	10.4	10.8	10.7	45.1	47.0	47.0
Ft. Worth-Arlington	118.1	121.5	121.0	29.9	30.6	30.7	135.4	138.2	135.4
Galveston-Texas City	8.0	8.3	8.2	4.9	4.6	4.5	13.7	14.1	13.4
Houston	150.6	156.1	158.7	95.7	101.8	100.9	348.7	370.7	362.1
Killeen-Temple	7.7	8.3	8.4	2.7	2.8	2.7	16.0	18.7	18.2
Laredo	1.7	1.8	1.9	4.5	5.0	5.0	10.6	11.9	11.6
Longview-Marshall	15.7	15.9	15.8	3.0	3.1	3.1	16.6	17.3	17.0
Lubbock	7.1	7.6	7.5	4.8	4.6	4.7	27.4	28.6	27.8
McAllen-Edinburg-Mission	12.8	14.4	14.3	2.9	3.2	3.2	26.4	31.9	31.8
Midland	2.6	2.7	2.8	2.3	2.3	2.3	10.0	10.2	10.1
Odessa	4.0	4.1	4.1	2.1	2.1	2.1	12.6	13.0	12.8
San Angelo	5.4	5.4	5.5	3.3	3.0	3.0	9.1	9.4	9.2
San Antonio	48.9	47.6	47.2	18.9	19.0	19.1	125.0	130.8	127.2
Sherman-Denison	11.0	11.0	11.2	2.0	1.9	1.8	7.7	7.9	8.0
Texarkana	7.5	7.5	7.5	1.8	1.9	1.9	10.3	10.8	10.4
Tyler	10.8	10.5	10.4	2.7	2.5	2.5	16.2	16.4	16.3
Victoria	3.0	3.0	3.0	1.4	1.3	1.3	7.4	7.8	7.6
Waco	14.5	14.7	14.7	3.3	3.4	3.3	18.4	19.1	18.6
Wichita Falls	8.3	6.2	6.2	2.6	2.6	2.6	11.6	12.5	12.1
Utah	94.6	102.1	100.2	37.7	41.4	39.4	150.7	165.2	157.0
Provo-Orem	11.9	14.2	14.3	2.7	2.6	2.5	16.8	16.3	17.0
Salt Lake City-Ogden	61.7	65.8	63.8	28.7	31.8	30.7	109.7	118.5	112.2
Vermont	48.9	50.1	49.1	10.2	10.3	10.2	58.2	62.6	61.9
Barre-Montpelier	4.5	4.9	4.7	.6	.9	.9	7.3	7.8	7.8
Burlington	16.7	16.6	16.2	3.1	3.3	3.2	18.0	19.4	18.6

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Pennsylvania-Continued									
Reading	7.8	8.3	8.2	28.7	31.0	30.1	16.1	17.3	16.3
Scranton-Wilkes-Barre	13.0	13.5	13.4	70.8	73.8	73.3	41.3	42.7	41.6
Williamsport	2.3	2.4	2.4	9.7	10.1	10.0	6.2	6.9	6.7
York	4.8	4.9	4.8	30.9	32.4	32.6	18.1	18.7	18.4
Rhode Island									
Pawtucket-Woonsocket-Attleboro	26.3	26.5	26.4	111.5	117.2	113.6	59.2	60.6	60.5
Providence	3.8	3.9	3.9	23.2	24.6	23.7	10.1	10.3	10.2
	21.9	22.5	22.9	83.8	89.5	86.4	44.5	44.7	44.5
South Carolina									
Charleston	62.9	65.1	64.8	240.0	259.8	257.1	258.6	271.2	267.7
Columbia	8.2	8.6	8.6	38.2	41.6	40.9	51.6	52.6	52.3
Greenville-Spartanburg	17.6	18.0	17.9	44.0	45.5	45.2	61.5	63.0	62.8
	12.0	12.0	11.9	53.1	57.7	55.8	40.5	42.5	41.8
South Dakota									
Rapid City	13.9	14.7	14.8	61.8	65.2	64.0	59.4	60.5	59.4
Sioux Falls	1.6	1.6	1.5	8.3	8.7	8.5	7.1	7.5	7.3
	6.1	6.5	6.7	17.9	19.9	19.0	7.4	7.5	7.5
Tennessee									
Chattanooga	101.2	104.6	104.4	409.6	426.7	419.9	324.5	327.4	325.6
Johnson City-Kingsport-Bristol	12.4	12.7	12.7	37.0	39.1	38.3	34.3	35.6	35.9
Knoxville	5.1	5.4	5.5	29.2	31.0	31.2	23.7	24.4	23.8
Memphis	9.6	9.7	9.9	52.4	52.3	56.6	50.9	49.4	49.2
Nashville	24.3	25.1	25.3	100.4	78.1	107.6	71.3	71.5	71.8
	33.9	34.7	35.0	116.3	121.8	119.5	67.5	69.9	69.3
Texas									
Abilene	435.1	440.4	440.3	1,456.6	1,549.3	1,543.8	1,163.5	1,213.7	1,205.7
Amarillo	2.5	2.4	2.5	13.1	12.9	12.8	8.5	9.0	9.0
Austin	4.5	4.2	4.2	16.2	16.9	16.8	13.7	13.5	13.4
Beaumont-Port Arthur	24.4	24.1	24.2	82.8	84.7	84.8	100.4	102.4	102.2
Brazoria	5.3	5.3	5.3	28.8	29.7	29.7	20.1	20.6	20.5
Brownsville-Harlingen	2.0	2.0	2.0	7.9	8.4	8.3	10.7	11.3	11.2
Bryan-College Station	3.5	3.6	3.6	14.4	15.6	15.8	16.5	16.8	16.7
Corpus Christi	1.6	1.6	1.5	8.3	8.9	9.0	18.5	22.1	19.8
Dallas	6.8	7.0	7.0	28.2	28.7	28.7	27.4	27.8	27.5
El Paso	129.6	127.7	126.8	315.7	333.8	330.5	147.6	152.2	152.5
Ft. Worth-Arlington	8.7	8.4	8.4	36.5	39.0	38.8	40.1	41.4	40.9
Galveston-Texas City	26.8	26.8	26.5	111.9	118.2	118.3	67.9	69.5	69.8
Houston	4.2	4.1	4.1	13.2	13.9	13.7	21.1	20.7	20.7
Killeen-Temple	100.9	101.0	100.1	366.5	386.9	387.3	187.4	194.5	193.9
Laredo	2.9	3.0	2.9	15.3	16.2	16.4	21.4	21.3	21.3
Longview-Marshall	1.6	1.5	1.5	6.0	6.4	6.4	9.0	10.1	9.7
Lubbock	2.7	2.7	2.7	11.6	12.1	12.0	8.5	8.5	8.5
McAllen-Edinburg-Mission	5.2	5.5	5.5	21.8	23.1	23.2	21.6	22.0	21.7
Midland	3.8	3.8	3.7	15.4	16.1	16.3	24.5	25.8	25.7
Odessa	2.3	2.3	2.3	9.2	9.6	9.5	6.1	6.6	6.5
San Angelo	1.7	1.7	1.7	7.0	7.2	7.2	7.6	7.5	7.4
San Antonio	1.8	1.8	1.8	8.0	8.1	8.1	6.7	7.1	6.9
Sherman-Denison	38.3	39.7	39.5	119.1	126.1	124.9	113.9	120.5	120.6
Texarkana	1.8	1.7	1.7	8.7	8.4	8.4	4.4	4.4	4.3
Tyler	1.9	1.9	1.8	9.0	9.5	9.5	12.4	12.2	12.2
Victoria	3.7	3.4	3.4	14.2	14.5	14.4	9.2	9.5	9.5
Waco	1.5	1.5	1.5	5.9	6.0	5.9	4.8	4.9	4.8
Wichita Falls	4.7	4.9	4.8	20.6	21.6	21.5	12.4	13.0	12.9
	2.3	2.3	2.3	11.6	11.9	11.9	9.6	9.8	9.9
Utah									
Provo-Orem	33.4	33.0	32.9	148.5	162.7	158.9	142.9	144.7	144.7
Salt Lake City-Ogden	2.2	2.3	2.4	28.3	32.0	31.1	13.3	13.4	13.5
	27.6	27.1	26.8	100.9	109.3	106.4	93.8	95.0	96.0
Vermont									
Barre-Montpelier	12.2	12.7	12.7	63.8	65.6	67.4	40.3	43.2	40.7
Burlington	3.0	3.0	3.0	7.6	8.0	8.5	8.2	8.4	8.2
	3.6	3.6	3.6	18.1	18.6	18.6	11.3	12.7	11.6

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Total			Mining			Construction		
	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P
Virginia	2,683.6	2,860.7	2,804.7	15.9	15.7	15.5	172.1	201.9	192.0
Bristol	30.9	32.9	31.9	.1	.1	.1	.7	.9	.7
Charlottesville	65.4	69.2	67.8	.1	.1	.1	3.5	4.0	3.9
Danville	40.4	42.3	41.9	.1	.1	.1	1.6	2.2	2.1
Lynchburg	70.6	73.0	71.3	.1	.1	.1	3.2	3.6	3.4
Norfolk-Virginia Beach-Newport News	546.2	569.6	553.8	.1	.2	.1	35.9	38.7	36.0
Northern Virginia	715.5	769.1	760.0	.5	.6	.5	51.8	62.6	61.4
Richmond-Petersburg	440.9	462.0	452.6	.8	1.0	1.0	27.4	31.0	30.0
Roanoke	120.6	124.0	122.3	.1	.1	.1	6.8	7.9	7.4
Washington	1,855.0	1,984.5	1,955.4	3.0	3.4	3.3	83.2	96.6	91.2
Seattle	950.3	1,020.2	1,009.0	.6	.6	.6	46.7	51.8	49.9
West Virginia	590.0	616.9	602.4	34.5	34.5	34.0	20.0	24.7	21.6
Charleston	104.6	108.7	106.3	1.9	1.9	1.9	3.5	4.3	3.7
Huntington-Ashland	101.1	106.2	103.7	1.4	1.4	1.3	3.3	3.6	3.4
Parkersburg-Marietta	58.2	61.8	59.8	.5	.7	.7	2.6	3.1	2.6
Wheeling	57.8	60.3	58.1	2.4	2.6	2.6	1.7	2.1	1.7
Wisconsin	2,072.6	2,185.0	2,139.5	1.4	2.0	1.7	61.4	73.6	67.3
Appleton-Oshkosh-Neenah	143.9	153.3	149.7	(¹)	(¹)	(¹)	6.1	6.8	6.5
Eau Claire	53.9	58.3	56.2	(¹)	(¹)	(¹)	1.3	1.8	1.6
Green Bay	92.9	97.4	95.8	(¹)	(¹)	(¹)	3.0	3.3	3.1
Janesville-Beloit	54.7	58.6	57.5	(¹)	(¹)	(¹)	1.2	1.9	1.6
Kenosha	42.0	43.2	40.7	(¹)	(¹)	(¹)	1.4	1.6	1.6
La Crosse	51.8	56.9	55.4	(¹)	(¹)	(¹)	1.3	2.0	1.9
Madison	197.6	208.2	203.5	(¹)	(¹)	(¹)	6.4	6.0	5.5
Milwaukee	698.1	733.6	722.1	(¹)	(¹)	(¹)	20.9	23.4	22.1
Racine	70.9	74.1	73.3	(¹)	(¹)	(¹)	1.7	2.0	1.9
Wausau	46.0	49.1	48.3	(¹)	(¹)	(¹)	1.6	2.0	1.9
Wyoming	177.7	177.9	174.6	18.2	17.6	17.4	7.7	7.3	6.5
Puerto Rico	792.1	836.6	823.7	.8	.8	.8	37.6	42.7	41.8
Caguas	50.9	53.1	52.3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Mayaguez	56.4	59.1	58.3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Ponce	51.1	53.9	53.0	.1	.1	.1	3.4	3.9	3.8
San Juan	489.3	518.3	510.1	.5	.4	.4	28.0	30.5	29.9
Virgin Islands	40.6	41.5	40.6	(¹)	(¹)	(¹)	2.2	2.1	1.9

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Virginia	425.7	429.0	426.6	140.9	150.1	145.6	611.4	666.2	638.7
Bristol	10.4	10.9	10.9	1.1	1.1	1.0	7.9	8.7	8.3
Charlottesville	9.0	8.8	8.8	2.3	2.3	2.3	12.9	13.4	12.8
Danville	16.7	16.8	16.8	.9	.9	.9	8.6	9.7	9.3
Lynchburg	23.2	22.8	22.4	2.6	2.6	2.5	15.4	16.9	16.0
Norfolk-Virginia Beach-Newport News	67.3	66.4	66.1	25.7	26.7	26.0	134.3	144.3	136.9
Northern Virginia	35.3	35.2	34.8	49.9	56.2	56.4	161.5	171.7	165.7
Richmond-Petersburg	62.6	63.1	62.5	23.2	23.4	23.1	106.4	113.2	108.1
Roanoke	19.8	19.8	19.7	8.5	8.4	8.3	33.6	34.6	33.5
Washington	325.3	345.6	344.5	97.7	102.9	102.0	454.5	495.5	479.1
Seattle	191.6	205.4	206.1	59.6	62.9	63.2	231.3	252.4	244.3
West Virginia	85.3	87.9	87.3	36.4	37.2	37.1	137.8	146.2	141.0
Charleston	10.7	11.0	11.1	8.6	8.6	8.6	27.5	29.3	28.3
Huntington-Ashland	19.2	19.9	20.0	7.8	7.8	7.8	25.9	27.7	26.5
Parkersburg-Marietta	13.6	14.1	14.1	2.1	2.2	2.2	14.1	15.3	14.4
Wheeling	7.2	7.2	7.1	3.2	3.4	3.3	16.0	17.1	16.3
Wisconsin	533.8	554.9	551.0	94.4	100.6	97.3	487.2	517.6	500.3
Appleton-Oshkosh-Neenah	50.1	52.6	52.3	5.2	5.9	5.6	30.5	33.3	31.4
Eau Claire	10.7	11.6	11.4	3.0	3.1	3.1	15.2	15.7	15.1
Green Bay	23.8	25.1	25.0	7.1	7.5	7.2	24.3	24.7	24.5
Janesville-Beloit	17.7	18.6	18.4	2.1	2.1	2.2	13.4	14.1	13.7
Kenosha	14.7	13.6	11.9	1.5	1.6	1.5	9.0	9.8	9.4
La Crosse	11.2	11.1	11.1	2.1	2.3	2.1	14.8	16.6	16.1
Madison	23.5	24.9	24.9	6.9	7.3	7.0	44.1	49.3	46.2
Milwaukee	169.9	176.4	176.6	34.4	36.3	34.8	159.3	168.9	162.9
Racine	25.4	26.1	26.3	2.1	2.3	2.2	16.1	16.8	16.4
Wausau	12.5	13.6	13.5	2.7	2.8	2.8	11.5	12.2	11.8
Wyoming	8.6	8.5	8.5	13.4	12.9	12.7	40.0	40.3	39.2
Puerto Rico	153.3	157.7	155.2	18.1	17.3	18.2	143.5	156.6	148.8
Caguas	16.1	16.7	16.5	(¹)	(¹)	(¹)	10.2	11.7	11.1
Mayaguez	20.6	21.1	20.7	(¹)	(¹)	(¹)	7.9	8.2	7.8
Ponce	9.8	10.2	9.8	(¹)	(¹)	(¹)	8.1	9.1	8.6
San Juan	63.3	66.3	65.2	14.2	14.0	14.6	99.0	107.6	102.3
Virgin Islands	2.2	2.4	2.2	2.6	2.6	2.6	9.8	9.7	9.5

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-8. Employees on nonagricultural payrolls in States and selected areas by major industry—Continued

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Jan. 1988	Dec. 1988	Jan. 1989 ^o	Jan. 1988	Dec. 1988	Jan. 1989 ^o
Virginia	145.5	152.3	152.5	628.9	686.2	678.1	543.2	559.3	555.7
Bristol	1.1	1.3	1.2	4.6	4.6	4.5	5.0	5.3	5.2
Charlottesville	3.3	3.4	3.4	12.0	12.7	12.4	22.3	24.5	24.1
Danville	1.2	1.3	1.3	6.0	6.1	6.1	5.3	5.3	5.3
Lynchburg	3.8	4.1	4.1	13.0	13.5	13.5	9.3	9.4	9.3
Norfolk-Virginia Beach-Newport News	26.2	26.8	26.2	126.9	135.6	132.0	129.8	130.9	130.5
Northern Virginia	47.4	49.6	49.7	228.5	248.3	246.6	140.6	144.9	144.9
Richmond-Petersburg	37.8	40.0	39.9	91.3	95.4	93.4	91.4	94.9	94.6
Roanoke	8.2	8.4	8.4	28.2	29.4	29.5	15.4	15.4	15.4
Washington	106.9	111.7	111.4	422.9	454.0	450.5	361.5	374.8	373.4
Seattle	68.5	71.0	70.9	219.5	236.8	236.2	132.5	139.3	137.8
West Virginia	24.0	24.3	24.3	125.7	132.8	131.0	126.3	129.3	126.1
Charleston	6.2	6.3	6.3	25.1	26.0	25.8	21.1	21.3	20.6
Huntington-Ashland	3.7	3.8	3.8	21.3	22.7	22.3	18.5	19.3	18.6
Parkersburg-Marietta	2.3	2.3	2.3	13.4	14.0	13.8	9.6	10.1	9.7
Wheeling	2.7	2.8	2.7	15.3	15.7	15.4	9.3	9.4	9.0
Wisconsin	113.4	116.5	116.4	461.0	484.8	478.8	320.0	335.0	326.7
Appleton-Oshkosh-Neenah	6.9	7.2	7.3	28.1	30.2	29.7	16.8	17.1	16.6
Eau Claire	1.8	1.8	1.8	12.0	12.9	12.7	9.9	11.4	10.5
Green Bay	3.3	3.3	3.3	20.7	22.3	21.5	10.7	11.2	11.2
Janesville-Beloit	1.6	1.6	1.6	11.8	12.7	12.6	6.8	7.5	7.3
Kenosha	1.1	1.2	1.2	8.3	9.0	8.8	6.0	6.4	6.3
La Crosse	1.5	1.6	1.6	14.0	15.4	15.1	6.9	7.9	7.5
Madison	18.0	18.6	18.6	43.7	45.4	45.5	54.9	56.5	55.7
Milwaukee	49.7	51.0	51.2	182.5	193.8	191.5	81.2	83.5	82.7
Racine	2.2	2.2	2.2	15.5	16.3	16.0	7.9	8.4	8.3
Wausau	3.5	3.6	3.6	8.3	8.6	8.6	5.9	6.3	6.1
Wyoming	7.3	7.2	7.2	30.7	31.3	31.1	51.8	52.8	52.0
Puerto Rico	35.6	36.0	36.0	117.0	125.4	123.2	286.3	300.2	299.7
Caguas	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	15.9	16.2	16.2
Mayaguez	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	18.8	19.5	19.5
Ponce	(¹)	(¹)	(¹)	9.9	10.0	9.9	16.5	17.2	17.3
San Juan	28.4	28.6	28.6	84.6	91.7	90.2	171.2	179.2	178.7
Virgin Islands	1.9	2.0	2.0	9.4	9.5	9.6	12.5	13.2	12.8

¹ Not available.
² Combined with construction.
^o = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1988 benchmarks.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

C-1. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry, 1964 to date

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.52	530.85	37.8	12.69	479.68
1988	34.8	9.29	323.29	42.3	12.69	536.79	37.9	12.97	491.56
Monthly data, not seasonally adjusted									
1988:									
February	34.5	\$9.17	\$316.37	41.8	\$12.71	\$531.28	36.1	\$12.82	\$462.80
March	34.4	9.18	315.79	41.9	12.59	527.52	37.4	12.87	481.34
April	34.7	9.23	320.28	42.8	12.60	539.28	37.9	12.88	488.15
May	34.6	9.26	320.40	42.2	12.54	529.19	38.2	12.87	491.63
June	34.9	9.23	322.13	42.5	12.55	533.38	38.7	12.85	497.30
July	35.1	9.25	324.68	42.3	12.66	535.52	38.5	12.91	497.04
August	35.0	9.24	323.40	42.0	12.62	530.04	38.6	12.95	499.87
September	34.8	9.40	327.12	42.2	12.75	536.05	38.4	13.13	504.19
October	34.9	9.45	329.81	42.7	12.72	543.14	39.0	13.13	512.07
November	34.7	9.46	328.26	41.9	12.83	537.58	37.7	13.04	491.61
December	34.9	9.46	330.15	42.7	12.97	553.82	37.2	13.16	489.55
1989:									
January ^o	34.5	9.54	329.13	41.9	13.11	549.31	36.4	13.21	480.84
February ^o	34.3	9.54	327.22	41.6	13.03	542.05	36.2	13.16	476.39

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

C-1. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry, 1964 to date—Continued

Year and month	Manufacturing				Transportation and public utilities			Wholesale trade		
	Weekly hours	Hourly earnings	Hourly earnings, excluding overtime	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages										
1964	40.7	\$2.53	\$2.43	\$102.97	41.1	\$2.89	\$118.78	40.7	\$2.52	\$102.56
1965	41.2	2.61	2.50	107.53	41.3	3.03	125.14	40.8	2.61	106.49
1966	41.4	2.71	2.59	112.19	41.2	3.11	128.13	40.7	2.73	111.11
1967	40.6	2.82	2.71	114.49	40.5	3.23	130.82	40.3	2.88	116.06
1968	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.05	122.31
1969	40.6	3.19	3.05	129.51	40.7	3.63	147.74	40.2	3.23	129.85
1970	39.8	3.35	3.23	133.33	40.5	3.85	155.93	39.9	3.44	137.26
1971	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.5	3.65	144.18
1972	40.5	3.82	3.66	154.71	40.4	4.65	187.86	39.4	3.85	151.69
1973	40.7	4.09	3.91	166.46	40.5	5.02	203.31	39.3	4.08	160.34
1974	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.39	170.33
1975	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.7	4.73	183.05
1976	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.03	194.66
1977	40.3	5.68	5.44	228.90	39.9	6.99	278.90	38.8	5.39	209.13
1978	40.4	6.17	5.91	249.27	40.0	7.57	302.80	38.8	5.88	228.14
1979	40.2	6.70	6.43	269.34	39.9	8.16	325.58	38.8	6.39	247.93
1980	39.7	7.27	7.02	288.62	39.6	8.87	351.25	38.5	6.96	267.96
1981	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.56	291.06
1982	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.09	309.85
1983	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.55	329.18
1984	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.89	342.27
1985	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.16	351.74
1986	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.35	358.11
1987	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
1988	41.1	10.17	9.71	417.99	39.3	12.32	484.18	38.1	9.92	377.95
Monthly data, not seasonally adjusted										
1988:										
February	40.7	\$10.05	\$9.63	\$409.04	38.9	\$12.23	\$475.75	37.9	\$9.78	\$370.66
March	40.9	10.07	9.64	411.86	38.6	12.19	470.53	37.9	9.78	370.66
April	41.0	10.12	9.68	414.92	39.2	12.27	480.98	38.2	9.88	377.42
May	40.9	10.14	9.70	414.73	39.2	12.28	481.38	38.0	9.87	375.06
June	41.2	10.16	9.70	418.59	39.5	12.27	484.67	38.1	9.85	375.29
July	40.7	10.16	9.72	413.51	39.8	12.33	490.73	38.3	9.93	380.32
August	40.8	10.12	9.66	412.90	39.7	12.35	490.30	38.0	9.88	375.44
September	41.3	10.25	9.75	423.33	39.5	12.41	490.20	38.1	10.01	381.38
October	41.3	10.24	9.76	422.91	39.5	12.43	490.99	38.2	10.08	385.06
November	41.5	10.30	9.82	427.45	39.3	12.46	489.68	38.0	10.05	381.90
December	41.6	10.37	9.87	431.39	39.5	12.43	490.99	38.2	10.12	386.58
1989:										
January ^o	41.0	10.37	9.91	425.17	39.1	12.51	489.14	38.0	10.22	388.36
February ^o	40.7	10.37	9.92	422.06	39.1	12.48	487.97	37.8	10.22	386.32

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

C-1. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry, 1964 to date—Continued

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976	32.1	3.57	114.60	36.4	4.27	155.43	33.0	4.31	143.52
1977	31.6	3.85	121.66	36.4	4.54	165.26	33.0	4.65	153.45
1978	31.0	4.20	130.20	36.4	4.89	178.00	32.8	4.99	163.67
1979	30.6	4.53	138.62	36.2	5.27	190.77	32.7	5.36	175.27
1980	30.2	4.88	147.38	36.2	5.79	209.60	32.6	5.85	190.71
1981	30.1	5.25	158.03	36.3	6.31	229.05	32.6	6.41	208.97
1982	29.9	5.48	163.85	36.2	6.78	245.44	32.6	6.92	225.59
1983	29.8	5.74	171.05	36.2	7.29	263.90	32.7	7.31	239.04
1984	29.8	5.85	174.33	36.5	7.63	278.50	32.6	7.59	247.43
1985	29.4	5.94	174.64	36.4	7.94	289.02	32.5	7.90	256.75
1986	29.2	6.03	176.08	36.4	8.36	304.30	32.5	8.18	265.85
1987	29.2	6.11	178.41	36.3	8.73	316.90	32.5	8.48	275.60
1988	29.1	6.31	183.62	35.9	9.10	326.69	32.6	8.90	290.14
Monthly data, not seasonally adjusted									
1988:									
February	28.5	\$6.23	\$177.56	36.4	\$9.02	\$328.33	32.6	\$8.81	\$287.21
March	28.6	6.24	178.46	35.8	8.97	321.13	32.3	8.80	284.24
April	28.9	6.26	180.91	36.2	9.03	326.89	32.6	8.82	287.53
May	28.9	6.28	181.49	35.8	9.09	325.42	32.4	8.84	286.42
June	29.4	6.26	184.04	35.8	8.98	321.48	32.7	8.78	287.11
July	30.0	6.28	188.40	36.2	9.03	326.89	33.0	8.79	290.07
August	29.8	6.26	186.55	35.7	9.04	322.73	32.8	8.79	288.31
September	29.0	6.37	184.73	35.8	9.14	327.21	32.5	8.98	291.85
October	29.1	6.38	185.66	36.0	9.29	334.44	32.7	9.07	296.59
November	28.8	6.43	185.18	35.7	9.27	330.94	32.5	9.10	295.75
December	29.6	6.42	190.03	35.8	9.32	333.66	32.5	9.15	297.38
1989:									
January ^p	28.5	6.47	184.40	36.2	9.48	343.18	32.6	9.24	301.22
February ^p	28.5	6.49	184.97	35.8	9.45	338.31	32.4	9.27	300.35

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1987 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Feb. 1989 ^P	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Feb. 1989 ^P
Total private		34.8	34.4	34.9	34.5	34.3					
Mining		42.3	42.1	42.7	41.9	41.6	-	-			
Metal mining	10	42.3	42.9	42.3	42.6	-	-	-	-	-	
Iron ores	101	41.6	41.5	42.7	43.2	-	-	-	-	-	
Copper ores	102	43.9	45.1	43.7	44.4	-	-	-	-	-	
Coal mining	11,12	42.3	43.0	42.9	42.5	-	-	-	-	-	
Bituminous coal and lignite mining	12	42.4	43.0	42.9	42.6	-	-	-	-	-	
Oil and gas extraction	13	41.3	41.6	42.2	41.2	-	-	-	-	-	
Crude petroleum, natural gas, and natural gas liquids	131,2	41.5	42.3	44.1	42.2	-	-	-	-	-	
Oil and gas field services	138	41.2	41.3	41.1	40.6	-	-	-	-	-	
Nonmetallic minerals, except fuels	14	45.4	42.0	44.8	43.3	-	-	-	-	-	
Crushed and broken stone	142	46.7	42.0	46.0	43.6	-	-	-	-	-	
Construction		37.9	35.9	37.2	36.4	36.2	-	-	-	-	-
General building contractors	15	37.4	35.6	37.3	36.8	-	-	-	-	-	-
Residential building construction	152	36.4	34.6	36.2	35.7	-	-	-	-	-	-
Operative builders	153	38.4	37.1	38.2	38.0	-	-	-	-	-	-
Nonresidential building construction	154	38.5	36.6	38.6	38.1	-	-	-	-	-	-
Heavy construction contractors	16	41.9	39.0	40.0	38.1	-	-	-	-	-	-
Highway and street construction	161	42.9	38.0	38.9	36.5	-	-	-	-	-	-
Heavy construction, except highway	162	41.4	39.3	40.5	38.8	-	-	-	-	-	-
Special trade contractors	17	37.0	35.3	36.5	35.9	-	-	-	-	-	-
Plumbing, heating, and air conditioning	171	38.4	37.4	36.9	38.2	-	-	-	-	-	-
Painting, paper hanging, and decorating	172	35.9	34.4	35.7	34.8	-	-	-	-	-	-
Electrical work	173	38.8	38.1	38.9	38.2	-	-	-	-	-	-
Masonry, stonework, and plastering	174	34.9	32.8	33.5	33.6	-	-	-	-	-	-
Carpentering and flooring	175	35.2	33.9	34.4	34.1	-	-	-	-	-	-
Roofing and sheet metal work	176	33.8	29.7	32.2	30.9	-	-	-	-	-	-
Manufacturing		41.1	41.0	41.6	41.0	40.7	3.9	3.8	4.2	3.8	3.7
Durable goods		41.8	41.6	42.4	41.7	41.4	4.1	3.9	4.5	4.0	3.9
Lumber and wood products	24	40.3	39.5	40.4	39.6	39.1	3.8	3.2	3.5	3.2	-
Logging camps and logging contractors	241	39.9	39.1	39.7	38.3	-	4.3	3.7	4.2	3.9	-
Sawmills and planing mills	242	41.4	41.1	41.7	41.2	-	4.2	4.2	4.2	3.9	-
Sawmills and planing mills, general	2421	41.7	41.4	42.0	41.4	-	4.5	4.4	4.4	4.2	-
Hardwood dimension and flooring	2426	40.3	40.5	41.2	40.6	-	3.3	3.6	3.4	3.1	-
Millwork, plywood, and structural members	243	40.1	39.4	40.4	39.5	-	3.3	2.8	3.3	3.0	-
Millwork	2431	40.0	38.8	39.8	39.4	-	2.7	1.6	2.5	2.3	-
Wood kitchen cabinets	2434	39.0	38.5	39.0	37.7	-	2.8	2.2	2.8	2.2	-
Hardwood veneer and plywood	2435	40.9	40.0	41.5	40.7	-	3.7	3.8	3.7	3.9	-
Softwood veneer and plywood	2436	42.0	42.1	43.4	42.7	-	5.0	4.7	5.3	5.4	-
Wood containers	244	38.7	37.0	38.7	36.5	-	3.2	2.6	3.0	3.0	-
Wood buildings and mobile homes	245	39.0	36.3	36.7	37.7	-	2.6	1.6	2.4	2.0	-
Mobile homes	2451	38.6	35.5	38.3	37.8	-	2.5	1.2	2.3	2.1	-
Miscellaneous wood products	249	40.2	40.0	39.6	39.5	-	3.1	3.2	3.0	2.8	-
Furniture and fixtures	25	39.4	38.9	40.5	39.2	39.0	2.7	2.6	3.1	2.5	-
Household furniture	251	39.1	38.5	40.3	38.9	-	2.4	2.5	2.7	2.2	-
Wood household furniture	2511	39.5	39.3	40.7	39.5	-	2.6	2.7	2.7	2.4	-
Upholstered household furniture	2512	37.9	37.0	39.9	38.0	-	1.8	1.9	2.7	1.8	-
Metal household furniture	2514	40.6	40.2	41.1	39.5	-	3.1	3.4	3.3	2.7	-
Mattresses and bedsprings	2515	39.3	38.3	38.7	37.7	-	3.1	2.6	2.7	2.4	-
Office furniture	252	40.3	40.5	41.8	40.4	-	2.7	3.0	3.4	2.9	-
Public building and related furniture	253	40.7	40.1	41.5	39.8	-	4.2	4.4	5.0	3.2	-
Partitions and fixtures	254	40.1	39.3	40.2	39.9	-	3.4	2.9	3.7	3.3	-
Miscellaneous furniture and fixtures	259	38.9	37.3	40.3	39.0	-	2.5	1.9	3.0	1.9	-
Stone, clay, and glass products	32	42.3	40.9	42.2	41.5	40.8	5.1	4.3	4.8	4.5	-
Flat glass	321	45.7	45.5	45.8	46.5	-	7.7	7.4	7.8	8.3	-
Glass and glassware, pressed or blown	322	41.5	41.0	41.7	41.8	-	4.5	4.4	4.4	4.2	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Feb. 1989 ^P	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Feb. 1989 ^P
Total private		\$9.29	\$9.18	\$9.46	\$9.54	\$9.54	\$323.29	\$315.79	\$330.15	\$329.13	\$327.22
Mining		12.69	12.77	12.97	13.11	13.03	536.79	537.62	553.82	549.31	542.05
Metal mining	10	13.19	12.95	13.51	13.62	-	557.94	555.56	571.47	580.21	
Iron ores	101	14.19	14.18	15.23	15.19	-	590.30	588.47	650.32	656.21	
Copper ores	102	11.62	11.54	11.61	11.79		510.12	520.45	507.36	523.48	
Coal mining	11,12	15.91	16.02	16.05	16.26		671.40	688.86	688.55	691.05	
Bituminous coal and lignite mining	12	15.96	16.07	16.10	16.31		675.11	691.01	690.69	694.81	
Oil and gas extraction	13	11.72	11.71	12.08	12.17		484.04	487.14	509.78	501.40	
Crude petroleum, natural gas, and natural gas liquids	131,2	14.44	14.40	14.81	14.83		599.26	609.12	653.12	625.83	
Oil and gas field services	138	10.19	10.16	10.43	10.58		419.83	419.61	428.67	429.55	
Nonmetallic minerals, except fuels	14	10.98	10.83	11.12	10.99		498.49	454.86	498.18	475.87	
Crushed and broken stone	142	10.37	10.02	10.42	10.13		484.28	420.84	479.32	441.67	
Construction		12.97	12.99	13.16	13.21	13.16	491.56	466.34	489.55	480.84	476.39
General building contractors	15	12.15	12.07	12.37	12.40		454.41	429.69	461.40	456.32	
Residential building construction	152	11.48	11.35	11.75	11.71		417.87	392.71	425.35	418.05	
Operative builders	153	11.19	11.01	11.72	11.73		429.70	408.47	447.70	445.74	
Nonresidential building construction	154	12.93	12.90	13.10	13.20		497.81	472.14	505.66	502.92	
Heavy construction contractors	16	12.39	12.08	12.44	12.59		519.14	471.12	497.60	479.68	
Highway and street construction	161	12.38	11.85	12.25	12.34		531.10	450.30	476.53	450.41	
Heavy construction, except highway	162	12.40	12.17	12.53	12.69		513.36	478.28	507.47	492.37	
Special trade contractors	17	13.49	13.62	13.68	13.70		499.13	480.79	499.32	491.83	
Plumbing, heating, and air conditioning	171	13.77	13.73	14.03	13.98		528.77	513.50	545.77	534.04	
Painting, paper hanging, and decorating	172	12.73	13.00	12.75	12.77		457.01	447.20	455.18	444.40	
Electrical work	173	14.68	14.78	14.67	14.58		566.65	563.12	570.66	556.96	
Masonry, stonework, and plastering	174	13.64	13.54	13.76	13.79		476.04	444.11	460.96	463.34	
Carpentering and flooring	175	12.85	12.74	13.09	12.93		452.32	431.89	450.30	440.91	
Roofing and sheet metal work	176	12.03	12.28	12.22	12.36		406.61	364.72	393.48	381.92	
Manufacturing		10.17	10.07	10.37	10.37	10.37	417.99	412.87	431.39	425.17	422.06
Durable goods		10.70	10.60	10.90	10.90	10.90	447.26	440.96	462.16	454.53	451.26
Lumber and wood products	24	8.60	8.51	8.75	8.70	8.69	346.58	336.15	353.50	344.52	339.78
Logging camps and logging contractors	241	10.87	10.77	11.20	10.86	-	433.71	421.11	444.64	415.94	-
Sawmills and planing mills	242	8.73	8.68	8.91	8.89		361.42	356.75	371.55	366.27	
Sawmills and planing mills, general	2421	9.06	9.05	9.24	9.21		377.80	374.67	388.08	381.29	
Hardwood dimension and flooring	2426	7.05	6.93	7.30	7.32		284.12	280.67	300.76	297.19	
Millwork, plywood, and structural members	243	8.60	8.52	8.65	8.70		344.86	335.69	349.46	343.65	
Millwork	2431	8.81	8.77	8.83	8.83		352.40	340.28	351.43	347.90	
Wood kitchen cabinets	2434	7.96	7.77	8.09	8.04		310.44	299.15	315.51	303.11	
Hardwood veneer and plywood	2435	7.01	7.00	7.09	7.25		286.71	280.00	294.24	295.08	
Softwood veneer and plywood	2436	10.16	10.09	10.15	10.32		426.72	424.79	440.51	440.66	
Wood containers	244	6.37	6.26	6.46	6.42		246.52	231.62	250.00	247.17	
Wood buildings and mobile homes	245	8.09	7.87	8.23	8.33		315.51	285.68	318.50	314.04	
Mobile homes	2451	8.17	7.87	8.32	8.40		315.36	279.39	318.66	317.52	
Miscellaneous wood products	249	7.41	7.32	7.54	7.43		297.88	292.80	300.09	293.49	
Furniture and fixtures	25	7.92	7.80	8.04	8.07	8.06	312.05	303.42	325.62	316.34	314.34
Household furniture	251	7.30	7.19	7.42	7.43	-	285.43	276.82	299.03	289.03	-
Wood household furniture	2511	6.84	6.71	6.93	6.97		270.18	263.70	282.05	275.32	
Upholstered household furniture	2512	7.98	7.93	8.17	8.15		302.44	293.41	325.98	309.70	
Metal household furniture	2514	7.20	7.02	7.34	7.19		292.32	282.20	301.67	284.01	
Mattresses and bedsprings	2515	7.80	7.69	7.98	7.99		306.54	294.53	308.83	301.22	
Office furniture	252	9.01	8.95	9.04	9.31		363.10	362.48	377.87	376.12	
Public building and related furniture	253	8.38	8.23	8.77	8.59		341.07	330.02	363.96	341.88	
Partitions and fixtures	254	9.40	9.22	9.57	9.56		376.94	362.35	384.71	381.44	
Miscellaneous furniture and fixtures	259	8.31	8.24	8.33	8.42		323.26	307.35	335.70	328.38	
Stone, clay, and glass products	32	10.48	10.35	10.58	10.60	10.60	443.30	423.32	446.48	439.90	432.48
Flat glass	321	15.02	14.93	15.54	15.44	-	686.41	679.32	711.73	717.96	-
Glass and glassware, pressed or blown	322	11.68	11.67	11.74	11.80		484.72	478.47	489.56	493.24	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	41.2	40.4	41.5	41.4		5.3	5.1	5.0	4.8	
Pressed and blown glass, nec	3229	41.8	41.8	42.0	42.2		3.7	3.6	3.8	3.5	
Products of purchased glass	323	41.9	40.5	42.2	42.5		3.5	3.1	3.5	3.7	
Cement, hydraulic	324	42.6	42.6	41.7	42.7		3.7	3.8	3.1	3.8	
Structural clay products	325	42.1	42.0	42.4	41.6		4.4	4.2	4.4	3.9	
Pottery and related products	326	40.4	40.8	41.1	40.1		3.3	3.1	3.9	3.1	
Concrete, gypsum, and plaster products	327	43.1	39.6	41.9	40.3		6.4	4.6	5.5	4.8	
Concrete block and brick	3271	44.8	40.8	43.8	42.6		6.9	4.5	5.3	4.7	
Concrete products, nec	3272	42.8	41.7	43.0	41.9		6.0	5.4	5.8	5.5	
Ready-mixed concrete	3273	42.2	36.8	39.6	37.6		6.4	3.5	4.7	3.8	
Misc. nonmetallic mineral products	329	42.5	42.3	43.1	42.6		4.8	4.9	5.0	4.9	
Abrasive products	3291	43.4	42.9	44.6	44.4		4.0	4.1	4.7	4.5	
Asbestos products	3292	43.0	43.9	44.5	44.5		4.5	5.2	6.4	5.4	
Primary metal industries											
Blast furnaces and basic steel products	331	44.0	43.9	44.2	43.9	43.4	5.5	5.3	5.8	5.6	
Blast furnaces and steel mills	3312	44.4	43.9	44.6	44.3	-	5.8	5.5	5.8	5.6	
Steel pipe and tubes	3317	42.8	43.7	42.4	42.5		6.0	5.6	6.1	5.8	
Iron and steel foundries	332	43.6	43.6	44.4	44.0		5.4	6.2	4.9	4.9	
Gray iron foundries	3321	43.7	43.4	44.4	44.2		5.7	5.5	6.2	5.9	
Malleable iron foundries	3322	43.7	43.4	44.4	44.2		6.1	5.8	6.6	6.3	
Steel foundries, nec	3325	42.3	42.5	43.0	43.0		4.4	4.2	5.0	5.1	
Primary nonferrous metals	333	43.5	43.7	44.2	43.6		5.4	5.2	5.7	5.1	
Primary aluminum	3334	43.6	43.6	43.8	44.0		4.8	4.6	4.9	4.7	
Primary aluminum	3334	43.8	44.0	43.4	44.0		4.8	4.4	4.7	4.9	
Nonferrous rolling and drawing	335	43.6	43.7	44.2	44.0		6.0	5.9	6.2	6.1	
Copper rolling and drawing	3351	43.5	43.7	44.7	44.1		6.2	6.4	6.3	5.5	
Aluminum sheet, plate, and foil	3353	45.3	45.9	44.9	44.4		7.7	8.1	6.9	6.8	
Nonferrous wire drawing and insulating	3357	43.2	43.3	43.6	43.7		5.5	5.2	5.9	6.0	
Nonferrous foundries	336	41.9	41.9	43.2	42.4		4.0	3.8	4.9	4.3	
Aluminum foundries	3361	42.4	42.5	43.4	42.8		4.3	4.1	5.1	4.7	
Fabricated metal products											
Metal cans and shipping containers	34	41.8	41.8	42.7	41.8	41.4	4.1	4.0	4.6	4.1	
Metal cans	341	44.6	43.9	45.6	44.3	-	5.8	5.4	5.6	5.4	
Metal cans	3411	45.0	44.2	46.1	44.6		6.0	5.6	5.6	5.4	
Cutlery, hand tools, and hardware	342	41.5	41.7	41.8	41.3		3.6	3.7	3.7	3.4	
Hand and edge tools, and hand saws and blades	3423,5	41.1	41.7	41.1	40.7		3.1	3.6	3.3	3.2	
Hardware, nec	3429	41.4	41.4	41.9	41.3		3.7	3.8	3.8	3.4	
Plumbing and heating, except electric	343	41.0	42.0	41.8	41.5		3.6	4.1	3.8	3.7	
Plumbing fittings and brass goods	3432	41.1	42.2	42.4	42.3		3.3	4.1	3.8	4.1	
Heating equipment, except electric	3433	40.7	41.6	41.3	40.6		3.6	3.7	3.7	3.9	
Fabricated structural metal products	344	40.9	40.5	41.8	40.7		3.7	3.2	4.3	3.7	
Fabricated structural metal	3441	42.0	41.2	42.7	41.8		4.6	3.4	5.2	4.6	
Metal doors, sash, and trim	3442	39.8	38.6	40.1	38.9		2.8	2.2	2.8	2.5	
Fabricated plate work (boiler shops)	3443	42.5	43.1	42.9	42.4		4.3	4.6	4.8	4.3	
Sheet metal work	3444	40.0	40.0	40.8	40.0		3.2	3.0	3.8	3.1	
Architectural metal work	3446	40.5	39.7	42.3	40.5		3.8	3.1	5.3	4.6	
Screw machine products, bolts, etc	345	43.1	43.8	43.8	43.6		5.4	5.9	6.0	5.7	
Screw machine products	3451	41.9	42.4	42.2	42.2		4.5	5.1	4.7	4.8	
Bolts, nuts, rivets, and washers	3452	44.7	45.4	45.6	45.2		6.5	6.8	7.5	6.8	
Metal forgings and stampings	346	42.9	42.8	44.0	43.2		5.0	4.8	5.7	5.2	
Iron and steel forgings	3462	43.3	43.2	44.3	44.6		5.1	4.7	6.9	6.2	
Automotive stampings	3465	44.5	43.8	45.8	45.0		6.0	5.2	6.3	6.2	
Metal stampings, nec	3469	41.1	41.5	42.0	40.8		4.0	4.3	4.5	3.7	
Metal services, nec	347	41.0	40.7	42.1	41.1		3.7	3.6	4.1	3.8	
Plating and polishing	3471	40.9	40.4	42.0	41.1		3.6	3.6	4.1	3.6	
Metal coating and allied services	3479	41.3	41.3	42.2	41.1		3.8	3.5	4.1	4.2	
Ordnance and accessories, nec	348	41.8	42.5	43.2	41.6		3.2	3.4	3.1	2.9	
Ammunition, except for small arms, nec	3483	40.8	41.2	41.5	40.5		2.7	2.7	2.9	2.8	
Misc. fabricated metal products	349	41.8	42.3	42.6	41.8		3.9	4.1	4.4	3.7	
Valves and pipe fittings	3494	42.5	43.7	43.2	42.4		4.1	4.6	4.8	3.9	
Misc. fabricated wire products	3496	40.8	41.1	41.1	40.6		3.6	3.8	3.9	3.4	
Machinery, except electrical											
Engines and turbines	35	42.6	42.8	43.4	42.5	42.3	4.4	4.4	5.0	4.4	
Engines and turbines	351	44.4	45.3	45.0	43.2	-	5.1	6.4	5.0	4.0	
Turbines and turbine generator sets	3511	43.8	42.3	47.6	42.4		5.8	3.0	9.5	4.0	
Internal combustion engines, nec	3519	44.6	46.2	44.2	43.5		4.8	7.4	3.7	4.0	
Farm and garden machinery	352	42.3	43.3	42.1	41.7		4.0	4.2	4.2	4.0	
Farm machinery and equipment	3523	42.9	43.2	42.4	42.1		4.5	4.1	4.7	4.3	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	\$12.11	\$11.90	\$12.14	\$12.26		\$498.93	\$480.76	\$503.81	\$507.56	
Pressed and blown glass, nec	3229	11.20	11.42	11.32	11.31		468.16	477.36	475.44	477.28	
Products of purchased glass	323	9.08	8.86	9.25	9.39		380.45	358.83	390.35	399.08	
Cement, hydraulic	324	13.33	13.33	13.55	13.70		567.86	567.86	565.04	584.99	
Structural clay products	325	8.88	8.71	8.99	9.12		373.85	365.82	381.18	379.39	
Pottery and related products	326	9.34	9.09	9.50	9.57		377.34	370.87	390.45	383.76	
Concrete, gypsum, and plaster products	327	10.21	9.99	10.26	10.23		440.05	395.60	429.89	412.27	
Concrete block and brick	3271	9.31	9.08	9.29	9.40		417.09	370.46	406.90	400.44	
Concrete products, nec	3272	9.16	9.05	9.17	9.26		392.05	377.39	394.31	387.99	
Ready-mixed concrete	3273	11.05	10.88	11.17	11.10		466.31	400.38	442.33	417.36	
Misc. nonmetallic mineral products	329	10.58	10.44	10.68	10.58		449.65	441.61	460.31	450.71	
Abrasive products	3291	10.07	10.03	10.29	10.12		437.04	430.29	458.93	449.33	
Asbestos products	3292	10.68	10.48	11.20	11.07		459.24	460.07	498.40	492.62	
Primary metal industries	33	12.15	12.06	12.27	12.27	\$12.23	529.74	524.61	541.11	537.43	\$530.78
Blast furnaces and basic steel products	331	13.98	13.82	14.07	13.99	13.96	615.12	606.70	621.89	614.16	610.05
Blast furnaces and steel mills	3312	14.72	14.55	14.78	14.73	-	653.57	638.75	659.19	652.54	-
Steel pipe and tubes	3317	10.93	11.03	11.08	11.01		467.80	482.01	469.79	467.93	
Iron and steel foundries	332	10.98	10.90	11.20	11.27		478.73	475.24	497.28	495.88	
Gray iron foundries	3321	11.52	11.41	11.83	11.87		503.42	495.19	525.25	524.65	
Malleable iron foundries	3322	11.84	11.81	12.10	12.18		500.83	501.93	520.30	523.74	
Steel foundries, nec	3325	10.21	10.19	10.26	10.30		444.14	445.30	453.49	449.08	
Primary nonferrous metals	333	13.22	13.03	13.44	13.38		576.39	568.11	588.67	588.72	
Primary aluminum	3334	13.57	13.42	13.71	13.77		594.37	590.48	595.01	605.88	
Nonferrous rolling and drawing	335	11.67	11.54	11.86	11.85		508.81	504.30	524.21	521.40	
Copper rolling and drawing	3351	10.91	10.82	11.13	11.04		474.59	472.83	497.51	486.86	
Aluminum sheet, plate, and foil	3353	13.98	13.98	14.10	14.03		633.29	641.68	633.09	622.93	
Nonferrous wire drawing and insulating	3357	11.86	11.56	12.08	12.15		512.35	500.55	526.69	530.96	
Nonferrous foundries	336	9.63	9.61	9.81	9.80		403.50	402.66	423.79	415.52	
Aluminum foundries	3361	9.83	9.84	10.09	10.11		416.79	418.20	437.91	432.71	
Fabricated metal products	34	10.24	10.12	10.43	10.44	10.44	428.03	423.02	445.36	436.39	432.22
Metal cans and shipping containers	341	13.49	13.42	13.67	13.75		601.65	589.14	623.35	609.13	
Metal cans	3411	14.34	14.22	14.59	14.66		645.30	628.52	672.60	653.84	
Cutlery, hand tools, and hardware	342	10.16	10.02	10.35	10.35		421.64	417.83	432.63	427.46	
Hand and edge tools, and hand saws and blades	3423,5	9.30	9.27	9.50	9.52		382.23	386.56	390.45	387.46	
Hardware, nec	3429	10.57	10.39	10.74	10.72		437.60	430.15	450.01	442.74	
Plumbing and heating, except electric	343	9.30	9.20	9.37	9.48		381.30	386.40	391.67	393.42	
Plumbing fittings and brass goods	3432	8.94	8.80	9.07	9.15		367.43	371.36	384.57	387.05	
Heating equipment, except electric	3433	9.14	9.01	9.33	9.36		372.00	374.82	385.33	380.02	
Fabricated structural metal products	344	9.57	9.45	9.76	9.77		391.41	382.73	407.97	397.64	
Fabricated structural metal	3441	10.24	9.95	10.50	10.43		430.08	409.94	448.35	435.97	
Metal doors, sash, and trim	3442	8.07	7.94	8.21	8.30		321.19	306.48	329.22	322.87	
Fabricated plate work (boiler shops)	3443	10.30	10.40	10.37	10.40		437.75	448.24	444.87	440.96	
Sheet metal work	3444	9.88	9.71	10.06	10.07		395.20	388.40	410.45	402.80	
Architectural metal work	3446	8.91	8.79	8.88	9.02		360.86	348.96	375.62	365.31	
Screw machine products, bolts, etc	345	10.01	9.96	10.18	10.24		431.43	436.25	445.88	446.46	
Screw machine products	3451	9.36	9.31	9.56	9.59		392.18	394.74	403.43	404.70	
Bolts, nuts, rivets, and washers	3452	10.76	10.69	10.89	10.98		480.97	485.33	496.58	496.30	
Metal forgings and stampings	346	12.19	11.98	12.38	12.45		522.95	512.74	544.72	537.84	
Iron and steel forgings	3462	12.91	12.68	13.48	13.47		559.00	547.78	597.16	600.76	
Automotive stampings	3465	14.29	13.97	14.35	14.44		635.91	611.89	657.23	649.80	
Metal stampings, nec	3469	9.48	9.48	9.60	9.65		389.63	393.42	403.20	393.72	
Metal services, nec	347	8.22	8.06	8.40	8.43		337.02	328.04	353.64	346.47	
Plating and polishing	3471	8.22	8.16	8.34	8.38		336.20	329.66	350.28	344.42	
Metal coating and allied services	3479	8.22	7.89	8.52	8.52		339.49	325.86	359.54	350.17	
Ordnance and accessories, nec	348	11.31	11.14	11.44	11.42		472.76	473.45	494.21	475.07	
Ammunition, except for small arms, nec	3483	10.94	10.72	11.11	11.16		446.35	441.66	461.07	451.98	
Misc. fabricated metal products	349	9.52	9.44	9.73	9.64		397.94	399.31	414.50	402.95	
Valves and pipe fittings	3494	10.31	10.18	10.54	10.40		438.18	444.87	455.33	440.96	
Misc. fabricated wire products	3496	8.48	8.46	8.69	8.58		345.98	347.71	357.16	348.35	
Machinery, except electrical	35	10.97	10.85	11.20	11.16	11.20	467.32	464.38	486.08	474.30	473.76
Engines and turbines	351	13.69	13.77	13.62	13.75	-	607.84	623.78	612.90	594.00	-
Turbines and turbine generator sets	3511	13.96	13.84	14.18	13.70		611.45	585.43	674.97	580.88	
Internal combustion engines, nec	3519	13.61	13.75	13.44	13.76		607.01	635.25	594.05	598.56	
Farm and garden machinery	352	10.12	10.02	10.41	10.23		428.08	433.87	438.26	426.59	
Farm machinery and equipment	3523	10.81	10.74	11.24	11.01		463.75	463.97	476.58	463.52	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	43.3	43.5	43.8	42.6		4.3	4.6	5.0	4.2	
Construction machinery	3531	44.3	44.6	44.1	42.3		4.0	4.2	4.8	4.2	
Mining machinery	3532	42.4	43.2	43.7	42.7		4.4	4.6	5.1	4.4	
Oil field machinery	3533	43.3	43.8	43.6	42.9		5.6	6.5	6.1	4.8	
Conveyors and conveying equipment	3535	43.1	42.2	44.9	43.2		4.8	4.0	6.3	5.1	
Industrial trucks and tractors	3537	41.5	41.9	42.5	41.1		3.4	3.9	3.8	2.6	
Metalworking machinery	354	43.4	43.6	44.6	44.0		5.3	5.3	6.1	5.9	
Machine tools, metal cutting types	3541	43.0	42.5	44.8	44.6		4.6	4.4	5.9	5.4	
Machine tools, metal forming types	3542	44.8	44.6	46.5	45.2		6.3	6.4	7.9	6.9	
Special dies, tools, jigs, and fixtures	3544	44.0	44.1	44.9	44.4		6.0	5.9	6.7	6.6	
Machine tool accessories	3545	42.1	42.8	43.7	42.6		4.5	4.7	5.1	4.8	
Power driven hand tools	3546	42.6	42.5	43.4	43.7		3.7	4.0	4.0	4.0	
Special industry machinery	355	42.3	42.5	43.7	42.3		4.7	4.6	5.5	4.6	
Food products machinery	3551	42.5	42.3	44.2	42.3		4.2	4.1	5.1	4.2	
Textile machinery	3552	42.5	42.3	43.6	42.6		3.9	4.0	4.7	4.0	
Printing trades machinery	3555	39.9	41.7	40.4	39.3		5.0	5.7	5.3	3.9	
General industrial machinery	356	43.0	43.1	44.1	43.1		4.7	4.4	5.6	4.7	
Pumps and pumping equipment	3561	43.5	43.7	44.8	43.4		4.5	4.5	5.2	4.0	
Ball and roller bearings	3562	44.1	44.6	44.6	44.6		6.0	5.4	7.0	6.5	
Air and gas compressors	3563	42.8	43.3	44.5	43.1		5.0	5.0	6.6	4.7	
Blowers and fans	3564	41.4	40.9	42.6	41.2		3.2	2.5	4.2	3.3	
Speed changers, drives, and gears	3566	43.5	43.8	44.8	43.4		5.4	4.6	6.1	4.8	
Power transmission equipment, nec	3568	41.9	42.8	43.1	43.0		5.0	4.9	5.4	5.1	
Office and computing machines	357	41.6	41.9	42.2	41.0		3.2	3.3	3.8	2.7	
Electronic computing equipment	3573	41.8	42.2	42.6	41.2		3.2	3.1	3.9	2.6	
Refrigeration and service machinery	358	41.9	42.2	42.5	41.8		3.5	3.5	3.6	3.7	
Refrigeration and heating equipment	3585	42.4	42.8	42.9	42.5		3.8	3.9	3.7	4.2	
Misc. machinery, except electrical	359	42.0	41.9	42.6	42.1		4.6	4.3	5.2	4.7	
Carburetors, pistons, rings, and valves	3592	42.8	41.9	43.8	43.9		5.0	3.6	5.8	5.2	
Machinery, except electrical, nec	3599	41.9	42.0	42.5	41.9		4.5	4.4	5.1	4.6	
Electrical and electronic equipment	36	41.0	41.3	41.8	40.9	40.4	3.3	3.3	3.8	3.2	
Electric distributing equipment	361	42.3	42.1	43.0	42.5	-	3.7	3.5	4.0	3.3	
Transformers	3612	42.1	41.3	42.6	42.6		3.6	3.1	4.1	3.5	
Switchgear and switchboard apparatus	3613	42.5	42.7	43.2	42.3		3.8	3.9	3.9	3.2	
Electrical industrial apparatus	362	42.2	42.2	43.3	42.7		3.9	3.6	4.4	3.9	
Motors and generators	3621	41.9	41.6	42.8	42.6		4.1	3.6	4.7	4.4	
Industrial controls	3622	41.5	42.3	42.8	41.6		2.8	3.1	3.4	2.0	
Household appliances	363	40.0	40.6	40.7	40.5		3.0	2.9	3.6	3.1	
Household refrigerators and freezers	3632	40.4	39.3	42.0	40.4		4.1	2.1	5.6	2.8	
Household laundry equipment	3633	40.4	41.7	41.8	44.4		2.2	2.6	2.7	3.9	
Electric housewares and fans	3634	40.7	42.0	40.2	40.2		3.3	3.7	3.3	3.2	
Electric lighting and wiring equipment	364	40.1	41.0	40.4	40.1		3.1	3.5	3.5	3.1	
Electric lamps	3641	40.4	42.0	38.7	40.2		3.1	4.3	2.5	3.1	
Current-carrying wiring devices	3643	39.5	40.9	39.7	39.6		2.8	3.2	3.3	2.7	
Noncurrent-carrying wiring devices	3644	41.1	41.3	42.6	40.2		3.1	3.5	4.0	3.3	
Residential lighting fixtures	3645	38.7	39.1	39.4	38.8		2.1	2.2	2.3	2.0	
Radio and TV receiving equipment	365	41.2	40.2	43.9	40.8		3.4	2.2	4.6	3.7	
Radio and TV receiving sets	3651	40.9	40.0	43.4	39.9		2.9	1.8	4.4	3.1	
Communication equipment	366	40.9	41.5	41.4	40.5		2.6	2.8	3.1	2.4	
Telephone and telegraph apparatus	3661	42.2	43.6	41.5	40.9		3.1	3.6	3.4	2.8	
Radio and TV communication equipment	3662	40.4	40.7	41.3	40.4		2.4	2.5	2.9	2.2	
Electronic components and accessories	367	40.5	40.9	41.2	39.8		3.3	3.6	3.7	3.1	
Electronic tubes	3671-3	42.3	43.7	43.4	41.7		3.6	3.2	4.8	4.4	
Semiconductors and related devices	3674	40.2	40.5	40.9	39.5		3.5	3.7	3.9	3.4	
Electronic components, nec	3679	40.7	40.8	41.8	40.0		3.3	3.6	3.8	3.0	
Misc. electrical equipment and supplies	369	42.3	42.0	43.9	43.1		4.0	3.6	4.5	4.4	
Storage batteries	3691	42.3	41.7	44.4	42.9		3.5	3.5	5.0	3.7	
Engine electrical equipment	3694	42.9	42.5	44.8	43.4		4.8	4.1	5.9	5.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	\$11.09	\$11.04	\$11.36	\$11.20	-	\$480.20	\$480.24	\$497.57	\$477.12	-
Construction machinery	3531	12.37	12.25	12.81	12.58	-	547.99	546.35	564.92	532.13	-
Mining machinery	3532	11.39	11.32	11.42	11.35	-	482.94	489.02	499.05	484.65	-
Oil field machinery	3533	10.73	10.83	11.02	10.75	-	464.61	474.35	480.47	461.18	-
Conveyors and conveying equipment	3535	9.97	9.81	10.28	10.23	-	429.71	413.98	461.57	441.94	-
Industrial trucks and tractors	3537	9.82	9.82	9.85	9.86	-	407.53	411.46	418.63	405.25	-
Metalworking machinery	354	11.40	11.28	11.63	11.71	-	494.76	491.81	518.70	515.24	-
Machine tools, metal cutting types	3541	11.32	11.15	11.57	11.49	-	486.76	473.88	518.34	512.45	-
Machine tools, metal forming types	3542	11.86	11.78	12.12	12.19	-	531.33	525.39	563.58	550.99	-
Special dies, tools, jigs, and fixtures	3544	12.20	12.04	12.47	12.59	-	536.80	530.96	559.90	559.00	-
Machine tool accessories	3545	10.20	10.14	10.37	10.41	-	429.42	433.99	453.17	443.47	-
Power driven hand tools	3546	8.97	8.77	9.19	9.16	-	382.12	372.73	398.85	400.29	-
Special industry machinery	355	11.11	10.91	11.41	11.33	-	469.95	463.68	498.62	479.26	-
Food products machinery	3551	11.03	10.84	11.25	11.29	-	468.78	458.53	497.25	477.57	-
Textile machinery	3552	9.19	8.98	9.46	9.49	-	390.58	379.85	412.46	404.27	-
Printing trades machinery	3555	12.14	11.84	12.63	12.46	-	484.39	493.73	510.25	489.68	-
General industrial machinery	356	10.59	10.45	10.82	10.76	-	455.37	450.40	477.16	463.76	-
Pumps and pumping equipment	3561	11.21	11.17	11.48	11.26	-	487.64	488.13	514.30	488.68	-
Ball and roller bearings	3562	11.06	10.76	11.39	11.28	-	487.75	479.90	507.99	503.09	-
Air and gas compressors	3563	10.50	10.46	10.62	10.45	-	449.40	452.92	472.59	450.40	-
Blowers and fans	3564	9.42	9.30	9.62	9.62	-	389.99	380.37	409.81	396.34	-
Speed changers, drives, and gears	3566	10.57	10.34	10.76	10.70	-	459.80	452.89	482.05	464.38	-
Power transmission equipment, nec	3568	10.60	10.61	10.61	10.64	-	444.14	454.11	457.29	457.52	-
Office and computing machines	357	10.70	10.47	11.02	10.91	-	445.12	438.69	465.04	447.31	-
Electronic computing equipment	3573	10.67	10.46	10.97	10.85	-	446.01	441.41	467.32	447.02	-
Refrigeration and service machinery	358	10.60	10.50	10.74	10.72	-	444.14	443.10	456.45	448.10	-
Refrigeration and heating equipment	3585	10.79	10.74	10.89	10.90	-	457.50	459.67	467.18	463.25	-
Misc. machinery, except electrical	359	10.62	10.48	10.84	10.85	-	446.04	439.11	461.78	456.79	-
Carburetors, pistons, rings, and valves	3592	12.90	12.84	13.04	13.17	-	552.12	538.00	571.15	578.16	-
Machinery, except electrical, nec	3599	10.32	10.17	10.55	10.54	-	432.41	427.14	448.38	441.63	-
Electrical and electronic equipment	36	10.13	10.02	10.29	10.27	\$10.25	415.33	413.83	430.12	420.04	\$414.10
Electric distributing equipment	361	9.45	9.40	9.53	9.45	-	399.74	395.74	409.79	401.63	-
Transformers	3612	9.25	9.17	9.32	9.21	-	389.43	376.72	397.03	392.35	-
Switchgear and switchboard apparatus	3613	9.62	9.59	9.72	9.65	-	408.85	409.49	419.90	408.20	-
Electrical industrial apparatus	362	10.03	9.82	10.12	10.08	-	423.27	414.40	438.20	430.42	-
Motors and generators	3621	10.00	9.74	10.17	10.15	-	419.00	405.18	435.28	432.39	-
Industrial controls	3622	9.91	9.75	9.89	9.77	-	411.27	412.43	423.29	406.43	-
Household appliances	363	10.08	10.03	10.12	10.27	-	403.20	407.22	411.88	415.94	-
Household refrigerators and freezers	3632	11.74	11.43	11.97	11.93	-	474.30	449.20	502.74	481.97	-
Household laundry equipment	3633	11.86	11.94	11.88	12.10	-	479.14	497.90	496.58	537.24	-
Electric housewares and fans	3634	7.37	7.39	7.36	7.40	-	299.96	310.38	295.87	297.48	-
Electric lighting and wiring equipment	364	9.52	9.37	9.66	9.73	-	381.75	384.17	390.26	390.17	-
Electric lamps	3641	10.74	10.60	10.83	11.03	-	433.90	445.20	419.12	443.41	-
Current-carrying wiring devices	3643	9.26	8.98	9.51	9.57	-	365.77	367.28	377.55	378.97	-
Noncurrent-carrying wiring devices	3644	9.32	9.35	9.42	9.22	-	383.05	386.16	401.29	370.64	-
Residential lighting fixtures	3645	6.98	6.99	7.01	7.11	-	270.13	273.31	276.19	275.87	-
Radio and TV receiving equipment	365	9.59	9.34	9.98	9.75	-	395.11	375.47	438.12	397.80	-
Radio and TV receiving sets	3651	10.02	9.67	10.48	10.29	-	409.82	386.80	454.83	410.57	-
Communication equipment	366	12.08	11.92	12.25	12.12	-	494.07	494.68	507.15	490.86	-
Telephone and telegraph apparatus	3661	11.62	11.46	11.72	11.58	-	490.36	499.66	486.38	473.62	-
Radio and TV communication equipment	3662	12.26	12.10	12.46	12.33	-	495.30	492.47	514.60	498.13	-
Electronic components and accessories	367	9.14	9.05	9.32	9.33	-	370.17	370.15	383.98	371.33	-
Electronic tubes	3671-3	11.39	11.28	11.73	11.77	-	481.80	492.94	509.08	490.81	-
Semiconductors and related devices	3674	11.14	11.03	11.36	11.21	-	447.83	446.72	464.62	442.80	-
Electronic components, nec	3679	8.19	8.15	8.30	8.39	-	333.33	332.52	346.94	335.60	-
Misc. electrical equipment and supplies	369	10.84	10.73	11.20	11.22	-	458.53	450.66	491.68	483.58	-
Storage batteries	3691	11.32	11.49	11.90	11.87	-	478.84	479.13	528.36	509.22	-
Engine electrical equipment	3694	11.55	11.29	11.87	12.04	-	495.50	479.83	531.78	522.54	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a
Durable goods—Continued											
Transportation equipment	37	42.7	42.4	43.6	43.0	42.8	4.7	4.4	5.3	5.0	
Motor vehicles and equipment	371	43.5	42.5	44.5	43.8	43.7	5.3	4.5	5.9	5.5	
Motor vehicles and car bodies	3711	43.3	41.2	44.5	42.9	-	5.2	4.0	5.7	5.0	
Truck and bus bodies	3713	42.4	42.0	42.6	41.9	-	4.1	3.6	4.4	3.4	
Motor vehicle parts and accessories	3714	44.0	43.9	45.3	45.1	-	5.7	5.2	6.7	6.5	
Truck trailers	3715	40.3	40.3	40.3	39.9	-	2.7	2.8	2.8	2.3	
Aircraft and parts	372	42.4	42.9	43.3	42.6		4.7	4.8	5.5	5.1	
Aircraft	3721	42.0	42.4	42.9	42.6		4.3	4.5	5.2	5.0	
Aircraft engines and engine parts	3724	42.2	42.6	42.6	41.5		4.6	4.1	5.3	4.8	
Aircraft equipment, nec	3728	43.2	43.9	44.3	43.5		5.4	5.7	6.1	5.5	
Ship and boat building and repairing	373	40.5	40.8	40.3	40.9	-	3.0	3.2	2.8	3.5	
Ship building and repairing	3731	40.9	41.5	40.4	41.9	-	3.2	3.4	2.9	4.0	
Boat building and repairing	3732	39.8	39.5	40.1	39.3	-	2.6	2.7	2.5	2.6	
Railroad equipment	374	42.6	41.8	43.2	42.7		4.2	4.0	4.9	4.2	
Guided missiles, space vehicles, and parts	376	43.2	43.9	44.5	43.5	-	4.5	4.7	5.3	4.8	
Guided missiles and space vehicles	3761	43.2	44.1	44.8	43.1	-	4.6	4.9	5.4	4.5	
Miscellaneous transportation equipment	379	39.9	39.0	40.7	40.4		2.8	2.9	3.1	3.0	
Travel trailers and campers	3792	38.4	36.8	38.8	38.7	-	2.0	1.3	2.1	2.4	
Instruments and related products	38	41.5	41.8	42.0	41.7	41.6	3.1	3.2	3.5	3.1	
Engineering and scientific instruments	381	41.9	42.4	43.4	42.2	-	3.1	3.3	3.9	3.1	
Measuring and controlling devices	382	41.5	41.7	42.0	42.0		2.9	3.1	3.3	2.8	
Environmental controls	3822	39.8	40.4	41.2	41.1		2.5	3.1	2.8	2.7	
Process control instruments	3823	43.6	43.6	44.2	43.7		4.0	4.1	4.6	3.9	
Instruments to measure electricity	3825	41.0	41.2	41.2	41.8		2.4	2.5	2.7	2.2	
Optical instruments and lenses	383	43.6	42.5	44.5	43.8		3.4	2.6	3.7	3.3	
Medical instruments and supplies	384	40.8	41.2	41.1	40.9	-	3.0	3.4	3.2	2.8	
Surgical and medical instruments	3841	40.6	41.2	40.4	40.6		2.7	2.9	2.9	2.5	-
Surgical appliances and supplies	3842	40.9	41.2	41.5	40.9		3.1	3.7	3.5	2.9	-
Ophthalmic goods	385	39.8	39.7	40.4	40.8		2.9	2.5	3.2	3.2	
Photographic equipment and supplies	386	43.4	44.3	42.7	42.9		4.2	4.4	4.7	4.8	
Watches, clocks, and watchcases	387	40.4	40.3	41.5	38.8		2.3	1.7	2.4	.7	-
Miscellaneous manufacturing	39	39.2	38.9	39.7	39.3	39.2	2.5	2.3	2.7	2.2	-
Jewelry, silverware, and plated ware	391	38.2	37.7	39.4	36.8	-	2.1	1.5	2.9	1.5	-
Jewelry, precious metal	3911	37.3	37.0	39.2	36.3	-	1.8	1.3	3.0	1.3	
Musical instruments	393	40.3	41.0	40.4	39.4	-	2.6	2.7	3.3	1.8	
Toys and sporting goods	394	39.1	39.3	38.9	39.7		2.2	2.4	2.0	2.1	-
Dolls, games, toys, and children's vehicles	3942,4	38.2	39.0	36.9	38.4	-	1.6	2.3	.8	1.4	
Sporting and athletic goods, nec	3949	39.8	39.5	40.3	40.6		2.7	2.6	2.8	2.6	
Pens, pencils, office, and art supplies	395	40.2	41.0	40.0	40.1	-	2.7	2.9	3.1	2.7	
Costume jewelry and notions	396	37.9	36.9	38.9	38.3		2.0	1.5	2.5	1.9	
Costume jewelry	3961	36.5	35.3	38.7	36.9	-	1.5	1.0	2.3	1.6	
Miscellaneous manufactures	399	39.7	39.0	40.5	40.1	-	2.9	2.7	3.0	2.7	
Signs and advertising displays	3993	39.7	38.7	40.3	39.5	-	2.9	2.3	3.3	2.6	
Nondurable goods		40.2	40.2	40.5	39.9	39.7	3.7	3.7	3.8	3.5	3.5
Food and kindred products	20	40.4	40.5	40.9	40.0	39.5	4.2	4.2	4.3	4.0	-
Meat products	201	40.2	41.5	40.6	39.8	-	4.3	5.0	4.4	3.9	
Meat packing plants	2011	41.6	43.3	41.3	40.3	-	5.2	6.4	5.2	4.6	
Sausages and other prepared meats	2013	40.8	40.5	41.6	39.2	-	4.5	4.2	4.9	3.5	-
Poultry dressing plants	2016	38.9	40.5	39.4	39.5	-	3.2	4.1	3.2	3.2	-
Dairy products	202	41.0	40.5	41.2	41.1		4.2	3.9	4.0	3.9	
Cheese, natural and processed	2022	39.4	38.7	39.2	39.5	-	3.5	3.3	3.4	3.4	-
Fluid milk	2026	42.0	41.7	41.9	41.6	-	4.7	4.6	4.5	4.3	-
Preserved fruits and vegetables	203	39.5	38.8	39.9	39.6		4.1	3.1	3.9	3.7	
Canned specialties	2032	41.3	40.3	44.5	45.7		5.4	5.5	7.1	8.1	-
Canned fruits and vegetables	2033	39.4	38.6	39.4	38.3	-	4.7	2.9	3.7	3.0	-
Frozen fruits and vegetables	2037	38.3	37.4	38.2	38.0		3.6	2.5	2.8	3.0	
Grain mill products	204	44.6	45.0	46.4	44.1		6.3	6.5	7.3	6.4	-
Flour and other grain mill products	2041	46.5	45.2	48.1	45.6	-	6.9	5.9	7.7	6.1	
Prepared feeds, nec	2048	43.3	44.6	43.9	43.3	-	6.1	7.0	6.7	6.6	-
Bakery products	205	40.0	39.4	40.1	38.9		4.0	3.8	3.8	3.5	
Bread, cake, and related products	2051	39.0	38.3	38.9	37.9		4.0	3.6	3.8	3.6	
Cookies and crackers	2052	42.6	42.2	42.9	41.4		3.9	4.1	3.8	3.4	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Durable goods—Continued											
Transportation equipment	37	\$13.36	\$13.22	\$13.65	\$13.63	\$13.61	\$570.47	\$560.53	\$595.14	\$586.09	\$582.51
Motor vehicles and equipment	371	14.07	13.94	14.31	14.29	14.26	612.05	592.45	636.80	625.90	623.16
Motor vehicles and car bodies	3711	16.09	16.07	16.25	16.28	-	696.70	662.08	723.13	698.41	-
Truck and bus bodies	3713	11.80	11.76	12.07	11.50	-	500.32	493.92	514.18	481.85	-
Motor vehicle parts and accessories	3714	13.23	13.04	13.44	13.53	-	582.12	572.46	608.83	610.20	-
Truck trailers	3715	9.25	9.33	9.40	9.36	-	372.78	376.00	378.82	373.46	-
Aircraft and parts	372	13.60	13.37	13.95	13.99	-	576.64	573.57	604.04	595.97	-
Aircraft	3721	(¹)	(¹)	(¹)	(¹)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	\$13.80	\$13.56	\$13.99	\$14.10	-	\$582.36	\$577.66	\$595.97	\$585.15	-
Aircraft equipment, nec	3728	12.58	12.36	12.92	12.80	-	543.46	542.60	572.36	556.80	-
Ship and boat building and repairing	373	10.40	10.54	10.43	10.57	-	421.20	430.03	420.33	432.31	-
Ship building and repairing	3731	11.59	11.73	11.64	11.71	-	474.03	486.80	470.26	490.65	-
Boat building and repairing	3732	8.35	8.23	8.48	8.67	-	332.33	325.09	340.05	340.73	-
Railroad equipment	374	12.17	12.28	12.55	12.42	-	518.44	513.30	542.16	530.33	-
Guided missiles, space vehicles, and parts	376	13.19	12.95	13.57	13.51	-	569.81	568.51	603.87	587.69	-
Guided missiles and space vehicles	3761	(¹)	(¹)	(¹)	(¹)	-	-	-	-	-	-
Miscellaneous transportation equipment	379	\$10.35	\$10.50	\$10.58	\$10.44	-	\$412.97	\$409.50	\$430.61	\$421.78	-
Travel trailers and campers	3792	8.71	8.71	9.06	9.04	-	334.46	320.53	351.53	349.85	-
Instruments and related products	38	9.95	9.93	10.10	10.17	10.24	412.93	415.07	424.20	424.09	425.98
Engineering and scientific instruments	381	10.97	10.74	11.18	11.25	-	459.64	455.38	485.21	474.75	-
Measuring and controlling devices	382	9.71	9.80	9.72	9.78	-	402.97	408.66	408.24	410.76	-
Environmental controls	3822	9.17	9.25	9.14	9.11	-	364.97	373.70	376.57	374.42	-
Process control instruments	3823	9.46	9.61	9.53	9.43	-	412.46	419.00	421.23	412.09	-
Instruments to measure electricity	3825	9.88	10.04	9.72	9.91	-	405.08	413.65	400.46	414.24	-
Optical instruments and lenses	383	10.80	10.53	11.12	11.03	-	470.88	447.53	494.84	483.11	-
Medical instruments and supplies	384	8.93	8.81	9.14	9.16	-	364.34	362.97	375.65	374.64	-
Surgical and medical instruments	3841	9.18	8.96	9.40	9.33	-	372.71	369.15	379.76	378.80	-
Surgical appliances and supplies	3842	8.64	8.62	8.85	8.95	-	353.38	355.14	367.28	366.06	-
Ophthalmic goods	385	7.54	7.49	7.61	7.63	-	300.09	297.35	307.44	311.30	-
Photographic equipment and supplies	386	13.60	13.80	13.97	14.23	-	590.24	611.34	596.52	610.47	-
Watches, clocks, and watchcases	387	7.30	7.19	7.34	7.53	-	294.92	289.76	304.61	292.16	-
Miscellaneous manufacturing	39	7.98	7.97	8.17	8.22	8.20	312.82	310.03	324.35	323.05	321.44
Jewelry, silverware, and plated ware	391	8.60	8.48	8.79	8.82	-	328.52	319.70	346.33	324.58	-
Jewelry, precious metal	3911	8.73	8.59	8.90	8.89	-	325.63	317.83	348.88	322.71	-
Musical instruments	393	7.96	7.85	8.17	8.11	-	320.79	321.85	330.07	319.53	-
Toys and sporting goods	394	7.21	7.29	7.33	7.44	-	281.91	286.50	285.14	295.37	-
Dolls, games, toys, and children's vehicles	3942,4	7.02	7.21	7.21	7.48	-	268.16	281.19	266.05	287.23	-
Sporting and athletic goods, nec	3949	7.35	7.34	7.41	7.41	-	292.53	289.93	298.62	300.85	-
Pens, pencils, office, and art supplies	395	7.87	7.97	7.95	8.29	-	316.37	326.77	318.00	332.43	-
Costume jewelry and notions	396	6.74	6.58	6.89	6.88	-	255.45	242.80	268.02	263.50	-
Costume jewelry	3961	6.27	6.06	6.41	6.44	-	228.86	213.92	248.07	237.64	-
Miscellaneous manufactures	399	8.75	8.71	8.96	8.98	-	347.38	339.69	362.88	360.10	-
Signs and advertising displays	3993	9.14	9.04	9.32	9.34	-	362.86	349.85	375.60	368.93	-
Nondurable goods		9.42	9.32	9.60	9.62	9.62	378.68	374.66	388.80	383.84	381.91
Food and kindred products	20	9.11	9.06	9.26	9.28	9.30	368.04	366.93	378.73	371.20	367.35
Meat products	201	7.61	7.56	7.70	7.66	-	305.92	313.74	312.62	304.87	-
Meat packing plants	2011	8.47	8.46	8.49	8.45	-	352.35	366.32	350.64	340.54	-
Sausages and other prepared meats	2013	9.03	8.98	9.14	9.05	-	368.42	363.69	380.22	354.76	-
Poultry dressing plants	2016	6.35	6.28	6.49	6.52	-	247.02	254.34	255.71	257.54	-
Dairy products	202	9.87	9.80	10.02	10.04	-	404.67	396.90	412.82	412.64	-
Cheese, natural and processed	2022	9.18	9.07	9.35	9.24	-	361.69	351.01	366.52	364.98	-
Fluid milk	2026	10.31	10.29	10.45	10.56	-	433.02	429.09	437.86	439.30	-
Preserved fruits and vegetables	203	8.42	8.55	8.71	8.80	-	332.59	331.74	347.53	348.48	-
Canned specialties	2032	10.41	10.33	10.55	10.76	-	429.93	416.30	469.48	491.73	-
Canned fruits and vegetables	2033	8.43	8.59	8.79	8.92	-	332.14	331.57	346.33	341.64	-
Frozen fruits and vegetables	2037	7.63	7.94	7.78	7.83	-	292.23	296.96	297.20	297.54	-
Grain mill products	204	11.12	11.04	11.33	11.17	-	495.95	496.80	525.71	492.60	-
Flour and other grain mill products	2041	10.88	10.60	11.26	10.77	-	505.92	479.12	541.61	491.11	-
Prepared feeds, nec	2048	8.63	8.66	8.64	8.67	-	373.68	386.24	379.30	375.41	-
Bakery products	205	10.26	10.17	10.36	10.36	-	410.40	400.70	415.44	403.00	-
Bread, cake, and related products	2051	10.23	10.15	10.29	10.37	-	398.97	388.75	400.28	393.02	-
Cookies and crackers	2052	10.34	10.20	10.49	10.35	-	440.48	430.44	450.02	428.49	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	40.5	40.8	41.1	41.3	-	3.6	3.6	4.0	4.2	-
Cane and beet sugar	2061-3	42.4	44.1	45.6	44.9	-	5.8	6.4	7.6	7.2	-
Confectionery products	2065	39.2	39.1	38.5	39.1	-	2.8	2.5	2.7	3.1	-
Fats and oils	207	43.2	44.4	44.2	44.7	-	5.3	6.2	5.3	5.3	-
Beverages	208	40.8	40.2	41.6	40.1	-	3.9	3.2	3.5	3.2	-
Malt beverages	2082	42.8	41.9	43.2	43.6	-	5.9	5.7	4.9	5.5	-
Bottled and canned soft drinks	2086	40.1	39.9	40.5	38.4	-	3.3	2.2	3.1	2.1	-
Misc. food and kindred products	209	38.1	37.8	38.3	36.6	-	3.7	3.3	3.5	3.3	-
Tobacco manufactures	21	39.8	39.2	39.9	37.9	37.5	2.6	3.4	2.7	1.8	-
Cigarettes	211	40.2	41.0	40.3	38.0	-	2.9	4.3	3.0	1.6	-
Textile mill products	22	41.1	41.3	41.1	40.6	40.5	4.0	4.2	4.2	3.9	-
Weaving mills, cotton	221	41.1	41.7	40.6	39.5	-	4.4	5.4	4.1	3.6	-
Weaving mills, synthetics	222	41.9	42.5	41.6	41.5	-	4.4	4.7	4.3	4.3	-
Weaving and finishing mills, wool	223	41.9	42.9	41.7	40.9	-	3.3	3.2	3.8	3.7	-
Narrow fabric mills	224	41.6	41.5	42.8	42.1	-	3.7	3.6	4.7	3.8	-
Knitting mills	225	39.7	39.3	39.6	39.6	-	3.2	3.2	3.5	3.3	-
Women's hosiery, except socks	2251	38.6	37.9	40.2	40.2	-	2.7	3.4	3.8	3.5	-
Hosiery, nec	2252	39.1	39.4	36.5	39.0	-	2.6	3.3	1.9	2.7	-
Knit outerwear mills	2253	39.3	38.7	38.4	37.7	-	3.1	2.5	3.1	2.9	-
Knit underwear mills	2254	38.9	37.9	39.4	39.7	-	2.0	1.8	2.1	2.0	-
Circular knit fabric mills	2257	41.2	41.7	42.4	41.9	-	4.6	5.0	5.4	4.8	-
Textile finishing, except wool	226	42.0	42.0	43.5	42.6	-	4.8	5.0	6.0	5.5	-
Finishing plants, cotton	2261	42.8	42.0	44.0	41.7	-	5.0	5.5	6.4	5.2	-
Finishing plants, synthetics	2262	42.0	42.8	43.6	43.3	-	4.8	5.1	6.0	5.8	-
Floor covering mills	227	42.8	41.7	42.3	40.3	-	4.2	3.5	4.4	3.8	-
Yarn and thread mills	228	40.7	41.8	40.7	40.9	-	4.1	4.7	4.0	4.2	-
Yarn mills, except wool	2281	41.1	42.5	41.1	41.5	-	4.3	4.9	4.2	4.5	-
Throwing and winding mills	2282	38.3	37.9	38.2	37.8	-	2.8	2.7	3.0	2.5	-
Miscellaneous textile goods	229	42.7	43.1	42.8	42.1	-	4.5	4.8	4.7	4.3	-
Apparel and other textile products	23	36.9	36.6	37.1	36.7	36.7	1.8	1.9	1.9	1.7	-
Men's and boys' suits and coats	231	36.9	36.9	37.5	37.1	-	1.4	1.6	1.6	1.2	-
Men's and boys' furnishings	232	36.7	36.7	36.8	36.4	-	1.5	1.7	1.5	1.4	-
Men's and boys' shirts and nightwear	2321	37.0	36.1	37.0	36.7	-	1.3	1.5	1.2	1.3	-
Men's and boys' separate trousers	2327	36.5	36.9	36.5	36.3	-	1.4	1.6	1.5	1.2	-
Men's and boys' work clothing	2328	35.8	36.8	35.7	35.8	-	1.5	2.0	1.5	1.4	-
Women's and misses' outerwear	233	35.7	35.5	35.6	35.3	-	1.6	1.7	1.5	1.5	-
Women's and misses' blouses and waists	2331	35.8	34.8	35.4	35.6	-	1.3	1.4	1.2	1.2	-
Women's and misses' dresses	2335	35.3	35.1	35.1	35.7	-	1.5	1.4	1.4	1.6	-
Women's and misses' suits and coats	2337	35.9	34.8	35.5	34.8	-	1.9	1.5	2.0	1.8	-
Women's and misses' outerwear, nec	2339	35.8	35.9	36.0	35.2	-	1.7	2.0	1.5	1.5	-
Women's and children's undergarments	234	37.7	37.7	37.5	37.3	-	1.7	1.7	1.6	1.7	-
Women's and children's underwear	2341	38.0	37.6	37.9	37.7	-	1.6	1.5	1.5	1.7	-
Brassieres and allied garments	2342	35.8	38.0	35.1	35.4	-	2.1	3.0	2.1	1.8	-
Children's outerwear	236	37.0	37.5	37.1	37.4	-	1.8	2.4	1.9	2.1	-
Children's dresses and blouses	2361	36.0	36.0	36.4	36.8	-	1.5	2.2	1.7	2.0	-
Misc. apparel and accessories	238	38.3	37.2	38.9	38.0	-	2.3	2.0	2.2	2.0	-
Misc. fabricated textile products	239	38.9	37.9	39.6	38.6	-	2.7	2.4	3.3	2.6	-
Curtains and draperies	2391	36.1	34.1	36.4	35.4	-	1.2	.8	1.6	1.0	-
House furnishings, nec	2392	38.7	37.6	39.0	37.5	-	2.5	2.2	2.9	2.0	-
Automotive and apparel trimmings	2396	41.7	40.4	43.1	42.2	-	5.4	4.5	6.8	5.4	-
Paper and allied products	26	43.2	43.5	44.0	43.2	43.0	5.1	5.2	5.3	5.1	-
Paper and pulp mills	261,2,6	45.3	45.4	46.2	45.2	-	6.4	6.3	6.9	6.6	-
Paper mills, except building paper	262	45.4	45.5	46.4	45.3	-	6.5	6.5	7.1	6.7	-
Paperboard mills	263	44.4	45.1	45.5	44.2	-	7.2	7.1	7.3	6.5	-
Misc. converted paper products	264	41.8	42.4	42.2	41.6	-	3.9	4.2	4.1	3.9	-
Paper coating and glazing	2641	43.3	43.6	44.4	43.9	-	4.1	4.0	4.4	4.4	-
Envelopes	2642	41.1	42.0	41.3	41.3	-	3.2	4.1	3.7	3.6	-
Bags, except textile bags	2643	41.8	42.7	42.6	41.5	-	4.4	4.7	4.8	4.2	-
Paperboard containers and boxes	265	42.6	42.7	43.4	43.0	-	4.5	4.7	4.8	4.6	-
Folding paperboard boxes	2651	42.4	43.1	43.8	43.4	-	4.4	5.0	5.1	5.0	-
Corrugated and solid fiber boxes	2653	43.2	43.3	43.5	43.6	-	4.9	4.9	4.9	5.0	-
Sanitary food containers	2654	42.6	41.9	43.6	41.3	-	4.3	4.3	4.4	3.4	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Feb. 1989 ^a
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	\$9.40	\$9.24	\$9.38	\$9.63		\$380.70	\$376.99	\$385.52	\$397.72	
Cane and beet sugar	2061-3	10.88	10.27	10.79	10.83		461.31	452.91	492.02	486.27	
Confectionery products	2065	8.28	8.15	8.19	8.53		324.58	318.67	315.32	333.52	
Fats and oils	207	9.30	9.23	9.50	9.51		401.76	409.81	419.90	425.10	
Beverages	208	12.13	11.91	12.29	12.42		494.90	478.78	511.26	498.04	
Malt beverages	2082	16.89	16.50	16.93	17.24		722.89	691.35	731.38	751.66	
Bottled and canned soft drinks	2086	9.67	9.43	9.96	9.93		387.77	376.26	403.38	381.31	
Misc. food and kindred products	209	8.52	8.51	8.59	8.68		324.61	321.68	329.00	317.69	
Tobacco manufactures	21	14.56	13.79	14.18	14.33	\$14.71	579.49	540.57	565.78	543.11	\$551.63
Cigarettes	211	17.47	17.08	18.02	17.75	-	702.29	700.28	726.21	674.50	-
Textile mill products	22	7.37	7.34	7.52	7.59	7.60	302.91	303.14	309.07	308.15	307.80
Weaving mills, cotton	221	7.68	7.71	7.74	7.80	-	315.65	321.51	314.24	308.10	-
Weaving mills, synthetics	222	7.95	7.88	8.07	8.17		333.11	334.90	335.71	339.06	
Weaving and finishing mills, wool	223	7.99	7.79	8.20	8.29		334.78	334.19	341.94	339.06	
Narrow fabric mills	224	6.82	6.74	6.94	7.00		283.71	279.71	297.03	294.70	
Knitting mills	225	6.67	6.72	6.79	6.91		264.80	264.10	268.88	273.64	
Women's hosiery, except socks	2251	6.57	6.71	6.71	6.85		253.60	254.31	269.74	275.37	
Hosiery, nec	2252	6.41	6.40	6.44	6.61		250.63	252.16	235.06	257.79	
Knit outerwear mills	2253	6.40	6.57	6.42	6.58		251.52	254.26	246.53	248.07	
Knit underwear mills	2254	6.46	6.46	6.56	6.74		251.29	244.83	258.46	267.58	
Circular knit fabric mills	2257	7.48	7.37	7.78	7.75		308.18	307.33	329.87	324.73	
Textile finishing, except wool	226	7.78	7.63	8.01	8.05		326.76	320.46	348.44	342.93	
Finishing plants, cotton	2261	7.80	7.67	7.98	8.05		333.84	322.14	351.12	335.69	
Finishing plants, synthetics	2262	8.05	7.87	8.32	8.41		338.10	336.84	362.75	364.15	
Floor covering mills	227	7.69	7.59	7.79	7.78		329.13	316.50	329.52	313.53	
Yarn and thread mills	228	7.07	7.00	7.24	7.29		287.75	292.60	294.67	298.16	
Yarn mills, except wool	2281	7.04	6.98	7.21	7.30		289.34	296.65	296.33	302.95	
Throwing and winding mills	2282	7.24	7.18	7.42	7.33		277.29	272.12	283.44	277.07	
Miscellaneous textile goods	229	8.38	8.31	8.68	8.64		357.83	358.16	371.50	363.74	
Apparel and other textile products	23	6.10	6.02	6.27	6.29	6.28	225.09	220.33	232.62	230.84	230.48
Men's and boys' suits and coats	231	6.87	6.87	7.04	7.08	-	253.50	253.50	264.00	262.67	-
Men's and boys' furnishings	232	5.60	5.59	5.71	5.78		205.52	205.15	210.13	210.39	
Men's and boys' shirts and nightwear	2321	5.47	5.45	5.61	5.71		202.39	196.75	207.57	209.56	
Men's and boys' separate trousers	2327	5.45	5.47	5.60	5.58		198.93	201.84	204.40	202.55	
Men's and boys' work clothing	2328	5.61	5.60	5.68	5.75		200.84	206.08	202.78	205.85	
Women's and misses' outerwear	233	5.90	5.76	6.07	6.08		210.63	204.48	216.09	214.62	
Women's and misses' blouses and waists	2331	5.13	5.13	5.23	5.26		183.65	178.52	185.14	187.26	
Women's and misses' dresses	2335	6.25	6.02	6.54	6.42		220.63	211.30	229.55	229.19	
Women's and misses' suits and coats	2337	6.55	6.45	6.62	6.61		235.15	224.46	235.01	230.03	
Women's and misses' outerwear, nec	2339	5.78	5.66	5.94	6.02		206.92	203.19	213.84	211.90	
Women's and children's undergarments	234	5.68	5.62	5.71	5.85		214.14	211.87	214.13	218.21	
Women's and children's underwear	2341	5.53	5.42	5.57	5.71		210.14	203.79	211.10	215.27	
Brassieres and allied garments	2342	6.56	6.73	6.49	6.67		234.85	255.74	227.80	236.12	
Children's outerwear	236	5.47	5.44	5.58	5.65		202.39	204.00	207.02	211.31	
Children's dresses and blouses	2361	5.47	5.34	5.68	5.71		196.92	192.24	206.75	210.13	
Misc. apparel and accessories	238	5.95	5.83	6.01	6.13		227.89	216.88	233.79	232.94	
Misc. fabricated textile products	239	7.32	7.23	7.55	7.49		284.75	274.02	298.98	289.11	
Curtains and draperies	2391	6.00	5.88	6.12	6.20		216.60	200.51	222.77	219.48	
House furnishings, nec	2392	6.23	6.15	6.31	6.35		241.10	231.24	246.09	238.13	
Automotive and apparel trimmings	2396	11.24	11.12	11.82	11.45		468.71	449.25	509.44	483.19	
Paper and allied products	26	11.64	11.54	11.79	11.77	11.80	502.85	501.99	518.76	508.46	507.40
Paper and pulp mills	261,2,6	14.29	13.99	14.48	14.44	-	647.34	635.15	668.98	652.69	-
Paper mills, except building paper	262	14.33	14.04	14.52	14.49		650.58	638.82	673.73	656.40	
Paperboard mills	263	14.49	14.41	14.70	14.46		643.36	649.89	668.85	639.13	
Misc. converted paper products	264	10.10	10.10	10.27	10.32		422.18	428.24	433.39	429.31	
Paper coating and glazing	2641	11.28	11.23	11.43	11.46		488.42	489.63	507.49	503.09	
Envelopes	2642	9.58	9.50	9.75	9.81		393.74	399.00	402.68	405.15	
Bags, except textile bags	2643	9.36	9.34	9.43	9.46		391.25	398.82	401.72	392.59	
Paperboard containers and boxes	265	9.97	9.93	10.06	10.06		424.72	424.01	436.60	432.58	
Folding paperboard boxes	2651	10.36	10.33	10.57	10.51		439.26	445.22	462.97	456.13	
Corrugated and solid fiber boxes	2653	10.13	10.05	10.23	10.24		437.62	435.17	445.01	446.46	
Sanitary food containers	2654	9.74	9.72	9.95	9.83		414.92	407.27	433.82	405.98	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Nondurable goods—Continued											
Printing and publishing	27	38.0	37.8	38.4	37.7	37.6	3.1	2.9	3.2	2.8	
Newspapers	271	33.4	32.6	33.8	32.7	-	1.4	1.1	1.5	.9	
Periodicals	272	38.1	38.0	38.2	37.8	-	3.2	3.2	2.9	3.2	
Books	273	39.3	39.8	39.3	38.4	-	3.6	3.9	3.6	3.0	
Book publishing	2731	38.2	38.8	38.4	37.5	-	2.8	3.5	2.7	2.3	
Book printing	2732	41.0	41.3	40.7	39.9	-	4.8	4.6	4.9	4.3	
Miscellaneous publishing	274	36.4	37.0	36.8	36.7	-	2.2	2.8	2.1	1.8	
Commercial printing	275	39.4	39.1	39.8	39.1	-	3.6	3.3	3.8	3.4	
Commercial printing, letterpress	2751	39.2	39.1	39.8	39.0	-	3.1	2.9	3.3	2.7	
Commercial printing, lithographic	2752	39.3	39.0	39.6	39.0	-	3.7	3.4	3.9	3.6	
Manifold business forms	276	41.6	42.0	42.5	41.3	-	4.1	4.5	4.8	3.7	
Blankbooks and bookbinding	278	39.2	39.1	40.2	39.3	-	3.2	3.1	3.4	3.0	
Printing trade services	279	38.7	38.4	38.6	38.6	-	4.3	4.3	3.8	4.0	
Chemicals and allied products	28	42.3	42.5	42.9	42.5	42.4	4.1	4.1	4.2	4.0	
Industrial inorganic chemicals	281	43.0	43.1	43.7	43.0	-	4.3	4.2	4.4	3.9	
Industrial inorganic chemicals, nec	2819	43.2	43.7	43.9	43.3	-	4.2	4.1	4.3	3.9	
Plastics materials and synthetics	282	43.4	43.5	43.7	43.0	-	4.8	4.7	5.0	4.5	
Plastics materials and resins	2821	43.9	44.3	44.3	43.5	-	5.1	5.0	5.4	4.8	
Organic fibers, noncellulosic	2824	43.1	42.7	43.7	42.6	-	4.5	4.2	4.7	4.4	
Drugs	283	41.1	41.9	42.2	41.8	-	3.2	3.4	3.9	3.7	
Pharmaceutical preparations	2834	40.9	41.4	41.9	41.1	-	3.2	3.4	3.8	3.8	
Soap, cleaners, and toilet goods	284	40.2	40.1	40.7	40.3	-	3.2	3.2	2.7	2.8	
Soap and other detergents	2841	43.4	43.0	43.6	43.1	-	5.0	5.3	4.1	4.8	
Polishing, sanitation, and finishing preparations	2842,3	41.0	41.4	42.0	41.1	-	3.1	3.2	3.3	3.2	
Toilet preparations	2844	38.0	37.7	38.5	38.4	-	2.2	2.0	1.6	1.4	
Paints and allied products	285	41.9	41.7	42.2	41.6	-	3.8	3.7	3.4	3.4	
Industrial organic chemicals	286	44.2	44.7	44.7	44.4	-	5.3	5.3	5.6	5.2	
Cyclic crudes and intermediates	2865	42.3	43.7	42.9	42.9	-	4.9	5.4	4.8	5.1	
Gum, wood, and industrial organic chemicals, nec	2861,9	44.7	45.0	45.2	44.8	-	5.4	5.3	5.8	5.2	
Agricultural chemicals	287	43.4	43.3	44.2	43.8	-	5.1	5.0	4.9	4.8	
Miscellaneous chemical products	289	42.0	41.2	42.8	42.2	-	3.7	3.3	3.8	3.6	
Petroleum and coal products	29	44.4	44.2	44.3	43.3	43.3	5.5	5.1	5.2	4.9	
Petroleum refining	291	44.5	44.5	44.8	43.5	-	5.2	5.1	5.3	4.9	
Paving and roofing materials	295	45.3	43.8	43.0	43.4	-	7.6	6.2	5.4	5.7	
Rubber and misc. plastics products	30	41.6	41.8	42.0	41.7	41.4	4.2	4.2	4.4	4.2	
Tires and inner tubes	301	45.2	46.3	45.5	45.4	-	6.4	6.5	6.6	6.1	
Rubber and plastics footwear	302	40.3	42.7	40.7	38.7	-	2.1	3.0	2.3	2.2	
Reclaimed rubber, and rubber and plastics hose and belting	303,4	44.2	45.8	44.2	44.2	-	4.5	5.2	4.4	4.4	
Fabricated rubber products, nec	306	41.6	41.8	41.9	41.7	-	3.8	4.0	3.8	3.7	
Miscellaneous plastics products	307	41.1	41.1	41.6	41.2	-	4.0	3.9	4.3	4.1	
Leather and leather products	31	37.5	37.6	38.3	37.9	37.6	2.0	1.9	2.0	1.9	
Leather tanning and finishing	311	41.0	41.1	41.5	41.7	-	4.0	4.3	4.8	4.9	
Footwear, except rubber	314	37.2	37.3	38.1	37.6	-	1.6	1.6	1.5	1.4	
Men's footwear, except athletic	3143	37.2	37.1	37.6	37.0	-	1.1	1.2	1.2	1.1	
Women's footwear, except athletic	3144	36.9	37.4	39.0	38.0	-	2.1	2.2	1.9	1.8	
Luggage	316	39.2	40.1	38.5	38.8	-	3.1	3.0	1.9	1.9	
Handbags and personal leather goods	317	36.1	35.8	35.9	35.2	-	2.1	2.0	2.2	1.6	
Transportation and public utilities		39.3	39.0	39.5	39.1	39.1					
Railroad transportation:											
Class I railroads ³	4011	44.9	44.1	45.5	44.5	-	-	-	-	-	
Local and interurban passenger transit	41	34.4	33.4	34.3	34.0	-	-	-	-	-	
Local and suburban transportation	411	38.6	38.3	38.5	38.9	-	-	-	-	-	
Intercity highway transportation	413	39.9	38.9	39.3	39.0	-	-	-	-	-	
Trucking and warehousing	42	38.3	37.4	39.2	37.7	-	-	-	-	-	
Trucking and trucking terminals	421,3	38.2	37.3	39.1	37.5	-	-	-	-	-	
Public warehousing	422	39.2	38.5	40.1	39.0	-	-	-	-	-	
Pipe lines, except natural gas	46	42.0	42.8	42.6	42.2	-	-	-	-	-	

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Nondurable goods—Continued											
Printing and publishing	27	\$10.53	\$10.38	\$10.71	\$10.73	\$10.69	\$400.14	\$392.36	\$411.26	\$404.52	\$401.94
Newspapers	271	10.50	10.36	10.72	10.82	-	350.70	337.74	362.34	353.81	-
Periodicals	272	10.97	10.71	11.28	11.44	-	417.96	406.98	430.90	432.43	-
Books	273	9.48	9.41	9.61	9.51	-	372.56	374.52	377.67	365.18	-
Book publishing	2731	9.13	9.00	9.31	9.30	-	348.77	349.20	357.50	348.75	-
Book printing	2732	10.00	10.06	10.02	9.83	-	410.00	415.48	407.81	392.22	-
Miscellaneous publishing	274	9.86	9.72	10.02	9.97	-	358.90	359.64	368.74	365.90	-
Commercial printing	275	10.80	10.64	10.97	10.99	-	425.52	416.02	436.61	429.71	-
Commercial printing, letterpress	2751	10.36	10.28	10.51	10.48	-	406.11	401.95	418.30	408.72	-
Commercial printing, lithographic	2752	10.95	10.75	11.13	11.19	-	430.34	419.25	440.75	436.41	-
Manifold business forms	276	10.99	10.84	11.24	11.13	-	457.18	455.28	477.70	459.67	-
Blankbooks and bookbinding	278	8.40	8.26	8.58	8.44	-	329.28	322.97	344.92	331.69	-
Printing trade services	279	12.98	12.94	13.17	13.34	-	502.33	496.90	508.36	514.92	-
Chemicals and allied products	28	12.67	12.55	12.91	12.84	12.92	535.94	533.38	553.84	545.70	547.81
Industrial inorganic chemicals	281	13.87	13.70	14.02	13.95	-	596.41	590.47	612.67	599.85	-
Industrial inorganic chemicals, nec	2819	13.88	13.73	13.97	13.92	-	599.62	600.00	613.28	602.74	-
Plastics materials and synthetics	282	13.01	12.76	13.18	13.11	-	564.63	555.06	575.97	563.73	-
Plastics materials and resins	2821	13.92	13.59	14.26	14.20	-	611.09	602.04	631.72	617.70	-
Organic fibers, noncellulosic	2824	12.41	12.30	12.39	12.35	-	534.87	525.21	541.44	526.11	-
Drugs	283	12.05	11.85	12.41	12.34	-	495.26	496.52	523.70	515.81	-
Pharmaceutical preparations	2834	11.76	11.57	12.14	12.18	-	480.98	479.00	508.67	500.60	-
Soap, cleaners, and toilet goods	284	11.05	11.12	11.26	11.27	-	444.21	445.91	458.28	454.18	-
Soap and other detergents	2841	14.60	14.46	15.00	14.86	-	633.64	621.78	654.00	640.47	-
Polishing, sanitation, and finishing preparations	2842,3	10.24	10.16	10.24	10.33	-	419.84	420.62	430.08	424.56	-
Toilet preparations	2844	9.28	9.43	9.48	9.50	-	352.64	355.51	364.98	364.80	-
Paints and allied products	285	11.24	11.13	11.49	11.52	-	470.96	464.12	484.88	479.23	-
Industrial organic chemicals	286	15.06	14.86	15.23	15.08	-	665.65	664.24	680.78	669.55	-
Cyclic crudes and intermediates	2865	14.74	14.69	14.68	14.85	-	623.50	641.95	629.77	637.07	-
Gum, wood, and industrial organic chemicals, nec	2861,9	15.13	14.90	15.36	15.13	-	676.31	670.50	694.27	677.82	-
Agricultural chemicals	287	12.29	12.35	12.69	12.54	-	533.39	534.76	560.90	549.25	-
Miscellaneous chemical products	289	11.53	11.45	11.81	11.70	-	484.26	471.74	505.47	493.74	-
Petroleum and coal products	29	15.05	14.89	15.28	15.30	15.34	668.22	658.14	676.90	662.49	664.22
Petroleum refining	291	16.20	15.91	16.38	16.36	-	720.90	708.00	733.82	711.66	-
Paving and roofing materials	295	11.63	11.39	11.57	11.57	-	526.84	498.88	497.51	502.14	-
Rubber and misc. plastics products	30	9.11	9.00	9.27	9.32	9.29	378.98	376.20	389.34	388.64	384.61
Tires and inner tubes	301	14.37	14.26	14.66	14.80	-	649.52	660.24	667.03	671.92	-
Rubber and plastics footwear	302	6.34	6.17	6.50	6.79	-	255.50	263.46	264.55	262.77	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	9.17	9.02	9.25	9.27	-	405.31	413.12	408.85	409.73	-
Fabricated rubber products, nec	306	8.78	8.85	8.78	8.82	-	365.25	369.93	367.88	367.79	-
Miscellaneous plastics products	307	8.49	8.35	8.66	8.68	-	348.94	343.19	360.26	357.62	-
Leather and leather products	31	6.28	6.16	6.45	6.49	6.53	235.50	231.62	247.04	245.97	245.53
Leather tanning and finishing	311	8.43	8.32	8.69	8.58	-	345.63	341.95	360.64	357.79	-
Footwear, except rubber	314	5.99	5.85	6.14	6.22	-	222.83	218.21	233.93	233.87	-
Men's footwear, except athletic	3143	6.33	6.22	6.55	6.64	-	235.48	230.76	246.28	245.68	-
Women's footwear, except athletic	3144	5.71	5.54	5.86	5.90	-	210.70	207.20	228.54	224.20	-
Luggage	316	6.31	6.43	6.41	6.41	-	247.35	257.84	246.79	248.71	-
Handbags and personal leather goods	317	5.91	5.82	5.92	5.86	-	213.35	208.36	212.53	206.27	-
Transportation and public utilities		12.32	12.16	12.43	12.51	12.48	484.18	474.24	490.99	489.14	487.97
Railroad transportation:											
Class I railroads ³	4011	15.00	14.75	15.28	15.08	-	673.50	650.48	695.24	671.06	-
Local and interurban passenger transit	41	8.51	8.37	8.69	8.74	-	292.74	279.56	298.07	297.16	-
Local and suburban transportation	411	9.08	9.01	9.35	9.43	-	350.49	345.08	359.98	366.83	-
Intercity highway transportation	413	11.29	11.36	11.37	11.45	-	450.47	441.90	446.84	446.55	-
Trucking and warehousing	42	10.95	10.84	11.10	11.10	-	419.39	405.42	435.12	418.47	-
Trucking and trucking terminals	421,3	11.13	11.02	11.27	11.26	-	425.17	411.05	440.66	422.25	-
Public warehousing	422	8.78	8.60	9.06	9.18	-	344.18	331.10	363.31	358.02	-
Pipe lines, except natural gas	46	15.75	15.69	16.24	15.91	-	661.50	671.53	691.82	671.40	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ²	Feb. 1989 ²	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ²	Feb. 1989 ²
Transportation and public utilities—Continued											
Communication	48	39.8	40.0	39.2	39.2						
Telephone communication	481	41.3	41.3	40.5	40.4						
Radio and television broadcasting	483	35.9	36.2	35.7	36.0						
Electric, gas, and sanitary services	49	41.6	41.8	41.9	41.7						
Electric services	491	41.6	41.4	42.0	41.8						
Gas production and distribution	492	41.2	41.7	42.0	41.7						
Combination utility services	493	41.8	42.3	42.4	41.9						
Sanitary services	495	42.4	43.1	41.4	41.3						
Wholesale trade		38.1	37.9	38.2	38.0	37.8					
Durable goods	50	38.5	38.4	38.7	38.6						
Motor vehicles and automotive equipment	501	38.1	38.4	38.1	37.7						
Furniture and home furnishings	502	37.5	37.4	37.8	36.8						
Lumber and construction materials	503	39.3	38.2	39.3	38.9						
Sporting goods, toys, and hobby goods	504	36.0	36.0	35.8	35.6						
Metals and minerals, except petroleum	505	40.4	40.5	40.9	40.8						
Electrical goods	506	38.0	37.9	38.1	38.3						
Hardware, plumbing, and heating equipment	507	38.6	38.5	38.8	38.6						
Machinery, equipment, and supplies	508	38.8	38.7	39.0	39.0						
Miscellaneous durable goods	509	38.0	37.2	38.3	38.1						
Nondurable goods	51	37.4	37.3	37.5	37.1						
Paper and paper products	511	36.9	36.9	37.2	37.1						
Drugs, proprietaries, and sundries	512	37.0	37.3	37.0	36.9						
Apparel, piece goods, and notions	513	36.8	37.0	36.8	36.7						
Groceries and related products	514	37.9	37.8	38.1	37.5						
Chemicals and allied products	516	39.7	39.1	39.9	39.8						
Petroleum and petroleum products	517	38.5	39.0	38.5	38.6						
Beer, wine, and distilled beverages	518	36.0	35.3	36.6	35.7						
Miscellaneous nondurable goods	519	36.7	36.4	36.7	36.1						
Retail trade		29.1	28.3	29.6	28.5	28.5					
Building materials and garden supplies	52	36.5	35.6	36.3	35.7						
Lumber and other building materials	521	38.3	37.1	38.0	37.4						
Hardware stores	525	32.9	32.5	33.2	32.3						
General merchandise stores	53	27.6	25.9	30.4	26.4						
Department stores	531	27.2	25.5	30.0	26.1						
Variety stores	533	29.3	28.3	33.1	28.0						
Misc. general merchandise stores	539	29.6	28.5	31.2	27.9						
Food stores	54	30.1	29.6	30.0	29.4						
Grocery stores	541	30.3	29.8	30.0	29.5						
Retail bakeries	546	28.8	27.4	29.9	28.5						
Automotive dealers and service stations	55	36.4	36.3	36.2	36.1						
New and used car dealers	551,2	37.2	37.2	37.1	36.8						
Auto and home supply stores	553	38.6	38.5	38.4	38.1						
Gasoline service stations	554	34.2	34.1	34.0	34.0						
Apparel and accessory stores	56	26.9	25.6	28.1	26.0						
Men's and boys' clothing and furnishings	561	28.9	28.9	30.4	28.4						
Women's ready-to-wear stores	562	25.1	23.9	25.8	23.6						
Family clothing stores	565	26.9	25.2	28.0	25.6						
Shoe stores	566	28.4	26.7	29.8	28.3	-					
Furniture and home furnishings stores	57	32.9	32.7	33.7	32.7						
Furniture and home furnishings stores	571	33.4	32.8	33.9	33.1						
Household appliance stores	572	33.6	33.6	34.8	34.2						
Radio, television, and music stores	573	31.8	32.2	32.9	31.6						
Eating and drinking places ⁴	58	25.7	24.9	25.5	25.3						

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Transportation and public utilities—Continued											
Communication	48	\$12.74	\$12.57	\$12.88	\$13.12	-	\$507.05	\$502.80	\$504.90	\$514.30	-
Telephone communication	481	13.46	13.29	13.61	13.90	-	555.90	548.88	551.21	561.56	-
Radio and television broadcasting	483	11.49	11.19	11.90	12.11	-	412.49	405.08	424.83	435.96	-
Electric, gas, and sanitary services	49	14.29	13.98	14.66	14.69	-	594.46	584.36	614.25	612.57	-
Electric services	491	14.39	13.94	14.69	14.74	-	598.62	577.12	616.98	616.13	-
Gas production and distribution	492	13.32	13.25	13.66	13.80	-	548.78	552.53	573.72	575.46	-
Combination utility services	493	16.88	16.58	17.44	17.31	-	705.58	701.33	739.46	725.29	-
Sanitary services	495	10.91	10.45	11.25	11.29	-	462.58	450.40	465.75	466.28	-
Wholesale trade		9.92	9.78	10.12	10.22	\$10.22	377.95	370.66	386.58	388.36	\$386.32
Durable goods	50	10.14	9.96	10.33	10.45	-	390.39	382.46	399.77	403.37	-
Motor vehicles and automotive equipment	501	9.15	9.05	9.33	9.43	-	348.62	347.52	355.47	355.51	-
Furniture and home furnishings	502	9.34	9.01	9.48	9.60	-	350.25	336.97	358.34	353.28	-
Lumber and construction materials	503	9.66	9.47	9.91	9.90	-	379.64	361.75	389.46	385.11	-
Sporting goods, toys, and hobby goods	504	9.62	9.72	9.25	9.21	-	346.32	349.92	331.15	327.88	-
Metals and minerals, except petroleum	505	10.63	10.55	10.85	10.90	-	429.45	427.28	443.77	444.72	-
Electrical goods	506	10.54	10.33	10.79	10.97	-	400.52	391.51	411.10	420.15	-
Hardware, plumbing, and heating equipment	507	9.49	9.36	9.64	9.75	-	366.31	360.36	374.03	376.35	-
Machinery, equipment, and supplies	508	10.84	10.62	11.05	11.17	-	420.59	410.99	430.95	435.63	-
Miscellaneous durable goods	509	8.03	7.97	8.25	8.44	-	305.14	296.48	315.98	321.56	-
Nondurable goods	51	9.60	9.51	9.80	9.86	-	359.04	354.72	367.50	365.81	-
Paper and paper products	511	10.42	10.28	10.66	10.87	-	384.50	379.33	396.55	403.28	-
Drugs, proprietaries, and sundries	512	11.09	10.99	11.27	11.26	-	410.33	409.93	416.99	415.49	-
Apparel, piece goods, and notions	513	9.42	9.42	9.49	9.77	-	346.66	348.54	349.23	358.56	-
Groceries and related products	514	9.75	9.61	9.95	10.04	-	369.53	363.26	379.10	376.50	-
Chemicals and allied products	516	12.21	12.21	12.29	12.36	-	484.74	477.41	490.37	491.93	-
Petroleum and petroleum products	517	9.68	9.64	9.90	9.86	-	372.68	375.96	381.15	380.60	-
Beer, wine, and distilled beverages	518	11.14	10.91	11.59	11.30	-	401.04	385.12	424.19	403.41	-
Miscellaneous nondurable goods	519	7.87	7.80	8.05	8.03	-	288.83	283.92	295.44	289.88	-
Retail trade		6.31	6.24	6.42	6.47	6.49	183.62	176.59	190.03	184.40	184.97
Building materials and garden supplies	52	7.36	7.25	7.54	7.59	-	268.64	258.10	273.70	270.96	-
Lumber and other building materials	521	7.76	7.61	7.98	8.02	-	297.21	282.33	303.24	299.95	-
Hardware stores	525	6.19	6.12	6.24	6.33	-	203.65	198.90	207.17	204.46	-
General merchandise stores	53	6.57	6.50	6.63	6.69	-	181.33	168.35	201.55	176.62	-
Department stores	531	6.87	6.80	6.93	6.96	-	186.86	173.40	207.90	181.66	-
Variety stores	533	4.99	4.92	5.17	5.35	-	146.21	139.24	171.13	149.80	-
Misc. general merchandise stores	539	5.30	5.19	5.30	5.47	-	156.88	147.92	165.36	152.61	-
Food stores	54	7.00	6.96	7.07	7.10	-	210.70	206.02	212.10	208.74	-
Grocery stores	541	7.12	7.09	7.20	7.20	-	215.74	211.28	216.00	212.40	-
Retail bakeries	546	5.97	5.82	6.05	5.97	-	171.94	159.47	180.90	170.15	-
Automotive dealers and service stations	55	8.21	7.89	8.31	8.30	-	298.84	286.41	300.82	299.63	-
New and used car dealers	551,2	10.02	9.50	10.08	10.03	-	372.74	353.40	373.97	369.10	-
Auto and home supply stores	553	7.06	6.85	7.26	7.27	-	272.52	263.73	278.78	276.99	-
Gasoline service stations	554	5.77	5.70	5.87	5.88	-	197.33	194.37	199.58	199.92	-
Apparel and accessory stores	56	5.77	5.72	5.86	5.96	-	155.21	146.43	164.67	154.96	-
Men's and boys' clothing and furnishings	561	6.95	6.76	7.03	7.45	-	200.86	195.36	213.71	211.58	-
Women's ready-to-wear stores	562	5.45	5.35	5.54	5.66	-	136.80	127.87	142.93	133.56	-
Family clothing stores	565	5.61	5.63	5.66	5.85	-	150.91	141.88	158.48	149.76	-
Shoe stores	566	5.93	5.82	6.13	5.92	-	168.41	155.39	182.67	167.54	-
Furniture and home furnishings stores	57	7.83	7.65	8.07	8.14	-	257.61	250.16	271.96	266.18	-
Furniture and home furnishings stores	571	7.97	7.81	8.17	8.21	-	266.20	256.17	276.96	271.75	-
Household appliance stores	572	7.80	7.57	8.23	8.16	-	262.08	254.35	286.40	279.07	-
Radio, television, and music stores	573	7.60	7.41	7.86	8.03	-	241.68	238.60	258.59	253.75	-
Eating and drinking places ⁴	58	4.57	4.52	4.69	4.68	-	117.45	112.55	119.60	118.40	-

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ²	Feb. 1989 ²	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ²	Feb. 1989 ²
Retail trade—Continued											
Miscellaneous retail	59	30.0	29.5	31.0	29.5						
Drug stores and proprietary stores	591	27.6	27.7	27.7	27.0						
Miscellaneous shopping goods stores	594	28.7	27.4	30.2	28.1						
Nonstore retailers	596	32.4	32.0	33.9	32.1						
Fuel and ice dealers	598	39.0	41.5	40.2	40.0						
Retail stores, nec	599	31.8	30.7	33.2	30.9						
Finance, insurance, and real estate⁵		35.9	36.2	35.8	36.2	35.8					
Banking	60	35.8	36.0	35.8	36.1						
Commercial and stock savings banks	602	35.7	35.9	35.7	36.1						
Credit agencies other than banks	61	36.4	36.4	36.4	36.5						
Savings and loan associations	612	35.8	35.9	35.7	36.1						-
Personal credit institutions	614	36.3	36.5	36.2	36.1						
Insurance carriers	63	37.2	37.5	37.0	37.3						
Life insurance	631	36.8	37.1	36.8	37.1	-					
Medical service and health insurance	632	38.0	38.8	37.8	38.0						
Fire, marine, and casualty insurance	633	37.0	37.3	36.7	37.0						
Services		32.6	32.4	32.5	32.6	32.4					
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	31.2	30.2	30.1	30.7						
Personal services:											
Laundry, cleaning, and garment services	721	34.2	33.4	34.5	33.7		-				
Beauty shops ⁴	723	29.9	28.7	30.3	29.8						
Business services	73	33.8	33.5	34.0	33.7						
Advertising	731	36.8	36.8	36.7	37.6						
Services to buildings	734	29.3	28.5	29.9	29.7						
Computer and data processing services	737	37.8	37.7	38.0	38.1		-				-
Auto repair, services, and garages	75	36.7	36.6	36.8	36.6						-
Automotive repair shops	753	38.0	38.1	38.2	37.9						
Miscellaneous repair services	76	38.1	37.7	38.1	37.7						-
Motion pictures	78	28.9	29.3	29.3	29.2						-
Motion picture production and services	781	37.0	37.6	36.9	36.8						
Amusement and recreation services	79	28.3	27.4	27.6	27.8						
Health services	80	32.4	32.4	32.3	32.7						
Offices of physicians	801	31.2	31.2	31.3	31.7						
Offices of dentists	802	28.4	28.5	28.6	29.0						
Nursing and personal care facilities	805	31.6	31.6	31.7	32.2						
Hospitals	806	34.0	34.1	33.8	34.0						
Legal services	81	34.7	34.9	34.6	34.8						
Miscellaneous services	89	38.3	38.3	38.1	38.0						-
Engineering and architectural services	891	39.2	39.1	39.2	38.8		-				
Accounting, auditing, and bookkeeping	893	37.5	37.8	36.8	37.2		-				

See footnotes at end of table.

**ESTABLISHMENT DATA
HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-2. Average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Retail trade—Continued											
Miscellaneous retail	59	\$6.57	\$6.52	\$6.60	\$6.78		\$197.10	\$192.34	\$204.60	\$200.01	
Drug stores and proprietary stores	591	6.21	6.04	6.28	6.40		171.40	167.31	173.96	172.80	
Miscellaneous shopping goods stores	594	6.14	6.09	6.13	6.38		176.22	166.87	185.13	179.28	
Nonstore retailers	596	7.40	7.26	7.50	7.50		239.76	232.32	254.25	240.75	
Fuel and ice dealers	598	9.25	9.57	9.57	9.64		360.75	397.16	384.71	385.60	
Retail stores, nec	599	6.68	6.62	6.67	6.88		212.42	203.23	221.44	212.59	
Finance, insurance, and real estate⁵		9.10	8.96	9.32	9.48	\$9.45	326.69	324.35	333.66	343.18	\$338.31
Banking	60	7.83	7.76	7.95	8.12		280.31	279.36	284.61	293.13	
Commercial and stock savings banks	602	7.56	7.51	7.65	7.82		269.89	269.61	273.11	282.30	
Credit agencies other than banks	61	8.27	8.09	8.50	8.63		301.03	294.48	309.40	315.00	
Savings and loan associations	612	7.76	7.67	8.01	8.15		277.81	275.35	285.96	294.22	
Personal credit institutions	614	7.77	7.62	8.02	8.13		282.05	278.13	290.32	293.49	
Insurance carriers	63	10.18	9.85	10.47	10.53		378.70	369.38	387.39	392.77	
Life insurance	631	9.63	9.26	9.86	9.92		354.38	343.55	362.85	368.03	
Medical service and health insurance	632	9.85	9.54	10.11	10.16		374.30	370.15	382.16	386.08	
Fire, marine, and casualty insurance	633	10.71	10.34	11.07	11.12		396.27	385.68	406.27	411.44	
Services		8.90	8.81	9.15	9.24	9.27	290.14	285.44	297.38	301.22	300.35
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	6.40	6.38	6.61	6.62		199.68	192.68	198.96	203.23	
Personal services:											
Laundry, cleaning, and garment services	721	6.34	6.29	6.45	6.47		216.83	210.09	222.53	218.04	
Beauty shops ⁴	723	6.74	6.49	6.86	6.68		201.53	186.26	207.86	199.06	
Business services	73	9.13	9.08	9.28	9.47		308.59	304.18	315.52	319.14	
Advertising	731	12.41	12.24	12.73	12.88		456.69	450.43	467.19	484.29	
Services to buildings	734	6.82	6.68	6.91	6.93		199.83	190.38	206.61	205.82	
Computer and data processing services	737	12.79	12.61	13.15	13.37		483.46	475.40	499.70	509.40	
Auto repair, services, and garages	75	8.18	8.05	8.36	8.31		300.21	294.63	307.65	304.15	
Automotive repair shops	753	8.83	8.67	9.05	9.04		335.54	330.33	345.71	342.62	
Miscellaneous repair services	76	9.54	9.39	9.68	9.68		363.47	353.06	368.81	364.94	
Motion pictures	78	11.81	12.27	12.71	12.32		341.31	359.51	372.40	359.74	
Motion picture production and services	781	15.95	16.28	16.69	16.02		590.15	612.13	615.86	589.54	
Amusement and recreation services	79	7.38	7.78	8.06	8.02		208.85	213.17	222.46	222.96	
Health services	80	9.23	9.00	9.50	9.59		299.05	291.60	306.85	313.59	
Offices of physicians	801	8.81	8.70	9.02	9.12		274.87	271.44	282.33	289.10	
Offices of dentists	802	8.90	8.70	9.15	9.25		252.76	247.95	261.69	268.25	
Nursing and personal care facilities	805	6.33	6.18	6.52	6.60		200.03	195.29	206.68	212.52	
Hospitals	806	10.51	10.22	10.84	10.94		357.34	348.50	366.39	371.96	
Legal services	81	12.69	12.42	13.02	13.27		440.34	433.46	450.49	461.80	
Miscellaneous services	89	12.53	12.32	12.82	13.00		479.90	471.86	488.44	494.00	
Engineering and architectural services	891	13.33	13.24	13.59	13.82		522.54	517.68	532.73	536.22	
Accounting, auditing, and bookkeeping	893	10.78	10.49	11.00	11.19		404.25	396.52	404.80	416.27	

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² See table C-2a for average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing.

³ Data relate to line haul railroads with operating revenues of \$50,000,000 or more.

⁴ Money payments only; tips, not included.

⁵ Data for nonoffice sales agents are excluded from all series in this division.

- Data not available.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1987 forward are subject to revision.

A Note on Average Hourly Earnings in Aircraft (SIC 3721) and Guided Missiles and Space Vehicles (SIC 3761) Manufacturing

For many years, the Bureau of Labor Statistics' average hourly earnings series for production workers in aircraft manufacturing (SIC 3721) and guided missiles and space vehicles manufacturing (SIC 3761) have been used to escalate labor costs in contracts between aerospace companies and their customers. Although the Bureau's series by definition take account of traditional wage rate changes, they do not capture "lump-sum payments to workers in lieu of general wage increases" which were negotiated in aerospace manufacturers' collective bargaining agreements beginning in late 1983.

Because of special circumstances in the aerospace industry, BLS has calculated average hourly earnings series for SIC 3721 and SIC 3761 which include lump-sum payments. These series, beginning in October 1983, the effective date of the first aerospace bargain-

ing agreement using lump-sum payments, were published in the June 1988 issue of *Employment and Earnings*. Current and year earlier data are presented in table C-2a along with the average hourly earnings series produced as part of the Current Employment Statistics program. An explanation of the methodology used to derive these series appears in the Explanatory Notes of this publication.

Lump-sum payments are but one of several recent changes in the way that employees are compensated. The changes are widespread and they differ by industry. Because of these developments, the Bureau is conducting a broad-based review of all concepts and definitions used in its earnings and wage programs to determine the proper treatment of lump-sum payments and other new compensation practices.

C-2a. Average hourly earnings in aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing

Series	Aircraft (SIC 3721)				Guided missiles and space vehicles (SIC 3761)			
	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Average hourly earnings, excluding lump-sum payments	\$14.18	\$13.96	\$14.60	\$14.70	\$13.56	\$13.28	\$13.99	\$13.96
Average hourly earnings, including lump-sum payments	14.65	14.39	15.06	15.16	13.87	13.56	14.39	14.34

^p = preliminary.

NOTE: Revised average hourly earnings data, including lump-sum payments, for guided missiles and space vehicles (SIC 3761) for August, September, October, and November 1988 are: \$14.06, \$13.94,

\$14.12, and \$14.23, respectively. Final average hourly earnings data, including lump-sum payments, for aircraft (SIC 3721) for October and November are \$14.96 and \$15.07, respectively.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

C-3. Average hourly earnings, excluding overtime,¹ of production workers on manufacturing payrolls

Industry	Avg. 1988	Feb. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Manufacturing	\$9.71	\$9.63	\$9.87	\$9.91	\$9.92
Durable goods	10.21	10.13	10.35	10.40	10.41
Lumber and wood products	8.23	8.20	8.39	8.36	()
Furniture and fixtures	7.66	7.51	7.74	7.83	()
Stone, clay, and glass products	9.88	9.79	10.01	10.06	()
Primary metal industries	11.43	11.35	11.51	11.53	()
Fabricated metal products	9.76	9.68	9.90	9.95	()
Machinery, except electrical	10.43	10.30	10.59	10.61	()
Electrical and electronic equipment	9.75	9.67	9.84	9.88	()
Transportation equipment	12.66	12.55	12.86	12.88	()
Instruments and related products	9.59	9.57	9.70	9.81	()
Miscellaneous manufacturing	7.74	7.68	7.90	8.00	()
Nondurable goods	9.01	8.93	9.18	9.21	\$9.22
Food and kindred products	8.66	8.68	8.80	8.84	()
Tobacco manufactures	14.09	13.58	13.72	14.00	()
Textile mill products	7.03	6.97	7.16	7.24	()
Apparel and other textile products	5.96	5.88	6.11	6.15	()
Paper and allied products	11.00	10.90	11.12	11.12	()
Printing and publishing	10.12	10.01	10.28	10.35	()
Chemicals and allied products	12.08	11.99	12.31	12.27	()
Petroleum and coal products	14.17	14.17	14.44	14.48	()
Rubber and misc. plastics products	8.67	8.59	8.81	8.87	()
Leather and leather products	6.12	6.05	6.29	6.33	()

¹ Derived by assuming that overtime hours are paid at the rate of time and one-half.

² Not available.

³ = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1987 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

C-4. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry, in current and constant (1977) dollars.

Industry	Average hourly earnings					Average weekly earnings				
	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p	Avg. 1988	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Feb. 1989 ^p
Total private:										
Current dollars	\$9.29	\$9.18	\$9.46	\$9.54	\$9.54	\$323.29	\$315.79	\$330.15	\$329.13	\$327.22
Constant (1977) dollars	4.84	4.88	4.83	4.85	(²)	168.29	167.97	168.70	167.41	(²)
Mining:										
Current dollars	12.69	12.77	12.97	13.11	\$13.03	536.79	537.62	553.82	549.31	\$542.05
Constant (1977) dollars	6.61	6.79	6.63	6.67	(²)	279.43	285.97	282.99	279.40	(²)
Construction:										
Current dollars	12.97	12.99	13.16	13.21	\$13.16	491.56	466.34	489.55	480.84	\$476.39
Constant (1977) dollars	6.75	6.91	6.72	6.72	(²)	255.89	248.05	250.15	244.58	(²)
Manufacturing:										
Current dollars	10.17	10.07	10.37	10.37	\$10.37	417.99	412.87	431.39	425.17	\$422.06
Constant (1977) dollars	5.29	5.36	5.30	5.27	(²)	217.59	219.61	220.43	216.26	(²)
Transportation and public utilities:										
Current dollars	12.32	12.16	12.43	12.51	\$12.48	484.18	474.24	490.99	489.14	\$487.97
Constant (1977) dollars	6.41	6.47	6.35	6.36	(²)	252.05	252.26	250.89	248.80	(²)
Wholesale trade:										
Current dollars	9.92	9.78	10.12	10.22	\$10.22	377.95	370.66	386.58	388.36	\$386.32
Constant (1977) dollars	5.16	5.20	5.17	5.20	(²)	196.75	197.16	197.54	197.54	(²)
Retail trade:										
Current dollars	6.31	6.24	6.42	6.47	\$6.49	183.62	176.59	190.03	184.40	\$184.97
Constant (1977) dollars	3.28	3.32	3.28	3.29	(²)	95.59	93.93	97.10	93.79	(²)
Finance, insurance, and real estate:										
Current dollars	9.10	8.96	9.32	9.48	\$9.45	326.69	324.35	333.66	343.18	\$338.31
Constant (1977) dollars	4.74	4.77	4.76	4.82	(²)	170.06	172.53	170.50	174.56	(²)
Services:										
Current dollars	8.90	8.81	9.15	9.24	\$9.27	290.14	285.44	297.38	301.22	\$300.35
Constant (1977) dollars	4.63	4.69	4.68	4.70	(²)	151.04	151.83	151.96	153.21	(²)

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² Not available.
³ = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced all unadjusted data from April 1987 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

C-5. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted

Industry	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p	Feb. ^p
Total private	34.8	34.6	34.9	34.7	34.7	34.9	34.6	34.7	34.9	34.8	34.7	34.8	34.7
Mining	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Construction	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Manufacturing	41.0	40.9	41.2	41.0	41.1	41.1	41.0	41.2	41.2	41.2	40.8	41.0	41.0
<i>Overtime hours</i>	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9	4.0	3.9	3.9	3.9	3.9
Durable goods	41.5	41.5	42.0	41.8	41.8	41.8	41.6	41.9	41.9	41.9	41.5	41.8	41.6
<i>Overtime hours</i>	3.8	3.8	4.2	4.2	4.1	4.0	4.1	4.0	4.2	4.2	4.1	4.1	4.0
Lumber and wood products	40.3	40.1	40.6	40.1	40.2	40.5	40.0	39.9	40.7	40.3	40.3	40.3	39.6
Furniture and fixtures	39.5	39.3	39.5	39.5	39.4	39.7	39.0	39.6	39.4	39.4	39.2	40.0	39.6
Stone, clay, and glass products	42.3	42.3	42.5	42.3	42.4	42.1	42.1	42.3	42.5	42.6	42.4	42.6	41.8
Primary metal industries	43.1	43.3	43.5	43.6	43.6	43.4	43.5	44.0	43.8	43.7	43.4	43.7	43.3
Blast furnaces and basic steel products ..	43.8	43.7	43.8	43.9	44.3	44.0	44.0	44.6	44.3	44.0	43.7	43.9	43.7
Fabricated metal products	41.6	41.6	42.0	41.9	42.0	41.7	41.8	42.0	41.9	42.2	41.7	41.8	41.7
Machinery, except electrical	42.6	42.5	42.8	42.6	42.5	43.0	42.4	42.7	42.6	42.5	42.3	42.4	42.4
Electrical and electronic equipment	40.9	40.9	41.2	41.0	41.1	41.0	40.8	41.0	41.0	41.0	40.7	40.7	40.7
Transportation equipment	42.0	42.1	43.0	43.0	43.0	42.6	42.7	43.3	43.3	43.3	42.4	42.7	42.8
Motor vehicles and equipment	42.3	42.3	44.1	44.0	44.2	42.5	43.6	44.5	44.2	44.6	43.0	43.4	43.6
Instruments and related products	41.3	41.4	41.8	41.4	41.3	41.8	41.5	41.6	41.9	41.6	41.0	41.7	41.7
Miscellaneous manufacturing	39.3	39.2	39.4	39.2	39.3	39.2	39.2	39.2	39.1	39.2	38.9	39.5	39.6
Nondurable goods	40.2	40.1	40.3	40.0	40.1	40.2	40.1	40.2	40.2	40.2	39.9	40.1	40.1
<i>Overtime hours</i>	3.6	3.6	3.6	3.6	3.6	3.7	3.6	3.7	3.8	3.6	3.6	3.6	3.7
Food and kindred products	40.3	40.1	40.1	40.1	40.3	40.5	40.4	40.3	40.6	40.6	40.3	40.1	40.2
Tobacco manufactures	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Textile mill products	41.6	41.2	41.6	40.8	40.7	41.1	41.1	41.1	41.0	41.0	40.5	40.8	40.7
Apparel and other textile products	37.0	37.0	37.4	36.8	36.9	36.9	36.8	37.1	36.8	37.0	36.6	37.0	37.0
Paper and allied products	43.3	43.2	43.3	43.3	43.2	43.2	43.2	43.3	43.2	43.1	43.1	43.1	43.3
Printing and publishing	38.1	38.1	38.2	37.7	38.0	38.0	38.0	38.1	38.0	37.8	37.7	38.0	37.9
Chemicals and allied products	42.4	42.5	42.1	42.0	42.4	42.3	42.1	42.1	42.5	42.4	42.3	42.5	42.5
Petroleum and coal products	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Rubber and misc. plastics products	41.6	41.7	42.0	41.7	41.6	41.6	41.5	41.6	41.5	41.7	41.2	41.6	41.6
Leather and leather products	37.8	37.9	37.3	37.3	36.9	37.0	37.6	37.5	37.9	37.3	37.7	38.3	38.6
Transportation and public utilities	39.1	38.8	39.5	39.4	39.3	39.5	39.3	39.4	39.4	39.2	39.4	39.5	39.3
Wholesale trade	38.2	38.1	38.3	38.0	37.9	38.2	37.8	38.1	38.1	38.0	38.0	38.2	38.1
Retail trade	29.1	29.0	29.2	29.0	29.1	29.3	29.0	28.9	29.2	29.0	29.2	29.2	29.1
Finance, insurance, and real estate	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Services	32.7	32.4	32.7	32.5	32.5	32.7	32.4	32.6	32.8	32.6	32.6	32.8	32.5

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² These series are not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular

components and consequently cannot be separated with sufficient precision.
^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

C-6. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted

(1977=100)

Industry	1988											1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p	Feb. ^p
Total private	123.9	123.6	125.1	124.4	125.4	126.4	125.5	126.0	127.1	127.1	127.2	128.3	127.9
Goods-producing	101.1	101.6	102.7	102.1	103.2	103.3	102.8	103.1	104.0	104.5	103.5	104.3	104.1
Mining	82.5	83.2	85.9	84.4	85.0	85.6	83.5	82.8	83.5	80.9	81.2	79.9	80.0
Construction	136.0	139.1	141.1	139.3	144.0	142.4	142.5	143.4	145.3	147.5	144.6	146.2	145.6
Manufacturing	95.2	95.2	96.1	95.7	96.1	96.5	96.0	96.3	96.9	97.2	96.6	97.4	97.2
Durable goods	92.7	92.7	94.0	93.9	94.3	94.8	94.2	94.6	95.2	95.6	94.8	95.7	95.3
Lumber and wood products	103.6	103.1	104.7	103.2	103.8	103.9	102.3	101.7	104.8	104.7	105.2	106.0	103.2
Furniture and fixtures	113.2	112.3	113.2	113.7	113.4	115.1	112.0	114.2	114.2	114.5	113.9	115.9	115.3
Stone, clay, and glass products	87.3	87.5	88.3	87.5	88.1	88.0	87.5	87.5	88.3	88.9	88.9	89.7	88.0
Primary metal industries	66.4	66.9	67.6	68.1	68.6	69.0	68.7	69.7	70.1	70.0	69.6	69.9	69.3
Blast furnaces and basic steel products	53.9	54.1	54.8	54.6	55.4	55.3	54.8	55.0	55.1	54.8	54.1	54.6	54.4
Fabricated metal products	90.8	90.8	91.8	92.1	92.8	92.7	92.6	93.1	93.6	94.6	93.7	94.5	94.4
Machinery, except electrical	90.2	90.4	91.5	91.6	91.6	93.7	92.6	93.2	93.7	94.3	94.3	95.0	95.7
Electrical and electronic equipment	101.8	101.9	102.8	102.3	103.0	103.1	102.8	103.1	103.4	103.7	102.3	102.1	102.2
Transportation equipment	97.3	96.8	100.0	100.2	100.0	99.7	99.9	100.2	100.7	100.8	98.7	100.3	99.3
Motor vehicles and equipment	85.7	84.8	89.8	89.9	90.3	88.2	90.9	91.4	91.9	92.6	89.0	91.2	89.7
Instruments and related products	105.0	105.2	106.5	106.1	106.6	108.2	107.7	107.9	109.5	109.0	108.3	110.4	110.4
Miscellaneous manufacturing	84.8	84.5	85.0	83.9	84.5	85.1	84.2	84.2	83.1	83.6	83.6	85.5	86.3
Nondurable goods	99.0	98.8	99.1	98.4	98.9	99.1	98.7	98.7	99.4	99.7	99.2	99.8	99.9
Food and kindred products	101.7	100.9	101.0	100.5	101.4	100.6	100.2	100.1	102.7	103.3	102.1	102.4	102.1
Tobacco manufactures	75.8	74.8	73.8	71.0	71.4	73.7	72.0	69.1	69.7	72.7	73.2	67.6	69.9
Textile mill products	82.7	81.7	82.2	80.6	80.2	81.2	79.9	80.4	80.2	80.2	79.1	80.1	79.9
Apparel and other textile products	85.5	85.7	86.2	84.7	84.8	84.7	83.9	84.5	83.9	84.9	84.2	85.4	85.7
Paper and allied products	101.5	101.3	101.4	101.5	101.7	101.9	101.9	101.4	101.3	101.3	101.3	101.1	101.5
Printing and publishing	135.5	136.0	136.5	134.9	136.4	136.6	137.0	137.5	137.6	137.2	137.5	138.7	138.7
Chemicals and allied products	97.1	97.9	97.1	97.4	98.8	98.7	98.7	98.4	99.7	99.4	99.5	100.5	100.2
Petroleum and coal products	84.5	83.5	84.9	85.3	86.8	86.6	86.6	86.1	87.3	86.3	86.7	83.7	86.1
Rubber and misc. plastics products	121.0	121.8	122.9	123.1	123.4	124.8	124.2	123.9	124.7	126.0	125.1	125.9	126.8
Leather and leather products	57.2	56.9	55.5	55.5	54.9	55.5	56.0	55.8	56.4	55.1	55.6	57.0	57.4
Service-producing	136.4	135.8	137.4	136.8	137.8	139.1	138.1	138.7	139.9	139.6	140.4	141.6	141.2
Transportation and public utilities	111.8	111.2	113.5	113.5	113.8	114.7	114.5	114.6	115.0	115.2	116.2	117.2	117.0
Wholesale trade	123.1	123.6	124.8	124.4	124.9	126.3	125.4	126.9	127.4	127.7	128.1	129.3	129.5
Retail trade	125.2	124.8	126.0	125.1	126.2	127.3	126.2	125.7	127.2	126.7	127.8	128.7	128.6
Finance, insurance, and real estate	141.6	139.6	141.1	140.1	140.1	142.1	140.0	140.6	141.2	140.4	140.0	142.4	140.3
Services	158.0	157.2	159.0	158.3	160.0	161.5	160.7	162.0	163.5	163.2	164.1	165.4	164.7

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

C-7. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, seasonally adjusted

Industry	1988												1989	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^P	Feb. ^P	
Average hourly earnings														
Total private (in current dollars)	\$9.13	\$9.16	\$9.23	\$9.27	\$9.27	\$9.32	\$9.32	\$9.37	\$9.43	\$9.42	\$9.45	\$9.50	\$9.51	
Mining	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	
Construction	\$12.82	\$12.90	\$12.93	\$12.91	\$12.93	\$13.03	\$12.99	\$13.04	\$13.03	\$13.01	\$13.09	\$13.13	\$13.17	
Manufacturing	10.03	10.05	10.11	10.15	10.18	10.17	10.20	10.26	10.28	10.29	10.31	10.32	10.35	
Excluding overtime³	9.59	9.61	9.65	9.69	9.72	9.71	9.74	9.78	9.81	9.83	9.84	9.86	9.88	
Transportation and public utilities	12.19	12.21	12.29	12.35	12.33	12.37	12.39	12.37	12.43	12.37	12.36	12.50	12.43	
Wholesale trade	9.72	9.76	9.88	9.88	9.86	9.97	9.93	10.01	10.13	10.04	10.08	10.19	10.16	
Retail trade	6.20	6.22	6.25	6.28	6.29	6.33	6.32	6.34	6.37	6.42	6.42	6.43	6.46	
Finance, insurance, and real estate	8.91	8.90	8.99	9.08	9.00	9.10	9.09	9.18	9.36	9.26	9.37	9.43	9.33	
Services	8.72	8.75	8.81	8.88	8.86	8.92	8.93	8.99	9.06	9.04	9.09	9.14	9.18	
Total private (in constant dollars)⁴	4.84	4.83	4.85	4.85	4.84	4.84	4.82	4.83	4.84	4.82	4.82	4.82	(⁵)	
Average weekly earnings														
Total private:														
In current dollars	317.72	316.94	322.13	321.67	321.67	325.27	322.47	325.14	329.11	327.82	327.92	330.60	330.00	
In constant (1977) dollars ⁴	168.28	167.25	169.36	168.41	167.89	169.06	166.82	167.68	169.03	167.77	167.39	167.73	(⁵)	

¹ Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

² This series is not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

³ Derived by assuming that overtime hours are paid at the rate of time and one-half.

⁴ The Consumer Price Index for Urban Wage Earners and Clerical

Workers (CPI-W) is used to deflate these series.

⁵ Not available.

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision. The CPI-W has been revised to reflect the experience through December 1988. Constant-dollar earnings series have been revised back to 1984.

**ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-8. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Alabama	41.5	41.6	41.3	\$9.00	\$9.10	\$9.19	\$373.50	\$378.56	\$379.55
Birmingham	41.2	41.6	41.8	9.22	9.17	9.26	379.86	381.47	387.07
Mobile	41.0	42.1	42.4	10.41	10.64	10.61	426.81	447.94	449.86
Alaska	37.6	42.3	34.9	13.06	13.84	13.63	491.06	585.43	475.69
Arizona	40.7	41.7	40.7	9.75	9.92	9.93	396.83	413.66	404.15
Arkansas	41.1	41.0	40.6	8.07	8.24	8.17	331.68	337.84	331.70
Fayetteville-Springdale	43.6	37.0	38.9	7.21	7.61	7.37	314.36	281.57	286.69
Fort Smith	40.1	41.5	40.7	8.67	8.73	8.71	347.67	362.30	354.50
Little Rock-North Little Rock	41.1	41.0	41.5	8.65	8.58	8.55	355.52	351.78	354.83
Pine Bluff	44.4	45.7	42.3	10.64	11.18	10.40	472.42	510.93	439.92
Colorado	39.6	39.6	39.2	10.05	10.48	10.56	397.98	415.01	413.95
Denver	39.1	40.5	39.3	10.46	11.16	10.95	408.99	451.98	430.34
Connecticut	42.3	42.3	42.1	10.67	11.01	11.00	451.34	465.72	463.10
Bridgeport-Milford	42.5	41.7	41.7	11.25	11.35	11.33	478.12	473.30	472.46
Hartford	43.0	43.0	42.4	10.94	11.65	11.65	470.42	500.95	493.96
New Britain	43.3	43.5	43.4	10.96	11.51	11.52	474.57	500.69	499.97
New Haven-Meriden	39.9	42.1	42.2	10.17	10.42	10.48	405.78	438.68	442.26
Stamford	39.7	39.6	40.3	11.91	12.28	12.45	472.83	486.29	501.74
Waterbury	44.3	44.8	45.0	9.39	10.15	9.98	415.98	454.72	449.10
Delaware	40.1	39.8	40.1	10.42	10.39	10.55	417.84	413.52	423.06
Wilmington	40.4	41.5	41.6	13.06	12.49	12.23	527.62	518.34	508.77
District of Columbia:									
Washington MSA	39.1	39.9	39.5	10.86	11.53	11.57	424.63	460.05	457.02
Florida	41.0	42.0	40.8	8.24	8.65	8.64	337.84	363.30	352.51
Fort Lauderdale-Hollywood-Pompano Beach	41.6	42.5	41.2	8.24	8.51	8.59	342.78	361.68	353.91
Jacksonville	41.4	41.1	39.9	9.14	9.24	9.30	378.40	379.76	371.07
Miami-Hialeah	39.7	40.6	39.0	7.06	7.34	7.42	280.28	298.00	289.38
Orlando	41.7	41.0	38.5	8.46	9.44	9.63	352.78	387.04	370.76
Pensacola	39.8	45.2	41.3	10.83	11.05	11.00	431.03	499.46	454.30
Tampa-St. Petersburg-Clearwater	40.2	41.9	41.0	7.78	8.55	8.60	312.76	358.25	352.60
West Palm Beach-Boca Raton-Delray Beach	42.7	42.8	42.7	9.34	9.43	9.32	398.82	403.60	397.96
Georgia	41.4	42.2	40.9	8.69	8.77	8.79	359.77	370.09	359.51
Atlanta	42.1	41.8	40.3	10.27	10.22	10.24	432.37	427.20	412.67
Savannah	44.6	49.0	47.7	11.30	11.57	11.42	503.98	566.93	544.73
Hawaii	39.9	40.0	38.6	9.51	9.94	9.95	379.45	397.60	384.07
Honolulu	38.8	40.5	39.1	9.63	10.12	10.11	373.64	409.86	395.30
Idaho	38.4	39.3	38.0	10.04	10.05	9.96	385.54	394.97	378.48
Illinois	42.0	41.7	41.1	11.00	11.06	11.04	462.00	461.20	453.74
Aurora-Elgin	41.9	43.5	41.9	10.39	10.60	10.47	435.34	461.10	438.69
Bloomington-Normal	41.1	41.5	40.0	10.94	11.33	11.27	449.63	470.20	450.80
Champaign-Urbana-Rantoul	43.2	42.7	41.1	9.52	9.40	9.57	411.26	401.38	393.33
Chicago	42.9	42.4	41.6	10.61	10.79	10.81	455.17	457.50	449.70
Davenport-Rock Island-Moline	40.0	40.5	40.1	12.84	13.17	13.06	513.60	533.39	523.71
Decatur	42.7	41.5	42.0	14.07	14.44	14.58	600.79	599.26	612.36
Joliet	42.0	42.1	42.1	12.04	12.38	12.25	505.68	521.20	515.73
Kankakee	39.3	38.9	39.8	9.48	11.28	11.35	372.56	438.79	451.73
Lake County	41.4	40.6	40.3	11.31	11.62	11.69	468.23	471.77	471.11
Peoria	46.3	44.6	42.8	13.36	13.48	13.35	618.57	601.21	571.38
Rockford	42.9	43.1	42.9	12.12	11.76	11.79	519.95	506.86	505.79
Springfield	42.0	42.5	41.5	11.73	11.87	11.72	492.66	504.48	486.38
Indiana	42.2	42.1	41.1	11.32	11.49	11.67	477.70	483.73	479.64

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

C-8. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas—Continued

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
Iowa	42.1	42.6	41.4	\$10.59	\$10.81	\$10.71	\$445.84	\$460.51	\$443.39
Cedar Rapids	41.5	40.4	40.3	11.86	12.56	12.72	492.19	507.42	512.62
Des Moines	42.6	43.0	43.0	11.89	11.63	11.71	506.51	500.09	503.53
Dubuque	41.9	45.5	39.7	11.85	12.13	11.67	496.52	551.92	463.30
Sioux City	37.6	33.0	34.2	8.29	8.27	8.39	311.70	272.91	286.94
Kansas	40.7	40.6	40.2	10.02	10.46	10.45	407.81	424.68	420.09
Topeka	43.8	41.9	41.4	11.37	11.46	11.39	498.01	480.17	471.55
Wichita	40.5	41.9	41.0	10.52	11.20	11.30	426.06	469.28	463.30
Kentucky	41.0	41.0	40.3	10.10	10.21	10.15	414.10	418.61	409.05
Lexington-Fayette	40.6	40.0	39.5	10.41	10.47	10.49	422.65	418.80	414.36
Louisville	42.4	42.4	41.3	11.76	11.80	11.68	498.62	500.32	482.38
Louisiana	42.4	42.3	41.7	10.82	10.90	11.08	458.77	461.07	462.04
Baton Rouge	43.3	44.1	43.4	12.76	12.31	12.86	552.51	542.87	558.12
New Orleans	40.9	40.2	39.9	10.64	10.52	10.63	435.18	422.90	424.14
Shreveport	39.7	41.3	41.2	11.13	11.54	11.39	441.86	476.60	469.27
Maine	41.4	40.5	40.2	8.87	9.69	9.74	367.22	392.45	391.55
Lewiston-Auburn	40.4	38.0	39.6	7.72	8.53	8.19	311.89	324.14	324.32
Portland	42.0	39.9	40.3	9.28	10.18	10.56	389.76	406.18	425.57
Maryland	40.7	41.7	41.2	10.23	10.68	10.72	416.36	445.36	441.66
Baltimore MSA	41.6	41.7	41.2	11.05	11.34	11.27	459.68	472.88	464.32
Massachusetts	41.4	42.0	41.2	10.03	10.51	10.60	415.24	441.42	436.72
Boston	41.5	41.6	40.9	10.81	11.20	11.27	448.62	465.92	460.94
Springfield	42.7	42.6	42.7	9.44	9.89	9.86	403.09	421.31	421.02
Worcester	40.5	41.6	41.4	10.24	10.63	10.67	414.72	442.21	441.74
Michigan	42.5	44.8	44.0	13.31	13.60	13.68	565.67	609.28	601.92
Ann Arbor	46.0	46.6	46.6	14.21	14.64	14.54	653.66	682.22	677.56
Battle Creek	43.2	43.3	43.3	14.07	14.41	14.45	607.82	623.95	625.68
Detroit	43.7	45.8	44.6	14.36	14.67	14.67	627.53	671.89	654.28
Flint	41.1	46.7	46.8	16.64	17.02	17.59	683.90	794.83	823.21
Grand Rapids	40.7	42.2	41.8	11.20	11.44	11.84	455.84	482.77	494.91
Jackson	42.0	44.8	42.9	9.84	10.57	10.27	413.28	473.54	440.58
Kalamazoo	42.6	43.8	43.4	12.21	12.60	12.75	520.15	551.88	553.35
Lansing-East Lansing	38.7	44.5	41.0	14.38	14.54	14.60	556.51	647.03	598.60
Muskegon	41.6	41.9	41.3	11.91	11.94	12.18	495.46	500.29	503.03
Saginaw-Bay City-Midland	43.3	45.8	45.4	14.66	15.46	15.45	634.78	708.07	701.43
Minnesota	40.4	41.0	39.8	10.48	10.69	10.73	423.39	438.29	427.05
Duluth	36.9	36.7	36.2	10.87	11.44	11.10	401.10	419.85	401.82
Minneapolis-St. Paul	40.6	41.4	39.8	11.05	11.34	11.33	448.63	469.48	450.93
St. Cloud	38.8	38.6	36.9	9.81	10.16	10.10	380.63	392.18	372.69
Mississippi	40.3	41.5	40.8	7.73	7.93	8.00	311.52	329.10	326.40
Jackson	41.8	41.1	40.9	8.68	8.96	9.00	362.82	368.26	368.10
Missouri	40.9	42.3	41.6	10.07	10.36	10.38	411.86	438.23	431.81
Kansas City	40.6	41.9	42.0	11.49	11.64	11.59	466.49	487.72	486.78
St. Louis	41.2	42.8	42.4	11.65	12.12	12.11	479.98	518.74	513.46
Springfield	40.1	42.1	40.6	8.53	8.57	8.58	342.05	360.80	348.35
Montana	40.1	40.3	39.3	10.45	10.92	10.95	419.05	440.08	430.34
Nebraska	40.6	40.5	39.7	9.45	9.51	9.50	383.67	385.16	377.15
Lincoln	41.6	40.3	39.8	10.21	10.00	10.07	424.74	403.00	400.79
Omaha	42.0	42.0	41.3	10.15	10.31	10.28	426.30	433.02	424.56
Nevada	39.6	43.9	40.0	9.80	10.48	10.06	388.08	460.07	402.40
Las Vegas	38.9	42.4	41.3	12.62	12.76	12.84	490.92	541.02	530.29
New Hampshire	41.2	41.1	41.7	9.44	10.05	10.00	388.93	413.06	417.00
Manchester	40.1	40.1	41.1	9.88	10.33	10.31	396.19	414.23	423.74
Nashua	40.3	42.6	41.4	11.67	12.36	12.13	470.30	526.54	502.18
Portsmouth-Dover-Rochester	41.4	42.5	41.0	9.16	9.55	9.52	379.22	405.88	390.32

See footnotes at end of table.

**ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED**

C-8. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas—Continued

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a	Jan. 1988	Dec. 1988	Jan. 1989 ^a
New Jersey	41.0	41.5	41.3	\$10.72	\$11.13	\$11.16	\$439.52	\$461.90	\$460.91
New Mexico	40.6	41.5	40.9	8.82	8.88	8.74	358.09	368.52	357.47
Albuquerque	40.9	40.7	39.9	9.33	9.44	9.40	381.60	384.21	375.06
New York	39.6	40.4	40.1	10.21	10.76	10.69	404.32	434.70	428.67
Albany-Schenectady-Troy	40.1	42.4	41.1	10.78	11.40	11.06	432.28	483.36	454.57
Binghamton	40.8	41.2	41.0	9.38	9.81	9.72	382.70	404.17	398.52
Buffalo	43.5	43.9	42.7	11.96	12.61	12.84	520.26	553.58	548.27
Elmira	40.9	43.3	42.9	9.71	9.86	9.85	397.14	426.94	422.57
Nassau-Suffolk	39.0	39.4	39.2	10.69	11.65	11.56	416.91	459.01	453.15
New York PMSA	37.0	37.6	37.2	9.62	10.17	10.05	355.94	382.39	373.86
New York City	36.7	37.2	36.9	9.45	9.94	9.84	346.82	369.77	363.10
Niagara Falls	42.4	43.5	42.9	13.31	14.08	13.92	564.34	612.48	597.17
Orange County	39.1	38.5	39.2	7.91	8.63	8.74	309.28	332.26	342.61
Poughkeepsie	41.2	41.5	40.8	9.66	10.17	10.28	397.99	422.06	419.42
Rochester	42.2	43.4	43.1	12.36	12.80	12.80	521.59	555.52	551.68
Rockland County	37.5	36.4	36.7	10.38	11.04	10.99	389.25	401.86	403.33
Syracuse	41.7	42.0	41.9	11.54	12.46	12.39	481.22	523.32	519.14
Utica-Rome	41.1	42.3	41.5	9.64	9.76	9.78	396.20	412.85	405.87
Westchester County	40.1	41.7	40.5	10.64	11.69	11.38	426.66	487.47	460.89
North Carolina	40.5	41.1	40.6	8.08	8.29	8.30	327.24	340.72	336.98
Asheville	41.7	41.3	41.0	8.03	8.32	8.31	334.85	343.62	340.71
Charlotte-Gastonia-Rock Hill	41.1	41.2	40.1	8.33	8.65	8.62	342.36	356.38	345.66
Greensboro-Winston-Salem-High Point	39.6	40.3	39.9	9.06	9.18	9.10	358.78	389.15	363.09
Raleigh-Durham	41.4	42.3	42.0	9.15	9.27	9.26	378.81	392.12	388.92
North Dakota	37.4	39.0	37.8	8.25	8.44	8.52	308.55	329.16	322.06
Fargo-Moorhead	36.2	39.2	39.5	8.29	8.38	8.69	300.10	328.50	343.26
Ohio	42.8	43.8	43.3	11.88	12.20	12.21	507.81	534.36	528.69
Akron	43.2	43.1	43.1	11.34	11.44	11.52	489.89	493.06	496.51
Canton	43.2	43.0	43.1	11.43	11.61	11.63	493.78	499.23	501.25
Cincinnati	43.1	43.5	42.7	11.16	11.33	11.37	481.00	492.86	485.50
Cleveland	43.0	44.3	44.0	11.71	12.15	12.15	503.53	538.25	534.60
Columbus	41.4	41.9	41.6	11.32	11.76	11.72	468.65	492.74	487.55
Dayton-Springfield	42.2	44.4	44.0	12.02	12.95	13.02	507.24	574.98	572.88
Toledo	43.7	44.3	43.7	13.10	13.30	13.27	572.47	589.19	579.90
Youngstown-Warren	41.8	43.5	43.7	13.34	13.66	13.79	557.61	594.21	602.62
Oklahoma	41.1	42.0	41.0	10.34	10.49	10.52	424.97	440.58	431.32
Oklahoma City	40.8	43.3	41.9	11.40	11.51	11.49	465.12	498.38	481.43
Tulsa	41.7	42.9	41.0	11.05	10.80	10.78	460.79	463.32	441.98
Oregon	39.7	40.2	39.7	10.70	10.71	10.73	424.79	430.54	425.98
Eugene-Springfield	41.5	40.9	40.2	10.53	10.57	10.29	437.00	432.31	413.66
Portland	40.3	40.4	39.6	10.83	10.72	10.89	436.45	433.09	431.24
Salem	37.5	38.0	37.4	9.51	9.27	9.55	356.63	352.26	357.17
Pennsylvania	40.9	41.1	40.9	10.17	10.47	10.43	415.95	430.32	426.59
Allentown-Bethlehem	38.5	40.1	39.6	10.52	10.55	10.37	405.02	423.06	410.65
Altoona	39.7	40.1	40.2	8.64	9.06	9.27	343.01	363.31	372.65
Beaver County	41.6	43.3	44.1	10.86	10.64	10.74	451.78	460.71	473.83
Erie	43.1	43.1	43.3	10.36	10.60	10.56	446.52	456.86	457.25
Harrisburg-Lebanon-Carlisle	39.8	40.3	40.7	9.50	9.84	9.86	378.10	396.55	401.30
Johnstown	40.1	39.4	40.3	8.67	8.39	8.50	347.67	330.57	342.55
Lancaster	40.3	41.0	40.6	9.94	10.40	10.39	400.58	426.40	421.83
Philadelphia PMSA	40.1	41.5	40.2	11.03	11.55	11.44	442.30	479.33	459.89
Pittsburgh	42.4	42.4	42.0	11.24	11.28	11.32	476.58	478.27	475.44

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

C-8. Average hours and earnings of production workers on manufacturing payrolls in States and selected areas—Continued

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Pennsylvania—Continued									
Reading	41.3	40.9	41.4	\$10.62	\$11.07	\$11.02	\$438.61	\$452.76	\$456.23
Scranton-Wilkes-Barre	38.5	38.6	38.2	8.85	9.17	9.07	340.73	353.96	346.47
Williamsport	41.4	40.0	39.4	8.80	9.27	9.29	364.32	370.80	366.03
York	43.0	42.4	42.1	9.55	10.07	10.01	410.65	426.97	421.42
Rhode Island									
Pawtucket-Woonsocket-Attleboro	40.0	39.3	39.1	8.41	8.85	8.95	336.40	347.81	349.95
Providence	40.5	39.6	39.1	7.92	8.47	8.55	320.76	335.41	334.31
Providence	39.5	38.8	38.5	8.40	8.57	8.64	331.80	332.52	332.64
South Carolina									
Charleston	41.2	41.5	41.3	8.25	8.36	8.42	339.90	346.94	347.75
Charleston	40.8	40.8	41.2	9.05	9.18	9.23	369.24	374.54	380.28
Columbia	41.2	41.7	41.7	8.16	8.53	8.59	336.19	355.70	358.20
Greenville-Spartanburg	40.6	41.6	41.3	8.18	8.32	8.37	332.11	346.11	345.68
South Dakota									
Sioux Falls	40.6	43.0	42.3	8.07	8.25	8.28	327.64	354.75	350.24
Sioux Falls	43.4	44.3	43.7	8.08	8.71	8.82	350.67	385.85	385.43
Tennessee									
Chattanooga	42.5	42.4	41.0	8.93	9.20	9.13	379.53	390.08	374.33
Chattanooga	45.2	43.3	41.6	7.80	8.24	8.06	352.56	356.79	335.30
Johnson City-Kingsport-Bristol	45.2	45.8	43.1	9.46	9.56	9.59	427.59	437.85	413.33
Knoxville	42.0	40.3	38.9	9.06	8.91	8.74	380.52	359.07	339.99
Memphis	43.1	42.1	42.3	9.20	9.26	9.37	396.52	389.85	396.35
Nashville	42.0	42.6	41.8	10.38	10.82	10.63	435.96	460.93	444.33
Texas									
Dallas	41.8	42.2	41.4	9.93	10.12	10.09	415.07	427.06	417.73
Dallas	41.1	42.0	41.1	9.76	10.10	10.08	401.14	424.20	414.29
Ft. Worth-Arlington	40.9	41.4	41.0	10.44	10.85	10.84	427.00	449.19	444.44
Houston	43.9	45.0	43.6	11.26	11.66	11.50	494.31	524.70	501.40
San Antonio	38.8	39.6	39.9	7.57	7.57	7.50	293.72	299.77	299.25
Utah									
Salt Lake City-Ogden	39.6	41.0	40.3	9.96	10.03	10.00	394.42	411.23	403.00
Salt Lake City-Ogden	40.1	42.1	40.6	9.99	9.95	9.90	400.60	418.90	401.94
Vermont									
Burlington	40.1	41.6	41.2	9.25	9.93	9.79	370.93	413.09	403.35
Burlington	40.4	41.5	40.8	9.60	10.20	10.46	387.84	423.30	426.77
Virginia									
Bristol	40.8	41.4	40.8	9.27	9.52	9.48	378.22	394.13	386.78
Bristol	43.4	42.7	43.3	8.13	7.75	7.78	352.84	330.93	336.87
Charlottesville	40.2	42.9	41.4	7.48	7.91	7.87	300.70	339.34	325.82
Danville	40.6	41.4	40.6	8.68	8.65	8.81	352.41	358.11	357.69
Lynchburg	41.4	41.2	41.8	8.61	9.20	9.26	356.45	379.04	387.07
Northern Virginia	38.2	39.9	38.9	10.15	10.80	10.72	387.73	430.92	417.01
Richmond-Petersburg	41.3	42.3	41.7	11.93	12.23	12.08	492.71	517.33	503.74
Roanoke	41.6	42.1	40.9	9.22	9.88	9.31	383.55	415.95	380.78
Washington									
.....	40.1	41.0	40.1	11.90	12.13	12.19	477.19	497.33	488.82
West Virginia									
Charleston	40.9	41.8	39.7	10.53	10.79	10.86	430.68	451.02	431.14
Charleston	43.3	46.5	43.1	13.06	13.68	13.57	565.50	636.12	584.87
Huntington-Ashland	41.5	41.8	40.4	12.02	12.58	12.38	498.83	525.84	500.15
Parkersburg-Marietta	42.5	43.5	42.2	12.31	12.51	12.83	523.18	544.19	541.43
Wheeling	41.3	40.5	38.5	11.80	11.97	12.08	487.34	484.79	465.08
Wisconsin									
Appleton-Oshkosh	41.7	42.2	41.4	10.74	10.72	10.71	447.86	452.38	443.39
Appleton-Oshkosh	42.8	44.3	42.7	11.18	11.54	11.59	478.50	511.22	494.89
Eau Claire	39.0	40.8	41.4	11.01	10.61	10.97	429.39	432.89	454.16
Green Bay	42.2	42.5	40.1	11.36	11.57	11.68	479.39	491.73	468.37
Janesville-Beloit	41.0	44.1	44.6	12.70	13.15	13.24	520.70	579.92	590.50
Kenosha	41.0	41.6	40.4	12.76	13.03	12.93	523.16	542.05	522.37
La Crosse	39.2	41.9	41.3	9.00	9.22	9.29	352.80	386.32	383.68
Madison	41.1	41.6	41.6	10.14	10.08	10.08	416.75	419.33	419.33
Milwaukee	42.2	41.7	41.3	11.72	11.57	11.52	494.58	482.47	475.78
Racine	41.6	39.8	40.0	11.10	10.81	10.94	461.76	430.24	437.60
Wausau	41.4	42.4	42.1	10.28	10.11	10.13	425.59	428.66	426.47
Wyoming									
.....	37.0	38.7	36.9	9.09	10.11	9.97	336.33	391.26	367.89
Puerto Rico									
.....	38.7	39.5	38.7	5.45	5.62	5.65	210.91	221.99	218.66
Virgin Islands									
.....	38.1	41.6	40.0	10.08	10.19	11.01	384.05	423.90	440.40

¹ Not available.
^p = preliminary.

NOTE: Area definitions are published annually in the May issue of this

publication. All State and area data have been adjusted to March 1988 benchmarks.

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

C-9. Hours of wage and salary workers in nonagricultural establishments by major industry, seasonally adjusted

Industry	Millions of hours (annual rate) ¹			Percent change		
	Dec. 1988 ^f	Jan. 1989 ^f	Feb. 1989 ^p	Feb. 1988 to Feb. 1989 ^p	Dec. 1988 to Jan. 1989 ^f	Jan. 1989 to Feb. 1989 ^p
Total	200,110	201,493	201,698	3.4	0.7	0.1
Private sector	164,935	166,152	165,958	3.4	.7	-.1
Mining	1,574	1,543	1,528	-2.8	-1.9	-1.0
Construction	10,646	10,765	10,747	7.4	1.1	-.2
Manufacturing	41,930	42,152	42,116	2.0	.5	-.1
Durable goods	25,062	25,203	25,146	2.5	.6	-.2
Nondurable goods	16,869	16,948	16,971	1.3	.5	.1
Transportation and public utilities	11,634	11,713	11,713	4.2	.7	.0
Wholesale trade	12,465	12,566	12,624	5.2	.8	.5
Retail trade	29,507	29,773	29,734	3.1	.9	-.1
Finance, insurance, and real estate	12,576	12,687	12,579	.0	.9	-.9
Services	44,603	44,954	44,915	4.5	.8	-.1
Government	35,175	35,341	35,740	3.5	.5	1.1

¹ Total hours paid for 1 week in the month, seasonally adjusted, multiplied by 52.

^f = preliminary.

= revised.

NOTE: Data refer to hours of all employees—production workers,

nonsupervisory workers, and salaried workers—and are based largely on establishment data. See *BLS Handbook of Methods*, BLS Bulletin 2285, chapter 10, Productivity Measures: Business Sector and Major Subsectors. SOURCE: Office of Productivity and Technology (202 523 9261).

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

C-10. Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted

(1977=100)

Item	Annual average		Quarterly index										
	1987	1988 ¹	1986			1987				1988			
			II	III	IV	I	II	III	IV	I	II	III	IV ²
Business sector													
Output per hour of all persons	111.0	112.1	110.4	110.0	109.8	109.9	110.6	111.7	111.8	112.8	111.8	112.3	111.8
Output	133.3	139.3	128.2	128.5	129.3	130.5	132.2	134.3	136.2	138.0	138.8	139.8	140.6
Hours	120.1	124.2	116.1	116.8	117.8	118.8	119.5	120.3	121.8	122.3	124.1	124.5	125.8
Compensation per hour	190.4	199.5	182.0	184.0	186.2	187.3	189.0	191.1	194.0	195.8	198.1	201.1	203.4
Real compensation per hour ¹	101.5	102.2	101.1	101.6	102.1	101.4	101.1	101.3	101.9	101.9	102.0	102.4	102.4
Unit labor costs	171.5	177.9	164.9	167.3	169.6	170.5	170.8	171.1	173.5	173.5	177.1	179.0	182.0
Unit nonlabor payments	168.7	171.7	165.2	166.6	163.7	165.6	168.7	171.5	168.9	170.0	170.4	172.7	173.5
Implicit price deflator	170.5	175.7	165.0	167.0	167.5	168.7	170.1	171.2	171.9	172.3	174.7	176.8	179.0
Nonfarm business sector													
Output per hour of all persons	109.0	110.5	108.4	108.0	107.8	107.8	108.6	109.6	109.9	110.8	110.1	110.7	110.7
Output	133.0	139.8	127.8	128.1	128.8	130.1	131.9	134.1	136.0	137.9	139.2	140.5	141.7
Hours	122.1	126.5	117.9	118.6	119.5	120.7	121.5	122.3	123.8	124.4	126.4	126.9	128.1
Compensation per hour	189.4	198.2	181.2	183.1	185.4	186.4	187.9	190.0	192.9	194.6	196.6	199.4	202.2
Real compensation per hour ¹	101.0	101.5	100.7	101.2	101.7	100.9	100.5	100.7	101.4	101.3	101.3	101.5	101.8
Unit labor costs	173.8	179.3	167.1	169.5	172.1	172.9	173.0	173.3	175.6	175.7	178.6	180.2	182.6
Unit nonlabor payments	170.2	173.6	166.6	168.1	164.9	167.2	169.8	173.0	170.9	171.6	171.8	173.9	176.8
Implicit price deflator	172.5	177.3	167.0	169.0	169.5	170.9	171.9	173.2	174.0	174.2	176.2	178.0	180.6
Manufacturing													
Output per hour of all persons	132.0	136.2	127.2	128.0	128.8	130.0	131.7	132.8	133.2	134.3	135.5	137.2	137.9
Output	130.1	138.1	124.1	124.8	125.9	127.2	128.7	131.1	133.5	135.0	136.9	139.3	141.2
Hours	98.6	101.4	97.6	97.4	97.7	97.8	97.7	98.8	100.2	100.6	101.1	101.5	102.4
Compensation per hour	186.9	193.6	182.0	183.6	185.3	185.9	186.3	187.2	188.2	190.7	192.1	194.4	197.0
Real compensation per hour ¹	99.7	99.2	101.1	101.4	101.7	100.7	99.7	99.3	98.9	99.3	99.0	99.0	99.2
Unit labor costs	141.7	142.1	143.2	143.4	143.8	143.1	141.4	141.0	141.3	142.1	141.8	141.6	142.9
Durable goods													
Output per hour of all persons	138.5	143.2	132.6	133.9	135.1	136.6	138.1	139.1	140.0	141.3	142.7	144.2	144.7
Output	136.0	145.0	130.0	130.7	131.8	133.3	134.2	136.5	139.9	141.3	144.0	146.4	148.4
Hours	98.2	101.3	98.0	97.6	97.6	97.6	97.2	98.2	99.9	100.0	100.9	101.5	102.6
Compensation per hour	185.2	191.8	180.8	182.2	184.2	184.9	184.4	185.3	186.2	189.5	190.1	192.3	195.1
Real compensation per hour ¹	98.8	98.2	100.4	100.7	101.1	100.1	98.7	98.3	97.8	98.7	97.9	97.9	98.2
Unit labor costs	133.7	133.9	136.3	136.0	136.4	135.3	133.5	133.2	133.0	134.1	133.3	133.4	134.8
Nondurable goods													
Output per hour of all persons	122.3	125.8	118.9	119.2	119.6	120.1	122.4	123.5	123.2	123.9	124.8	126.9	127.7
Output	121.4	127.8	115.4	115.9	117.0	118.0	120.5	123.1	124.0	125.6	126.4	128.8	130.4
Hours	99.3	101.6	97.0	97.2	97.9	98.2	98.4	99.7	100.7	101.4	101.3	101.5	102.2
Compensation per hour	190.1	196.8	184.0	186.0	187.2	188.0	189.7	190.8	191.9	193.2	195.7	197.9	200.2
Real compensation per hour ¹	101.4	100.8	102.2	102.7	102.7	101.8	101.5	101.2	100.8	100.6	100.8	100.8	100.8
Unit labor costs	155.4	156.4	154.7	156.0	156.5	156.4	155.0	154.5	155.8	156.0	156.8	156.0	156.9
Nonfinancial corporations													
Output per all-employee hour	111.3	112.7	109.3	109.6	110.3	110.1	110.9	112.2	112.2	113.3	112.9	112.7	(²)
Output	134.6	141.5	128.3	128.9	130.4	131.3	133.3	136.1	137.7	140.1	141.2	142.0	(²)
Hours	120.9	125.6	117.3	117.6	118.1	119.3	120.2	121.3	122.8	123.6	125.0	126.1	(²)
Compensation per hour	185.5	193.2	178.5	180.2	182.2	182.9	184.3	186.1	188.5	189.9	191.9	194.5	(²)
Real compensation per hour ¹	98.9	99.0	99.2	99.5	100.0	99.0	98.6	98.7	99.0	98.9	98.8	99.0	(²)
Total unit costs	170.6	175.3	166.7	168.4	168.8	169.9	170.3	170.2	172.0	171.5	173.8	176.4	(²)
Unit labor costs	166.6	171.5	163.3	164.3	165.1	166.2	166.1	165.9	168.1	167.5	170.0	172.6	(²)
Unit nonlabor costs	182.5	186.9	176.9	180.3	179.6	180.8	182.6	183.0	183.6	183.4	185.1	187.8	(²)
Unit profits	130.8	129.8	132.7	133.6	129.7	128.5	129.8	136.4	128.3	132.5	132.6	129.6	(²)
Implicit price deflator	165.8	169.9	162.6	164.2	164.1	164.9	165.4	166.1	166.7	166.9	168.8	170.8	(²)

¹ Measures of real hourly compensation have been revised to reflect the most recent information on seasonal variation in the Consumer Price Index for All Urban Consumer.

² Not available.
= revised.

SOURCE: Office of Productivity and Technology (202 523 9261).

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

C-11. Percent changes from the preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted annual rates

Item	Percent change from											
	Previous quarter						Same quarter, previous year					
	III 1987	IV 1987	I 1988	II 1988	III 1988	IV 1988 ¹	III 1987	IV 1987	I 1988	II 1988	III 1988	IV 1988 ¹
Business sector												
Output per hour of all persons	3.9	0.6	3.5	-3.4	1.7	-2.0	1.5	1.9	2.7	1.1	0.6	-0.1
Output	6.6	5.7	5.5	2.4	2.8	2.2	4.5	5.3	5.8	5.0	4.1	3.2
Hours	2.6	5.1	1.9	6.0	1.1	4.3	3.0	3.4	3.0	3.9	3.5	3.3
Compensation per hour	4.6	6.2	3.7	4.8	6.2	4.7	3.9	4.2	4.5	4.8	5.2	4.8
Real compensation per hour ¹ .....	.9	2.4	.0	.3	1.4	.3	-.3	-.2	.5	.9	1.0	.5
Unit labor costs .....	.7	5.6	.2	8.5	4.4	6.8	2.3	2.3	1.8	3.7	4.6	4.9
Unit nonlabor payments	6.7	-5.8	2.5	1.0	5.3	2.1	2.9	3.2	2.7	1.0	.7	2.7
Implicit price deflator	2.8	1.4	1.0	5.8	4.7	5.1	2.5	2.6	2.1	2.7	3.2	4.2
Nonfarm business sector												
Output per hour of all persons	3.7	.9	3.4	-2.4	2.0	.1	1.5	1.9	2.8	1.4	1.0	.7
Output	6.8	5.9	5.6	4.0	3.5	3.7	4.7	5.6	6.0	5.6	4.7	4.2
Hours	2.9	4.9	2.1	6.6	1.5	3.6	3.2	3.6	3.1	4.1	3.8	3.4
Compensation per hour	4.5	6.4	3.5	4.2	5.7	5.6	3.7	4.1	4.4	4.6	5.0	4.8
Real compensation per hour ¹ .....	.7	2.6	-.1	-.3	.9	1.1	-.4	-.3	.4	.7	.8	.4
Unit labor costs .....	.7	5.4	.1	6.8	3.7	5.6	2.2	2.1	1.6	3.2	4.0	4.0
Unit nonlabor payments	7.7	-4.8	1.6	.7	4.8	6.8	2.9	3.6	2.6	1.2	.5	3.5
Implicit price deflator	3.1	1.8	.6	4.7	4.1	6.0	2.5	2.6	1.9	2.5	2.8	3.8
Manufacturing												
Output per hour of all persons	3.2	1.3	3.2	3.7	5.2	1.8	3.7	3.4	3.3	2.8	3.3	3.5
Output	7.8	7.5	4.6	5.8	7.1	5.5	5.1	6.0	6.2	6.4	6.2	5.7
Hours	4.4	6.1	1.3	2.0	1.8	3.6	1.4	2.6	2.8	3.4	2.8	2.2
Compensation per hour	2.1	2.1	5.4	3.0	4.8	5.5	2.0	1.6	2.6	3.2	3.8	4.6
Real compensation per hour ¹	-1.5	-1.5	1.8	-1.5	.0	1.0	-2.1	-2.7	-1.3	-.7	-.3	.3
Unit labor costs	-1.1	.8	2.2	-.7	-.5	3.5	-1.7	-1.8	-.7	.3	.5	1.1
Durable goods												
Output per hour of all persons	2.9	2.6	3.8	3.8	4.3	1.4	3.8	3.7	3.4	3.3	3.6	3.3
Output	7.0	10.2	4.3	7.7	6.8	5.6	4.5	6.1	6.0	7.3	7.2	6.1
Hours	4.0	7.3	.4	3.8	2.4	4.2	.6	2.3	2.5	3.8	3.4	2.7
Compensation per hour	2.0	1.9	7.1	1.4	4.7	5.8	1.7	1.1	2.5	3.1	3.8	4.8
Real compensation per hour ¹	-1.6	-1.7	3.4	-3.0	.0	1.3	-2.4	-3.2	-1.4	-.8	-.3	.4
Unit labor costs	-.9	-.7	3.2	-2.3	.5	4.3	-2.1	-2.5	-.9	-.2	.1	1.4
Nondurable goods												
Output per hour of all persons	3.8	-1.1	2.3	3.2	6.8	2.5	3.6	3.0	3.1	2.0	2.7	3.7
Output	9.0	3.1	5.1	2.7	7.7	5.2	6.2	6.0	6.4	4.9	4.6	5.2
Hours	5.1	4.2	2.7	-.5	.9	2.7	2.5	2.9	3.2	2.9	1.8	1.4
Compensation per hour	2.4	2.2	2.9	5.2	4.6	4.7	2.6	2.5	2.8	3.2	3.7	4.4
Real compensation per hour ¹	-1.3	-1.4	-.7	.6	-.1	.3	-1.5	-1.8	-1.1	-.7	-.4	.0
Unit labor costs	-1.3	3.4	.6	2.0	-2.0	2.2	-1.0	-.5	-.3	1.1	1.0	.7
Nonfinancial corporations												
Output per all-employee hour	4.7	-.1	4.3	-1.6	-.8	(²)	2.3	1.6	3.0	1.8	.4	(²)
Output	8.8	4.7	7.2	3.0	2.5	(²)	5.6	5.6	6.7	5.9	4.3	(²)
Hours	4.0	4.8	2.8	4.7	3.3	(²)	3.2	3.9	3.6	4.1	3.9	(²)
Compensation per hour	4.1	5.2	3.0	4.2	5.5	(²)	3.3	3.4	3.8	4.1	4.5	(²)
Real compensation per hour ¹ .....	.4	1.5	-.6	-.3	.8	(²)	-.9	-.9	-.2	.2	.3	(²)
Total unit costs	-.2	4.2	-1.0	5.3	6.3	(²)	1.1	1.9	1.0	2.1	3.7	(²)
Unit labor costs	-.6	5.3	-1.2	5.9	6.4	(²)	.9	1.8	.8	2.3	4.0	(²)
Unit nonlabor costs .....	.8	1.3	-.3	3.7	6.1	(²)	1.5	2.2	1.5	1.4	2.7	(²)
Unit profits	21.9	-21.5	13.8	.3	-8.9	(²)	2.0	-1.1	3.1	2.2	-5.0	(²)
Implicit price deflator	1.7	1.5	.3	4.8	4.6	(²)	1.2	1.6	1.2	2.1	2.8	(²)

¹ Measures of real hourly compensation have been revised to reflect the most recent information on seasonal variation in the Consumer Price Index for All Urban Consumer.

² Not available.
(²) = revised.

SOURCE: Office of Productivity and Technology (202 523 9261).

**STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED**

D-1. Labor force status by State and selected metropolitan areas

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P
Alabama	1,866.2	1,917.3	1,896.3	144.8	147.3	161.2	7.8	7.7	8.5
Birmingham	435.7	445.4	438.8	28.0	26.9	29.2	6.4	6.0	6.7
Huntsville	130.0	136.2	133.9	6.9	7.2	7.5	5.3	5.3	5.6
Mobile	207.4	212.5	210.1	19.8	21.4	22.1	9.5	10.1	10.5
Montgomery	135.0	138.1	136.5	8.2	8.6	9.2	6.0	6.2	6.7
Tuscaloosa	69.7	71.9	70.8	4.2	3.9	4.3	6.0	5.5	6.0
Alaska	240.7	239.1	235.3	26.7	20.7	24.4	11.1	8.6	10.4
Arizona	1,596.4	1,683.1	1,664.0	85.9	90.0	96.5	5.4	5.3	5.8
Phoenix	992.4	1,039.6	1,029.6	44.9	46.8	50.0	4.5	4.5	4.9
Tucson	303.2	319.0	316.0	13.8	14.2	15.5	4.6	4.5	4.9
Arkansas	1,096.3	1,131.7	1,131.1	98.4	73.1	89.2	9.0	6.5	7.9
Fayetteville-Springdale	60.2	63.1	61.5	2.8	2.3	2.7	4.7	3.7	4.3
Fort Smith	91.9	93.7	94.0	6.7	7.0	7.9	7.3	7.5	8.4
Little Rock-North Little Rock	262.1	273.2	272.2	19.2	13.6	16.3	7.3	5.0	6.0
Pine Bluff	36.6	38.1	38.0	3.3	2.5	3.1	9.0	6.7	8.3
California¹	13,866.7	14,131.0	14,168.2	776.8	611.0	761.4	5.6	4.3	5.4
Anaheim-Santa Ana	1,306.1	1,375.9	1,372.0	38.1	33.6	41.4	2.9	2.4	3.0
Bakersfield	220.8	224.5	228.4	21.3	20.8	24.7	9.7	9.3	10.8
Fresno	285.3	303.5	303.6	31.7	27.9	33.5	11.1	9.2	11.0
Los Angeles-Long Beach	4,329.0	4,158.6	4,167.0	242.0	148.7	183.3	5.6	3.6	4.4
Modesto	147.3	156.0	157.3	17.7	15.7	19.6	12.0	10.0	12.4
Oakland	1,042.5	1,085.9	1,087.3	48.8	40.0	49.0	4.7	3.7	4.5
Oxnard-Ventura	340.0	353.9	357.0	17.6	16.2	19.0	5.2	4.6	5.3
Riverside-San Bernardino	920.4	944.4	957.2	48.8	44.0	56.4	5.3	4.7	5.9
Sacramento	675.0	716.5	719.1	39.5	33.1	41.2	5.9	4.6	5.7
San Diego	1,076.7	1,141.3	1,142.1	45.4	37.8	46.1	4.2	3.3	4.0
San Francisco	863.5	891.4	888.3	30.5	25.0	31.7	3.5	2.8	3.6
San Jose	820.3	848.3	850.5	32.5	27.6	33.9	4.0	3.3	4.0
Santa Barbara-Santa Maria-Lompoc	174.0	179.5	180.6	8.2	6.6	8.5	4.7	3.7	4.7
Santa Rosa-Petaluma	187.8	193.2	193.9	9.8	8.1	10.2	5.2	4.2	5.2
Stockton	183.0	191.0	194.6	19.6	17.3	21.3	10.7	9.0	10.9
Vallejo-Fairfield-Napa	182.3	191.5	191.8	11.1	8.9	11.3	6.1	4.7	5.9
Colorado	1,679.8	1,719.1	1,678.7	135.1	106.8	123.0	8.0	6.2	7.3
Boulder-Longmont	128.3	134.7	130.1	7.7	6.8	7.4	6.0	5.0	5.7
Denver	868.8	886.0	866.7	62.6	50.5	57.2	7.2	5.7	6.6
Connecticut	1,673.1	1,701.7	1,677.3	56.2	55.9	61.8	3.4	3.3	3.7
Bridgeport-Milford	223.2	224.2	222.0	9.0	9.0	10.4	4.0	4.0	4.7
Hartford	408.2	413.1	409.3	12.9	13.1	13.9	3.2	3.2	3.4
New Britain	69.1	70.3	69.0	2.6	2.5	2.9	3.8	3.6	4.2
New Haven-Meriden	261.6	267.6	264.4	8.2	8.3	9.2	3.1	3.1	3.5
Stamford	110.0	111.9	110.3	2.4	2.3	2.4	2.1	2.0	2.2
Waterbury	96.7	98.1	97.0	4.4	3.9	4.7	4.5	4.0	4.8
Delaware	342.2	351.5	352.3	16.2	10.9	12.1	4.7	3.1	3.4
Wilmington	299.2	305.7	306.8	15.6	10.0	11.8	5.2	3.3	3.9
District of Columbia	329.3	333.6	330.4	19.8	15.5	17.6	6.0	4.6	5.3
Washington	2,154.2	2,203.1	2,208.6	70.2	56.7	61.5	3.3	2.6	2.8
Florida¹	5,922.1	6,093.5	6,051.5	295.6	327.1	358.3	5.0	5.4	5.9
Daytona Beach	146.0	148.8	147.5	6.7	7.6	8.2	4.6	5.1	5.5
Fort Lauderdale-Hollywood-Pompano Beach	615.1	635.2	630.8	25.1	28.7	32.6	4.1	4.5	5.2
Fort Myers-Cape Coral	135.8	144.1	143.8	4.8	5.5	6.1	3.5	3.8	4.2
Jacksonville	440.1	453.0	449.1	23.3	25.9	28.3	5.3	5.7	6.3
Melbourne-Titusville-Palm Bay	177.8	181.7	181.6	8.4	9.3	10.6	4.7	5.1	5.8
Miami-Hialeah	916.8	935.9	929.1	49.3	54.1	57.9	5.4	5.8	6.2
Orlando	556.3	574.9	566.6	25.0	27.9	32.9	4.5	4.9	5.8
Pensacola	143.7	145.5	143.5	9.0	10.1	10.8	6.3	6.9	7.5
Sarasota	117.7	122.6	121.1	4.0	4.9	4.9	3.4	4.0	4.0
Tallahassee	123.6	127.4	125.4	4.7	5.0	6.0	3.8	3.9	4.8
Tampa-St. Petersburg-Clearwater	971.2	988.2	982.8	46.3	50.5	54.1	4.8	5.1	5.5
West Palm Beach-Boca Raton-DeLray Beach	397.8	419.0	417.5	17.4	20.5	22.9	4.4	4.9	5.5

See footnotes at end of table.

**STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED**

D-1. Labor force status by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P
Georgia	3,113.3	3,233.8	3,251.7	202.8	154.7	182.6	6.5	4.8	5.6
Athens	74.3	76.6	77.1	5.0	2.8	3.6	6.7	3.6	4.6
Atlanta	1,473.9	1,519.9	1,526.1	80.5	64.8	74.2	5.5	4.3	4.9
Augusta	179.8	181.8	181.7	10.9	8.5	10.3	6.0	4.7	5.7
Columbus	100.3	102.5	101.1	6.9	5.7	5.9	6.9	5.6	5.8
Macon-Warner Robins	128.5	133.1	132.6	7.5	5.7	7.0	5.8	4.3	5.3
Savannah	112.4	113.7	114.1	7.6	5.7	6.1	6.7	5.0	5.3
Hawaii	515.0	517.1	515.1	12.5	14.6	17.8	2.4	2.8	3.5
Honolulu	383.1	361.9	379.8	8.7	9.4	11.5	2.3	2.5	3.0
Idaho	458.4	483.5	479.8	38.1	26.0	33.9	8.3	5.4	7.1
Boise City	104.4	111.5	111.5	5.9	3.8	5.0	5.6	3.4	4.5
Illinois ¹	5,721.9	5,796.2	5,791.5	422.2	359.9	372.2	7.4	6.2	6.4
Aurora-Elgin	175.9	183.0	181.6	10.8	9.9	10.5	6.1	5.4	5.8
Bloomington-Normal	67.2	70.5	69.8	3.5	3.9	3.3	5.3	5.6	4.7
Champaign-Urbana-Rantoul	85.7	90.3	87.7	4.0	3.8	4.0	4.7	4.2	4.5
Chicago	3,151.4	3,186.7	3,171.8	203.7	176.8	179.0	6.5	5.5	5.6
Davenport-Rock Island-Moline	179.4	181.1	181.4	13.9	13.0	13.1	7.8	7.2	7.2
Decatur	58.2	58.8	59.1	5.9	4.3	5.1	10.1	7.3	8.6
Joliet	193.6	194.3	194.1	16.5	13.4	13.9	8.5	6.9	7.2
Kankakee	45.0	43.5	44.0	4.8	3.6	3.8	10.6	8.2	8.7
Lake County	266.7	280.4	280.7	12.7	11.9	12.2	4.8	4.3	4.3
Peoria	153.4	156.3	156.9	11.5	9.8	10.2	7.5	6.3	6.5
Rockford	148.4	147.6	147.3	12.4	9.4	9.4	8.4	6.3	6.4
Springfield	109.1	110.0	109.9	6.6	5.7	6.1	6.1	5.2	5.6
Indiana	2,747.8	2,801.7	2,809.0	179.6	125.7	144.0	6.5	4.5	5.1
Anderson	59.7	59.3	59.9	4.9	2.8	3.3	8.3	4.7	5.5
Bloomington	58.7	62.0	63.2	2.6	1.9	2.3	4.4	3.0	3.6
Elkhart-Goshen	93.4	97.2	97.6	4.6	4.4	4.0	5.0	4.5	4.1
Evansville	139.4	142.2	142.7	9.6	6.2	7.7	6.9	4.4	5.4
Fort Wayne	195.3	199.4	200.0	11.0	8.2	8.9	5.6	4.1	4.5
Gary-Hammond	250.8	255.3	256.7	19.7	12.1	14.6	7.9	4.7	5.7
Indianapolis	654.7	674.3	672.5	35.2	25.9	28.1	5.4	3.8	4.2
Lafayette	65.8	68.4	67.9	2.5	2.2	2.0	3.7	3.2	3.0
Muncie	60.3	60.7	60.9	4.6	2.8	3.3	7.5	4.5	5.5
South Bend-Mishawaka	128.4	132.4	132.1	6.8	5.6	6.0	5.3	4.2	4.6
Terre Haute	59.6	58.9	59.4	4.4	2.6	3.6	7.5	4.5	6.0
Iowa	1,453.5	1,509.9	1,514.8	79.5	60.0	73.5	5.5	4.0	4.9
Cedar Rapids	93.7	97.4	98.3	4.2	2.8	3.7	4.5	2.9	3.8
Des Moines	224.3	238.0	238.3	9.0	7.5	8.7	4.0	3.2	3.6
Dubuque	43.8	44.7	45.5	3.1	2.4	3.2	7.1	5.4	7.1
Sioux City	58.9	61.2	61.4	3.5	2.4	2.7	5.9	3.9	4.5
Waterloo-Cedar Falls	68.5	72.3	72.1	4.6	3.1	3.9	6.8	4.3	5.5
Kansas	1,270.0	1,278.6	1,274.8	66.4	61.0	66.3	5.2	4.8	5.2
Topeka	92.0	92.4	93.4	4.5	4.4	4.9	4.8	4.8	5.2
Wichita	253.7	257.7	256.7	14.2	11.6	12.9	5.6	4.5	5.0
Kentucky	1,649.7	1,689.3	1,699.1	146.3	113.3	138.2	8.9	6.7	8.1
Lexington-Fayette	181.4	195.0	193.7	9.2	8.2	9.3	5.1	4.2	4.8
Louisville	489.2	512.2	505.5	33.4	39.0	31.6	6.8	7.6	6.3
Owensboro	42.7	43.0	43.4	4.0	2.4	3.2	9.4	5.6	7.4
Louisiana	1,891.9	1,880.3	1,887.1	231.3	190.8	223.3	12.2	10.1	11.8
Alexandria	59.0	58.7	59.4	6.4	5.7	6.8	10.8	9.7	11.4
Baton Rouge	263.9	266.5	265.0	26.6	23.6	27.2	10.1	8.8	10.3
Houma-Thibodaux	70.0	69.1	68.7	9.8	6.8	8.0	13.9	9.8	11.7
Lafayette	97.6	97.8	96.9	11.3	8.5	10.2	11.6	8.7	10.6
Monroe	68.1	67.6	66.8	8.0	6.5	7.4	11.7	9.6	11.1
New Orleans	585.9	585.1	584.4	58.5	51.8	56.9	10.0	8.9	9.7
Shreveport	161.9	157.4	158.7	19.6	16.0	18.1	12.1	10.2	11.4
Maine	580.5	601.1	595.9	27.3	24.8	27.4	4.7	4.1	4.6
Lewiston-Auburn	41.8	42.8	42.7	2.2	2.0	2.4	5.2	4.7	5.7
Portland	123.8	131.3	129.2	3.0	2.8	3.0	2.4	2.1	2.3

See footnotes at end of table.

**STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED**

D-1. Labor force status by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P
Maryland	2,426.5	2,472.4	2,488.1	120.5	93.4	100.8	5.0	3.8	4.0
Baltimore	1,170.4	1,189.2	1,191.3	62.6	50.9	51.8	5.3	4.3	4.3
Massachusetts ¹	3,103.9	3,127.2	3,139.1	117.6	93.9	119.3	3.8	3.0	3.8
Boston	1,539.2	1,551.5	1,554.3	47.6	39.3	47.9	3.1	2.5	3.1
Brockton	97.5	98.6	98.4	4.1	3.3	4.2	4.2	3.4	4.3
Fall River	77.1	76.6	75.7	5.3	3.9	4.5	6.8	5.0	5.9
Fitchburg-Leominster	47.1	46.7	47.0	2.1	1.9	2.4	4.5	4.0	5.0
Lawrence-Haverhill	185.7	185.1	186.0	8.3	6.5	8.3	4.4	3.5	4.4
Lowell	151.5	151.8	152.4	5.8	4.6	6.0	3.8	3.0	3.9
New Bedford	85.8	85.9	87.2	5.6	4.2	5.6	6.5	4.9	6.4
Springfield	252.1	249.2	251.8	9.6	7.7	9.6	3.8	3.1	3.8
Worcester	219.5	224.2	226.4	7.6	5.9	7.9	3.5	2.6	3.5
Michigan ¹	4,438.2	4,638.3	4,588.5	473.4	328.6	358.3	10.7	7.1	7.8
Ann Arbor	154.0	166.7	163.7	7.6	5.3	8.1	4.9	3.2	3.7
Battle Creek	63.4	65.5	64.9	7.1	4.3	5.2	11.2	6.6	8.0
Benton Harbor	75.6	79.6	79.2	6.7	5.5	6.3	8.9	8.9	8.0
Detroit	2,135.3	2,231.9	2,209.1	219.0	153.9	163.7	10.3	8.9	7.4
Flint	193.3	188.1	187.4	35.1	19.8	23.8	18.2	10.4	12.7
Grand Rapids	343.3	372.9	361.1	25.7	22.2	19.9	7.5	5.9	5.5
Jackson	63.8	87.2	66.1	6.4	4.9	5.1	10.0	7.3	7.7
Kalamazoo	112.9	120.2	118.4	7.4	5.6	5.9	8.5	4.6	5.0
Lansing-East Lansing	236.5	246.7	245.8	21.4	13.3	14.2	9.1	5.4	5.8
Muskegon	66.3	89.4	87.5	7.8	8.3	8.6	11.7	9.0	9.7
Saginaw-Bay City-Midland	179.8	186.3	183.7	21.4	12.3	14.3	11.9	8.8	7.8
Minnesota	2,278.0	2,390.3	2,323.1	111.0	96.5	118.9	4.9	4.1	5.1
Duluth	106.2	104.6	106.5	8.4	5.5	7.2	8.0	5.3	6.7
Minneapolis-St. Paul	1,358.1	1,398.3	1,389.6	52.8	45.9	55.0	3.9	3.3	4.0
Rochester	59.5	62.0	61.8	1.9	1.9	2.0	3.2	3.1	3.2
St. Cloud	93.5	95.6	97.2	5.3	6.1	6.1	5.7	6.3	8.3
Mississippi	1,139.1	1,148.2	1,143.2	97.2	100.7	107.6	8.5	8.8	9.4
Jackson	197.1	200.1	198.7	11.3	11.6	12.0	5.7	5.8	6.1
Missouri	2,583.6	2,578.3	2,581.5	171.3	142.6	188.7	6.6	5.5	6.5
Kansas City	848.2	851.6	848.3	47.0	46.1	48.1	5.6	5.4	5.7
St. Louis	1,250.5	1,259.3	1,280.8	84.7	87.7	84.7	6.8	5.4	6.7
Springfield	121.2	125.4	123.6	5.9	5.3	6.1	4.9	4.2	4.9
Montana	392.7	398.8	394.8	29.7	25.9	28.9	7.8	6.5	7.3
Nebraska	795.9	816.8	810.3	36.0	24.4	28.4	4.5	3.0	3.5
Lincoln	122.7	128.4	126.9	3.7	3.4	2.9	3.0	2.6	2.3
Omaha	320.4	331.1	333.8	14.4	10.0	12.2	4.5	3.0	3.7
Nevada	560.4	598.5	591.6	34.9	25.9	34.8	6.2	4.3	5.9
Las Vegas	328.4	350.9	349.1	19.3	15.0	19.7	5.9	4.3	5.6
Reno	135.8	142.5	139.0	8.6	5.9	8.2	6.3	4.1	5.9
New Hampshire	588.4	617.8	614.4	14.9	13.5	17.8	2.5	2.2	2.9
Manchester	84.8	87.6	83.7	1.9	1.7	2.2	2.3	1.9	2.6
Nashua	98.5	101.3	98.7	2.3	2.4	2.9	2.3	2.4	2.9
Portsmouth-Dover-Rochester	127.7	134.4	130.0	3.1	2.4	3.1	2.4	1.8	2.4
New Jersey ¹	3,963.8	4,013.1	4,008.7	178.4	158.9	183.7	4.5	4.0	4.6
Atlantic City	168.8	173.8	174.3	12.8	11.4	13.1	7.6	6.5	7.5
Bergen-Passaic	720.1	728.2	728.8	26.5	24.8	28.3	3.7	3.4	3.9
Jersey City	289.6	273.1	272.2	19.3	17.7	20.1	7.2	6.5	7.4
Middlesex-Somerset-Hunterdon	581.0	572.9	571.0	17.9	15.1	17.7	3.2	2.8	3.1
Monmouth-Ocean	488.0	476.8	479.1	20.3	17.5	21.6	4.3	3.7	4.5
Newark	958.5	960.4	960.5	43.3	37.4	43.7	4.5	3.9	4.8
Trenton	173.4	175.0	174.7	6.3	5.0	6.1	3.6	2.9	3.5
Vineland-Millville-Bridgeton	58.9	59.6	59.7	5.5	5.2	5.5	9.4	8.7	9.3
New Mexico	673.3	680.3	673.1	56.4	43.3	47.9	8.4	6.4	7.1
Albuquerque	257.0	262.9	258.0	15.3	12.6	14.0	6.0	4.8	5.4
Las Cruces	54.3	54.7	53.8	3.9	3.3	3.4	7.3	6.0	6.4
Santa Fe	65.0	64.6	64.5	3.7	2.7	3.4	5.7	4.2	5.3

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

D-1. Labor force status by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P	Jan. 1988	Dec. 1988	Jan. 1989 ^P
New York ¹	8,532.9	8,614.2	8,652.1	427.5	396.9	482.1	5.0	4.6	5.6
Albany-Schenectady-Troy	426.6	429.2	433.5	19.1	18.0	22.8	4.5	4.2	5.3
Binghamton	129.5	129.7	130.9	5.3	5.4	7.0	4.1	4.2	5.3
Buffalo	455.4	456.5	458.1	28.7	25.4	32.4	6.3	5.6	7.1
Elmira	42.4	42.8	42.9	2.0	1.8	2.3	4.6	4.2	5.3
Nassau-Suffolk	1,436.0	1,452.4	1,449.2	50.0	50.0	61.1	3.5	3.4	4.2
New York	3,907.2	3,928.1	3,949.0	195.2	182.0	210.4	5.0	4.6	5.3
New York City	3,226.0	3,241.2	3,263.5	171.0	160.4	184.4	5.3	4.9	5.7
Orange County	133.3	136.7	138.1	6.1	6.0	7.3	4.6	4.4	5.3
Poughkeepsie	129.0	131.6	130.4	4.0	4.2	5.3	3.1	3.2	4.1
Rochester	505.1	515.4	517.8	22.9	22.0	25.9	4.5	4.3	5.0
Syracuse	319.4	321.4	324.4	19.3	15.2	19.7	6.0	4.7	6.1
Utica-Rome	136.3	137.8	140.5	8.8	7.6	10.4	6.5	5.5	7.4
North Carolina ¹	3,255.3	3,358.0	3,381.3	166.1	110.7	150.4	5.1	3.3	4.4
Asheville	84.0	88.9	89.0	4.4	2.3	3.6	5.2	2.6	4.1
Charlotte-Gastonia-Rock Hill	614.6	640.5	648.6	23.6	18.5	23.7	3.8	2.9	3.7
Greensboro-Winston-Salem-High Point	516.6	528.8	535.6	21.1	14.5	20.3	4.1	2.7	3.8
Raleigh-Durham	388.2	407.6	404.7	14.2	8.5	11.8	3.7	2.1	2.9
North Dakota	320.7	323.2	320.3	18.5	15.3	18.4	5.8	4.7	5.7
Bismarck	44.3	45.0	45.2	2.7	2.2	2.6	6.0	5.0	5.7
Fargo-Moorhead	83.8	85.9	85.1	3.0	2.4	3.3	3.6	2.8	3.9
Grand Forks	34.3	35.4	34.7	1.5	1.2	1.5	4.4	3.4	4.4
Ohio ¹	5,274.6	5,352.1	5,383.9	375.8	286.4	369.3	7.1	5.4	6.9
Akron	320.2	329.3	331.0	24.7	17.9	23.2	7.7	5.4	7.0
Canton	190.0	190.9	193.2	15.1	10.4	13.8	7.9	5.5	7.2
Cincinnati	744.7	768.8	770.7	40.2	32.7	40.3	5.4	4.3	5.2
Cleveland	929.1	939.6	939.5	58.5	45.2	56.4	6.3	4.8	6.0
Columbus	704.0	723.8	725.0	40.0	33.2	41.7	5.7	4.6	5.8
Dayton-Springfield	466.5	475.2	474.8	27.6	22.7	27.5	5.9	4.8	5.8
Toledo	307.9	313.6	316.3	20.8	16.6	22.0	6.7	5.3	7.0
Youngstown-Warren	220.6	224.0	225.1	19.8	16.9	18.7	9.0	7.5	8.3
Oklahoma	1,543.6	1,528.5	1,524.1	118.9	85.5	100.4	7.7	5.6	6.6
Enid	29.6	28.3	28.5	2.0	1.3	1.7	6.8	4.5	6.0
Lawton	49.3	48.6	47.7	2.8	2.4	2.6	5.6	4.9	5.4
Oklahoma City	501.7	496.7	492.5	32.6	23.7	26.4	6.5	4.8	5.4
Tulsa	343.3	340.7	338.1	28.9	19.5	22.7	8.4	5.7	6.7
Oregon	1,376.1	1,414.3	1,426.2	96.8	69.3	87.0	7.0	4.9	6.1
Eugene-Springfield	137.4	143.0	144.5	8.9	6.6	8.2	6.5	4.6	5.7
Portland	630.7	651.8	654.5	35.4	25.4	29.1	5.6	3.9	4.5
Salem	128.2	130.4	132.2	9.7	7.2	8.3	7.6	5.5	6.3
Pennsylvania ¹	5,745.3	5,806.4	5,884.4	357.1	244.4	292.1	6.2	4.2	5.0
Allentown-Bethlehem	321.8	330.3	330.8	18.5	12.8	14.9	5.8	3.9	4.5
Altoona	59.3	59.7	60.0	5.0	3.6	4.4	8.4	6.0	7.4
Beaver County	60.9	59.4	60.1	6.5	4.3	5.2	10.7	7.2	8.7
Erie	129.7	130.1	133.7	9.6	6.0	7.4	7.4	4.6	5.5
Harrisburg-Lebanon-Carlisle	317.8	319.8	325.6	15.2	10.3	12.3	4.8	3.2	3.8
Johnstown	95.0	94.2	97.8	9.2	5.7	7.3	9.7	6.1	7.5
Lancaster	214.9	220.7	222.3	9.5	7.1	7.7	4.4	3.2	3.5
Philadelphia	2,411.2	2,439.3	2,463.8	111.0	84.0	99.2	4.6	3.4	4.0
Pittsburgh	964.8	962.5	974.8	70.5	43.9	52.9	7.3	4.6	5.4
Reading	171.4	178.5	178.1	9.0	7.6	7.6	5.3	4.2	4.3
Scranton-Wilkes-Barre	355.8	359.3	366.1	26.6	18.4	22.3	7.5	5.1	6.1
Williamsport	59.1	59.3	60.6	4.0	3.2	3.9	6.8	5.4	6.4
York	217.0	221.3	225.8	11.9	8.6	10.3	5.5	3.9	4.5
Rhode Island	513.2	533.9	524.9	15.5	10.9	16.8	3.0	2.0	3.2
Pawtucket-Woonsocket-Attleboro	164.9	166.7	165.6	6.8	4.8	7.3	4.1	2.9	4.4
Providence	336.2	351.4	343.9	9.6	7.0	10.2	2.8	2.0	3.0
South Carolina	1,643.9	1,683.6	1,696.3	92.6	58.3	77.4	5.6	3.5	4.6
Charleston	223.7	230.9	231.3	10.1	6.8	9.0	4.5	2.9	3.9
Columbia	230.9	235.2	236.7	8.8	5.5	7.6	3.8	2.3	3.2
Greenville-Spartanburg	326.8	341.2	339.5	13.8	8.0	11.0	4.2	2.3	3.3
South Dakota	348.6	353.5	347.0	14.8	13.4	16.6	4.2	3.8	4.8
Rapid City	38.6	39.2	38.0	1.8	1.6	1.9	4.7	4.1	5.1
Sioux Falls	73.1	73.9	72.5	3.5	2.8	3.2	4.7	3.7	4.5

See footnotes at end of table.

**STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED**

D-1. Labor force status by State and selected metropolitan areas—Continued

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p	Jan. 1988	Dec. 1988	Jan. 1989 ^p
Tennessee	2,317.4	2,344.8	2,342.9	135.2	128.1	152.9	5.8	5.5	6.5
Chattanooga	208.0	213.7	213.4	11.2	10.6	12.5	5.4	5.0	5.8
Johnson City-Kingsport-Bristol	213.0	215.4	213.5	13.4	10.5	12.4	6.3	4.9	5.8
Knoxville	280.3	284.7	283.4	16.1	17.5	21.6	5.8	6.1	7.6
Memphis LMA	433.2	445.5	443.8	21.8	20.6	24.8	5.0	4.6	5.6
Nashville	518.5	520.9	517.2	21.0	19.6	23.9	4.0	3.8	4.6
Texas¹	8,138.5	8,265.9	8,188.2	680.6	515.2	621.8	8.4	6.2	7.6
Abilene	52.8	54.0	53.5	4.0	3.0	3.7	7.6	5.5	7.0
Amarillo	96.4	97.8	96.5	6.5	5.2	6.4	6.8	5.3	6.7
Austin	422.9	423.3	419.5	29.3	21.2	25.4	6.9	5.0	6.1
Beaumont-Port Arthur	160.3	161.6	161.4	19.1	14.1	17.6	11.9	8.7	10.9
Brazoria	80.4	82.7	82.3	7.7	5.4	6.6	9.6	6.5	8.0
Brownsville-Harlingen	96.9	97.5	93.0	16.3	10.5	12.4	16.8	10.7	13.3
Bryan-College Station	54.5	59.7	56.7	2.9	2.3	3.2	5.3	3.8	5.6
Corpus Christi	155.8	155.5	155.2	17.5	11.7	14.1	11.2	7.5	9.1
Dallas	1,426.8	1,447.4	1,429.8	91.3	70.3	84.6	6.4	4.9	5.9
El Paso	235.9	241.1	238.5	27.2	23.2	26.3	11.5	9.6	11.0
Fort Worth-Arlington	672.9	681.4	675.7	46.7	34.8	42.1	6.9	5.1	6.2
Galveston-Texas City	107.1	104.7	103.7	11.7	7.3	9.1	11.0	6.9	8.7
Houston	1,582.4	1,627.9	1,612.4	126.8	87.6	106.2	8.0	5.4	6.6
Killeen-Temple	91.8	95.2	94.8	7.5	6.8	8.1	8.2	7.1	8.5
Laredo	47.3	48.8	48.9	8.0	6.1	7.4	16.8	12.6	15.1
Longview-Marshall	78.2	78.7	78.8	8.1	6.0	7.6	10.3	7.6	9.6
Lubbock	110.6	115.4	112.1	6.7	6.0	6.1	6.0	5.2	5.4
McAllen-Edinburg-Mission	154.0	162.2	162.2	30.2	26.0	30.0	19.6	16.0	18.5
Midland	49.2	49.3	48.8	3.7	2.6	3.2	7.6	5.3	6.5
Odessa	53.5	52.5	52.3	4.5	3.5	4.6	8.5	6.7	8.8
San Angelo	44.3	45.1	44.4	2.7	2.4	3.0	6.2	5.4	6.8
San Antonio	595.4	606.3	600.1	50.0	40.2	48.0	8.4	6.6	8.0
Sherman-Denison	48.5	48.0	47.6	3.8	2.8	3.3	7.7	5.8	6.9
Texarkana	57.0	57.6	57.1	4.8	3.8	4.8	8.5	6.7	8.3
Tyler	74.4	74.5	73.8	6.2	4.8	5.6	8.4	6.5	7.6
Victoria	36.1	35.2	35.3	3.0	1.9	2.4	8.3	5.4	6.8
Waco	91.9	93.5	91.7	8.2	5.5	5.9	9.0	5.9	6.5
Wichita Falls	56.6	57.4	56.9	4.4	3.1	3.7	7.7	5.4	6.5
Utah	740.0	779.9	764.1	42.4	27.9	33.5	5.7	3.6	4.4
Provo-Orem	100.2	111.8	107.1	5.3	4.4	4.1	5.3	4.0	3.8
Salt Lake City-Ogden	486.6	508.7	499.5	26.3	16.5	20.4	5.4	3.3	4.1
Vermont	294.1	306.5	303.6	9.7	7.6	9.9	3.3	2.5	3.3
Burlington	73.2	76.1	73.6	1.6	1.5	1.6	2.2	2.0	2.2
Virginia	3,030.1	3,076.8	3,057.1	132.8	126.8	131.9	4.4	4.1	4.3
Charlottesville	66.4	68.2	67.8	2.0	1.9	2.0	3.0	2.8	3.0
Danville	52.0	52.3	52.2	4.1	3.5	3.5	8.0	6.7	6.8
Lynchburg	70.4	70.4	70.0	3.9	3.6	3.7	5.5	5.1	5.3
Norfolk-Virginia Beach-Newport News	596.4	605.9	595.6	28.1	29.2	29.6	4.7	4.8	5.0
Richmond-Petersburg	438.0	445.9	441.7	16.3	16.0	16.3	3.7	3.6	3.7
Roanoke	121.6	121.4	121.0	5.2	5.5	5.2	4.3	4.5	4.3
Washington	2,240.1	2,314.9	2,331.4	164.6	126.5	159.7	7.3	5.5	6.8
Seattle	1,006.1	1,053.8	1,058.6	54.3	41.7	52.6	5.4	4.0	5.0
West Virginia	738.0	733.5	736.4	86.7	60.4	61.6	11.8	8.2	8.4
Charleston	115.3	113.8	115.1	11.6	8.0	8.2	10.1	7.0	7.1
Huntington-Ashland	124.5	123.6	126.3	12.8	7.6	10.4	10.3	6.1	8.3
Parkersburg-Marietta	70.9	71.5	71.9	6.1	4.5	5.4	8.7	6.3	7.5
Wheeling	72.2	71.3	71.3	7.0	5.1	5.8	9.8	7.1	8.1
Wisconsin	2,488.1	2,593.8	2,570.3	165.1	96.5	119.3	6.6	3.7	4.6
Appleton-Oshkosh-Neenah	164.9	173.3	171.8	10.1	6.1	7.7	6.2	3.5	4.5
Eau Claire	70.2	74.1	72.6	4.9	2.8	3.5	7.0	3.8	4.8
Green Bay	104.5	107.9	107.5	7.0	3.8	4.8	6.7	3.6	4.5
Janesville-Beloit	71.4	74.6	74.2	5.0	2.5	3.1	7.0	3.3	4.2
Kenosha	56.5	56.9	55.3	3.7	2.0	3.4	6.6	3.6	6.2
La Crosse	54.4	59.2	58.4	3.0	1.9	2.4	5.6	3.2	4.0
Madison	214.7	226.1	222.3	9.2	5.8	6.3	4.3	2.5	2.8
Milwaukee	741.9	775.3	771.2	39.5	24.2	28.2	5.3	3.1	3.7
Racine	87.8	90.8	90.9	5.7	3.4	4.1	6.5	3.8	4.5
Wausau	60.0	61.8	62.1	4.7	2.3	3.2	7.8	3.7	5.2
Wyoming	228.9	231.8	227.1	20.3	16.2	18.2	8.9	7.0	8.0

¹ Data are obtained directly from the Current Population Survey. See the Explanatory Notes for State and Area Labor Force Data.

² Not available.

^p = preliminary.

NOTE: Data refer to place of residence. Estimates for 1988 have been

benchmarked to 1988 Current Population Survey annual averages. Except in the 11 States designated by footnote 1, estimates for 1989 are provisional and will be revised when new benchmark information becomes available. Area definitions are published annually in the May issue of this publication.

Explanatory Notes

Introduction

The statistics in this periodical are compiled from two major sources: (1) Household interviews, and (2) reports from employers.

Data based on household interviews are obtained from a sample survey of the population 16 years of age and over. The survey is conducted each month by the Bureau of the Census for the Bureau of Labor Statistics and provides comprehensive data on the labor force, the employed, and the unemployed, including such characteristics as age, sex, race, family relationship, marital status, occupation, and industry attachment. The survey also provides data on the characteristics and past work experience of those not in the labor force. The information is collected by trained interviewers from a sample of over about 55,800 households, representing 729 areas in 1,973 counties and independent cities, with coverage in 50 States and the District of Columbia. The data collected are based on the activity or status reported for the calendar week including the 12th of the month.

Data based on establishment records are compiled each month from mail questionnaires by the Bureau of Labor Statistics, in cooperation with State agencies. The establishment survey is designed to provide industry information on nonagricultural wage and salary employment, average weekly hours, average hourly earnings, and average weekly earnings for the Nation, States, and metropolitan areas. The employment, hours, and earnings series are currently based on payroll reports from a sample of over 300,000 establishments employing over 38 million nonagricultural wage and salary workers. The data relate to all workers, full or part time, who received pay during the payroll period which includes the 12th day of the month.

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

The household and establishment data supplement one another, each providing significant types of information that the other cannot suitably supply. Population characteristics, for example, are readily obtained only from the household survey whereas detailed industrial classifications can be reliably derived only from establishment reports.

Data from these two sources differ from each other because of differences in definitions and coverage, sources of information, methods of collection, and estimating procedures. Sampling variability and response errors are additional reasons for discrepancies. The major factors which

have a differential effect on the levels and trends of the two series are as follows.

Employment

Coverage. The household survey definition of employment comprises wage and salary workers (including domestics and other private household workers), self-employed persons, unpaid workers who worked 15 hours or more during the survey week in family-operated enterprises, and members of the Armed Forces stationed in the United States. Civilian employment in both agricultural and nonagricultural industries is included. The payroll survey covers only wage and salary employees on the payrolls of nonagricultural establishments.

Multiple jobholding. The household survey provides information on the work status of the population without duplication, since each person is classified as employed, unemployed, or not in the labor force. Employed persons holding more than one job are counted only once and are classified according to the job at which they worked the greatest number of hours during the survey week. In the figures based on establishment reports, persons who worked in more than one establishment during the reporting period are counted each time their names appear on payrolls.

Unpaid absences from jobs. The household survey includes among the employed all civilians who had jobs but were not at work during the survey week—that is, were not working but had jobs from which they were temporarily absent because of illness, bad weather, vacation, labor-management disputes, or because they were taking time off for various other reasons, even if they were not paid by their employers for the time off. In the figures based on payroll reports, persons on leave paid for by the company are included, but not those on leave without pay for the entire payroll period.

For a comprehensive discussion of the differences between household and establishment survey employment data, see Gloria P. Green's article, "Comparing Employment Estimates From Household and Payroll Surveys," *Monthly Labor Review*, December 1969.

Hours of work

The household survey measures hours actually worked whereas the payroll survey measures hours paid for by

employers. In the household survey data, all persons with a job but not at work are excluded from the hours distributions and the computations of average hours. In the payroll survey, production or nonsupervisory employees on paid vacation, paid holiday, or paid sick leave are included and assigned the number of hours for which they were paid during the reporting period.

Earnings

The household survey measures median earnings of wage and salary workers in all occupations and industries in both the private and public sectors. Data refer to the usual earnings received from the worker's sole or primary job. Data from the establishment survey generally refer to average earnings of production and related workers in mining and manufacturing, construction workers in construction, and nonsupervisory employees in private service-producing industries. For a comprehensive discussion of the household survey earnings series, see *Technical Description of the Quarterly Data on Weekly Earnings from the Current Population Survey*, BLS Bulletin 2113.

COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

Unemployment insurance data. The unemployed total from the household survey includes all persons who did not have a job at all during the survey week and were looking for work or were waiting to be called back to a job from which they had been laid off, whether or not they were eligible for unemployment insurance. Figures on unemployment insurance claims, prepared by the Employment and Training Administration of the Department of Labor, exclude persons who have exhausted their benefit rights, new workers who have not earned rights to unemployment insurance, and persons losing jobs not covered by unemployment insurance systems (some workers in agriculture, domestic services, and religious organizations, and self-employed and unpaid family workers). Beginning in January 1978, coverage was extended to include domestic workers whose employers paid \$1,000 or more in wages in any calendar quarter, agricultural employees whose employers engaged 10 or more workers in 20 weeks or paid a total of \$20,000 or more in wages in any calendar quarter, and almost all State and local government employees.

In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used in the household survey. For example, persons with a job but not at work and persons working only a few hours during the week are sometimes eligible for unemployment compensation but are classified as employed rather than

unemployed in the household survey.

For an examination of the similarities and differences between State insured unemployment and total unemployment, see "Measuring Total and State Insured Unemployment" by Gloria P. Green in the June 1971 issue of the *Monthly Labor Review*.

Agricultural employment estimates of the Department of Agriculture. The principal differences in coverage are the inclusion of persons under 16 in the Economics and Statistics Service series and the treatment of dual jobholders, who are counted more than once if they work on more than one farm during the reporting period. There are also wide differences in sampling techniques and collecting and estimating methods which cannot be readily measured in terms of their impact on differences in the levels and trends of the two series.

COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

Statistics on manufactures and business, Bureau of the Census. BLS establishment statistics on employment differ from employment counts derived by the Bureau of Census from its censuses or sample surveys of manufacturing and business establishments. The major reasons for noncomparability are different treatment of business units considered parts of an establishment, such as central administrative offices and auxiliary units, the industrial classification of establishments, and different reporting patterns by multiunit companies. There are also differences in the scope of the industries covered, e.g., the Census of Business excludes professional services, public utilities, and financial establishments, whereas these are included in the BLS statistics.

County Business Patterns. Data in *County Business Patterns* (CBP), published by the Bureau of the Census, U.S. Department of Commerce, differ from BLS establishment statistics in the treatment of central administrative offices and auxiliary units. Differences may also arise because of industrial classification and reporting practices. In addition, CBP excludes interstate railroads and government, and coverage is incomplete for some of the nonprofit activities.

Employment covered by State unemployment insurance programs. Most nonagricultural wage and salary workers are covered by the unemployment insurance programs. However, certain activities, such as interstate railroads, parochial schools, and churches, are not covered by unemployment insurance whereas these are included in the BLS establishment statistics.

Household Data (A tables)

COLLECTION AND COVERAGE

Statistics on the employment status of the population, the personal, occupational, and other characteristics of the employed, the unemployed, and persons not in the labor force, and related data are compiled for the BLS by the Bureau of the Census in its Current Population Survey (CPS). A detailed description of this survey appears in *Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Survey*, BLS Report 463. Historical national data are published in *Labor Force Statistics Derived From the Current Population Survey: A Databook*, BLS Bulletin 2096.

These monthly surveys of the population are conducted through a scientifically selected sample designed to represent the civilian noninstitutional population. Respondents are interviewed to obtain information about the employment status of each member of the household 16 years of age and over. The inquiry relates to activity or status during the calendar week, Sunday through Saturday, which includes the 12th of the month. This is known as the survey week. Actual field interviewing is conducted in the following week.

Inmates of institutions and persons under 16 years of age are not covered in the regular monthly enumerations, and are excluded from the population and labor force statistics shown in this publication. Data on the members of the Armed Forces stationed in the United States, who are included as part of the categories "noninstitutional population," "labor force," and "total employment," are obtained from the Department of Defense.

Each month about 55,800 occupied units are eligible for interview. About 2,600 of these households are visited but interviews are not obtained because the occupants are not at home after repeated calls or are unavailable for other reasons. This represents a noninterview rate for the survey of between 4 and 5 percent. In addition to the 55,800 occupied units, there are 11,500 sample units in an average month which are visited but found to be vacant or otherwise not enumerated. Part of the sample is changed each month. The rotation plan provides for three-fourths of the sample to be common from one month to the next, and one-half to be common with the same month a year earlier.

CONCEPTS AND DEFINITIONS

The concepts and definitions underlying labor force data have been modified, but not substantially altered, since the inception of the survey in 1940; those used since 1967 are as follows:

Employed persons are (a) all civilians who, during the survey week, did any work at all as paid employees, in their own business, profession, or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family; and (b) all those who

were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management disputes, or personal reasons, whether they were paid for the time off or were seeking other jobs. Members of the Armed Forces stationed in the United States are also included in the employed total.

Each employed person is counted only once. Those who held more than one job are counted in the job at which they worked the greatest number of hours during the survey week.

Included in the total are employed citizens of foreign countries who are temporarily in the United States but not living on the premises of an embassy. Excluded are persons whose only activity consisted of work around the house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and similar organizations.

Unemployed persons are all civilians who had no employment during the survey week, were available for work, except for temporary illness, and had made specific efforts to find employment some time during the prior 4 weeks. Persons who were waiting to be recalled to a job from which they had been laid off or were waiting to report to a new job within 30 days need not be looking for work to be classified as unemployed.

Duration of unemployment represents the length of time (through the current survey week) during which persons classified as unemployed had been continuously looking for work. For persons on layoff, duration of unemployment represents the number of full weeks since the termination of their most recent employment. A period of 2 weeks or more during which a person was employed or ceased looking for work is considered to break the continuity of the present period of seeking work. Measurements of mean and median duration are computed from a distribution of single weeks of unemployment.

Unemployment is also categorized according to the status of individuals at the time they began to look for work. The reasons for unemployment are divided into four major groups. (1) *Job losers* are persons whose employment ended involuntarily who immediately began looking for work, and persons on layoff. (2) *Job leavers* are persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work. (3) *Reentrants* are persons who previously worked at a full-time job lasting 2 weeks or longer but were out of the labor force prior to beginning to look for work. (4) *New entrants* are persons who never worked at a full-time job lasting 2 weeks or longer. Each of these four categories of the unemployed may be expressed as an unemployment rate or proportion of the entire civilian labor force; the sum of the four rates thus equals the unemployment rate for all civilian workers.

Jobseekers are all unemployed persons who made

specific efforts to find a job sometime during the 4-week period preceding the survey week. Jobseekers do not include those persons unemployed because they (a) were waiting to be called back to a job from which they had been laid off or (b) were waiting to report to a new job within 30 days. Jobseekers are grouped by the methods used to seek work, including going to a public or private employment agency or to an employer directly, seeking assistance from friends or relatives, placing or answering ads, or utilizing some other method. Examples of the "other" category include being on a union or professional register, obtaining assistance from a community organization, or waiting at a designated labor pickup point.

The *civilian labor force* comprises all civilians classified as employed or unemployed in accordance with the criteria described above. The *labor force* also includes members of the Armed Forces stationed in the United States.

The *overall unemployment rate* represents the number unemployed as a percent of the labor force, including members of the Armed Forces stationed in the United States.

The *unemployment rate for all civilian workers* represents the number unemployed as a percent of the civilian labor force. This measure can also be computed for groups within the labor force classified by sex, age, race, Hispanic origin, marital status, etc.

Participation rates represent the proportion of the population that is in the labor force. The *labor force participation rate* is the ratio of the labor force, including the resident Armed Forces, to the noninstitutional population. The *civilian labor force participation rate* is the ratio of the civilian labor force to the civilian noninstitutional population. Civilian labor force participation rates are usually published for sex-age groups, often cross-classified by other demographic characteristics such as race and educational attainment.

Employment-population ratios represent the proportion of the noninstitutional population that is employed. The *total employment-population ratio* is total employment, including the resident Armed Forces, as a percent of the noninstitutional population. The *civilian employment-population ratio* is the percentage of all employed civilians in the civilian noninstitutional population.

Not in the labor force includes all persons who are not classified as employed or unemployed. These persons are further classified as engaged in own home housework, in school, unable to work because of long-term physical or mental illness, retired, and other. The "other" group includes individuals reported as too old or temporarily unable to work, the voluntarily idle, seasonal workers for whom the survey week fell in an off season and who were not reported as looking for work, and persons who did not look for work because they believed that no jobs were available in the area or that no jobs were available for which they could qualify—discouraged workers. Persons doing only incidental, unpaid family work (less than 15 hours in the specified week) are also classified as not in labor force.

For persons not in the labor force, data on previous work experience, intentions to seek work, desire for a job at the

time of interview, and reasons for not looking for work are published on a quarterly basis. As of January 1970, the detailed questions for persons not in the labor force are asked only in those households that are in the fourth and eighth months of the sample, i.e., the "outgoing" groups, those which had been in the sample for 3 previous months and would not be in for the subsequent month. Between 1967 and 1969, these questions were asked in those households entering the sample for the first time and those returning for the second 4 months of interviewing, i.e., the "incoming" groups.

Occupation, industry, and class of worker for the employed apply to the job held in the survey week. Persons with two or more jobs are classified in the job at which they worked the greatest number of hours during the survey week. The unemployed are classified according to their last full-time job lasting 2 weeks or more. The classifications of occupations and industries used in data derived from the CPS are defined as in the 1980 census. Information on the detailed categories included in these groups is available upon request.

The class-of-worker breakdown specifies wage and salary workers subdivided into private and government workers; self-employed workers; and unpaid family workers. Wage and salary workers receive wages, salary, commission, tips, or pay in kind from a private employer or from a government unit. Self-employed persons are those who work for profit or fees in their own business, profession, or trade, or operate a farm. Unpaid family workers are persons working without pay for 15 hours a week or more on a farm or in a business operated by a member of the household to whom they are related by birth or marriage.

Hours of work statistics relate to the actual number of hours worked during the survey week. For example, persons who normally work 40 hours a week but were off on the Columbus Day holiday would be reported as working 32 hours even though they were paid for the holiday. For persons working in more than one job, the figures relate to the number of hours worked in all jobs during the week; all the hours are credited to the major job.

Persons who worked 35 hours or more during the survey week are designated as working *full time*. Persons who worked between 1 and 34 hours are designated as working *part time*. Part-time workers are classified by their usual status at their present job (either full or part time) and by their reason for working part time during the survey week (economic or noneconomic reasons). Economic reasons include: Slack work, material shortages, repairs to plant or equipment, start or termination of a job during the week, and inability to find full-time work. Noneconomic reasons include: Labor dispute, bad weather, own illness, vacation, demands of home or school, no desire for full-time work, and full-time worker only during peak season. Persons on full-time schedules include, in addition to those working 35 hours or more, those who worked from 1 to 34 hours for noneconomic reasons and usually work full time.

Data on employment "at work" differ from data on total employment because they exclude persons in the zero-hours-

worked category, "with a job but not at work." These are persons who were absent from their jobs for the entire week for such reasons as bad weather, vacation, illness, or involvement in a labor dispute.

Employed persons are also categorized into full- and part-time groupings based primarily on their *usual status*. In this context, *full-time workers* are those who (a) worked 35 hours or more during the survey week, (b) worked 1 to 34 hours for economic or noneconomic reasons, but usually work full time, and (c) were with a job but not at work and usually work full time. Similarly, *part-time workers* are those who (a) voluntarily worked 1 to 34 hours during the survey week, (b) worked 1 to 34 hours for economic reasons, but usually work part time, i.e., persons who could only find part-time work; and (c) were with a job but not at work and usually work part time.

Unemployment rates for full- and part-time workers are calculated using the concepts of the *full- and part-time labor force* which are based on the type of job—full or part-time—that persons—whether working or unemployed—report that they want. The "full-time labor force" includes all persons working part time but who desire full-time work, that is, working part time for economic reasons. Thus, this category consists of persons on full-time schedules; all persons involuntarily working part time regardless of their usual status; and unemployed persons seeking full-time jobs. The "part-time labor force" consists of persons working part time voluntarily and unemployed persons seeking part-time work. Employed persons with a job but not at work are distributed according to whether they usually work on full-time or voluntary part-time schedules.

Labor force time lost is a measure of aggregate hours lost to the economy through unemployment and involuntary part-time employment and is expressed as a percent of potentially available aggregate hours. It is computed by assuming that; (1) unemployed persons looking for full-time work lost an average of 37.5 hours, (2) those looking for part-time work lost the average number of hours actually worked by voluntary part-time workers during the survey week, and (3) persons on part time for economic reasons lost the difference between 37.5 hours and the actual number of hours they worked.

White, black, and other are terms used to describe the race of workers. Included in the "other" group are American Indians, Alaskan Natives, and Asians and Pacific Islanders. All tables in this publication which contain racial data, with the exception of A-5 and its annual counterpart, present data for the black population group. Because of their relatively small sample size, data for "other" races are not published. In the enumeration process, race is determined by the household respondent.

Hispanic origin refers to persons who identified themselves in the enumeration process as Mexican, Puerto Rican living on the mainland, Cuban, Central or South American, or of other Hispanic origin or descent. Persons of Hispanic ori-

gin may be of any race; thus they are included in both the white and black population groups.

Vietnam-era veterans are those who served in the Armed Forces of the United States between August 5, 1964, and May 7, 1975. Data are limited to men in the civilian noninstitutional population; i.e., veterans in institutions and women are excluded. Nonveterans are men who never served in the Armed Forces.

Usual weekly earnings data are provided from responses to the question "How much does...USUALLY earn per week at this job before deductions?" Included are any overtime pay, commissions, or tips usually received. The term "usual" is as perceived by the respondent. If the respondent asks for a definition of usual, interviewers are instructed to define the term as more than half the weeks worked during the past 4 or 5 months. Data refer to wage and salary workers (excluding the incorporated self-employed) who usually work full time on their sole or primary job.

Median earnings indicate the value which divides the earnings distribution into two equal parts, one part having values above the median and the other having values below the median. The medians as shown in this publication are calculated by linear interpolation of the \$50 centered interval within which each median falls.

Data expressed in constant dollars are deflated by the Consumer Price Index for All Urban Consumers (CPI-U).

Single, never married; married, spouse present; and other marital status are terms used to define the marital status of individuals at the time of interview. Married, spouse present, applies to husband and wife if both were reported as members of the same household even though one may be temporarily absent on business, vacation, on a visit, in a hospital, etc. Other marital status applies to persons who are married, spouse absent; widowed; or divorced. Married, spouse absent, includes persons who are separated because of marital discord, as well as persons who are living apart because either the husband or the wife was employed and living away from home, serving in the Armed Forces, or had a different place of residence for any reason.

A *household* consists of all persons—related family members and all unrelated persons—who occupy a housing unit. A house, an apartment, a group of rooms, or a single room is regarded as a housing unit when occupied or intended for occupancy as separate living quarters.

A *householder* is the person (or one of the persons) in whose name the housing unit is owned or rented. The term is never applied to either husbands or wives in married-couple families but relates only to persons in families maintained by either men or women without a spouse.

Family refers to a group of two or more persons residing together who are related by birth, marriage, or adoption; all such persons are considered as members of one family even though they may include a related subfamily, that is, a married couple or a parent-child group related by birth or marriage to the householder and sharing the living quarters. The

count of families used in this publication excludes unrelated subfamilies such as lodgers, guests, or resident employees living in a household but not related to the householder. Families are classified either as married-couple families or as families maintained by women or men without spouses. A family maintained by a woman or a man is one in which the householder is either single, widowed, divorced, or married, spouse absent. Data on the earnings of families exclude all those in which there is no wage or salary earner or in which the husband, wife, or other persons maintaining the family is either self-employed or in the Armed Forces.

Poverty areas are defined as those census tracts in tracted areas, and Minor Civil Division's (MCD's) in untraced areas, in which 20 percent or more of the noninstitutional residents were poor according to the 1980 decennial census. Persons were classified as poor or nonpoor by comparing money income to a series of poverty income thresholds which vary by family size and number of children. While poverty areas have a substantial concentration of low-income residents, many poor persons live outside these areas, and conversely, the areas include many people who are not poor.

The *metropolitan areas* classification consists of the total of all Metropolitan Statistical Areas (MSA's) as defined by the Office of Management and Budget (OMB) as of June 30, 1983. These definitions differ from those used in the 1980 decennial census. A detailed discussion of the MSA definitions as well as changes in terminology can be found in "The New Metropolitan Area Definitions" section of the *1980 Census of Population Supplementary Report on Metropolitan Statistical Areas*, PC-S1-18. Nonmetropolitan areas consist of the total territory outside MSA's.

The *urban population*, as defined for the 1980 census, comprises all persons living in urbanized areas and in places of 2,500 or more inhabitants outside urbanized areas. More specifically, the urban population consists of all persons living in (1) places of 2,500 or more inhabitants incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the New England States, New York, and Wisconsin), but excluding those persons living in the rural portions of extended cities; and (2) other territories, incorporated and unincorporated, included in urbanized areas. The population not classified as urban constitutes the rural population.

HISTORICAL COMPARABILITY

Change in lower age limit

The lower age limit for official statistics on the labor force, employment, and unemployment was raised from 14 to 16 years of age in January 1967. Insofar as possible, historical series have been revised to provide consistent information based on the population 16 years and over. For a detailed discussion of this and other definitional changes introduced at that time, including estimates of their effect on the various series, see "New Definitions for Employment and Unemployment," *Employment and Earnings and Monthly*

Report on the Labor Force, February 1967.

Noncomparability of labor force levels

In addition to the changes introduced in 1967, there are several other periods of noncomparability in the labor force data: (1) Beginning in 1953, as a result of introducing data from the 1950 census into the estimating procedures, population levels were raised by about 600,000; labor force, total employment, and agricultural employment were increased by about 350,000, primarily affecting the figures for totals and men; other categories were relatively unaffected. (2) Beginning in 1960, the inclusion of Alaska and Hawaii resulted in an increase of about 500,000 in the population and about 300,000 in the labor force. Four-fifths of this increase was in nonagricultural employment; other labor force categories were not appreciably affected. (3) Beginning in 1962, the introduction of data from the 1960 census reduced the population by about 50,000 and labor force and employment by about 200,000; unemployment totals were virtually unchanged. (4) Beginning in 1972, information from the 1970 census was introduced into the estimation procedures, increasing the population by about 800,000; labor force and employment totals were raised by a little more than 300,000; and unemployment levels and rates were essentially unchanged. (5) A subsequent population adjustment based on the 1970 census was introduced in March 1973. This adjustment, which affected the white and black-and-other groups but had little effect on totals, resulted in the reduction of nearly 300,000 in the white population and an increase of the same magnitude in the black-and-other population. Civilian labor force and total employment figures were affected to a lesser degree; the white labor force was reduced by 150,000, and the black-and-other labor force rose by about 210,000. Unemployment levels and rates were not significantly affected.

In addition, beginning in January 1974, the methodology used to prepare independent estimates of the civilian noninstitutional population was modified to an inflation-deflation approach. This change in the derivation of the estimates had its greatest impact on estimates of 20- to 24-year-old men—particularly those of the black-and-other population—but had little effect on estimates of the total population 16 years and over. Additional information on the adjustment procedure appears in "CPS Population Controls Derived from Inflation-Deflation Method of Estimation", in the February 1974 issue of *Employment and Earnings*.

Effective in July 1975, as a result of the immigration of Vietnamese refugees into the United States, the total and black-and-other independent population controls for persons 16 years and over were adjusted upward by 76,000—30,000 men and 46,000 women. The addition of the refugees increased the black-and-other population by less than 1 percent in any age-sex group, and all of the changes were in the other population.

Beginning in January 1978, the introduction of an expansion in the sample and revisions in the estimation procedures resulted in an increase of about 250,000 in the civilian labor

force and employment totals; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978" in the February 1978 issue of *Employment and Earnings*.

Beginning in October 1978, the race of the individual was determined by the household respondent for the incoming rotation group households, rather than by the interviewer as before. The purpose of this change was to provide more accurate estimates of characteristics by race. Thus, in October 1978, one-eighth of the sample households had race determined by the household respondent and seven-eighths of the sample households had race determined by interviewer observation. It was not until January 1980 that the entire sample had race determined by the household respondent. The new procedure had no significant effect on the estimates.

Beginning in January 1979, the first-stage ratio estimation method was changed in the CPS estimation procedure. Differences between the old and new procedures existed only for metropolitan and nonmetropolitan area estimates, not for the total United States. The reasoning behind the change and an indication of the differences appear in "Revisions in the Current Population Survey in January 1979" in the February 1979 issue of *Employment and Earnings*.

Beginning in January 1982, the second-stage ratio adjustment methodology was changed in the CPS estimation procedure. The purpose of the change and an indication of its effect on national estimates of labor force characteristics appear in "Revisions in the Current Population Survey Beginning in January 1982" in the February 1982 issue of *Employment and Earnings*. In addition, current population estimates used in the second-stage estimation procedure were derived from information obtained from the 1980 census, rather than the 1970 census. This change caused substantial increases in total population and estimates of persons in all labor force categories. Rates for labor force characteristics, however, remained virtually unchanged. Some 30,000 labor force series were adjusted back to 1970 to avoid major breaks in series. The adjustment procedure used is also described in the February 1982 article cited above. The revisions did not, however, smooth out the breaks in series occurring between 1972 and 1979 that are described above, and data users should make allowances for them in making certain data comparisons.

Beginning in January 1983, the first-stage ratio adjustment methodology was updated to account for results obtained from the 1980 census. The purpose of the change and an indication of its effect on national estimates of labor force characteristics appear in "Revisions in the Current Population Survey Beginning in January 1983" in the February 1983 issue of *Employment and Earnings*. There were only slight differences between the old and new procedures in estimates of levels for the various labor force characteristics and virtually no differences in estimates of participation rates.

Beginning in January 1985, most of the steps of the CPS estimation procedure—the noninterview adjustment, the first and second-stage ratio adjustments, and the composite

estimator—were revised. These procedures are described in the Estimating Methods section. A description of the changes and an indication of their effect on national estimates of labor force characteristics appear in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1985" in the February 1985 issue of this publication. Overall, the revisions had only a slight effect on most estimates. The greatest impact was on estimates of persons of Hispanic origin. Major estimates were revised back to January 1980.

Beginning in January 1986, the population controls used in the second-stage ratio adjustment methodology were revised to reflect an explicit estimate of the number of undocumented immigrants (largely Hispanic) since 1980 and an improved estimate of the number of emigrants among legal foreign-born residents for the same time period. As a result, the total civilian population and labor force estimates were raised by nearly 400,000; civilian employment was increased by about 350,000. The Hispanic-origin civilian population and labor force estimates were raised by about 425,000 and 305,000, respectively, and civilian employment by 270,000. Overall and subgroup unemployment levels and rates were not significantly affected. Because of the magnitude of the adjustments for Hispanics, data have been revised back to January 1980 to the extent possible. An explanation of the changes and their effect on estimates of labor force characteristics appear in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986" in the February 1986 issue of this publication.

Changes in the occupational and industrial classification system

Beginning in 1971, the comparability of occupational employment data was affected as a result of changes in the occupational classification system for the 1970 census that were introduced into the CPS. Comparability was further affected in December 1971, when a question relating to major activity or duties was added to the monthly CPS questionnaire in order to determine more precisely the occupational classification of individuals. As a result of these changes, meaningful comparisons of occupational employment levels could not be made between 1971-72 and prior years nor between those 2 years. Unemployment rates were not significantly affected. For a further explanation of the changes in the occupational classification system, see "Revisions in Occupational Classifications for 1971" and "Revisions in the Current Population Survey" in the February 1971 and February 1972 issues, respectively, of *Employment and Earnings*.

Beginning in January 1983, the occupational and industrial classification systems used in the 1980 census were introduced into the CPS. These systems differ from those developed for the 1970 census, which were used in the CPS from January 1971 through December 1982.

The 1980 census occupational classification system evolved

from the Standard Occupational Classification system (SOC). While the CPS occupational data are now comparable with other data sources, the new system is so radically different in concepts and nomenclature from the 1970 system that comparisons of historical data are not possible without major adjustments. For example, the 1980 major group "sales occupations" is substantially larger than the 1970 category "sales workers". Major additions include "cashiers" from "clerical workers" and some self-employed proprietors in retail trade establishments from "managers and administrators, except farm."

The industrial classification system used in the 1980 census is based on the 1972 Standard Industrial Classification system (SIC), as modified in 1977. The adoption of the new system had a much less adverse effect on historical comparability than did the new occupational system. The most notable changes from the 1970 system were the transfer of farm equipment stores from "retail" to "wholesale" trade, postal service from "public administration" to "transportation", and some interchange between "professional and related services" and "public administration."

Additional information on the 1980 census occupational and industrial classification systems appears in "Revisions in the Current Population Survey Beginning in January 1983" in the February 1983 issue of *Employment and Earnings*.

Changes in the sample design

Since the inception of the survey, there have been various changes in the design of the CPS sample. Most of these changes were made in order to improve the efficiency of the sample design and/or to increase the reliability of the sample estimates.

One major change made after every decennial census is to change the sample design to make use of the recently collected census materials. Also, the number of sample areas and the number of sample persons are increased occasionally. In 1953, the current rotation plan was introduced, in which a sample unit is interviewed for 4 months, leaves the sample for 8 months, and then returns to the sample for another 4 months. When Alaska and Hawaii achieved statehood, three more sample areas were added to account for the population in these States. After the 1960 census, selection of a major portion of the sample from census address lists was begun, though a portion of the sample is still collected using area sampling. Following the 1970 census, the ultimate sampling unit was changed from a noncontiguous cluster of six housing units to a usually contiguous cluster of four housing units. In January 1978, a supplemental sample of 9,000 housing units, selected in 24 States and the District of Columbia and designed to provide more reliable annual average estimates for States, was incorporated into the design. In October 1978, a coverage improvement sample, composed of approximately 450 sample household units which represented 237,000 occupied mobile homes and 600,000 new construction housing units, was included in computing the estimates in order to provide coverage of mo-

mobile homes and new construction units that previously had no chance for selection in the CPS sample selected from the 1970 census frame. In January 1980, another supplemental sample of 9,000 households selected in 32 States and the District of Columbia was added to the existing sample. A sample reduction of about 6,000 units was implemented in May 1981. Beginning in January 1982, the sample was expanded by 100 households to provide additional coverage in counties added to SMSA's, which were redefined in 1973.

Beginning in 1985, a new State-based CPS sample was selected based on 1980 census information rather than 1970 census information. The selection of new sample areas provided an opportunity to improve the efficiency of the sample design. Sample areas chosen to replace incoming sample areas account for only 10 percent of the national estimate. The new CPS sample has resulted in increased reliability for State estimates with a slightly reduced sample size. Sample households are chosen from 729 sample areas, which represent 1,973 geographic areas in the United States. This current number of sample areas is not completely comparable to the old number of sample areas since many of the sample areas have been redefined. (See pp. 7-10 of the May 1984 issue of *Employment and Earnings*, for an overview of these new definitions and the introduction of the new sample.) A sample reduction of about 4,000 households was implemented in April 1988.

Table A provides a description of some aspects of the CPS sample design in use during the different data collection periods. A more detailed account of the history of the CPS sample design appears in the *Current Population Survey: Design and Methodology*, Technical Paper No. 40, Bureau of the Census, or *Concepts and Methods Used in Labor Force Statistics Derived From the Current Population Survey*, Report 463, Bureau of Labor Statistics.

ESTIMATING METHODS

Under the estimating methods used in the CPS, all of the results for a given month become available simultaneously and are based on returns from the entire panel of respondents. The estimation procedure involves weighting the data from each sample person by the inverse of the probability of the person being in the sample. This gives a rough measure of the number of actual persons that the sample person represents. Beginning in 1985, almost all sample persons within the same State have the same probability of selection. These estimates are then adjusted for noninterviews, and the ratio estimation procedure is applied.

1. *Noninterview adjustment.* The weights for all interviewed households are adjusted to the extent needed to account for occupied sample households for which no information was obtained because of absence, impassable roads, refusals, or unavailability of the respondents for other reasons. This noninterview adjustment is made separately by combinations of similar sample areas that are not necessarily contained within a State. Similarity of sample areas is based on Metropolitan Statistical Area (MSA) status and size. Within

Table A. Characteristics of the CPS sample, 1947 to date

Time period	Number of sample areas	Households eligible		Households visited but not eligible
		Interviewed	Not interviewed	
Aug. 1947 to Jan. 1954	68	21,000	500-1,000	3,000-3,500
Feb. 1954 to Apr. 1956	230	21,000	500-1,000	3,000-3,500
May 1956 to Dec. 1959	1330	33,500	1,500	6,000
Jan. 1960 to Feb. 1963	2333	33,500	1,500	6,000
Mar. 1963 to Dec. 1966	357	33,500	1,500	6,000
Jan. 1967 to July 1971	449	48,000	2,000	8,500
Aug. 1971 to July 1972	449	45,000	2,000	8,000
Aug. 1972 to Dec. 1977	461	45,000	2,000	8,000
Jan. 1978 to Dec. 1979	614	53,500	2,500	10,000
Jan. 1980 to Apr. 1981	629	62,200	2,800	12,000
May 1981 to Dec. 1984	629	57,800	2,500	11,000
Jan. 1985 to Mar. 1988	729	57,000	2,500	11,000
Apr. 1988 to present	729	53,200	2,600	11,500

¹ Beginning in May 1956, these areas were chosen to provide coverage in each State and the District of Columbia

² Three sample areas were added in 1960 to represent Alaska and Hawaii after statehood.

each combination of sample areas there is a further breakdown by residence. MSA sample areas are categorized by "central city" and "balance of the MSA". Residence categories of non-MSA areas are "urban" and "rural". The proportion of sample households not interviewed varies from 4 to 5 percent, depending on weather, vacation, etc.

2. *Ratio estimates.* The distribution of the population selected for the sample may differ somewhat, by chance, from that of the population as a whole in such characteristics as age, race, sex, and residence. Since these characteristics are closely correlated with labor force participation and other principal measurements made from the sample, the survey estimates can be substantially improved when weighted appropriately by the known distribution of these population characteristics. This is accomplished through two stages of ratio estimates as follows:

a. *First-stage ratio estimate.* In the CPS, a portion of the 729 sample areas is chosen to represent other areas not in the sample; the remainder of the sample areas represent only themselves. The first-stage ratio estimation procedure was designed to reduce the portion of the variance resulting from requiring sample areas to represent nonsample areas. Therefore, this procedure is not applied to sample areas which represent only themselves. The adjustment is made at the State level for each of the 43 States which contain nonsample areas by race cells of black and non-black. The procedure corrects for differences that existed in each cell at the time of the 1980 census between the race distribution of the population in sample areas and the known race distribution of the State.

b. *Second-stage ratio estimate.* In this stage, the sample proportions of persons in specific categories are adjusted to the distribution of independent current estimates of the civilian noninstitutional population in the same categories. The second-stage ratio adjustment, which is performed to

further reduce variability of the estimates and to correct to some extent for CPS undercoverage relative to the decennial census, is carried out in three steps. In the first step, the sample estimates are adjusted within each State and the District of Columbia to an independent control for the population 16 years and over. The second step involves an adjustment by Hispanic origin to a national estimate for eight age-sex categories by Hispanic and non-Hispanic. In the third step, a national adjustment is made by the race categories of white, black, and other races to independent estimates by age and sex. The white and black categories contain 32 age-sex groups each; the other races category has 6 age-sex cells. The entire second-stage adjustment procedure is iterated six times, each time beginning at the weights developed the previous time. This ensures that the sample estimates of the population for both State and national age-sex-race-origin categories will be virtually equal to the independent population control totals. This second-stage adjustment procedure incorporates changes instituted in January 1985. The nature and effect of these changes are discussed in detail in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1985" in the February 1985 issue of *Employment and Earnings*.

The controls by State for the civilian noninstitutional population 16 years and over are an arithmetic extrapolation of the trend in the growth of this segment of the population using the two most recent July 1 estimates, adjusted as a last step to a current estimate of the U.S. population of this group. State estimates by age for July 1 are published annually in *Current Population Reports, Series P-25*. For a description of the methodology used in developing the State total, see Report 957 of that series. A description of the age estimates methodology is available in Report 1010 of that series.

Prior to January 1985, there was no separate control for Hispanics in the second-stage ratio procedure. These Hispanic controls are prepared by carrying forward the 1980 census count for Hispanics by adding estimated Hispanic births and immigrants and subtracting estimated Hispanic deaths

and emigrants to yield an estimate of the Hispanic population by age and sex.

During the period from January 1982 to December 1984, the "inflation-deflation" method was temporarily discontinued in the preparation of the independent national controls used for the age-sex-race groups in the third step of the second-stage ratio estimation procedure. These controls were prepared by carrying forward the 1980 census data after taking account of subsequent aging of the population, births, deaths, and net migration and then subtracting the estimate for the institutional population and Armed Forces. Beginning in January 1985, the "inflation-deflation" method of deriving independent population controls was reintroduced into the CPS estimation procedure. With the "inflation-deflation" method, the independent controls are prepared by inflating the 1980 census counts to include estimated undercounts by age, sex and race, aging this population forward to each subsequent month and later age by adding births and net migration, and subtracting deaths. These post-censal population estimates are then deflated to census level to reflect the pattern of net undercount in the most recent census by age, sex, and race. Because an estimate of undercount is first added and then subtracted, the size of each race-sex group is unaffected by the "inflation-deflation" method. Similarly, the final estimate is affected only by the age structure of the undercount, but not the level. This feature of the method is important since the exact amount of undercount in the 1980 census remains unknown.

Data on births and deaths between April 1, 1980, and the estimate date are based on tabulations of vital statistics for the resident population made by the National Center for Health Statistics and data on deaths of military personnel overseas from the Department of Defense. Estimates of net civilian immigration are based on data provided by the Immigration and Naturalization Service, the Department of Defense, the Office of Personnel Management, and the Puerto Rico Planning Board. The civilian noninstitutional population is derived by subtracting the Armed Forces and the institutional population for the estimate date from the total including Armed Forces overseas. The institutional population is computed by applying institutional proportions derived from the 1980 census to the total population, including Armed Forces overseas for the estimate date. All computations described above are performed in cells defined by single year of age, race, and sex. The independent national control totals are then obtained by collapsing these cells into broader age groups for the population 16 years and older.

Beginning in January 1986, two changes were introduced into the estimation of the independent population controls. For the first time, an explicit allowance for net undocumented immigration since April 1, 1980 (the census date) was added to the estimated level of legal immigration. In addition, an increase in the estimate of emigration of legal foreign-born residents has been incorporated into the postcensal population estimates since 1980. The nature and effect of these changes are discussed in detail in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986" in the February 1986 issue of *Employment and Earnings*.

3. *Composite estimate procedure.* In deriving statistics for a given month, a composite estimating procedure is used which takes account of net changes from the previous month for continuing parts of the sample (75 percent), as well as the sample results for the current month. Also included is an additional term which is an estimate of the net difference between incoming and continuing parts of the current month's sample. Almost all estimates of month-to-month change are improved by this procedure, and most estimates of level are also improved, but to a lesser extent.

Rounding of estimates

The sums of individual items may not always equal the totals shown in the same tables because of independent rounding of totals and components to the nearest thousand. Similarly, sums of percent distributions may not always equal 100 percent because of rounding. Differences, however, are insignificant.

Reliability of the estimates

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. The standard errors provided primarily indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration but do not measure any systematic biases in the data.

Nonsampling error. The full extent of nonsampling error is unknown, but special studies have been conducted to quantify some sources of nonsampling error in the CPS, as discussed below. The effect of nonsampling error should be small on estimates of relative change, such as month-to-month change. Estimates of monthly levels would be more severely affected by the nonsampling error.

Nonsampling errors in surveys can be attributed to many sources, e.g., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness of respondents to provide correct information, inability to recall information, errors made in collection such as in recording or coding the data, errors made in processing the data, errors made in estimating values for missing data, and failure to represent all sample households and all persons within sample households (undercoverage).

Nonsampling errors occurring in the interview phase of the survey have been studied by means of a reinterview program. This program is used to estimate various sources of error as well as to evaluate and control the work of the interviewers. A random sample of each interviewer's work is inspected through reinterview at regular intervals. The results indicate, among other things, that the data published from the CPS are subject to moderate systematic biases. A description of the CPS reinterview program and some of the other results may be found in the *Current Population Survey Reinterview Program*,

January 1961 Through December 1966, Technical Paper No. 19, Bureau of the Census, U.S. Department of Commerce.

The effects of some components of nonsampling error in the CPS data can be examined as a result of the rotation plan used for the sample, since the level of the estimates varies by rotation group. A description of these effects appears in "The Effects of Rotation Group Bias on Estimates From Panel Surveys," by Barbara A. Bailer, *Journal of the American Statistical Association*, Volume 70, No. 349, March 1975.

Undercoverage in the CPS results from missed housing units and missed persons within sample households. Compared to the level of the decennial census, undercoverage is about 6 percent. It is known that the CPS undercoverage varies with age, sex, race, and Hispanic origin. Generally, undercoverage is larger for men than for women, and larger for blacks, Hispanics, and other races combined than for whites. Ratio estimation to independent age-sex-race-Hispanic origin population controls, as described previously, partially corrects for the biases due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics than interviewed persons in the same age-sex-race-Hispanic origin group. Further, the independent population controls used have not been adjusted for undercoverage in the 1980 census.

Additional information on nonsampling error in the CPS appears in "An Error Profile: Employment as Measured by the Current Population Survey," by Camilla Brooks and Barbara Bailer, Statistical Policy Working Paper 3, U.S. Department of Commerce, Office of Federal Statistical Policy and Standards; in "The Current Population Survey: An Overview," by Marvin Thompson and Gary Shapiro, *Annals of Economic and Social Measurement*, Vol. 2, April 1973; and in *The Current Population Survey, Design and Methodology*, Technical Paper No. 40, Bureau of the Census, U.S. Department of Commerce. This last document includes a comprehensive discussion of various sources of error and describes attempts to measure them in the CPS.

Sampling error. The standard error is primarily a measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The sample estimate and its estimated standard error enable one to construct confidence intervals, ranges that would include the average of all possible samples with a known probability. For example, if all possible samples were selected, each of these surveyed under essentially the same general conditions and using the same sample design, and an estimate and its estimated error were calculated from each sample, then:

1. Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples.
2. Approximately 90 percent of the intervals from 1.6

standard errors below the estimate to 1.6 standard errors above the estimate would include the average of all possible samples.

3. Approximately 95 percent of the intervals from 2 standard errors below the estimate to 2 standard errors above the estimate would include the average result of all possible samples.

In order to derive standard errors that would be applicable to a large number of estimates and could be prepared at a moderate cost, a number of approximations are required. First, the standard errors in this volume reflect the sample design and estimation procedures in effect prior to the expansions for State estimates. Thus, these standard errors may slightly overstate the standard errors applicable to the present design. Second, instead of computing an individual standard error for each estimate, generalized sets of standard errors are computed for various types of characteristics. This generalization yields more stable estimates of the standard errors. Consequently, the sets of standard errors provided give an indication of the order of magnitude of the standard error of an estimate rather than the precise standard error.

Tables B and C show approximate standard errors for major employment status characteristics for monthly estimates and for changes for consecutive months. These standard errors are applicable to the level of the estimates in recent months.

Tables D through H provide generalized standard errors for monthly level and month-to-month change for estimated totals, unemployment rates, and percentages. Table I contains factors for use with table H for computing standard errors, as described below, for monthly level and month-to-month change for percentages. Standard errors for intermediate values not shown in the table may be approximated by linear interpolation. The standard error for estimated changes from one month to the next is more closely related to the monthly level for the characteristic than to the size of the specific month-to-month change itself. Thus, in order to use the generalized standard errors for month-to-month change as given in the tables of standard errors, it is necessary to obtain the monthly estimate for the characteristic. It should be noted that the tables of standard errors for month-to-month change apply only to estimates of change between 2 consecutive months. Estimates of change for non-consecutive months are subject to higher standard errors. Table J contains factors for use with tables D, F, H, and I to compute approximate standard errors for levels, labor force participation rates, and percentages as pertaining to the year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages. Note that standard errors for changes in quarterly and yearly estimates apply only to consecutive quarters and years. For years prior to 1967, the standard errors must be adjusted due to the differences in the sample size. For years prior to 1956, the standard errors should be multiplied by 1.50, and for the 1956-66 period they should be multiplied by 1.22. Table K provides generalized standard

Table B. Standard errors for major employment status categories

(in thousands)

Employment status, sex, age, and race	Standard error of—	
	Monthly level	Month-to-month change (consecutive months only)
Total, 16 years and over:		
Civilian labor force	275	212
Employed	293	224
Unemployed	136	140
Men, 20 years and over:		
Civilian labor force	173	151
Employed	186	163
Unemployed	93	95
Women, 20 years and over:		
Civilian labor force	211	155
Employed	212	160
Unemployed	83	87
Both sexes, 16 to 19 years:		
Civilian labor force	88	94
Employed	92	102
Unemployed	59	66
Black, 16 years and over:		
Civilian labor force	94	73
Employed	104	79
Unemployed	68	71
Men, 20 years and over:		
Civilian labor force	59	51
Employed	64	57
Unemployed	44	47
Women, 20 years and over:		
Civilian labor force	76	50
Employed	76	54
Unemployed	45	48
Both sexes, 16 to 19 years:		
Civilian labor force	36	40
Employed	33	38
Unemployed	30	33

errors for quarterly estimates of persons and families for use with the CPS earnings data.

Standard errors for estimated totals. Tables D and E provide generalized standard errors for monthly totals and for month-to-month change. The figures given in these tables are to be used for the characteristics as indicated.

Illustration. Assume that in a given month the number of persons working a specific number of hours was 12,000,000, an increase of 400,000 over the previous month. Linear interpolation in the second column of table D shows that the standard error on an estimate of 12,000,000 is about 174,000. The 68-percent confidence interval as shown by these data is from 11,826,000 to 12,174,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Recall that the standard error of a month-to-month change is primarily dependent on the size of the monthly estimate. Thus, using linear interpolation in the first column of table E, the standard error on a month-to-month change of 400,000, when the monthly level is approximately 12,000,000, is about 129,000.

Standard errors for rates and percentages. The reliability of an estimated unemployment rate or an estimated percentage, computed using sample data for both numerator and denominator, depends upon both the size of the rate or percentage and the total upon which the rate or percentage is based. Estimated rates and percentages are relatively more

Table C. Standard errors for unemployment rates by major characteristics

Characteristic	Standard error of—		Characteristic	Standard error of—	
	Monthly level	Consecutive-month change		Monthly level	Consecutive-month change
Total (all civilian workers)	0.11	0.12			
Men, 20 years and over . . . . .	.15	.15			
Women, 20 years and over . . . . .	.16	.17			
Both sexes, 16 to 19 years . . . . .	.67	.81			
White workers . . . . .	.11	.12			
Black workers . . . . .	.51	.54			
Married men, spouse present . . . . .	.15	.17			
Married women, spouse present . . . . .	.19	.21			
Full-time workers . . . . .	.12	.12			
Part-time workers . . . . .	.34	.42			
Unemployed 15 weeks and over . . . . .	.06	.07			
			Occupation—Continued		
			Precision production, craft, and repair	0.32	0.36
			Machine operators, assemblers, and inspectors . . . . .	.49	.55
			Transportation and material moving . . . . .	.59	.66
			Handlers, equipment cleaners, helpers, and laborers . . . . .	.72	.82
			Farming, forestry, and fishing . . . . .	.68	.76
			Industry		
			Nonagricultural private wage and salary workers . . . . .	.12	.13
			Mining	1.63	1.86
			Construction . . . . .	.65	.75
			Manufacturing . . . . .	.26	.29
			Durable goods . . . . .	.33	.37
			Nondurable goods . . . . .	.42	.47
			Transportation, communications, and public utilities . . . . .	.42	.48
			Wholesale and retail trade . . . . .	.27	.30
			Finance and services . . . . .	.20	.22
			Government workers . . . . .	.23	.25
			Agricultural wage and salary workers	1.16	1.32
Occupation					
Executive, administrative, and managerial . . . . .	.22	.24			
Professional specialty . . . . .	.19	.21			
Technicians and related support . . . . .	.47	.52			
Sales . . . . .	.29	.33			
Administrative support, including clerical . . . . .	.23	.26			
Private household	1.18	1.33			
Protective service . . . . .	.76	.85			
Service, except private household and protective . . . . .	.39	.43			

reliable than the corresponding estimates of the numerator of the rates or percentages; this is particularly true for percentages of 50 percent or more. As a general rule, percentages are not published when the monthly base is less than 75,000, the quarterly average base is less than 60,000, or the annual average base is less than 35,000.

Tables F and G show generalized standard errors for monthly level and month-to-month change for unemployment rates. Generalized standard errors for estimated monthly percentages and estimated month-to-month change in percentage can be obtained through the use of the standard errors in table H and the factors in table I. First, obtain the standard error from table H for the specific percentage and base. The generalized standard error is then calculated by multiplying the standard error from table H by the appropriate factor from table I. When the numerator and denominator of the percentage are in different categories, use the factor indicated by the numerator of the percentage.

Illustration. Assume that in a given month 2.9 percent of a total of 112,440,000 employed persons are employed in agriculture. The standard error on an estimate of 2.9 percent with a base of 112,440,000 is obtained from table H (0.08 percent). The appropriate factor from table I for the numerator of the percentage, agricultural employment, is 1.26. The generalized standard error on the estimated 2.9 percent is then approximately $0.08 \times 1.26 = 0.10$ percentage point.

Standard errors for year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages. The approximate standard errors of levels, rates, and percentages involving year-to-year change of monthly estimates, quarterly averages, changes in quarterly averages, yearly averages, and changes in yearly averages may be obtained by using table J in conjunction with the other tables. Standard errors for estimates of change are more closely related to the level of the estimate than to the size of the specific change. Thus, to obtain the standard error of an estimate of an average level, rate, or percentage, or an estimate of a change in level, rate, or percentage, it is first necessary to find the appropriate estimate of level. For an estimate of an average level, rate, or percentage, find the standard error of this estimate. For an estimate of change in level, rate, or percentage, find the standard error of the average of the two estimates affecting the change. Then, after computing the standard error by treating these estimates as monthly estimates and using the procedures above, multiply this result by a suitable factor from table J to obtain the approximate standard error for the average or change.

Illustration. Suppose that one is interested in the year-to-year change of a monthly unemployment rate. Assume that for a certain month the unemployment rate is 6.2 percent, based on a total of 119,865,000 in the civilian labor force, and that

Table D. Standard errors for estimates of monthly level

(in thousands)

Estimated monthly level	Characteristic ¹								
	Agricultural employment	Unemployment		Labor force data other than agricultural employment and unemployment					
		Total or white	Black	Total or white	Black	Total or white, 16 to 19 years	Black, 16 to 19 years	Total or white men only, or women only	Black men only, or women only
50	15	11	12	12	12	12	12	11	10
100	21	16	17	17	17	17	16	15	14
500	47	36	38	37	37	36	32	34	31
1,000	66	51	53	52	51	50	35	49	43
2,000	93	72	73	74	70	68	-	68	58
4,000	131	101	97	104	92	86	-	95	73
6,000	159	123	110	126	104	92	-	115	76
8,000	182	141	116	145	109	88	-	132	69
10,000	202	156	-	161	108	72	-	145	47
15,000	-	188	-	193	74	-	-	172	-
20,000	-	213	-	219	-	-	-	191	-
30,000	-	-	-	259	-	-	-	215	-
40,000	-	-	-	286	-	-	-	225	-
50,000	-	-	-	306	-	-	-	222	-
60,000	-	-	-	319	-	-	-	206	-
70,000	-	-	-	326	-	-	-	172	-
80,000	-	-	-	327	-	-	-	107	-
100,000	-	-	-	314	-	-	-	-	-
120,000	-	-	-	274	-	-	-	-	-
140,000	-	-	-	195	-	-	-	-	-

¹ When determining the standard error of an estimate for a group which is a subset of the age, sex, or race groups listed, use the standard error for the next larger group, e.g., when determining the standard error

of the estimated number of employed persons age 20 to 54 years, use the column for total employed.

Table E. Standard errors for estimates of month-to-month change

(in thousands)

Estimated monthly level	Characteristic ¹							
	Unemployment				Labor force data other than unemployment and agricultural employment			
	Total or white	Both sexes 16 to 19 years, or part-time labor force ²	Black	Black, 16 to 19 years	Total or white	Black	Total or white, 16 to 19 years	Black, 16 to 19 years
50	13	14	13	14	9	9	14	14
100	18	20	19	20	12	12	20	19
500	40	45	41	38	27	27	43	37
1,000	56	63	57	41	39	38	59	39
2,000	78	89	76	-	55	52	80	-
4,000	108	124	95		77	68	100	
6,000	129	150	99		93	78	104	
8,000	144	-	89		107	82	94	
10,000	157		58		119	81	65	
15,000	177		-		143	59	-	
20,000	184				163	-		
30,000	-				192			
40,000					213			
50,000					228			
60,000					238			
70,000					244			
80,000					245			
100,000					237			
120,000					212			
140,000					160			

¹ See footnote 1, table D.

² Part-time labor force for unemployment also includes persons reentering

the labor force, persons who left their last job, and persons by duration of unemployment.

a year prior to this the unemployment rate was 7.0 percent, based on a total of 117,834,000 in the civilian labor force for the month. First, the standard error on the average of the two estimates, 6.6 percent with a base of 118,850,000, is obtained from table F (0.11 percentage point). The appropriate factor, then, from table J is 1.40. The approximate standard error on the change of 0.8 percent is then given by 0.11 x 1.40 = 0.15 percentage point.

The approximate standard error of levels involving year-to-year change of quarterly estimates pertaining to CPS earnings data for persons and families may be obtained by using table K in conjunction with the following formula:

Standard error of year-to-year change =

$$\sqrt{\left(\frac{\text{Standard error}}{x}\right)^2 + \left(\frac{\text{Standard error}}{y}\right)^2 - 2(P) \left(\frac{\text{Standard error}}{x}\right) \left(\frac{\text{Standard error}}{y}\right)}$$

X is the estimate for one quarter and Y is the estimate for another quarter. The coefficient, P, is a measure of the corre-

lation between the estimates X and Y resulting from the presence of some of the same respondents in the sample for each estimate. For consecutive year-to-year changes of quarterly estimates, the values of P are 0.30 for persons (total, white, and black) and 0.35 for families (total, white, and black). The respective values for estimates of Hispanics are 0.45 and 0.55.

Illustration. Assume that in a given quarter the number of women employed as full-time wage and salary workers was 27,000,000 and in the same quarter a year later, their number had increased to 29,000,000. Using linear interpolation in the eighth column of table K, the standard error of an estimate of 27,000,000 is 216,000; for 29,000,000 it is 221,000. Using the above formula, the standard error of the 2,000,000 year-to-year change is:

$$(216,000)^2 + (221,000)^2 - 2(.30) (216,000) (221,000),$$

or about 259,000.

Table F. Standard errors for unemployment rates

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
	1	2	5	10	15	20	25	30	35	50
50	2.28	3.20	4.98	6.85	8.13	9.09	9.82	10.36	10.75	11.12
100	1.61	2.26	3.52	4.84	5.75	6.43	6.94	7.33	7.60	7.87
500 . . . . .	.72	1.01	1.58	2.16	2.57	2.88	3.11	3.28	3.40	3.52
1,000 . . . . .	.51	.72	1.11	1.53	1.82	2.03	2.20	2.32	2.40	2.49
2,000 . . . . .	.36	.51	.79	1.08	1.29	1.44	1.55	1.64	1.70	1.76
4,000 . . . . .	.25	.36	.56	.77	.91	1.02	1.10	1.16	1.20	1.24
6,000 . . . . .	.21	.29	.45	.62	.74	.83	.90	.95	.98	1.02
10,000 . . . . .	.16	.23	.35	.48	.58	.64	.69	.73	.76	.79
20,000 . . . . .	.11	.16	.25	.34	.41	.45	.49	.52	.54	.56
60,000 . . . . .	.07	.09	.14	.20	.24	.26	.28	.30	.31	.32
100,000 . . . . .	.05	.07	.11	.15	.18	.20	.22	.23	.24	.25
120,000 . . . . .	.05	.07	.10	.14	.17	.19	.20	.21	.22	.23
140,000 . . . . .	.04	.06	.09	.13	.15	.17	.19	.20	.21	.21

Table G. Standard errors for month-to-month change in unemployment rates

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
	1	2	5	10	15	20	25	30	35	50
50	2.53	3.57	5.60	7.83	9.47	10.79	11.91	12.87	13.71	15.67
100	1.79	2.52	3.96	5.53	6.69	7.63	8.42	9.10	9.69	11.08
500 . . . . .	.80	1.13	1.77	2.47	2.99	3.41	3.76	4.06	4.33	4.94
1,000 . . . . .	.57	.80	1.25	1.75	2.11	2.41	2.65	2.87	3.05	3.48
2,000 . . . . .	.40	.56	.88	1.23	1.49	1.70	1.87	2.02	2.15	2.44
4,000 . . . . .	.28	.40	.63	.87	1.05	1.20	1.32	1.42	1.51	1.70
6,000 . . . . .	.23	.33	.51	.71	.86	.97	1.07	1.15	1.22	1.37
10,000 . . . . .	.18	.25	.39	.55	.66	.75	.82	.88	.93	1.03
20,000 . . . . .	.13	.18	.28	.38	.46	.51	.56	.60	.62	-
60,000 . . . . .	.07	.10	.16	.21	.24	.27	.28	-	-	-
100,000 . . . . .	.06	.08	.12	.15	.17	.18	-	-	-	-
120,000 . . . . .	.05	.07	.11	.14	.15	-	-	-	-	-
140,000 . . . . .	.05	.07	.10	-	-	-	-	-	-	-

Table H. Standard errors for estimated percentages and month-to-month change in percentages for labor force data

Monthly base of percentages (in thousands)	Percentage of monthly level									
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	20 or 80	25 or 75	30 or 70	35 or 65	50
50	2.34	3.29	5.12	7.05	8.39	9.40	10.18	10.77	11.21	11.75
100	1.65	2.33	3.62	4.99	5.94	6.65	7.20	7.62	7.93	8.31
500 . . . . .	.74	1.04	1.62	2.23	2.65	2.97	3.22	3.41	3.55	3.72
1,000 . . . . .	.52	.74	1.15	1.58	1.88	2.10	2.28	2.41	2.51	2.63
2,000 . . . . .	.37	.52	.81	1.12	1.33	1.49	1.61	1.70	1.77	1.86
4,000 . . . . .	.26	.37	.57	.79	.94	1.05	1.14	1.20	1.25	1.31
6,000 . . . . .	.21	.30	.47	.64	.77	.86	.93	.98	1.02	1.07
10,000 . . . . .	.17	.23	.36	.50	.59	.66	.72	.76	.79	.83
20,000 . . . . .	.12	.16	.26	.35	.42	.47	.51	.54	.56	.59
40,000 . . . . .	.08	.12	.18	.25	.30	.33	.36	.38	.40	.42
60,000 . . . . .	.07	.10	.15	.20	.24	.27	.29	.31	.32	.34
80,000 . . . . .	.06	.08	.13	.18	.21	.24	.25	.27	.28	.29
100,000 . . . . .	.05	.07	.11	.16	.19	.21	.23	.24	.25	.26
120,000 . . . . .	.05	.07	.10	.14	.17	.19	.21	.22	.23	.24
140,000 . . . . .	.04	.06	.10	.13	.16	.18	.19	.20	.21	.22
160,000 . . . . .	.04	.06	.09	.12	.15	.17	.18	.19	.20	.21

NOTE: The standard errors in this table must be multiplied by the factors in table I to obtain the approximate standard error for a specific characteristic.

Table I. Factors to be used with table H to compute approximate standard errors for percentages and month-to-month change in percentages

Characteristic	Factor		Characteristic	Factor	
	Monthly level	Month-to-month change		Monthly level	Month-to-month change
Agricultural employment:			Unemployment:		
Total or full-time labor force	1.26	1.05	Part-time labor force, duration of unemployment, left last job, reentering labor force	1.01	1.21
Part-time labor force	1.26	1.50	All other unemployment characteristics:		
Labor force data other than agricultural employment and unemployment:			Total or white:		
Total	1.00	.74	Total . . . . .	.97	1.08
Men only . . . . .	.93	.84	Both sexes, 16 to 19 years . . . . .	.97	1.21
Women only . . . . .	.86	.75	Black:		
Both sexes, 16 to 19 years	1.00	1.18	Total	1.04	1.13
Part-time labor force	1.00	1.18	Both sexes, 16 to 19 years	1.04	1.24

Table J. Factors to be used with tables D, F, H, and I to compute the approximate standard errors for levels, rates, and percentages for year-to-year change of monthly estimates, quarterly averages, change in quarterly averages, yearly averages, and change in yearly averages

Characteristic	Factor				
	Year-to-year change of monthly estimate	Quarterly averages	Change in quarterly averages	Yearly averages	Change in yearly averages
Agricultural employment:					
Total or men	1.30	0.89	0.80	0.72	0.70
Women or teenagers (16 to 19 years)	1.30	.83	.80	.58	.70
Part time	1.40	.74	.80	.46	.70
Labor force data other than agricultural employment and unemployment:					
Total or white	1.30	.88	.88	.67	.70
Black or teenagers (16 to 19 years)	1.30	.82	.88	.57	.70
Part time	1.40	.74	.88	.46	.60
Unemployment:					
Total	1.40	.76	.88	.50	.65
Part time	1.40	.69	.88	.39	.54

Table K. Standard errors for estimates of quarterly levels, to be used with CPS earnings data

(In thousands)

Estimated quarterly level	Characteristic								
	Total			Men			Women		
	Part-time workers	Total or full-time workers		Part-time workers	Total or full-time workers			Total, full-time, or part-time workers	
		Total or white	Black		Total	White	Black	Total or white	Black
10 .	5	5	5	5	5	5	5	5	5
50 .	11	12	12	11	12	12	12	11	11
75 .	13	15	15	13	15	15	15	13	13
100 .	15	17	17	15	17	17	17	15	15
150 .	19	21	21	19	21	21	21	19	19
200 .	22	24	24	22	24	24	24	22	21
250 .	24	27	27	24	27	27	27	24	24
300 .	26	30	30	26	30	30	29	26	26
500 .	34	38	38	34	38	38	37	34	33
750 .	42	47	46	42	47	47	45	42	41
1,000 .	48	54	53	48	54	54	50	48	46
1,500 .	59	66	63	59	66	66	59	59	56
2,000 .	68	76	72	68	76	76	65	68	63
2,500 .	76	85	79	75	84	84	69	75	69
3,000 .	83	93	85	82	92	92	71	82	74
5,000 .	107	119	100	105	117	116	64	105	85
7,500 .	130	145	107	127	140	138	64	127	88
10,000 .	149	165	102	144	157	155	-	145	-
15,000 .	180	198	102	187	183	179	-	173	-
20,000 .	205	224	-	192	199	193	-	195	-
25,000 .	226	244	-	207	209	199	-	211	-
30,000 .	224	261	-	219	212	198	-	224	-
40,000 .	273	286	-	233	201	174	-	242	-
50,000 .	296	301	-	-	160	100	-	249	-
75,000 .	331	304	-	-	160	-	-	-	-
100,000 .	343	255	-	-	-	-	-	-	-

Establishment Data (Tables B-1 through C-8)

COLLECTION

Payroll reports provide current information on wage and salary employment and hours and earnings in nonagricultural establishments, by industry and geographic location. Historical statistics are published in *Employment, Hours, and Earnings, United States, 1909-84*, and *Employment, Hours, and Earnings, States and Areas, 1939-82* and their supplements.

Federal-State cooperation

Under cooperative arrangements, responding establishments report employment, hours, and earnings data to State agencies. State agencies mail the forms to the establishments and examine the returns for consistency, accuracy, and completeness. The States use the reported data to prepare State and area series and also send the reported data to the BLS (Washington Office) for use in preparing the national series. This avoids a duplicate reporting burden on establishments, and, together with the use of similar estimating techniques at the national and State levels, promotes increased comparability between estimates.

Shuttle schedules

Form BLS 790—Report on Employment, Payroll, and Hours is the name of the data collection schedule. The collection agency returns the schedule to the respondent each month so that the next month's data can be entered on the space allotted for that month. This "shuttle" procedure assures maximum comparability and accuracy of reporting, since the respondent can see the figures that have been reported for previous months.

Form BLS 790 provides for entry of data on the total number of full- and part-time workers on the payrolls of nonagricultural establishments and, for most industries, employment, payroll, and hours of production and related workers or nonsupervisory workers for the pay period which includes the 12th of the month.

CONCEPTS

Industrial classification

Establishments reporting on Form BLS 790 are classified into industries on the basis of their principal product or activity determined from information on annual sales volume. Since January 1980, this information is collected on a supplement to the quarterly unemployment insurance tax reports filed by employers. For an establishment making more than one product or engaging in more than one activity, the entire employment of the establishment is included under the

industry indicated by the principal product or activity.

All data on employment, hours, and earnings for the Nation and for States and areas are classified in accordance with the 1972 *Standard Industrial Classification Manual (SICM)*, Office of Management and Budget. The BLS tabulates and estimates statistics which distinguish between private and public establishments, thus maintaining continuity with previously published statistics for the private and government sector.

Industry employment

Employment data, except those for the Federal Government, refer to persons on establishment payrolls who received pay for any part of the pay period which includes the 12th of the month. For Federal Government establishments, employment figures represent the number of persons who occupied positions on the last day of the calendar month. Intermittent workers are counted if they performed any service during the month.

The data exclude proprietors, the self-employed, unpaid volunteer or family workers, farm workers, and domestic workers. Salaried officers of corporations are included. Government employment covers only civilian employees; military personnel are excluded. Employees of the Central Intelligence Agency and the National Security Agency also are excluded.

Persons on establishment payrolls who are on paid sick leave (when pay is received directly from the firm), on paid holiday, on paid vacation, or who work during a part of the pay period even though they are unemployed or on strike during the rest of the period are counted as employed. Not counted as employed are persons who are on layoff, on leave without pay, on strike for the entire period, or who were hired but have not yet reported during the period.

Indexes of diffusion of employment change (table B-7). These indexes measure the dispersion among industries of the change in employment over the specified time span. The overall indexes are calculated from 349 seasonally adjusted employment series (three-digit industries) covering all nonagricultural payroll employment in the private sector. The manufacturing diffusion indexes are based on 143 three-digit industries.

To derive the indexes, each component industry is assigned a value of 0, 50, or 100 percent, depending on whether its employment showed a decrease, no change, or an increase, respectively, over the time span. The average value (mean) is then calculated, and this percent is the diffusion index number.

The reference point for diffusion analysis is 50 percent, the value which indicates that the same number of component industries had increased as had decreased. Index numbers above 50 show that more industries had increasing employment, and

values below 50 indicate that more had decreasing employment. The margin between the percent that increased and the percent that decreased is equal to the difference between the index and its complement, i.e., 100 minus the index. For example, an index of 65 percent means that 30 percent more industries had increasing employment than had decreasing employment ($65 - (100 - 65) = 30$). However, for dispersion analysis, the distance of the index number from the 50-percent reference point is the most significant observation.

Although diffusion indexes are commonly interpreted as showing the percent of components that increased over the time span, it should be remembered that the index reflects half of the unchanged components as well. (This is the effect of assigning a value of 50 percent to the unchanged components when computing the index.)

Industry hours and earnings

Average hours and earnings data are derived from reports of payrolls and hours for production and related workers in manufacturing and mining, construction workers in construction, and nonsupervisory employees in private service-producing industries.

Production and related workers include working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping, trucking, hauling, maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with the above production operations.

Construction workers include the following employees in the construction division: Working supervisors, qualified craft workers, mechanics, apprentices, helpers, laborers, etc., engaged in new work, alterations, demolition, repair, maintenance, etc., whether working at the site of construction or working in shops or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.

Nonsupervisory employees include employees (not above the working supervisory level) such as office and clerical workers, repairers, salespersons, operators, drivers, physicians, lawyers, accountants, nurses, social workers, research aides, teachers, drafters, photographers, beauticians, musicians, restaurant workers, custodial workers, attendants, line installers and repairers, laborers, janitors, guards, and other employees at similar occupational levels whose services are closely associated with those of the employees listed.

Payroll covers the payroll for full- and part-time production, construction, or nonsupervisory workers who received pay for any part of the pay period which includes the 12th of the month. The payroll is reported before deductions of any kind, e.g., for old-age and unemployment insurance, group insurance, withholding tax, bonds, or union dues; also included is pay for overtime, holidays, vacation, and sick leave paid directly by the firm. Bonuses (unless

earned and paid regularly each pay period); other pay not earned in the pay period reported (e.g., retroactive pay); tips; and the value of free rent, fuel, meals, or other payment in kind are excluded. "Fringe benefits" (such as health and other types of insurance, contributions to retirement, etc., paid by the employer) are also excluded.

Hours cover the hours paid for during the pay period which includes the 12th of the month for production, construction, or nonsupervisory workers. Included are hours paid for holidays, vacations, and for sick leave when pay is received directly from the firm.

Overtime hours cover hours worked by production or related workers for which overtime premiums were paid because the hours were in excess of the number of hours of either the straight-time workday or the workweek during the pay period which included the 12th of the month. Weekend and holiday hours are included only if overtime premiums were paid. Hours for which only shift differential, hazard, incentive, or other similar types of premiums were paid are excluded.

Average weekly hours. The workweek information relates to the average hours for which pay was received and is different from standard or scheduled hours. Such factors as unpaid absenteeism, labor turnover, part-time work, and stoppages cause average weekly hours to be lower than scheduled hours of work for an establishment. Group averages further reflect changes in the workweek of component industries.

Indexes of aggregate weekly hours. The indexes of aggregate weekly hours are prepared by dividing the current month's aggregate by the average of the 12 monthly figures for 1977. For basic industries, the hours aggregates are the product of average weekly hours and production worker or nonsupervisory worker employment. At all higher levels of industry aggregation, hours aggregates are the sum of the component aggregates.

Average overtime hours. The overtime hours represent that portion of the average weekly hours which exceeded regular hours and for which overtime premiums were paid. If an employee were to work on a paid holiday at regular rates, receiving as total compensation his or her holiday pay plus straight-time pay for hours worked that day, no overtime hours would be reported.

Since overtime hours are premium hours by definition, weekly hours and overtime hours do not necessarily move in the same direction from month to month; for example, overtime premiums may be paid for hours in excess of the straight-time workday although less than a full week is worked. Diverse trends at the industry group level also may be caused by a marked change in hours for a component industry where little or no overtime was worked in both the previous and current months. In addition, such factors as work stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on average hours.

Average hourly earnings. Average hourly earnings are on a "gross" basis. They reflect not only changes in basic hourly and incentive wage rates but also such variable factors as premium pay for overtime and late-shift work and changes in output of workers paid on an incentive plan. They also reflect shifts in the number of employees between relatively high-paid and low-paid work and changes in workers' earnings in individual establishments. Averages for groups and divisions further reflect changes in average hourly earnings for individual industries.

Averages of hourly earnings differ from wage rates. Earnings are the actual return to the worker for a stated period of time; rates are the amount stipulated for a given unit of work or time. The earnings series do not measure the level of total labor costs on the part of the employer since the following are excluded: Irregular bonuses, retroactive items, payments of various welfare benefits, payroll taxes paid by employers, and earnings for those employees not covered under production worker, construction worker, or nonsupervisory employee definitions.

Average hourly earnings, including lump-sum wage payments. These series are compiled only for aircraft (SIC 3721) and guided missiles and space vehicles (SIC 3761) manufacturing. The same concepts and estimation methods apply to these series as apply to the average hourly earnings series described above; the one difference between the series is definitional. The payroll data used to calculate this series include lump-sum payments made to production workers in lieu of general wage rate increases; such payments are excluded from the definition of gross payrolls used to calculate the other average hourly earnings series.

For each sample establishment in SIC 3721 and SIC 3761 covered by a lump-sum agreement, the reported payroll data are adjusted to include a prorated portion of the lump-sum payment. Such payments are generally made once a year and cover the following 12-month period. In order to spread the payment across this time period, a prorated portion of the payment is added to the payroll each month. This prorated portion is adjusted by an exit rate to reduce the lump-sum amount to account for persons who received the payment but left before the payment allocation period expired.

Average hourly earnings excluding overtime. Average hourly earnings, excluding overtime premium pay, are computed by dividing the total production worker payroll for the industry group by the sum of total production worker hours and one-half of total overtime hours. No adjustments are made for other premium payment provisions, such as holiday work, late-shift work, and overtime rates other than time and one-half.

Railroad hours and earnings. The figures for Class I railroads (excluding switching and terminal companies) are based on monthly data summarized in the M-300 report of the Interstate Commerce Commission and relate to all employees except executives, officials, and staff assistants (ICC

group I) who received pay during the month. Average hourly earnings are computed by dividing total compensation by total hours paid for. Average weekly hours are obtained by dividing the total number of hours paid for, reduced to a weekly basis, by the number of employees, as defined above. Average weekly earnings are derived by multiplying average weekly hours by average hourly earnings.

Average weekly earnings. These estimates are derived by multiplying average weekly hours estimates by average hourly earnings estimates. Therefore, weekly earnings are affected not only by changes in average hourly earnings but also by changes in the length of the workweek. Monthly variations in such factors as the proportion of part-time workers, stoppages for varying reasons, labor turnover during the survey period, and absenteeism for which employees are not paid may cause the average workweek to fluctuate.

Long-time trends of average weekly earnings can be affected by structural changes in the makeup of the work force. For example, persistent long-term increases in the proportion of part-time workers in retail trade and many of the services industries have reduced average workweeks in these industries and have affected the average weekly earnings series.

Real earnings, or earnings in constant dollars, are calculated from the earnings averages for the current month using a deflator derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

ESTIMATING METHODS

The principal features of the procedure used to estimate employment for the establishment statistics are (1) the use of the "link relative" technique, which is a form of ratio estimation; (2) periodic adjustment of employment levels to new benchmarks; and (3) the use of size and regional stratification.

The "link relative" technique

From a sample composed of establishments reporting for both the previous and current months, the ratio of current-month employment to that of the previous month is computed. This is called a "link relative." The estimates of employment (all employees, including production and nonproduction workers together) for the current month are obtained by multiplying the estimates for the previous month by these link relatives. In addition, bias correction factors are applied to selected employment estimates each month. The size of the bias correction factors is determined from past benchmark comparisons. Beginning with data for April 1983, these factors are modified by changes in the sample link relatives for the most recent quarter. Other features of the general procedures are described in table L.

Size and regional stratification

A number of industries are stratified by size of establish-

ment and/or by region, and the stratified production or non-supervisory worker data are used to weight the hours and earnings for aggregation into broader industry groupings. Accordingly, the basic estimating cell for an employment, hours, or earnings series, as the term is used in the summary of computational methods in table L, may be a whole industry or a size stratum, a region stratum, or a size stratum of a region within an industry.

Benchmark adjustments

Employment estimates are compared periodically with

benchmarks (comprehensive counts of employment) for the various nonagricultural industries, and appropriate adjustments are made as indicated. The industry estimates are currently projected from March 1987 levels. Normally, benchmark adjustments are made annually.

The primary sources of benchmark information are employment data, by industry, compiled quarterly by State agencies from reports of establishments covered under State unemployment insurance laws. These tabulations cover about 98 percent of employees on nonagricultural payrolls in the United States. Benchmark data for the residual are obtained from the records of the Social Security Administration, the

Table L. Summary of methods for computing industry statistics on employment, hours, and earnings

Employment, hours, and earnings	Basic estimating cell (industry, region, size, or region/size cell)	Aggregate industry level (division and, where stratified, industry)
Monthly data		
All employees	All-employee estimate for previous month multiplied by ratio of all employees in current month to all employees in previous month, for sample establishments which reported for both months. ¹	Sum of all-employee estimates for component cells.
Production or nonsupervisory workers, women employees	All-employee estimate for current month multiplied by (1) ratio of production or nonsupervisory workers to all employees in sample establishments for current month, (2) estimated ratio of women to all employees. ²	Sum of production or nonsupervisory worker estimates, or estimates of women employees, for component cells.
Average weekly hours	Production or nonsupervisory worker hours divided by number of production or nonsupervisory workers. ²	Average, weighted by production or nonsupervisory worker employment, of the average weekly hours for component cells.
Average weekly overtime hours	Production worker overtime hours divided by number of production workers. ²	Average, weighted by production worker employment, of the average weekly overtime hours for component cells.
Average hourly earnings	Total production or nonsupervisory worker payroll divided by total production or nonsupervisory worker hours. ²	Average, weighted by aggregate hours, of the average hourly earnings for component cells.
Average weekly earnings	Product of average weekly hours and average hourly earnings.	Product of average weekly hours and average hourly earnings.
Annual average data		
All employees, women employees, and production or nonsupervisory workers	Sum of monthly estimates divided by 12.	Sum of monthly estimates divided by 12.
Average weekly hours	Annual total of aggregate hours (production or nonsupervisory worker employment multiplied by average weekly hours) divided by annual sum of employment	Annual total of aggregate hours for production or nonsupervisory workers divided by annual sum of employment for these workers.
Average weekly overtime hours	Annual total of aggregate overtime hours (production worker employment multiplied by average weekly overtime hours) divided by annual sum of employment.	Annual total of aggregate overtime hours for production workers divided by annual sum of employment for these workers.
Average hourly earnings	Annual total of aggregate payrolls (product of production or nonsupervisory worker employment by weekly hours and hourly earnings) divided by annual aggregate hours.	Annual total of aggregate payrolls divided by annual aggregate hours.
Average weekly earnings	Product of average weekly hours and average hourly earnings.	Product of average weekly hours and average hourly earnings.

¹ The estimates are computed by multiplying the above product by bias adjustment factors, which compensate for the underrepresentation of newly formed enterprises and other sources of bias in the sample.

² The sample production-worker ratio, women-worker ratio, average weekly hours, average overtime hours, and average hourly earnings are modified by

a wedging technique designed to compensate for changes in the sample arising mainly from the voluntary character of the reporting. The wedging procedure accepts the advantage of continuity from the use of the matched sample and, at the same time, tapers or wedges the estimate toward the level of the latest sample average.

Interstate Commerce Commission, and a number of other agencies in private industry or government.

The estimates for the benchmark month are compared with new benchmark levels, industry by industry. If revisions are necessary, the monthly series of estimates between benchmark periods are adjusted between the new benchmark and the preceding one, and the new benchmark for each industry is then carried forward progressively to the current month by use of the sample trends. Thus, under this procedure, the benchmark is used to establish the level of employment; the sample is used to measure the month-to-month changes in the level. A comparison of the actual amounts of revisions made at the time of the March 1987 benchmark adjustment is shown in table M.

Data for all months since the last benchmark to which the series has been adjusted are subject to revision. Revised data are published as soon as possible after each benchmark revision.

THE SAMPLE

Design

The sampling plan used in the establishment survey is known as "sampling proportionate to average size of establishment." This design is an optimum allocation design among strata since the sampling variance is proportional to the average size of establishments. Under this type of design, large establishments fall into the sample with certainty. The size of the sample for the various industries is determined empirically on the basis of experience and of cost considerations. In a manufacturing industry in which a high proportion of total employment is concentrated in relatively few establishments, a larger percent of total employment is included in the sample. Consequently, the sample design for such industries provides for a complete census of the large establishments, with only a few chosen from among the smaller establishments or none at all if the concentration of employment is great enough. On the other hand, in an industry in which a large proportion of total employment is

Table M. Comparison of nonagricultural employment benchmarks and estimates for March 1987

Industry	Benchmark	Estimate	Percent difference
Total	100,427	100,462	(¹)
Mining	696	718	-3.2
Construction	4,531	4,599	-1.5
Manufacturing	18,810	18,897	- .5
Transportation and public utilities	5,274	5,275	(¹)
Wholesale trade	5,763	5,725	.7
Retail trade	17,902	17,737	.9
Finance, insurance, and real estate	6,443	6,478	- .5
Services	23,754	23,723	.1
Government	17,254	17,310	- .3

¹Less than 0.05 percent.

in small establishments, the sample design calls for inclusion of all large establishments and also for a substantial number of the small ones. Many industries in the trade and services divisions fall into this category. To keep the sample to a size which can be handled by available resources, it is necessary to design samples for these industries with a smaller proportion of universe employment than is the case for most manufacturing industries. Since individual establishments in these nonmanufacturing divisions generally show less fluctuation from regular cyclical or seasonal patterns than do establishments in manufacturing industries, these smaller samples (in terms of employment) generally produce reliable estimates.

In the context of the BLS establishment survey program, with its emphasis on producing timely data at minimum cost, a sample must be obtained which will provide coverage of a sufficiently large segment of the universe to provide reasonably reliable estimates that can be published promptly and regularly. The present sample meets these specifications for most industries. With its use, the BLS is able to produce preliminary estimates each month for many industries and for many geographic levels within a few weeks after the reference period, and, at a somewhat later date, statistics in considerably greater industrial detail.

Coverage

The BLS sample of establishment employment and payrolls is the largest monthly sampling operation in the field of social statistics. Table N shows the approximate proportion of total employment in each industry division covered by the group of establishments furnishing monthly employment data. The coverage for individual industries within the division may vary from the proportions shown.

Table N. Approximate size and coverage of BLS employment and payrolls sample, March 1987¹

Industry	Number of establishments in sample	Employees	
		Number reported	Percent of total
Total	246,256	37,530,000	37
Mining	3,434	265,000	38
Construction	22,567	808,000	18
Manufacturing	49,214	9,522,000	51
Transportation and public utilities	11,820	2,377,000	45
Wholesale trade	21,802	956,000	17
Retail trade	44,982	3,509,000	20
Finance, insurance, and real estate	17,699	2,140,000	33
Services	54,782	5,495,000	23
Government:			
Federal	(²)	2,916,000	100
State	4,795	3,298,000	81
Local	15,161	6,244,000	61

¹ Counts reflect reports used in final estimates. Since not all establishments report payroll and hours information, hours and earnings estimates are based on a smaller sample than employment estimates.

² Total Federal employment counts for use in national estimates are provided to BLS by the Office of Personnel Management. Detailed industry estimates for the Executive Branch, as well as State and area estimates of Federal employment, are based on a sample of 4,600 reports covering about 55 percent of employment in Federal establishments.

Reliability

Although the relatively large size of the BLS establishment sample assures a high degree of accuracy, the estimates derived from it may differ from the figures that would be obtained if it were possible to take a complete census using the same schedules and procedures. As discussed under the previous section, a link relative technique is used to estimate employment. This requires the use of the previous month's estimate as the base in computing the current month's estimate. Thus, small sampling and response errors may accumulate over several months. To remove this accumulated error, the estimates are usually adjusted annually to new benchmarks. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments (resulting from changes in their product which are not reflected in the levels of estimates until the data are adjusted to new benchmarks). In fact, at the more detailed industry levels, particularly within manufacturing, changes in classification are the major cause of benchmark adjustments. Another cause of differences arises from improvements in the quality of the benchmark data. Table O presents the average percent revisions of the five most recent benchmarks for major industry divisions. Detailed descriptions of individual benchmark revisions are available from the Bureau upon request.

The hours and earnings estimates for basic estimating cells are not subject to benchmark revisions, although the broader groupings may be affected slightly by changes in employment weights. The hours and earnings estimates, however, are subject to sampling errors, which may be expressed as

Table O. Average benchmark revision in employment estimates and relative errors for average weekly hours and average hourly earnings by industry

(In percent)

Industry	Average benchmark revision in estimates of employment ¹	Relative error ²	
		Average weekly hours	Average hourly earnings
Total	0.2	--	--
Total private . . . . .	.2	0.1	0.2
Mining	2.9	1.0	1.3
Construction	1.4	.2	.5
Manufacturing . . . . .	.8	.1	.2
Durable goods . . . . .	.9	.1	.3
Nondurable goods . . . . .	.8	.1	.2
Transportation and public utilities . . . . .	.3	.7	.6
Wholesale trade . . . . .	.8	.2	.4
Retail trade . . . . .	.9	.2	.4
Finance, insurance, and real estate . . . . .	.3	.2	.4
Services . . . . .	.2	.4	.6
Government ³ . . . . .	.5	--	--

¹ The average percent revision in employment for the 1983-87 benchmarks.

² Relative errors relate to 1982 data.

³ Estimates for government are based on a total count for Federal Government provided by the Office of Personnel Management and a sample of State and local government reports.

relative errors of the estimate. (A relative error is a standard error expressed as a percent of the estimate.) Relative errors for major industries are presented in table O and for individual industries with the specified number of employees in table P. The chances are about 2 out of 3 that the hours and earnings estimates from the sample would differ by a smaller percentage than the relative error from the averages that would have been obtained from a complete census.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The measure is the standard deviation adjusted for the bias in estimates:

$$RMSE = \sqrt{(\text{standard deviation})^2 + (\text{bias})^2}$$

If the bias is small, the chances are about 2 out of 3 that an estimate from the sample would differ from its benchmark by less than the root-mean-square error. The chances are about 19 out of 20 that the difference would be less than twice the root-mean-square error.

Approximations of the root-mean-square errors (based on the most recent benchmark revisions) of differences between final estimates and benchmarks are presented in table P.

For the two most recent months, estimates of employment, hours, and earnings are preliminary and are so footnoted in the tables. These figures are based on less than the total sample and are revised when all the reports in the sample have been received. Table Q presents root-mean-square errors of the amounts of revisions that may be expected between the preliminary and final levels of employment and preliminary and final month-to-month changes. Revisions of preliminary hours and earnings estimates are normally not greater than 0.1 of an hour for weekly hours and 1 cent for hourly earnings.

STATISTICS FOR STATES AND AREAS

State and area employment, hours, and earnings data are collected and prepared by State agencies in cooperation with BLS. The area statistics relate to metropolitan areas.

Table P. Root-mean-square errors of differences between benchmarks and estimates of employment and average relative errors for average weekly hours and average hourly earnings

Size of employment estimate	Root-mean-square error of employment estimates ¹	Relative error ² (in percent)	
		Average weekly hours	Average hourly earnings
50,000	2,100	2.2	4.0
100,000	3,900	1.3	2.3
200,000	5,600	1.1	2.0
500,000	14,000	.9	1.6
1,000,000	15,000	.8	1.2
2,000,000	26,000	.5	.9

¹ Assuming 12-month intervals between benchmark revisions.

² Relative errors relate to 1982 data.

Definitions for all areas are published each year in the issue of *Employment and Earnings* that contains State and area annual averages (usually the May issue). Changes in definitions are noted as they occur. Additional industry detail may be obtained from the State agencies listed on the inside back cover of each issue. These statistics are based on the same

establishment reports used by BLS for preparing national estimates. For employment, the sum of the State figures may differ slightly from the equivalent official U.S. totals on a national basis, because some States have more recent benchmarks than others and because of the effects of differing industrial and geographic stratification.

Table Q. Errors of preliminary employment estimates

Industry	Root-mean-square error of—		Industry	Root-mean-square error of—	
	Monthly level	Month-to-month change		Monthly level	Month-to-month change
Total	89,600	89,100	Nondurable goods—Continued		
Total private	62,700	60,000	Chemicals and allied products	2,700	2,900
Goods-producing industries	22,400	20,800	Petroleum and coal products	1,200	1,100
Mining	4,700	4,400	Rubber and misc. plastics products	1,600	1,700
Oil and gas extraction	4,000	3,400	Leather and leather products	1,800	1,700
Construction	14,800	15,700	Service-producing industries	86,300	85,700
General building contractors	5,000	5,200	Transportation and public utilities	15,500	13,900
Manufacturing	19,200	19,300	Transportation	17,800	17,300
Durable goods	14,400	12,700	Communication and public utilities	6,800	6,400
Lumber and wood products	2,300	2,100	Wholesale trade	9,400	8,200
Furniture and fixtures	1,700	1,700	Durable goods	6,100	5,500
Stone, clay, and glass products	1,600	1,600	Nondurable goods	5,400	4,600
Primary metal industries	4,700	4,700	Retail trade	40,700	36,100
Blast furnaces and basic steel products	3,600	3,400	General merchandise stores	23,900	21,400
Fabricated metal products	2,500	2,300	Food stores	6,900	6,200
Machinery, except electrical	6,000	7,300	Automotive dealers and service stations	3,300	3,200
Electrical and electronic equipment	5,100	5,100	Eating and drinking places	10,900	10,300
Transportation equipment	8,100	7,400	Finance, insurance, and real estate	8,400	7,500
Motor vehicles and equipment	7,000	7,000	Finance	4,000	3,900
Instruments and related products	2,000	2,200	Insurance	3,800	3,100
Miscellaneous manufacturing	1,900	1,800	Real estate	4,800	3,800
Nondurable goods	8,900	8,500	Services	34,700	31,700
Food and kindred products	5,600	5,700	Business services	11,000	10,500
Tobacco manufactures	1,600	1,500	Health services	10,300	10,100
Textile mill products	1,800	1,700	Government	62,800	54,500
Apparel and other textile products	4,700	4,100	Federal	16,900	11,700
Paper and allied products	1,600	1,400	State	22,600	20,600
Printing and publishing	2,200	2,100	Local	34,900	32,400

NOTE: Data are based on differences from December 1982 through December 1987.

Productivity Data (Tables C-9 through C-11)

COLLECTION

Productivity data are compiled by the Bureau of Labor Statistics from establishment data and from estimates of compensation and gross national product supplied by the U.S. Department of Commerce and the Federal Reserve Board.

CONCEPTS

Hours of wage and salary workers in nonagricultural establishments refer to hours paid for all employees—production workers, nonsupervisory workers, and salaried workers.

Output is the constant-dollar market value of final goods and services produced in a given period. Indexes of *output per hour* of all persons measure changes in the volume of goods and services produced per paid hour of labor input.

Compensation per hour includes wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. The data also include an estimate of wages, salaries, and supplementary payments for the self-employed, except for nonfinancial corporations, in which there are no self-employed.

Real compensation per hour is compensation per hour adjusted to eliminate the effect of changes in the Consumer Price Index for All Urban Consumers (CPI-U).

Unit labor costs measure the labor compensation cost required to produce one unit of output and are derived by dividing compensation per hour by output per hour.

Unit nonlabor payments include profits, depreciation, interest, and indirect taxes per unit of output. They are com-

puted by subtracting compensation of all persons from the current-dollar gross national product and dividing by output. In these tables, unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits and inventory valuation adjustments per unit of output.

The *implicit price deflator* is derived by dividing the current-dollar estimate of gross product by the constant-dollar estimate, making the deflator, in effect, a price index for gross product of the sector reported.

NOTES ON THE DATA

For the business sector and the nonfarm business sector, these indexes relate to the gross domestic product less households and institutions, owner-occupied housing, and the statistical discrepancy. For the nonfinancial corporate sector, the indexes refer to the gross domestic product of nonfinancial corporate business.

Manufacturing output data are supplied by the Bureau of Economic Analysis, U.S. Department of Commerce, and the Federal Reserve Board. Quarterly measures have been adjusted by the Bureau of Labor Statistics to annual estimates of output (gross product originating) from the Bureau of Economic Analysis. Compensation and hours data are from the Bureau of Economic Analysis and the Bureau of Labor Statistics. Historical statistics for most productivity measures appear in *Trends in Multifactor Productivity, 1948-81*, BLS Bulletin 2178. Additional information may be obtained from the Office of Productivity and Technology (202 523-9261).

State and Area Labor Force Data (D table)

FEDERAL-STATE COOPERATIVE PROGRAM

Labor force and unemployment estimates for States, labor market areas (LMA's), and other areas covered under Federal assistance programs are developed by State employment security agencies under a Federal-State cooperative program. The local unemployment estimates which are derived from standardized procedures developed by BLS are the basis for determining eligibility of an area for benefits under Federal programs such as the Job Training Partnership Act, the Economic Dislocation and Worker Adjustment Assistance Act, and the Urban Development Action Grant program.

Annual average data for the States and areas shown in table D are published in *Employment and Earnings* (usually the May issue). For regions, States, selected metropolitan areas, and central cities, annual average data classified by selected

demographic, social, and economic characteristics are published in the BLS bulletin, *Geographic Profile of Employment and Unemployment*.

Labor force estimates for counties and cities and other small areas have been prepared for administration of various Federal economic assistance programs and may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The report "Unemployment in States and Local Areas" is published monthly through GPO and is available in microfiche form only, on a subscription basis.

ESTIMATING METHODS

Monthly labor force, employment, and unemployment estimates are prepared for the 50 States, the District of Columbia, and over 2,600 labor market areas. The

estimation methods are described below for States (and the District of Columbia) and for sub-State areas. A more detailed description of the estimation procedure is contained in the BLS document, "Manual for Developing Local Area Unemployment Statistics."

Estimates for States

Current monthly estimates. The civilian labor force and unemployment estimates for the 11 largest States—California, Florida, Illinois, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Texas—are sufficiently reliable to be taken directly from the Current Population Survey (CPS) on a monthly basis. These are termed "direct-use States." For a description of the CPS concepts, see "Household Data," above.

For the 39 smaller States and the District of Columbia, which do not use the CPS directly each month, regression models (sets of equations) are used to develop employment and unemployment estimates. These, then, are the "non-direct-use" States. The regression techniques are based on historical and current relationships found within each State's economy as reflected in the different sources of data that are available for each State—the CPS, the Current Employment Statistics (CES) survey, and the unemployment insurance (UI) system. When the estimation procedures were introduced in 1989, over 10 years of data were used to develop the equations for each State. While all the State models have important variables in common, they differ somewhat from one another so as to better reflect individual State characteristics.

Two models—one for employment and one for the unemployment rate—are used for each State. The unemployment rate, rather than the unemployment level, is modeled, primarily because the rate is usually more meaningful for economic analysis.

The employment models use the CES estimates of nonfarm wage and salary jobs and also include data for employed persons not covered or only partially covered by the CES survey. Typically, these are agricultural workers, the self-employed, unpaid family workers, and private household workers.

The unemployment rate models also include different types of data. Data for UI claimants (without earnings due to employment) are used to represent most of the experienced unemployed. The models also include an employment-to-population ratio which reflects both the business cycle and the experienced unemployed not covered by the UI claims data. New entrants and reentrants into the labor force are also reflected in the models. For some States, the models include variables which reflect seasonal factors not reflected in the other data used, such as the large increase in the labor force at the end of the school year.

In both the employment and unemployment rate models, an important feature is the use of a technique that allows the equations to adjust automatically to structural changes that occur. The models are termed "variable coefficient models" because they include a built-in tuning mechanism, known as the Kalman Filter, which revises a model's coefficients when

the new data that become available each month indicate that changes in the data relationships have taken place. Once the estimates are developed from the models, the unemployment level and labor force estimates are calculated.

Benchmark correction procedures. Once each year, monthly estimates for the 39 non-direct-use States and the District of Columbia are adjusted, or benchmarked, by BLS to the annual average CPS estimates. The benchmarking technique employs a procedure (called the Denton method) which adjusts the annual average of the models to equal the CPS annual average, while preserving, as much as possible, the original monthly seasonal pattern of the model estimates.

In the 11 direct-use States, no benchmark correction is required, as the average of the 12 monthly State CPS estimates will equal the CPS annual averages.

Estimates for sub-State areas

Sub-State monthly labor force and unemployment estimates in over 2,600 labor market areas (LMA's) are prepared in several stages.

Preliminary estimate—employment. The total civilian employment estimates are based on CES data. These "place-of-work" estimates must be adjusted to refer to place-of-residence as used in the CPS. Factors for adjusting from place-of-work to place-of-residence have been developed for several categories of employment on the basis of employment relationships at the time of the 1980 decennial census. These factors are applied to the CES estimates for the current period to obtain adjusted employment estimates, to which are added estimates for employment not represented in the CES—agriculture, nonagricultural self-employed and unpaid family workers, and private household workers.

Preliminary estimate—unemployment. In the current month, the estimate of unemployment is an aggregate of the estimates for each of three categories: (1) persons who were previously employed in industries covered by State UI laws; (2) those previously employed in industries not covered by these laws; and (3) those who were entering the civilian labor force for the first time or reentering after a period of separation.

Sub-State adjustment for additivity. Estimates of employment and unemployment are prepared for the State and LMA's within the State. The LMA estimates geographically exhaust the entire State. Thus, a proportional adjustment must be applied to all sub-State LMA estimates to ensure that they add to the independently estimated State totals for employment and unemployment.

Benchmark correction. At the end of each year, sub-State estimates are revised. The revisions incorporate any changes in the inputs, such as revisions in the CES-based employment figures, corrections in claims counts, and updated historical relationships. The corrected estimates are then readjusted to add to the revised (benchmarked) State estimates of employment and unemployment.

Seasonal Adjustment

Over the course of a year, the size of the Nation's labor force, the levels of employment and unemployment, and other measures of labor market activity undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make it easier to observe the cyclical and other nonseasonal movements in the series. In evaluating changes in a seasonally adjusted series, it is important to note that seasonal adjustment is merely an approximation based on past experience. Seasonally adjusted estimates have a broader margin of possible error than the original data on which they are based, since they are subject not only to sampling and other errors but are also affected by the uncertainties of the seasonal adjustment process itself. Seasonally adjusted series for selected labor force and establishment-based data are published regularly in *Employment and Earnings*.

The seasonal adjustment program used for these series is an adaptation of the standard ratio-to-moving-average method. It provides for "moving" adjustment factors to take account of changing seasonal patterns. A detailed description of the method is given in *The X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15, Bureau of the Census (1967).

Beginning in January 1980, BLS introduced two major modifications in the seasonal adjustment methodology for data from the household survey. First, the data are being seasonally adjusted with a procedure called X-11 ARIMA, which was developed at Statistics Canada as an extension of the existing standard X-11 method. A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, January 1983. The X-11 procedure was originally developed at the Bureau of the Census and had been used by the BLS to seasonally adjust labor force series since 1973. Tests have shown that use of the X-11 ARIMA procedure, which places more emphasis on recent data, provides better seasonal adjustments than does the X-11 method alone.

The second change is that seasonal adjustment factors are calculated for use during the first 6 months of the year rather than for the entire year. In July of each year, BLS calculates and publishes in *Employment and Earnings* a set of seasonal adjustment factors for use in the second half, based on the experience through June. Revisions of historical data for the most recent 5 years are made at the beginning of each calendar year. However, as a result of the revisions to the estimates for 1970-81 based on 1980 census population counts, revisions to seasonally adjusted series in early 1982 were carried back to 1970.

All labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, for each of the three major labor force components—agricultural employment, nonagricultural employment, and unemployment—data for four sex-age groups (men and women under and over 20 years of age) are separately adjusted for seasonal variation and are then added to derive seasonally adjusted total figures. The seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force. Because of the independent seasonal adjustment of various series, components will not necessarily add to totals.

Revised seasonally adjusted data for selected labor force series based on the experience through December, new seasonal adjustment factors to be used to calculate the civilian unemployment rate for the first 6 months of the following year, and a description of the current seasonal adjustment methodology are published in each January issue of *Employment and Earnings*. Revised seasonally adjusted data covering the revision period for a broader range of labor force series are published in the February issue of this publication.

Beginning in July 1980, the BLS also uses the X-11 ARIMA methodology in seasonally adjusting the establishment data, which previously had been computed using the *BLS Seasonal Factor Method*. All series are seasonally adjusted using the multiplicative models under X-11 ARIMA. Seasonal adjustment factors used in calculating the current year's estimates are based on actual data through March 1988 and projected data through March 1989. The ARIMA model options for projecting the data series for 1 year ahead have been used in seasonally adjusting the establishment series since June 1981.

Seasonal adjustment factors are directly applied to the component levels. Seasonally adjusted totals for most of these series are then obtained by taking a weighted average of the seasonally adjusted data for the component series. Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and seasonally adjusted average weekly hours.

Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing average weekly earnings, seasonally adjusted, by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours, seasonally adjusted, by production

or nonsupervisory workers, seasonally adjusted, and dividing by the 1977 base. For total private, total goods-producing, total private service-producing, wholesale trade, retail trade, manufacturing, and durable and nondurable goods industries, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours, seasonally adjusted, for the appropriate component industries and dividing by the 1977 base.

Seasonally adjusted data are not published for a number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These failed or unsatisfactory seasonally adjusted series are used in the aggregation to broader level seasonally adjusted series, however.

Beginning in June 1983, seasonal adjustment factors for Federal Government employment are derived from unadjust-

ed data which include Christmas temporary workers employed by the Postal Service. In earlier years the number of these workers was substantial, and at times varied greatly from year to year, based on administrative decisions of the Postal Service. Hence, it was considered desirable to exclude this group from the unadjusted data upon which the seasonal adjustment factors were based. In the past several years, the number of these workers has decreased to the point where their presence has no impact on seasonal adjustment. Temporary census takers for the 1980 decennial census are removed prior to the calculation of seasonal adjustment factors for Federal Government employment.

The revised seasonally adjusted series for the establishment data reflect experience through March 1988. Seasonal adjustment factors to be used for current adjustment appear in the June 1988 issue of *Employment and Earnings*.

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