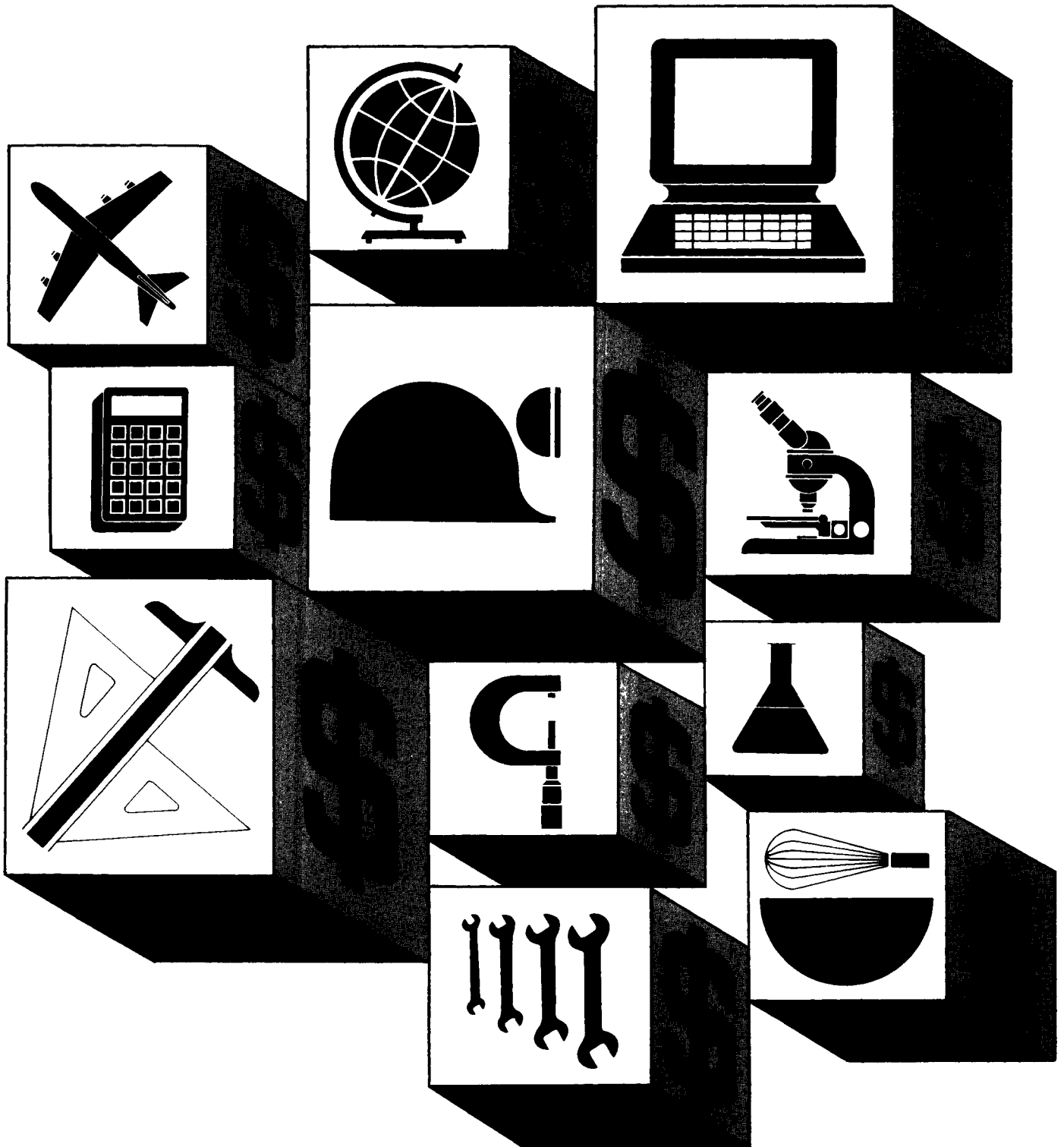




# EMPLOYMENT AND EARNINGS

U.S. Department of Labor  
Bureau of Labor Statistics  
August 1989





## U.S. DEPARTMENT OF LABOR

Elizabeth Dole, Secretary

### BUREAU OF LABOR STATISTICS

Janet L. Norwood, *Commissioner*

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## 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.

### Establishment data

National annual averages:  
Industry divisions (preliminary) Jan.

Industry detail (final) Mar.

Women employees (final) Mar.

National data revised to reflect new benchmarks and new seasonal adjustment factors June

Revised historical national data Supplement<sup>1</sup>

State and area annual averages May

Area definitions May

### State and area labor force data

Annual averages May

<sup>1</sup> The latest supplement was published in August 1988.

# Employment and Earnings

Vol. 36 No. 8 August 1989

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Editors: Gloria Peterson Green, Rosalie K. Epstein

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# Employment and Unemployment Developments, July 1989

Payroll employment continued to increase in July and unemployment was little changed. Both the overall jobless rate and that for civilian workers were 5.2 percent.

Nonagricultural payroll employment, as measured by the survey of business establishments, rose by 170,000. Jobs in the private sector (excluding government) increased by 195,000. Total civilian employment, as measured by the survey of households, showed little change over the month.

## Unemployment

The number of unemployed persons, 6.5 million, and the civilian worker unemployment rate, 5.2 percent, were virtually unchanged in July, after seasonal adjustment. In fact, the civilian worker rate has been either 5.2 or 5.3 percent for 4 consecutive months. Jobless rates for adult men (4.3 percent), adult women (5.0 percent), and whites (4.6 percent) held steady from the previous month. There was a small decline among teenagers (to 14.7 percent). The rate for Hispanic workers (9.0 percent) rose, while that for black workers (10.9 percent) showed a decrease, largely because the quite volatile rate for black teenagers (27.4 percent) fell markedly. (See tables A-33 and A-34.)

The number of persons working part time for economic reasons—sometimes referred to as the partially unemployed—was at a seasonally adjusted level of 4.8 million in July. This series has been trending down over the past year. (See table A-35.)

## Civilian employment and the labor force

Total civilian employment was essentially unchanged in July at a seasonally adjusted level of 117.5 million. The proportion of the working-age population that is employed (the employment-population ratio) was 63.0 percent, about where it has been for the past 7 months. Civilian employment has grown by 2.4 million over the past year. (See table A-33.)

The civilian labor force, at 124.0 million, and the labor force participation rate, 66.5 percent, were also about unchanged from the previous month. Over the past year,

the civilian labor force has risen by 2.4 million, as the number of adult women and men in the labor force expanded by 1.6 million and 1.0 million, respectively, while the number of teenagers—a declining population group—fell by 270,000. (See table A-33.)

## Industry payroll employment

Total nonagricultural payroll employment rose by 170,000 in July to a level of 108.7 million, seasonally adjusted. Private sector employment rose by 195,000. Over the past year, payroll jobs have increased by 2.9 million. (See table B-4.)

In the goods-producing sector, job growth was confined to the construction industry, where employment rose by about 35,000 in July, after being about unchanged during the prior 2 months. Mining employment was down for the second month in a row, due to labor-management disputes.

In manufacturing, employment held steady in July, following 3 consecutive months of decline. Increases in nondurable goods, particularly in food processing, were offset by decreases in durable goods industries. The durable goods sector has lost 55,000 jobs over the past 4 months, thus reversing much of the job growth that occurred in late 1988 and early 1989. Employment in the auto industry dropped sharply for the second straight month, losing over 10,000 jobs in July, as companies continued to slow production because of large inventories and slow sales. Employment in the electrical equipment industry continued its downward trend. The machinery industry, however, showed a small increase.

In the service-producing sector, jobs in the services industry grew by a modest 75,000, following a gain of 210,000 in the prior month. The health services component rose by 30,000, while business services was about unchanged. Retail trade rose by 50,000 over the month, with the largest increases occurring in food stores and eating and drinking places. The transportation industry continued to exhibit strength, with an addition of 25,000 jobs. Employment in finance, insurance, and real estate rose by

10,000 in July. Little employment growth occurred in wholesale trade. Recent employment growth in this industry has been at a much slower pace than earlier in the year.

### Weekly hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls increased 0.3 hour to 34.9 hours, seasonally adjusted. The manufacturing workweek held at 41.0 hours, while factory overtime, at 3.9 hours, was up 0.1 hour. (See table C-5.)

Mainly reflecting the increase in the workweek, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls increased by 1.1 percent to 129.4 (1977=100), after seasonal adjustment.

The index for manufacturing rose slightly over the month to 96.5. (See table C-6.)

### Hourly and weekly earnings

Average hourly earnings of private production or nonsupervisory workers increased 0.8 percent in July, seasonally adjusted, while average weekly earnings climbed by 1.7 percent. The large increase in hourly earnings followed 2 months of very small changes. Prior to seasonal adjustment, average hourly earnings increased by 5 cents to \$9.63 and average weekly earnings jumped \$4.63 to \$338.01. Over the year, both average hourly earnings and average weekly earnings increased by 4.2 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>
August	September 1	November	December 8
September	October 6	December	January 5
October	November 3	January	February 2

**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				
<b>Annual averages</b>												
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	64,683	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091	
1973 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1988:</b>												
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	3,236	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	
<b>1989:</b>												
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	
March .....	187,581	124,948	66.6	118,820	1,684	117,136	3,206	113,930	6,128	4.9	62,633	
April .....	187,708	125,343	66.8	118,797	1,684	117,113	3,104	114,009	6,546	5.2	62,365	
May .....	187,854	125,283	66.7	118,888	1,673	117,215	3,112	114,102	6,395	5.1	62,571	
June .....	187,995	125,768	66.9	119,207	1,666	117,541	3,096	114,445	6,561	5.2	62,228	
July .....	188,149	125,622	66.8	119,125	1,666	117,459	3,219	114,240	6,497	5.2	62,527	

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

<sup>2</sup> 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				
<b>Annual averages</b>												
<b>MEN</b>												
1978 <sup>1</sup>	78,107	61,151	78.3	58,010	1,531	56,479	2,718	53,761	3,142	5.1	18,956	
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	82,932	77.8	58,665	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	83,979	77.0	57,800	1,529	56,271	2,736	53,534	6,179	9.7	19,073	
1983	84,064	84,580	76.8	58,320	1,533	56,787	2,704	54,083	6,260	9.7	19,484	
1984	85,156	85,386	76.8	60,642	1,551	59,091	2,668	58,423	4,744	7.3	18,771	
1985	86,025	85,987	76.7	61,447	1,556	59,891	2,535	57,356	4,521	6.9	20,058	
1986 <sup>1</sup>	87,349	88,973	76.7	82,443	1,551	80,892	2,511	58,381	4,530	6.8	20,378	
1987	86,476	87,764	76.8	63,884	1,577	62,107	2,543	59,584	4,101	6.1	20,892	
1988	89,404	88,474	76.8	64,820	1,547	63,273	2,493	60,760	3,855	5.3	20,930	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1988:</b>												
July	89,445	88,481	76.5	64,941	1,512	63,429	2,475	60,954	3,520	5.1	20,964	
August	89,504	88,685	76.7	64,931	1,529	63,402	2,491	60,911	3,754	5.5	20,819	
September	89,577	88,604	76.8	65,015	1,540	63,475	2,488	60,987	3,589	5.2	20,973	
October	89,637	88,569	76.5	64,976	1,528	63,450	2,544	60,908	3,593	5.2	21,068	
November	89,716	88,686	76.8	65,074	1,542	63,532	2,533	60,999	3,812	5.3	21,030	
December	89,792	88,638	78.4	65,055	1,534	63,521	2,477	61,044	3,583	5.2	21,154	
<b>1989:</b>												
January	89,914	89,032	78.8	65,322	1,532	63,790	2,501	61,289	3,710	5.4	20,882	
February	89,973	89,113	76.8	65,572	1,521	64,051	2,509	61,542	3,540	5.1	20,860	
March	90,032	89,190	78.9	65,920	1,521	64,399	2,497	61,902	3,270	4.7	20,842	
April	90,094	89,360	77.0	65,767	1,521	64,246	2,440	61,806	3,593	5.2	20,734	
May	90,167	89,114	76.7	65,713	1,511	64,202	2,447	61,755	3,401	4.9	21,053	
June	90,237	89,507	77.0	66,110	1,501	64,609	2,455	62,154	3,397	4.9	20,730	
July	90,315	89,245	76.7	65,961	1,499	64,462	2,552	61,909	3,264	4.7	21,070	
<b>Annual averages</b>												
<b>WOMEN</b>												
1978 <sup>1</sup>	85,434	42,731	50.0	39,669	100	39,569	669	38,900	3,061	7.2	42,703	
1979	86,951	44,343	51.0	41,325	108	41,217	681	40,556	3,016	6.8	42,608	
1980	88,472	45,611	51.8	42,241	124	42,117	656	41,461	3,370	7.4	42,861	
1981	89,751	46,829	52.2	43,133	133	43,000	667	42,333	3,696	7.9	42,922	
1982	90,687	47,894	52.7	43,395	139	43,256	665	42,591	4,499	9.4	42,993	
1983	91,827	48,646	53.0	44,190	143	44,047	680	43,387	4,457	9.2	43,181	
1984	92,924	49,855	53.7	46,061	146	45,915	653	45,262	3,794	7.6	43,088	
1985	93,686	51,200	54.5	47,409	150	47,259	644	46,615	3,791	7.4	42,686	
1986 <sup>1</sup>	94,944	52,568	55.4	48,881	155	48,706	852	48,054	3,707	7.1	42,376	
1987	96,013	53,818	56.1	50,494	160	50,334	666	49,668	3,324	6.2	42,195	
1988	96,918	54,904	56.6	51,858	162	51,696	676	51,020	3,046	5.5	42,014	
<b>Monthly data, seasonally adjusted<sup>2</sup></b>												
<b>1988:</b>												
July	96,957	54,870	56.8	51,766	161	51,605	585	51,020	3,104	5.7	42,087	
August	97,018	55,007	56.7	51,964	163	51,801	651	51,150	3,043	5.5	42,011	
September	97,089	55,084	56.7	52,059	164	51,895	686	51,207	3,025	5.5	42,005	
October	97,164	55,209	56.8	52,284	161	52,123	894	51,429	2,925	5.3	41,955	
November	97,234	55,529	57.1	52,576	163	52,415	705	51,710	2,951	5.3	41,705	
December	97,306	55,621	57.2	52,850	162	52,688	716	51,772	2,971	5.3	41,685	
<b>1989:</b>												
January	97,427	56,091	57.6	53,085	164	52,921	799	52,122	3,006	5.4	41,336	
February	97,486	55,752	57.2	52,965	163	52,802	713	52,089	2,787	5.0	41,736	
March	97,550	55,758	57.2	52,900	163	52,737	709	52,028	2,858	5.1	41,792	
April	97,614	55,983	57.4	53,029	163	52,868	663	52,203	2,953	5.3	41,631	
May	97,687	56,189	57.5	53,175	162	53,013	666	52,347	2,994	5.3	41,518	
June	97,758	56,261	57.8	53,097	165	52,932	641	52,290	3,164	5.6	41,497	
July	97,834	56,377	57.6	53,164	167	52,997	666	52,331	3,213	5.7	41,457	

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

<sup>2</sup> 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
<b>Annual averages</b>								
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 <sup>1</sup> .....	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 <sup>2</sup> .....	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 <sup>1</sup> .....	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 <sup>1</sup> .....	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 <sup>1</sup> .....	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 <sup>1</sup> .....	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
<b>Monthly data, seasonally adjusted<sup>2</sup></b>								
<b>1988:</b>								
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
<b>1989:</b>								
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
March .....	185,897	123,284	66.3	117,136	6,128	5.0	4.8	5.1
April .....	186,024	123,659	66.5	117,113	6,546	5.3	5.3	5.3
May .....	186,181	123,610	66.4	117,215	6,395	5.2	5.0	5.3
June .....	186,329	124,102	66.6	117,541	6,561	5.3	5.0	5.6
July .....	186,483	123,956	66.5	117,459	6,497	5.2	4.8	5.7

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

Explanatory Notes.

<sup>2</sup> 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	July 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					
<b>TOTAL</b>											
16 years and over .....	186,483	126,238	67.7	119,502	6,736	5.3	60,245	27,482	2,156	3,453	27,154
16 to 19 years .....	14,196	9,875	69.6	8,465	1,410	14.3	4,321	592	862	42	2,826
16 to 17 years .....	6,814	4,115	60.4	3,409	705	17.1	2,699	215	480	13	1,991
18 to 19 years .....	7,383	5,761	78.0	5,056	704	12.2	1,622	377	381	29	835
20 to 24 years .....	18,004	15,081	83.8	13,808	1,273	8.4	2,923	1,366	624	69	864
25 to 54 years .....	103,672	86,025	83.0	82,432	3,593	4.2	17,645	12,165	638	1,343	3,499
25 to 34 years .....	42,919	35,942	83.7	34,071	1,871	5.2	6,977	5,028	418	308	1,225
25 to 29 years .....	21,170	17,669	83.5	16,683	985	5.6	3,501	2,415	290	143	653
30 to 34 years .....	21,749	18,274	84.0	17,388	886	4.8	3,478	2,613	127	164	572
35 to 44 years .....	35,985	30,367	84.4	29,232	1,135	3.7	5,618	3,837	172	479	1,131
35 to 39 years .....	19,349	16,214	83.8	15,554	661	4.1	3,134	2,161	105	228	640
40 to 44 years .....	16,635	14,153	85.1	13,678	474	3.3	2,483	1,676	67	250	490
45 to 54 years .....	24,768	19,716	79.6	19,130	586	3.0	5,051	3,301	50	557	1,144
45 to 49 years .....	13,463	11,094	82.4	10,767	327	2.9	2,369	1,580	37	239	513
50 to 54 years .....	11,305	8,822	76.3	8,363	259	3.0	2,682	1,721	12	317	631
55 to 64 years .....	21,413	11,800	55.1	11,425	375	3.2	9,613	4,496	22	794	4,301
55 to 59 years .....	10,670	7,067	66.2	6,839	228	3.2	3,604	1,938	13	415	1,239
60 to 64 years .....	10,743	4,733	44.1	4,586	147	3.1	6,009	2,558	9	379	3,063
65 years and over .....	29,199	3,456	11.8	3,370	86	2.5	25,742	8,863	12	1,205	15,662
65 to 69 years .....	10,030	2,048	20.4	1,986	62	3.0	7,982	2,788	4	279	4,912
70 to 74 years .....	7,785	917	11.8	901	17	1.9	6,868	2,393	2	234	4,239
75 years and over .....	11,384	491	4.3	483	8	1.6	10,893	3,684	6	691	6,511
<b>Men</b>											
16 years and over .....	88,816	69,573	78.3	68,265	3,308	4.8	19,243	504	1,001	1,914	15,824
16 to 19 years .....	7,137	5,249	73.5	4,554	694	13.2	1,888	31	397	21	1,440
16 to 17 years .....	3,478	2,218	63.8	1,844	374	16.9	1,260	15	233	8	1,004
18 to 19 years .....	3,656	3,031	82.8	2,710	320	10.6	828	18	164	13	435
20 to 24 years .....	8,717	7,877	90.4	7,240	636	8.1	840	33	293	46	469
25 to 54 years .....	50,732	47,580	93.8	45,841	1,739	3.7	3,150	196	294	866	1,794
25 to 34 years .....	21,156	20,067	94.9	19,187	980	4.4	1,089	69	202	226	591
25 to 29 years .....	10,406	9,789	94.1	9,331	458	4.7	617	32	146	105	334
30 to 34 years .....	10,750	10,279	95.6	9,857	422	4.1	472	38	56	121	257
35 to 44 years .....	17,572	16,607	94.5	16,047	560	3.4	965	66	72	309	517
35 to 39 years .....	9,485	8,971	94.6	8,661	310	3.5	514	39	41	147	288
40 to 44 years .....	8,086	7,636	94.4	7,386	250	3.3	450	28	32	162	229
45 to 54 years .....	12,004	10,907	90.9	10,607	300	2.7	1,097	60	20	330	666
45 to 49 years .....	6,539	6,033	92.3	5,858	175	2.9	506	27	13	150	318
50 to 54 years .....	5,465	4,874	89.2	4,749	125	2.6	591	33	6	180	371
55 to 64 years .....	10,097	6,813	67.5	6,616	197	2.9	3,285	90	11	471	2,712
55 to 59 years .....	5,080	4,042	79.6	3,928	114	2.8	1,039	32	6	256	745
60 to 64 years .....	5,017	2,771	55.2	2,687	84	3.0	2,248	58	5	215	1,968
65 years and over .....	12,134	2,054	16.9	2,014	41	2.0	10,079	154	6	511	9,408
65 to 69 years .....	4,556	1,191	26.1	1,160	31	2.8	3,365	37	-	177	3,150
70 to 74 years .....	3,372	541	16.0	534	8	1.5	2,831	41	1	117	2,672
75 years and over .....	4,206	322	7.7	320	2	.5	3,884	76	5	216	3,586
<b>Women</b>											
16 years and over .....	97,667	56,665	58.0	53,237	3,428	6.0	41,002	26,978	1,156	1,539	11,330
16 to 19 years .....	7,060	4,626	65.5	3,911	715	15.5	2,433	561	465	21	1,387
16 to 17 years .....	3,335	1,896	56.9	1,565	331	17.5	1,439	200	247	5	967
18 to 19 years .....	3,724	2,730	73.3	2,346	384	14.1	994	361	217	16	400
20 to 24 years .....	9,287	7,204	77.6	6,568	637	8.8	2,063	1,333	331	23	395
25 to 54 years .....	52,940	38,445	72.6	38,591	1,852	4.8	14,495	11,989	344	477	1,705
25 to 34 years .....	21,763	15,875	72.9	14,884	991	6.2	5,888	4,958	214	81	634
25 to 29 years .....	10,764	7,880	73.2	7,352	527	6.7	2,884	2,383	144	38	319
30 to 34 years .....	10,999	7,995	72.7	7,531	464	5.8	3,004	2,575	71	43	315
35 to 44 years .....	18,413	13,760	74.7	13,185	575	4.2	4,653	3,771	99	170	814
35 to 39 years .....	9,864	7,243	73.4	6,893	351	4.8	2,620	2,123	64	81	352
40 to 44 years .....	8,549	6,517	76.2	6,292	224	3.4	2,033	1,648	35	88	261
45 to 54 years .....	12,764	8,810	69.0	8,523	287	3.3	3,954	3,240	30	226	458
45 to 49 years .....	6,924	5,061	73.1	4,909	152	3.0	1,863	1,553	24	89	197
50 to 54 years .....	5,840	3,746	64.2	3,814	134	3.6	2,091	1,888	6	137	260
55 to 64 years .....	11,316	4,968	44.1	4,810	178	3.6	6,328	4,406	11	323	1,589
55 to 59 years .....	5,590	3,025	54.1	2,911	115	3.8	2,565	1,906	6	159	494
60 to 84 years .....	5,726	1,962	34.3	1,899	63	3.2	3,763	2,500	4	164	1,095
65 years and over .....	17,065	1,402	8.2	1,357	45	3.2	15,663	8,709	6	694	6,254
65 to 69 years .....	5,474	857	15.7	826	31	3.6	4,617	2,749	4	102	1,782
70 to 74 years .....	4,413	376	8.5	367	9	2.4	4,037	2,352	1	117	1,567
75 years and over .....	7,178	189	2.4	163	6	3.4	7,009	3,608	1	475	2,925

**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	July 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					
<b>WHITE</b>											
16 years and over .....	159,400	108,113	67.8	103,215	4,898	4.5	51,287	23,897	1,516	2,618	23,257
16 to 19 years .....	11,539	8,322	72.1	7,330	992	11.9	3,217	437	590	28	2,163
16 to 17 years .....	5,466	3,426	62.7	2,924	502	14.6	2,040	159	326	6	1,549
18 to 19 years .....	8,073	4,896	60.6	4,406	490	10.0	1,177	278	264	22	613
20 to 24 years .....	14,843	12,682	85.4	11,813	869	6.9	2,161	1,064	451	44	601
25 to 54 years .....	88,097	73,527	83.5	70,859	2,669	3.6	14,570	10,439	445	975	2,710
25 to 34 years .....	35,973	30,349	84.4	29,021	1,328	4.4	5,824	4,241	287	228	870
25 to 29 years .....	17,695	14,900	84.2	14,225	874	4.5	2,796	2,031	207	109	449
30 to 34 years .....	18,278	15,449	84.5	14,795	854	4.2	2,829	2,210	81	117	421
35 to 44 years .....	30,801	26,094	84.7	25,213	881	3.4	4,707	3,321	118	371	899
35 to 39 years .....	16,403	13,841	84.4	13,349	492	5.7	2,562	1,843	68	184	490
40 to 44 years .....	14,398	12,253	85.1	11,864	389	3.2	2,144	1,506	48	207	410
45 to 54 years .....	21,324	17,085	80.1	16,624	460	2.7	4,239	2,878	43	378	940
45 to 49 years .....	11,592	9,815	82.9	9,362	253	2.6	1,977	1,361	35	170	412
50 to 54 years .....	9,731	7,489	76.8	7,262	208	3.4	2,262	1,556	8	208	528
55 to 64 years .....	18,724	10,504	56.1	10,189	315	3.0	8,220	3,682	22	597	3,719
55 to 59 years .....	9,245	8,212	67.2	8,028	184	3.0	3,032	1,681	13	309	1,030
60 to 64 years .....	9,480	4,292	45.3	4,160	132	3.1	5,188	2,201	9	289	2,689
65 years and over .....	28,197	3,077	11.7	3,024	53	1.7	23,120	8,074	7	973	14,085
65 to 69 years .....	8,908	1,847	20.7	1,805	41	2.2	7,061	2,488	4	214	4,357
70 to 74 years .....	7,007	784	11.2	777	7	.9	6,222	2,192	2	199	3,829
75 years and over .....	10,282	446	4.3	441	5	1.1	9,837	3,396	1	561	5,879
<b>Men</b>											
16 years and over .....	76,507	60,350	78.9	57,909	2,441	4.0	18,157	384	703	1,483	13,807
16 to 19 years .....	5,822	4,426	76.1	3,928	502	11.3	1,394	24	262	14	1,094
16 to 17 years .....	2,796	1,858	66.4	1,590	268	14.4	939	13	150	8	770
18 to 19 years .....	3,026	2,570	84.9	2,336	234	9.1	456	12	112	8	324
20 to 24 years .....	7,264	6,685	92.0	6,239	446	6.7	579	16	220	31	313
25 to 54 years .....	43,822	41,274	94.6	39,966	1,309	3.2	2,348	145	208	654	1,340
25 to 34 years .....	17,920	17,184	95.8	16,523	842	3.7	756	47	145	169	394
25 to 29 years .....	8,784	8,341	95.0	8,028	315	3.8	443	23	113	78	231
30 to 34 years .....	9,138	8,823	96.8	8,496	327	3.7	313	24	33	93	163
35 to 44 years .....	15,251	14,511	95.1	14,078	434	3.0	740	54	48	253	365
35 to 39 years .....	8,151	7,781	95.5	7,552	229	2.9	370	32	26	116	197
40 to 44 years .....	7,100	6,730	94.8	6,525	205	3.0	369	22	22	137	189
45 to 54 years .....	10,451	9,599	91.8	9,366	234	2.4	852	45	15	232	580
45 to 49 years .....	5,697	5,307	93.2	5,178	129	2.4	390	19	12	107	251
50 to 54 years .....	4,754	4,292	90.3	4,187	105	2.4	462	26	3	125	308
55 to 64 years .....	8,891	6,105	68.7	5,948	157	2.8	2,787	64	11	362	2,350
55 to 59 years .....	4,441	3,586	80.7	3,497	89	2.5	855	22	6	167	640
60 to 64 years .....	4,451	2,519	56.8	2,451	68	2.7	1,932	43	5	175	1,709
65 years and over .....	10,906	1,857	17.0	1,830	27	1.5	9,049	134	1	402	8,512
65 to 69 years .....	4,070	1,085	26.7	1,063	22	2.0	2,985	29	-	136	2,820
70 to 74 years .....	3,043	471	15.5	467	4	.8	2,572	37	1	98	2,438
75 years and over .....	3,793	302	6.0	300	2	.5	3,492	66	-	168	3,256
<b>Women</b>											
16 years and over .....	82,894	47,763	57.6	45,306	2,457	5.1	35,131	23,512	813	1,155	9,650
16 to 19 years .....	5,718	3,894	68.1	3,404	490	12.6	1,823	412	328	14	1,089
16 to 17 years .....	2,670	1,568	58.7	1,335	234	14.9	1,102	146	176	-	779
18 to 19 years .....	3,047	2,326	76.3	2,069	256	11.0	721	268	151	14	290
20 to 24 years .....	7,578	5,997	79.1	5,575	423	7.0	1,581	1,048	231	14	288
25 to 54 years .....	44,475	32,253	72.5	30,893	1,360	4.2	12,222	10,294	237	321	1,370
25 to 34 years .....	18,053	13,185	73.0	12,499	686	5.2	4,869	4,194	142	57	478
25 to 29 years .....	8,911	6,559	73.8	6,199	359	5.5	2,353	2,008	94	33	218
30 to 34 years .....	9,142	6,828	72.5	6,299	327	4.9	2,516	2,186	48	24	258
35 to 44 years .....	15,550	11,583	74.5	11,138	447	3.9	3,987	3,267	68	118	514
35 to 39 years .....	8,252	6,060	73.4	5,797	263	4.3	2,192	1,809	42	48	293
40 to 44 years .....	7,298	5,523	75.7	5,339	184	3.3	1,775	1,458	26	70	221
45 to 54 years .....	10,872	7,485	68.8	7,259	227	3.0	3,367	2,833	26	148	360
45 to 49 years .....	5,895	4,308	73.1	4,184	124	2.9	1,567	1,340	23	63	161
50 to 54 years .....	4,977	3,177	63.8	3,075	103	3.2	1,800	1,492	5	83	220
55 to 64 years .....	9,833	4,400	44.7	4,241	159	3.6	5,433	3,818	11	236	1,389
55 to 59 years .....	4,804	2,827	54.7	2,531	95	3.6	2,177	1,859	7	122	390
60 to 64 years .....	5,029	1,773	35.3	1,709	63	3.8	3,258	2,159	4	114	980
65 years and over .....	15,291	1,219	8.0	1,194	25	2.1	14,071	7,940	6	571	5,554
65 to 69 years .....	4,838	762	15.7	742	19	2.5	4,076	2,457	4	78	1,537
70 to 74 years .....	3,964	313	7.9	310	3	1.0	3,650	2,155	1	101	1,393
75 years and over .....	6,489	144	2.2	141	3	1.9	6,345	3,328	1	393	2,823

**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	July 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					
<b>BLACK</b>											
16 years and over .....	21,038	13,978	66.4	12,364	1,614	11.5	7,060	2,720	415	779	3,146
16 to 19 years .....	2,175	1,291	59.4	913	378	29.3	884	134	214	13	523
18 to 17 years .....	1,088	564	51.9	393	171	30.3	524	55	122	6	341
18 to 19 years .....	1,088	727	66.9	520	207	28.5	360	79	92	7	183
20 to 24 years .....	2,480	1,879	75.8	1,534	345	18.4	600	245	111	22	222
25 to 54 years .....	11,803	9,506	80.5	8,695	811	8.5	2,297	1,223	90	339	645
25 to 34 years .....	5,315	4,321	81.3	3,898	483	11.2	994	573	55	71	295
25 to 29 years .....	2,677	2,163	80.8	1,885	279	12.9	514	265	30	30	168
30 to 34 years .....	2,638	2,157	81.8	1,954	204	9.5	481	289	25	41	126
35 to 44 years .....	3,898	3,238	83.1	3,015	223	6.9	660	340	31	99	190
35 to 39 years .....	2,200	1,784	81.1	1,830	154	8.6	418	212	24	57	125
40 to 44 years .....	1,697	1,454	85.7	1,385	70	4.8	244	128	7	43	85
45 to 54 years .....	2,590	1,947	75.2	1,842	105	5.4	643	310	4	169	160
45 to 49 years .....	1,379	1,069	77.5	1,002	67	6.3	310	161	1	83	84
50 to 54 years .....	1,211	878	72.5	839	38	4.3	334	148	3	106	76
55 to 64 years .....	2,125	982	46.2	932	50	5.1	1,143	476	-	181	485
55 to 59 years .....	1,103	651	59.0	615	36	5.5	452	192	-	94	166
60 to 64 years .....	1,021	331	32.4	317	14	4.2	691	285	-	67	319
65 years and over .....	2,456	320	13.0	289	30	9.4	2,137	642	-	224	1,271
65 to 69 years .....	903	168	18.6	147	20	11.9	734	233	-	63	438
70 years and over .....	1,554	152	9.8	142	10	6.6	1,402	408	-	160	633
<b>Men</b>											
16 years and over .....	9,448	6,973	73.8	6,220	753	10.8	2,474	112	173	411	1,778
16 to 19 years .....	1,074	687	64.0	512	175	25.5	387	7	109	6	265
18 to 17 years .....	548	296	54.4	207	91	30.6	250	3	65	2	181
18 to 19 years .....	527	389	73.9	305	64	21.6	137	4	44	5	85
20 to 24 years .....	1,130	937	82.9	770	167	17.8	193	16	32	14	131
25 to 54 years .....	5,294	4,655	87.9	4,294	361	7.7	640	46	32	195	366
25 to 34 years .....	2,408	2,162	89.8	1,961	201	9.3	245	20	14	53	158
25 to 29 years .....	1,212	1,085	89.5	963	122	11.3	127	8	6	27	86
30 to 34 years .....	1,196	1,077	90.1	998	79	7.3	119	13	8	26	72
35 to 44 years .....	1,738	1,557	89.6	1,453	104	6.7	181	12	14	51	104
35 to 39 years .....	982	864	88.0	794	70	8.1	116	6	9	28	76
40 to 44 years .....	756	693	91.7	659	35	5.0	63	6	5	24	28
45 to 54 years .....	1,148	935	81.4	880	55	5.9	213	14	4	91	104
45 to 49 years .....	613	508	82.9	466	42	8.2	105	7	1	39	57
50 to 54 years .....	535	427	79.7	413	13	3.1	109	6	3	52	47
55 to 64 years .....	960	535	55.8	498	37	7.0	425	24	-	94	306
55 to 59 years .....	500	347	69.4	324	23	6.7	153	9	-	57	87
60 to 64 years .....	460	188	41.0	174	14	7.6	271	15	-	37	220
65 years and over .....	990	160	16.2	147	13	8.3	830	19	-	102	710
65 to 69 years .....	395	85	21.6	76	9	10.8	309	8	-	40	261
70 years and over .....	598	75	12.5	71	4	( <sup>1</sup> )	521	10	-	62	449
<b>Women</b>											
16 years and over .....	11,590	7,005	60.4	6,144	861	12.3	4,586	2,609	241	367	1,368
16 to 19 years .....	1,101	604	54.9	401	203	33.6	497	127	105	7	258
18 to 17 years .....	540	266	49.3	186	79	29.9	274	52	57	4	160
18 to 19 years .....	561	338	60.3	215	123	36.5	223	75	48	2	88
20 to 24 years .....	1,350	942	69.8	784	178	18.9	407	229	79	8	91
25 to 54 years .....	6,509	4,851	74.5	4,401	450	9.3	1,657	1,177	58	144	279
25 to 34 years .....	2,907	2,159	74.2	1,877	282	13.0	749	553	41	18	137
25 to 29 years .....	1,465	1,078	73.6	922	157	14.5	387	277	24	3	82
30 to 34 years .....	1,442	1,080	74.9	956	125	11.6	362	276	17	15	54
35 to 44 years .....	2,160	1,881	87.1	1,562	119	7.1	479	328	17	48	86
35 to 39 years .....	1,218	920	75.5	836	84	9.1	298	206	15	29	49
40 to 44 years .....	941	761	80.8	726	35	4.6	181	122	2	19	37
45 to 54 years .....	1,442	1,012	70.2	962	50	4.9	430	296	-	78	56
45 to 49 years .....	766	561	73.2	536	25	4.4	205	154	-	24	27
50 to 54 years .....	676	451	66.7	426	25	5.6	225	142	-	54	29
55 to 64 years .....	1,165	447	38.4	434	13	2.8	718	452	-	87	179
55 to 59 years .....	604	305	50.5	292	13	4.2	299	182	-	37	80
60 to 64 years .....	561	142	25.3	142	-	-	419	270	-	50	99
65 years and over .....	1,466	159	10.9	143	17	10.6	1,306	623	-	122	561
65 to 69 years .....	508	83	16.3	71	11	13.7	425	225	-	23	177
70 years and over .....	958	77	8.0	71	6	( <sup>1</sup> )	881	398	-	98	384

<sup>1</sup> 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	July 1989								Not in labor force
	Civilian noninstitutional population	Civilian labor force							
		Total	Percent of population	Employed			Unemployed		
				Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
<b>TOTAL</b>									
18 years and over .....	27,082	18,125	66.9	16,287	211	16,076	1,838	10.1	8,957
16 to 19 years .....	2,658	1,553	58.4	1,135	27	1,109	418	26.9	1,104
16 to 17 years .....	1,348	689	51.1	485	14	471	204	28.6	659
18 to 19 years .....	1,310	865	66.0	650	13	637	214	24.8	445
20 to 24 years .....	3,161	2,399	75.9	1,995	16	1,979	404	16.8	762
25 to 54 years .....	15,572	12,498	80.3	11,574	129	11,444	924	7.4	3,075
25 to 34 years .....	6,945	5,593	80.5	5,050	52	4,998	543	9.7	1,353
25 to 29 years .....	3,474	2,768	79.7	2,457	29	2,429	311	11.2	705
30 to 34 years .....	3,471	1,529	44.0	2,593	23	2,568	232	15.2	647
35 to 44 years .....	5,184	4,273	82.4	4,018	48	3,971	254	6.0	911
35 to 39 years .....	2,946	2,374	80.6	2,204	22	2,183	170	7.2	572
40 to 44 years .....	2,238	1,899	84.9	1,814	26	1,788	85	4.5	339
45 to 54 years .....	3,444	2,632	76.4	2,506	29	2,477	126	4.8	812
45 to 49 years .....	1,871	1,479	79.0	1,405	8	1,397	74	5.0	392
50 to 54 years .....	1,573	1,153	73.3	1,101	21	1,079	52	4.5	421
55 to 64 years .....	2,669	1,296	48.2	1,236	19	1,217	60	4.8	1,393
55 to 59 years .....	1,426	854	59.9	810	13	797	44	5.2	571
60 to 64 years .....	1,263	441	35.0	426	6	420	15	3.5	821
65 years and over .....	3,002	380	12.7	348	20	326	33	8.8	2,622
65 to 69 years .....	1,122	201	17.9	181	11	169	20	10.0	921
70 to 74 years .....	779	134	17.2	124	9	115	10	7.5	646
75 years and over .....	1,101	45	4.1	42	-	42	3	( <sup>1</sup> )	1,056
<b>Men</b>									
18 years and over .....	12,309	9,223	74.9	8,356	171	8,185	867	9.4	3,086
16 to 19 years .....	1,315	821	62.4	628	26	602	193	23.5	494
16 to 17 years .....	682	360	52.8	254	14	241	106	28.4	322
18 to 19 years .....	632	460	72.8	374	13	361	66	18.8	172
20 to 24 years .....	1,452	1,192	82.1	1,002	12	990	190	15.9	261
25 to 54 years .....	7,108	5,306	86.7	5,875	102	5,773	431	8.8	802
25 to 34 years .....	3,236	2,903	89.7	2,665	44	2,621	238	8.2	333
25 to 29 years .....	1,622	1,447	89.2	1,304	26	1,278	143	9.9	174
30 to 34 years .....	1,614	1,455	90.2	1,361	18	1,342	95	6.5	159
35 to 44 years .....	2,320	2,096	90.3	1,969	39	1,930	127	6.0	225
35 to 39 years .....	1,334	1,190	89.2	1,108	17	1,092	82	8.9	144
40 to 44 years .....	987	906	91.8	861	22	839	45	5.0	81
45 to 54 years .....	1,552	1,307	84.2	1,241	19	1,222	86	5.1	245
45 to 49 years .....	842	726	86.2	660	7	653	46	6.3	116
50 to 54 years .....	710	582	81.9	562	12	549	20	3.4	129
55 to 64 years .....	1,206	706	58.7	666	12	656	41	5.7	496
55 to 59 years .....	640	456	71.3	431	6	425	25	5.5	184
60 to 64 years .....	566	252	44.5	236	6	231	16	6.2	314
65 years and over .....	1,228	197	16.0	164	19	164	13	8.8	1,031
65 to 69 years .....	496	108	21.9	97	11	86	9	8.8	380
70 to 74 years .....	330	71	21.5	67	9	58	4	( <sup>1</sup> )	259
75 years and over .....	412	20	4.9	20	-	20	-	( <sup>1</sup> )	392
<b>Women</b>									
18 years and over .....	14,773	6,902	60.3	7,931	39	7,891	971	10.9	5,872
16 to 19 years .....	1,343	732	54.5	507	-	507	225	30.8	611
16 to 17 years .....	666	328	49.3	231	-	231	98	29.7	337
18 to 19 years .....	678	404	59.7	277	-	276	128	31.6	273
20 to 24 years .....	1,709	1,207	70.8	993	4	989	214	17.7	502
25 to 54 years .....	8,464	6,192	73.2	5,699	27	5,671	493	8.0	2,273
25 to 34 years .....	3,709	2,690	72.5	2,385	8	2,377	305	11.3	1,019
25 to 29 years .....	1,852	1,321	71.3	1,153	3	1,151	166	12.7	531
30 to 34 years .....	1,657	1,369	82.7	1,232	5	1,226	137	10.0	486
35 to 44 years .....	2,863	2,177	76.0	2,049	9	2,040	126	5.9	686
35 to 39 years .....	1,612	1,184	73.4	1,096	5	1,091	88	7.4	428
40 to 44 years .....	1,251	993	79.4	953	4	949	40	4.0	258
45 to 54 years .....	1,892	1,324	70.0	1,264	10	1,254	60	4.5	567
45 to 49 years .....	1,029	753	73.2	725	1	724	28	3.7	276
50 to 54 years .....	863	571	66.2	539	9	530	32	5.5	292
55 to 64 years .....	1,483	588	39.8	569	7	561	19	3.2	895
55 to 59 years .....	786	398	50.7	379	7	372	19	4.9	388
60 to 64 years .....	697	189	27.2	190	-	190	-	-	507
65 years and over .....	1,774	183	10.3	163	1	162	20	10.9	1,591
65 to 69 years .....	636	95	15.0	84	-	83	11	11.8	541
70 to 74 years .....	449	83	14.0	57	-	57	8	( <sup>1</sup> )	387
75 years and over .....	689	25	3.6	22	-	22	3	( <sup>1</sup> )	664

<sup>1</sup> 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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
<b>TOTAL</b>								
Civilian noninstitutional population .....	184,729	186,483	80,608	81,679	89,588	90,607	14,533	14,196
Civilian labor force .....	123,888	126,238	63,320	64,325	50,426	52,038	10,143	9,875
Percent of population .....	67.1	67.7	78.6	78.8	56.3	57.4	69.8	69.6
Employed .....	117,066	119,502	60,622	61,710	47,783	49,326	8,661	8,465
Agriculture .....	3,541	3,713	2,454	2,546	650	743	438	425
Nonagricultural industries .....	113,524	115,789	58,168	59,165	47,133	48,583	8,223	8,041
Unemployed .....	6,823	6,736	2,697	2,614	2,643	2,712	1,482	1,410
Unemployment rate .....	5.5	5.3	4.3	4.1	5.2	5.2	14.6	14.3
Not in labor force .....	60,841	60,245	17,289	17,354	39,162	38,569	4,391	4,321
<b>White</b>								
Civilian noninstitutional population .....	158,279	159,400	69,928	70,684	76,489	77,177	11,861	11,539
Civilian labor force .....	106,381	108,113	55,196	55,922	42,568	43,869	8,617	8,322
Percent of population .....	67.2	67.8	79.1	79.1	55.7	56.8	72.6	72.1
Employed .....	101,432	103,215	53,182	53,983	40,671	41,902	7,579	7,330
Agriculture .....	3,313	3,502	2,272	2,401	621	704	421	398
Nonagricultural industries .....	98,119	99,713	50,910	51,582	40,050	41,199	7,158	6,932
Unemployed .....	4,949	4,898	2,014	1,939	1,897	1,967	1,038	992
Unemployment rate .....	4.7	4.5	3.6	3.5	4.5	4.5	12.0	11.9
Not in labor force .....	51,898	51,287	14,732	14,763	33,922	33,308	3,244	3,217
<b>Black</b>								
Civilian noninstitutional population .....	20,715	21,038	8,227	8,374	10,304	10,489	2,184	2,175
Civilian labor force .....	13,700	13,978	6,161	6,286	6,284	6,400	1,254	1,291
Percent of population .....	66.1	66.4	74.9	75.1	61.0	61.0	57.4	59.4
Employed .....	12,031	12,364	5,569	5,708	5,616	5,742	846	913
Agriculture .....	165	152	130	106	22	27	13	19
Nonagricultural industries .....	11,866	12,212	5,439	5,603	5,594	5,715	833	895
Unemployed .....	1,669	1,614	592	578	668	658	409	378
Unemployment rate .....	12.2	11.5	9.8	9.2	10.6	10.3	32.6	29.3
Not in labor force .....	7,015	7,060	2,066	2,088	4,020	4,089	929	884

**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	July 1989									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time <sup>1</sup>	Part time <sup>1</sup>	Total	Looking for full-time work	Looking for part-time work	
<b>TOTAL ENROLLED</b>										
Total, 16 to 24 years .....	3,948	2,479	62.8	2,193	845	1,348	286	92	194	11.5
16 to 19 years .....	2,054	1,187	57.6	977	295	682	210	55	155	17.7
20 to 24 years .....	1,893	1,292	68.2	1,218	550	666	76	37	40	5.9
High school .....	1,166	578	49.4	436	111	325	140	47	93	24.3
College .....	2,781	1,903	68.4	1,757	734	1,023	146	44	102	7.7
Full-time students .....	1,761	1,062	60.3	968	351	618	93	27	67	8.8
Part-time students .....	1,021	842	82.4	789	383	405	53	18	35	6.3
Men, 16 to 24 years .....	1,951	1,271	65.1	1,138	506	632	133	38	95	10.5
16 to 19 years .....	1,031	634	61.5	525	189	336	109	31	78	17.2
20 to 24 years .....	920	637	69.2	613	316	296	24	7	17	3.8
High school .....	641	354	55.2	265	81	185	89	25	63	25.0
College .....	1,310	917	70.0	873	425	448	44	13	32	4.8
Full-time students .....	829	503	60.7	479	207	271	25	7	18	4.9
Part-time students .....	480	414	86.1	394	218	176	20	8	14	4.7
Women, 16 to 24 years .....	1,997	1,208	60.5	1,055	339	716	153	54	99	12.6
16 to 19 years .....	1,023	553	54.0	452	106	346	101	24	77	18.2
20 to 24 years .....	973	655	67.3	603	233	370	52	30	22	7.9
High school .....	525	222	42.3	171	30	140	51	22	29	23.1
College .....	1,472	986	67.0	885	309	576	102	32	70	10.3
Full-time students .....	931	558	60.0	490	143	348	68	20	49	12.3
Part-time students .....	541	428	79.2	395	166	229	33	12	21	7.7
<b>White</b>										
Total, 16 to 24 years .....	3,084	2,041	66.0	1,841	745	1,096	201	50	150	9.8
16 to 19 years .....	1,562	959	61.4	812	266	546	147	24	123	15.3
20 to 24 years .....	1,532	1,082	70.8	1,028	479	550	54	26	27	5.0
Men .....	1,546	1,058	68.5	968	440	528	90	17	74	8.5
Women .....	1,546	983	63.5	873	305	567	110	34	77	11.2
High school .....	636	430	51.4	339	93	246	91	21	71	21.3
College .....	2,258	1,611	71.4	1,502	652	850	109	30	80	6.8
Full-time students .....	1,396	890	63.7	821	326	496	69	18	50	7.7
Part-time students .....	862	721	83.7	681	326	354	41	11	30	5.6
<b>Black</b>										
Total, 16 to 24 years .....	594	297	50.0	221	67	154	76	37	39	25.5
16 to 19 years .....	379	177	46.7	115	19	96	62	30	32	35.1
20 to 24 years .....	214	120	55.9	106	48	58	14	7	7	11.3
Men .....	263	136	51.7	98	39	59	38	17	21	28.0
Women .....	331	161	48.7	123	29	95	38	19	18	23.4
High school .....	267	120	45.0	72	11	61	48	25	23	40.2
College .....	326	177	54.2	149	56	94	27	11	16	15.5
Full-time students .....	209	88	42.0	69	10	59	19	8	11	21.7
Part-time students .....	117	89	75.9	80	45	35	8	3	5	9.4
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	372	200	53.8	147	59	88	53	13	40	26.5
16 to 19 years .....	235	97	41.4	51	7	43	47	11	35	48.1
20 to 24 years .....	137	103	75.0	97	52	45	6	2	5	6.1
Men .....	190	120	63.1	86	31	55	34	7	27	28.1
Women .....	183	81	44.2	61	28	33	19	6	14	24.1
High school .....	175	55	31.4	18	3	14	37	7	30	(?)
College .....	197	145	73.7	130	56	74	16	6	10	10.9
Full-time students .....	98	60	61.1	55	19	36	5	4	1	(?)
Part-time students .....	100	86	85.9	75	37	38	11	2	8	12.5

See footnotes at end of table.



**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—Continued**

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	July 1989									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time <sup>1</sup>	Part time <sup>1</sup>	Total	Looking for full-time work	Looking for part-time work	
<b>TOTAL NOT ENROLLED</b>										
Total, 16 to 24 years .....	28,252	22,477	79.6	20,080	14,868	5,212	2,397	1,903	494	10.7
16 to 19 years .....	12,142	6,688	71.6	7,488	4,039	3,449	1,200	813	367	13.8
20 to 24 years .....	16,110	13,769	85.6	12,592	10,829	1,763	1,197	1,090	107	6.7
Less than 4 years of high school .....	9,332	6,012	64.4	4,979	2,698	2,281	1,032	724	309	17.2
4 years of high school .....	11,036	9,274	84.0	6,288	6,570	1,718	965	673	112	10.6
1 to 3 years of college .....	5,974	5,398	90.4	5,111	4,069	1,041	287	226	61	5.3
4 years of college or more .....	1,910	1,794	93.9	1,702	1,531	172	92	80	12	5.1
<b>Men, 16 to 24 years .....</b>	<b>13,903</b>	<b>11,854</b>	<b>85.3</b>	<b>10,657</b>	<b>8,367</b>	<b>2,290</b>	<b>1,197</b>	<b>994</b>	<b>203</b>	<b>10.1</b>
16 to 19 years .....	6,106	4,615	75.6	4,029	2,421	1,608	585	409	176	12.7
20 to 24 years .....	7,797	7,240	92.9	6,628	5,946	681	612	585	27	8.5
Less than 4 years of high school .....	4,897	3,569	73.3	3,036	1,894	1,142	554	396	156	15.4
4 years of high school .....	5,339	4,839	90.7	4,353	3,724	629	487	454	32	10.1
1 to 3 years of college .....	2,834	2,633	92.9	2,515	2,061	453	118	106	12	4.5
4 years of college or more .....	833	793	95.2	754	689	65	39	36	3	4.9
<b>Women, 16 to 24 years .....</b>	<b>14,350</b>	<b>10,623</b>	<b>74.0</b>	<b>9,423</b>	<b>6,501</b>	<b>2,922</b>	<b>1,199</b>	<b>909</b>	<b>290</b>	<b>11.3</b>
16 to 19 years .....	6,036	4,073	67.5	3,459	1,616	1,841	615	404	211	15.1
20 to 24 years .....	6,314	6,549	78.6	5,965	4,883	1,082	585	505	80	8.9
Less than 4 years of high school .....	4,435	2,422	54.6	1,944	804	1,139	479	326	153	19.8
4 years of high school .....	5,697	4,434	77.8	3,936	2,847	1,089	499	419	60	11.2
1 to 3 years of college .....	3,140	2,765	88.1	2,596	2,008	588	169	120	49	6.1
4 years of college or more .....	1,077	1,001	92.9	948	842	106	53	44	8	5.3
<b>White</b>										
Total, 16 to 24 years .....	23,287	18,963	81.4	17,303	12,900	4,403	1,660	1,295	365	8.8
16 to 19 years .....	9,977	7,363	73.8	6,518	3,587	2,931	845	560	285	11.5
20 to 24 years .....	13,310	11,600	87.2	10,785	9,313	1,472	815	735	80	7.0
Men .....	11,541	10,055	87.1	9,197	7,308	1,889	858	700	158	8.5
Women .....	11,747	8,908	75.8	8,106	5,592	2,514	802	595	207	9.0
Less than 4 years of high school .....	7,529	5,017	66.6	4,282	2,357	1,925	735	506	230	14.7
4 years of high school .....	9,085	7,789	85.7	7,156	5,723	1,432	834	581	73	8.1
1 to 3 years of college .....	5,017	4,585	91.4	4,367	3,472	895	218	165	52	4.7
4 years of college or more .....	1,657	1,572	94.8	1,498	1,347	151	73	63	10	4.7
<b>Black</b>										
Total, 16 to 24 years .....	4,061	2,874	70.8	2,226	1,559	667	647	536	111	22.5
16 to 19 years .....	1,796	1,114	62.0	798	379	419	316	225	91	28.4
20 to 24 years .....	2,265	1,759	77.7	1,428	1,180	248	332	311	20	18.8
Men .....	1,941	1,468	76.7	1,164	856	328	304	284	40	20.4
Women .....	2,120	1,386	65.4	1,042	703	339	343	272	72	24.8
Less than 4 years of high school .....	1,495	815	54.5	559	260	299	258	188	68	31.4
4 years of high school .....	1,673	1,279	76.5	954	711	243	325	292	34	25.4
1 to 3 years of college .....	733	632	86.1	578	468	109	54	46	8	8.5
4 years of college or more .....	160	147	91.9	135	120	15	12	10	1	8.1
<b>Hispanic origin</b>										
Total, 16 to 24 years .....	2,978	2,187	73.5	1,868	1,507	361	319	250	69	14.6
16 to 19 years .....	1,156	735	63.5	592	381	210	143	94	49	19.4
20 to 24 years .....	1,821	1,453	79.8	1,277	1,126	151	178	157	19	12.1
Men .....	1,507	1,276	84.7	1,120	953	167	156	124	32	12.2
Women .....	1,471	912	62.0	749	555	194	163	127	36	17.9
Less than 4 years of high school .....	1,548	988	63.8	819	638	182	168	125	44	17.1
4 years of high school .....	1,034	842	81.4	734	617	117	108	67	20	12.6
1 to 3 years of college .....	325	268	88.5	255	202	54	33	28	5	11.3
4 years of college or more .....	71	70	( <sup>2</sup> )	60	51	8	10	10	-	( <sup>2</sup> )

<sup>1</sup> 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.

<sup>2</sup> 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							
	July 1988	July 1989	Total		Employed		Unemployed			
			July 1988	July 1989	July 1988	July 1989	Number		Percent of labor force	
							July 1988	July 1989	July 1988	July 1989
<b>VIETNAM-ERA VETERANS</b>										
Total, 30 years and over .....	7,905	7,927	7,281	7,257	7,044	6,989	237	268	3.3	3.7
30 to 44 years .....	5,910	5,489	5,653	5,232	5,455	5,034	198	198	3.5	3.8
30 to 34 years .....	685	472	646	447	621	418	25	29	3.9	6.5
35 to 39 years .....	2,142	1,731	2,034	1,621	1,957	1,551	77	70	3.8	4.3
40 to 44 years .....	3,083	3,286	2,973	3,164	2,877	3,065	96	99	3.2	3.1
45 years and over .....	1,995	2,438	1,628	2,025	1,589	1,955	39	70	2.4	3.5
<b>NONVETERANS</b>										
Total, 30 to 44 years .....	20,450	21,512	19,358	20,404	18,630	19,684	728	720	3.8	3.5
30 to 34 years .....	9,159	9,384	8,735	8,981	8,385	8,635	350	346	4.0	3.9
35 to 39 years .....	6,810	7,451	6,451	7,065	6,210	6,841	241	224	3.7	3.2
40 to 44 years .....	4,481	4,677	4,172	4,358	4,035	4,208	137	150	3.3	3.4

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.

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Sex, age, and race	July 1989							
	Employed						Unemployed	
	Full time			Part time			Looking for full-time work	Looking for part-time work
	Total	Full-time schedules <sup>1</sup>	Part time for economic reasons, usually work full time	Total	Voluntary <sup>1</sup>	Part time for economic reasons, usually work part time		
<b>TOTAL</b>								
Total, 16 years and over .....	100,660	98,816	1,844	18,842	15,186	3,656	5,590	1,146
16 to 19 years .....	4,335	4,104	231	4,130	2,982	1,148	868	541
16 to 17 years .....	1,177	1,121	56	2,233	1,683	550	339	366
18 to 19 years .....	3,157	2,982	175	1,899	1,300	599	529	175
20 years and over .....	96,325	94,712	1,613	14,711	12,204	2,507	4,722	604
20 to 24 years .....	11,379	11,114	265	2,429	1,836	593	1,126	147
25 years and over .....	84,946	83,598	1,348	12,282	10,367	1,915	3,596	457
25 to 54 years .....	73,780	72,599	1,181	8,652	7,073	1,579	3,247	345
55 years and over .....	11,186	10,999	167	3,629	3,293	336	349	112
<b>Men, 16 years and over .....</b>	<b>60,210</b>	<b>59,146</b>	<b>1,064</b>	<b>6,055</b>	<b>4,436</b>	<b>1,619</b>	<b>2,915</b>	<b>394</b>
16 to 19 years .....	2,611	2,458	153	1,944	1,369	575	440	254
20 years and over .....	57,599	56,688	911	4,111	3,067	1,044	2,474	140
20 to 24 years .....	6,263	6,109	154	977	706	271	592	45
25 years and over .....	51,336	50,579	757	3,134	2,361	773	1,883	95
25 to 54 years .....	44,201	43,538	663	1,640	1,009	631	1,674	65
55 years and over .....	7,135	7,041	94	1,495	1,353	142	209	30
<b>Women, 16 years and over .....</b>	<b>40,450</b>	<b>39,670</b>	<b>780</b>	<b>12,787</b>	<b>10,750</b>	<b>2,037</b>	<b>2,676</b>	<b>752</b>
16 to 19 years .....	1,724	1,646	78	2,187	1,614	573	428	287
20 years and over .....	38,726	38,024	702	10,600	9,137	1,463	2,248	465
20 to 24 years .....	5,116	5,005	111	1,452	1,130	322	535	102
25 years and over .....	33,610	33,019	591	9,149	8,007	1,142	1,713	382
25 to 54 years .....	29,579	29,061	518	7,012	6,065	947	1,572	280
55 years and over .....	4,031	3,958	73	2,136	1,942	194	141	82
<b>White</b>								
<b>Men, 16 years and over .....</b>	<b>52,844</b>	<b>51,986</b>	<b>858</b>	<b>5,065</b>	<b>3,805</b>	<b>1,260</b>	<b>2,147</b>	<b>294</b>
16 to 19 years .....	2,312	2,199	113	1,614	1,150	464	304	198
20 years and over .....	50,532	49,787	745	3,451	2,655	796	1,843	96
20 to 24 years .....	5,435	5,310	125	804	599	205	412	34
25 years and over .....	45,096	44,477	619	2,646	2,055	591	1,430	62
25 to 54 years .....	38,686	38,147	539	1,281	816	465	1,269	40
55 years and over .....	6,410	6,330	80	1,367	1,240	127	161	22
<b>Women, 16 years and over .....</b>	<b>34,050</b>	<b>33,409</b>	<b>641</b>	<b>11,256</b>	<b>9,629</b>	<b>1,627</b>	<b>1,895</b>	<b>561</b>
16 to 19 years .....	1,541	1,462	79	1,863	1,396	467	280	210
20 years and over .....	32,510	31,947	563	9,393	8,233	1,160	1,616	351
20 to 24 years .....	4,356	4,265	91	1,219	958	261	349	74
25 years and over .....	28,154	27,682	472	8,175	7,276	899	1,267	278
25 to 54 years .....	24,602	24,202	400	6,291	5,550	741	1,143	217
55 years and over .....	3,551	3,479	72	1,884	1,726	158	124	61
<b>Black</b>								
<b>Men, 16 years and over .....</b>	<b>5,479</b>	<b>5,299</b>	<b>180</b>	<b>741</b>	<b>469</b>	<b>272</b>	<b>669</b>	<b>84</b>
16 to 19 years .....	247	210	37	265	184	81	125	50
20 years and over .....	5,233	5,089	144	475	285	190	545	34
20 to 24 years .....	647	620	27	122	68	54	157	10
25 years and over .....	4,585	4,468	117	354	218	136	388	23
25 to 54 years .....	4,043	3,939	104	251	128	123	344	17
55 years and over .....	542	529	13	103	90	13	44	6
<b>Women, 16 years and over .....</b>	<b>4,954</b>	<b>4,838</b>	<b>116</b>	<b>1,190</b>	<b>862</b>	<b>328</b>	<b>694</b>	<b>167</b>
16 to 19 years .....	151	151	-	250	169	81	130	73
20 years and over .....	4,803	4,687	116	939	692	247	564	94
20 to 24 years .....	581	563	18	184	131	53	161	17
25 years and over .....	4,223	4,124	99	757	563	194	403	77
25 to 54 years .....	3,856	3,760	96	546	381	165	391	59
55 years and over .....	367	364	3	211	182	29	12	18

<sup>1</sup> 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	July 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 <sup>1</sup> .....	102,112	68.5	96,582	5,530	5.4	46,895	22,252	1,813	2,430	20,400
Husbands .....	40,354	78.6	39,334	1,020	2.5	10,970	190	129	947	9,704
With employed wife .....	25,887	92.4	25,279	608	2.3	2,127	83	68	295	1,682
With unemployed wife .....	1,046	93.6	957	89	8.5	72	-	8	12	52
With wife not in labor force .....	13,421	60.5	13,098	323	2.4	8,771	108	53	640	7,970
Wives .....	29,132	56.8	28,014	1,118	3.8	22,192	17,556	212	379	4,045
With employed husband .....	26,236	66.7	25,279	957	3.6	13,098	11,480	176	143	1,298
With unemployed husband .....	697	68.3	608	89	12.8	323	287	6	2	29
With husband not in labor force .....	2,199	20.0	2,127	72	3.3	8,771	5,790	30	234	2,718
Relatives in married-couple families .....	15,455	75.1	13,919	1,536	9.9	5,111	756	682	338	3,136
16 to 19 years .....	6,630	71.9	5,826	804	12.1	2,590	194	512	18	1,866
20 to 24 years .....	5,258	86.6	4,829	429	8.2	815	115	307	35	359
25 years and over .....	3,567	67.6	3,264	303	8.5	1,706	447	63	285	911
Women who maintain families .....	6,892	63.8	6,294	598	8.7	3,908	2,564	100	234	1,009
Relatives in families maintained by women .....	6,130	65.9	5,124	1,006	16.4	3,167	786	388	367	1,625
16 to 19 years .....	1,881	62.3	1,435	446	23.7	1,138	152	247	22	718
20 to 24 years .....	1,680	79.3	1,442	238	14.1	439	146	92	21	181
25 years and over .....	2,569	61.8	2,247	322	12.5	1,590	488	49	324	726
Men who maintain families .....	2,184	77.7	2,080	104	4.8	626	47	23	91	465
Relatives in families maintained by men .....	1,967	68.1	1,819	148	7.5	921	353	79	74	415
16 to 19 years .....	385	67.3	345	40	10.4	188	24	41	-	123
20 to 24 years .....	550	86.4	511	40	7.2	86	22	21	5	37
25 years and over .....	1,031	61.4	963	68	6.6	647	307	17	69	255

<sup>1</sup> 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.

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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
Total, 16 years and over .....	3,529	3,308	5.1	4.8	3,294	3,428	6.0	6.0
Married, spouse present .....	1,192	1,130	2.8	2.7	1,252	1,232	4.3	4.1
Widowed, divorced, or separated .....	400	396	5.8	5.6	703	715	6.7	6.5
Single (never married) .....	1,937	1,782	9.7	8.8	1,339	1,481	8.8	9.6
White, 16 years and over .....	2,600	2,441	4.4	4.0	2,348	2,457	5.0	5.1
Married, spouse present .....	975	898	2.6	2.4	1,024	1,049	3.9	3.9
Widowed, divorced, or separated .....	296	286	5.2	4.9	504	509	5.9	5.8
Single (never married) .....	1,329	1,257	8.0	7.5	820	898	6.7	7.3
Black, 16 years and over .....	812	753	11.9	10.8	857	861	12.5	12.3
Married, spouse present .....	162	179	5.1	5.5	181	143	7.4	6.0
Widowed, divorced, or separated .....	96	101	9.9	10.4	183	191	9.9	9.6
Single (never married) .....	554	474	20.5	17.2	492	527	19.1	19.9
Total, 25 years and over .....	2,065	1,978	3.7	3.5	1,998	2,076	4.6	4.6
Married, spouse present .....	1,107	1,024	2.8	2.5	1,043	1,030	3.8	3.7
Widowed, divorced, or separated .....	369	374	5.6	5.5	629	663	6.2	6.2
Single (never married) .....	589	580	6.9	6.5	326	382	5.4	6.1
White, 25 years and over .....	1,561	1,493	3.2	3.0	1,471	1,544	4.0	4.1
Married, spouse present .....	899	821	2.5	2.3	853	882	3.6	3.6
Widowed, divorced, or separated .....	267	263	4.8	4.6	444	470	5.5	5.5
Single (never married) .....	395	409	5.7	5.6	174	193	3.8	4.1
Black, 25 years and over .....	422	411	8.1	7.7	463	480	8.6	8.8
Married, spouse present .....	154	162	5.1	5.2	150	122	6.6	5.5
Widowed, divorced, or separated .....	94	101	9.9	10.6	171	180	9.5	9.3
Single (never married) .....	174	148	14.0	11.5	142	177	10.9	13.6

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

**A-12. Unemployed persons by occupation and sex**

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
Total, 16 years and over .....	6,823	6,736	5.5	5.3	5.1	4.8	6.0	6.0
Managerial and professional specialty .....	677	666	2.3	2.2	1.9	1.5	2.7	3.0
Executive, administrative, and managerial .....	316	336	2.1	2.2	1.9	1.5	2.5	3.2
Professional specialty .....	361	330	2.4	2.2	1.9	1.6	2.9	2.8
Technical, sales, and administrative support .....	1,537	1,556	4.1	4.1	3.4	3.0	4.5	4.6
Technicians and related support .....	89	79	2.4	2.0	2.0	2.3	2.8	1.7
Sales occupations .....	626	659	4.3	4.4	2.9	2.7	5.8	6.2
Administrative support, including clerical .....	822	818	4.3	4.2	5.1	4.1	4.1	4.2
Service occupations .....	1,173	1,135	7.0	6.5	6.7	6.3	7.1	6.7
Private household .....	60	59	5.7	5.9	( <sup>1</sup> )	( <sup>1</sup> )	5.8	6.1
Protective service .....	79	76	3.7	3.6	3.5	3.6	4.7	3.7
Service, except private household and protective .....	1,034	1,001	7.6	7.0	7.9	7.3	7.4	6.9
Precision production, craft, and repair .....	676	583	4.6	4.0	4.5	3.9	5.4	4.9
Mechanics and repairers .....	141	108	3.0	2.4	2.9	2.4	4.8	2.7
Construction trades .....	338	347	5.9	5.9	5.9	5.7	5.9	13.7
Other precision production, craft, and repair .....	198	128	4.6	3.0	4.3	2.8	5.5	3.8
Operators, fabricators, and laborers .....	1,445	1,620	7.3	8.1	6.7	7.3	8.9	10.2
Machine operators, assemblers, and inspectors .....	640	704	7.2	7.8	6.0	6.1	9.0	10.4
Transportation and material moving occupations .....	277	320	5.4	6.0	5.1	5.7	7.8	9.2
Handlers, equipment cleaners, helpers, and laborers .....	527	597	9.0	10.3	9.0	10.4	8.9	9.7
Construction laborers .....	124	147	11.4	14.5	11.0	14.5	( <sup>1</sup> )	( <sup>1</sup> )
Other handlers, equipment cleaners, helpers, and laborers .....	403	450	8.5	9.4	8.5	9.4	8.3	9.6
Farming, forestry, and fishing .....	255	203	6.0	4.7	5.1	4.1	10.4	7.6
No previous work experience .....	1,014	930	-	-	-	-	-	-
16 to 19 years .....	757	683	-	-	-	-	-	-
20 to 24 years .....	150	128	-	-	-	-	-	-
25 years and over .....	107	119	-	-	-	-	-	-

<sup>1</sup> Data not shown where base is less than 75,000.

A-13. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
Total, 16 years and over .....	6,823	6,736	5.5	5.3	5.1	4.8	6.0	6.0
Nonagricultural private wage and salary workers .....	4,886	4,953	5.2	5.2	5.0	4.7	5.5	5.9
Mining .....	43	40	5.3	5.3	5.7	4.9	3.0	7.0
Construction .....	523	539	8.1	8.1	8.2	8.1	6.5	8.4
Manufacturing .....	1,131	1,096	5.0	4.9	4.5	3.9	6.1	6.8
Durable goods .....	653	623	4.9	4.7	4.7	3.8	5.4	7.1
Lumber and wood products .....	72	31	9.7	4.2	9.6	4.0	10.7	5.9
Furniture and fixtures .....	35	42	4.3	5.9	2.9	3.6	7.6	11.3
Stone, clay, and glass products .....	28	30	4.4	4.5	2.9	2.9	9.4	10.5
Primary metal industries .....	37	29	4.3	3.3	4.6	3.2	2.2	4.4
Fabricated metal products .....	73	67	5.4	4.9	6.3	3.6	2.5	8.9
Machinery, except electrical .....	117	95	4.2	3.5	3.4	2.4	6.9	6.7
Electrical machinery, equipment, and supplies .....	99	91	4.8	4.4	5.0	3.9	4.5	5.2
Transportation equipment .....	147	180	5.3	6.5	4.8	5.5	7.1	10.4
Automobiles .....	91	110	7.1	9.0	8.5	7.7	9.6	13.8
Other transportation equipment .....	56	70	3.8	4.6	3.3	3.8	5.3	7.9
Professional and photographic equipment .....	23	19	3.1	2.4	4.7	2.3	.9	2.6
Other durable goods industries .....	23	39	4.5	6.7	4.1	6.8	4.6	6.7
Nondurable goods .....	478	474	5.2	5.1	4.0	4.0	6.8	6.6
Food and kindred products .....	140	138	7.4	7.1	5.8	5.9	10.9	9.2
Textile mill products .....	32	47	4.3	6.6	3.7	6.8	4.9	6.5
Apparel and other textile products .....	97	99	7.1	7.9	5.1	6.8	7.8	8.3
Paper and allied products .....	24	23	3.1	2.8	1.4	2.2	7.7	4.7
Printing and publishing .....	77	70	4.0	3.6	3.8	2.9	4.2	4.5
Chemicals and allied products .....	36	46	2.8	3.2	2.3	2.3	4.1	5.2
Rubber and miscellaneous plastics products .....	52	36	5.9	4.5	5.6	3.6	6.6	6.0
Other nondurable goods industries .....	20	14	4.7	3.2	3.9	3.4	5.8	2.9
Transportation and public utilities .....	233	277	3.6	4.2	3.3	3.9	4.4	4.6
Transportation .....	174	216	4.7	5.4	4.1	5.3	6.4	5.9
Communications and other public utilities .....	59	61	2.1	2.3	1.9	1.5	2.4	3.6
Wholesale and retail trade .....	1,414	1,453	6.0	6.0	5.3	4.6	6.8	7.4
Wholesale trade .....	171	178	3.9	4.0	3.2	3.6	5.7	4.9
Retail trade .....	1,243	1,274	6.5	6.5	6.0	5.2	6.9	7.7
Finance, insurance, and real estate .....	235	205	3.2	2.7	2.9	2.5	3.3	2.8
Service industries .....	1,307	1,342	5.1	5.0	5.1	4.7	5.0	5.3
Professional services .....	505	521	3.6	3.6	3.2	2.7	3.8	3.9
Other service industries .....	802	821	6.7	6.8	6.5	6.2	6.9	7.5
Agricultural wage and salary workers .....	182	147	8.9	6.9	7.8	6.0	13.6	10.1
Government, self-employed, and unpaid family workers .....	740	707	2.7	2.5	2.1	2.3	3.4	2.7
No previous work experience .....	1,014	930	-	-	-	-	-	-

**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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
<b>NUMBER OF UNEMPLOYED</b>												
Total unemployed .....	6,823	6,736	2,697	2,614	2,643	2,712	1,482	1,410	4,949	4,898	1,669	1,614
Job losers .....	2,957	2,797	1,727	1,582	1,021	1,063	209	152	2,231	2,090	651	631
On layoff .....	781	755	440	398	288	324	52	33	653	625	114	101
Other job losers .....	2,176	2,042	1,287	1,184	733	739	157	119	1,578	1,465	537	529
Job leavers .....	975	1,064	397	389	393	479	184	196	807	860	145	160
Reentrants .....	1,880	1,946	487	559	1,059	1,008	334	379	1,284	1,362	532	524
New entrants .....	1,011	930	86	85	170	162	755	683	626	586	340	299
<b>PERCENT DISTRIBUTION</b>												
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 .....	43.3	41.5	64.0	60.5	38.6	39.2	14.0	10.8	45.1	42.7	39.0	39.1
On layoff .....	11.4	11.2	16.3	15.2	10.9	12.0	3.5	2.3	13.2	12.8	6.8	6.3
Other job losers .....	31.9	30.3	47.7	45.3	27.7	27.2	10.5	8.5	31.9	29.9	32.2	32.8
Job leavers .....	14.3	15.8	14.7	14.9	14.9	17.7	12.4	13.9	16.3	17.6	8.7	9.9
Reentrants .....	27.5	28.9	18.0	21.4	40.1	37.2	22.5	26.9	25.9	27.8	31.9	32.5
New entrants .....	14.8	13.8	3.2	3.2	6.4	6.0	50.9	48.4	12.7	12.0	20.4	18.5
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>												
Job losers .....	2.4	2.2	2.7	2.4	2.1	2.0	2.0	1.5	2.1	2.0	4.8	4.5
Job leavers .....	.8	.8	.6	.6	.8	.9	1.8	2.0	.8	.8	1.1	1.1
Reentrants .....	1.5	1.5	.8	.9	2.1	1.9	3.3	3.8	1.2	1.3	3.9	3.8
New entrants .....	.8	.7	.1	.1	.3	.3	7.4	6.9	.6	.5	2.5	2.1



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

(Percent distribution)

Reason, sex, and age	July 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 .....	6,736	100.0	49.5	30.7	19.7	10.6	9.1
Job losers .....	2,797	100.0	41.3	31.4	27.4	15.3	12.1
On layoff .....	755	100.0	60.2	26.3	13.5	8.5	5.0
Other job losers .....	2,042	100.0	34.3	33.2	32.5	17.7	14.7
Job leavers .....	1,064	100.0	57.5	26.2	16.3	8.8	7.5
Reentrants .....	1,946	100.0	54.9	29.4	15.8	8.1	7.7
New entrants .....	930	100.0	54.1	36.9	8.9	3.7	5.2
Men, 20 years and over .....	2,614	100.0	42.0	29.3	28.7	14.7	14.0
Job losers .....	1,582	100.0	38.3	30.5	31.1	15.7	15.5
On layoff .....	398	100.0	59.6	24.7	15.7	8.2	7.5
Other job losers .....	1,184	100.0	31.2	32.5	36.4	18.2	18.1
Job leavers .....	389	100.0	57.7	22.9	19.3	9.3	10.0
Reentrants .....	559	100.0	41.5	30.5	28.1	15.7	12.4
New entrants .....	85	100.0	41.6	28.9	29.5	13.7	15.7
Women, 20 years and over .....	2,712	100.0	50.3	30.7	19.1	11.1	8.0
Job losers .....	1,063	100.0	41.1	34.1	24.8	16.3	8.6
On layoff .....	324	100.0	57.1	30.5	12.4	9.9	2.5
Other job losers .....	739	100.0	34.1	35.7	30.3	19.1	11.2
Job leavers .....	479	100.0	54.5	27.3	18.2	10.2	8.0
Reentrants .....	1,008	100.0	58.6	28.8	12.7	6.5	6.2
New entrants .....	162	100.0	46.3	30.1	23.6	8.6	15.0
Both sexes, 16 to 19 years .....	1,410	100.0	62.2	33.5	4.4	2.0	2.4
Job losers .....	152	100.0	73.3	21.1	5.6	3.6	2.1
On layoff .....	33	100.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Other job losers .....	119	100.0	66.5	25.6	7.9	5.1	2.8
Job leavers .....	196	100.0	64.5	29.7	5.8	4.6	1.1
Reentrants .....	379	100.0	64.8	29.4	5.8	1.1	4.7
New entrants .....	683	100.0	57.5	39.6	2.9	1.3	1.6

<sup>1</sup> 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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
Total, 16 years and over .....	6,823	6,736	100.0	100.0	5,562	5,590	100.0	100.0
Less than 5 weeks .....	3,164	3,338	46.4	49.5	2,387	2,578	42.8	46.1
5 to 14 weeks .....	2,186	2,070	32.0	30.7	1,791	1,783	32.1	31.9
5 to 10 weeks .....	1,771	1,630	26.0	24.2	1,422	1,386	25.5	24.8
11 to 14 weeks .....	415	440	6.1	6.5	369	397	6.6	7.1
15 weeks and over .....	1,473	1,328	21.6	19.7	1,404	1,229	25.2	22.0
15 to 26 weeks .....	685	712	10.0	10.6	643	664	11.5	11.9
27 weeks and over .....	788	616	11.5	9.1	762	564	13.7	10.1
27 to 51 weeks .....	339	283	5.0	4.2	328	263	5.9	4.7
52 weeks and over .....	450	333	6.6	4.9	434	302	7.8	5.4
Average (mean) duration, in weeks .....	12.7	11.2	-	-	14.2	12.0	-	-
Median duration, in weeks .....	5.6	5.1	-	-	6.3	5.7	-	-

**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	
								July 1988	July 1989	July 1988	July 1989
	July 1989										
Total, 16 years and over .....	6,736	3,338	2,070	712	616	11.2	5.1	46.4	49.5	21.6	19.7
16 to 19 years .....	1,410	876	472	28	34	6.0	4.0	60.2	62.2	5.0	4.4
20 to 24 years .....	1,273	694	362	104	93	8.9	4.6	51.5	54.5	18.3	15.4
25 to 34 years .....	1,871	857	573	255	187	12.0	6.0	43.3	45.8	24.6	23.6
35 to 44 years .....	1,135	486	367	135	147	14.1	6.5	36.9	42.8	29.8	24.8
45 to 54 years .....	586	247	147	110	82	17.0	7.0	39.2	42.1	32.4	32.8
55 to 64 years .....	375	131	110	72	63	16.5	9.1	25.9	34.9	44.2	35.8
65 years and over .....	86	47	19	9	10	10.6	4.6	53.3	54.4	14.9	23.1
Men, 16 years and over .....	3,308	1,496	1,035	399	379	12.8	5.9	41.1	45.2	25.8	23.5
16 to 19 years .....	694	398	268	16	13	5.8	4.4	59.0	57.3	6.5	4.1
20 to 24 years .....	636	329	190	60	57	9.9	4.8	44.1	51.8	19.2	18.3
25 to 34 years .....	880	374	262	129	115	13.6	6.9	37.2	42.5	31.1	27.7
35 to 44 years .....	560	215	183	73	89	16.0	7.7	31.6	38.4	35.0	29.0
45 to 54 years .....	300	105	71	68	55	21.9	9.3	31.4	35.0	42.8	41.1
55 to 64 years .....	197	54	52	46	46	20.1	13.5	15.2	27.2	54.0	46.4
65 years and over .....	41	21	8	8	4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 16 years and over .....	3,428	1,842	1,035	313	237	9.7	4.7	52.0	53.7	17.1	16.1
16 to 19 years .....	715	479	204	12	21	6.3	3.7	61.9	66.9	3.0	4.6
20 to 24 years .....	637	365	192	44	36	8.0	4.4	58.8	57.3	17.5	12.6
25 to 34 years .....	991	483	311	125	72	10.6	5.3	49.6	48.7	18.0	19.9
35 to 44 years .....	575	271	184	61	58	12.2	5.6	42.2	47.1	24.7	20.8
45 to 54 years .....	287	142	76	42	27	11.9	5.1	46.7	49.5	22.3	24.2
55 to 64 years .....	178	77	58	26	17	12.4	6.6	40.2	43.4	31.1	24.1
65 years and over .....	45	26	11	2	6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
White, 16 years and over .....	4,898	2,492	1,462	506	437	10.8	4.9	46.6	50.9	20.2	19.3
Men .....	2,441	1,139	735	286	281	12.8	5.6	41.7	46.6	24.0	23.2
Women .....	2,457	1,354	727	220	156	8.9	4.5	51.9	55.1	16.0	15.3
Black, 16 years and over .....	1,614	728	537	182	167	12.6	5.9	45.1	45.1	25.7	21.6
Men .....	753	304	266	93	91	12.9	6.6	38.5	40.3	31.2	24.3
Women .....	861	424	271	90	76	12.3	5.2	51.4	49.2	20.4	19.3
Men, 16 years and over:											
Married, spouse present .....	1,130	432	328	196	174	16.5	7.7	31.7	38.2	34.8	32.7
Widowed, divorced, or separated .....	396	158	104	58	77	17.3	8.1	40.4	39.8	35.6	33.9
Single (never married) .....	1,782	906	603	146	128	9.4	4.9	47.1	50.8	18.2	15.4
Women, 16 years and over:											
Married, spouse present .....	1,232	651	368	131	82	9.2	4.7	51.5	52.8	17.2	17.3
Widowed, divorced, or separated .....	715	315	231	101	67	12.3	6.2	45.6	44.1	23.1	23.6
Single (never married) .....	1,481	876	436	81	88	8.7	4.2	55.9	59.2	13.8	11.4

<sup>1</sup> 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	
	July 1989							July 1988	July 1989	July 1988	July 1989
<b>OCCUPATION</b>											
Managerial and professional specialty .....	666	290	230	87	59	12.2	6.0	39.6	43.5	24.3	21.9
Technical, sales, and administrative support .....	1,556	797	463	183	112	10.1	4.9	43.7	51.3	23.8	19.0
Service occupations .....	1,135	604	325	119	87	10.0	4.7	53.5	53.2	19.0	18.1
Precision production, craft, and repair .....	583	260	164	79	80	13.3	6.8	38.9	44.6	26.4	27.3
Operators, fabricators, and laborers .....	1,620	752	475	191	201	13.3	5.9	44.6	46.4	28.3	24.2
Farming, forestry, and fishing .....	203	105	60	13	26	11.8	4.8	50.7	51.6	17.4	19.1
<b>INDUSTRY<sup>1</sup></b>											
Agriculture .....	147	73	44	8	23	13.6	5.1	58.4	49.5	13.9	20.5
Construction .....	545	237	159	84	65	13.6	6.6	45.4	43.5	25.6	27.4
Manufacturing .....	1,104	505	313	148	138	13.2	6.1	42.6	45.7	30.6	25.9
Durable goods .....	631	298	171	77	85	13.3	5.6	40.6	47.3	32.1	25.6
Nondurable goods .....	474	206	142	72	53	13.1	6.7	45.3	43.6	28.4	26.4
Transportation and public utilities .....	321	152	84	47	37	13.0	5.7	27.4	47.4	33.0	26.4
Wholesale and retail trade .....	1,463	794	446	120	103	9.8	4.6	50.2	54.3	18.4	15.2
Finance and service industries .....	1,847	894	576	221	156	10.8	5.4	45.8	48.4	22.0	20.4
Public administration .....	204	90	56	36	22	12.2	6.9	43.2	44.3	24.8	28.5
No previous work experience .....	930	503	343	34	49	8.6	4.6	52.6	54.1	8.1	8.9

<sup>1</sup> 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	July 1989								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over .....	6,736	5,822	22.0	7.2	72.1	37.2	19.2	5.4	1.63
16 to 19 years .....	1,410	1,349	12.7	3.2	78.8	29.5	16.8	2.9	1.44
20 to 24 years .....	1,273	1,143	25.0	7.8	71.7	36.2	18.7	4.9	1.64
25 to 34 years .....	1,871	1,572	25.8	7.9	69.6	39.8	21.4	5.2	1.70
35 to 44 years .....	1,135	919	27.2	7.2	71.3	42.0	19.3	6.9	1.74
45 to 54 years .....	586	467	22.7	12.4	72.2	42.0	18.4	5.8	1.73
55 to 64 years .....	375	303	19.1	9.2	59.1	39.9	22.8	14.5	1.65
65 years and over .....	86	68	7.4	13.2	72.1	35.3	13.2	2.9	1.44
Men, 16 years and over .....	3,308	2,813	23.6	7.0	73.3	36.9	23.3	5.8	1.70
16 to 19 years .....	694	665	11.4	3.2	77.6	33.1	19.4	3.8	1.48
20 to 24 years .....	636	577	23.9	6.9	72.1	35.2	25.0	4.9	1.68
25 to 34 years .....	880	710	31.0	7.7	73.9	36.3	24.1	4.4	1.77
35 to 44 years .....	560	432	32.2	6.9	73.8	41.2	24.1	7.4	1.86
45 to 54 years .....	300	238	25.6	13.0	73.5	39.5	22.3	6.7	1.81
55 to 64 years .....	197	157	15.9	8.3	56.1	43.9	31.2	18.5	1.74
65 years and over .....	41	35	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Women, 16 years and over .....	3,428	3,009	20.5	7.3	71.0	37.5	15.3	5.0	1.57
16 to 19 years .....	715	684	13.9	3.1	80.1	25.9	14.3	2.0	1.39
20 to 24 years .....	637	566	26.1	8.7	71.4	37.3	12.4	4.8	1.61
25 to 34 years .....	991	863	21.4	8.0	65.9	42.6	19.1	5.9	1.63
35 to 44 years .....	575	487	22.8	7.4	88.8	42.7	14.8	6.4	1.63
45 to 54 years .....	287	229	19.2	11.8	70.7	44.5	14.4	4.8	1.66
55 to 64 years .....	178	146	22.6	9.6	62.3	35.6	14.4	10.3	1.55
65 years and over .....	45	33	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
White, 16 years and over .....	4,898	4,134	20.9	7.2	71.5	40.0	19.4	5.3	1.64
Men .....	2,441	2,023	22.4	7.0	73.5	39.3	23.6	6.2	1.72
Women .....	2,457	2,111	19.3	7.4	69.6	40.6	15.3	4.5	1.57
Black, 16 years and over .....	1,614	1,498	25.3	7.2	74.8	28.2	18.0	4.8	1.58
Men .....	753	891	27.1	7.1	74.7	28.2	21.1	4.1	1.82
Women .....	861	807	23.8	7.2	74.8	28.3	15.4	5.5	1.55

<sup>1</sup> 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	July 1989								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over .....	6,736	5,822	22.0	7.2	72.1	37.2	19.2	5.4	1.63
Job losers <sup>1</sup> .....	2,797	2,026	26.5	9.0	73.4	39.7	21.8	5.6	1.76
Job leavers .....	1,064	1,052	25.8	6.6	70.9	47.1	17.0	3.3	1.71
Reentrants .....	1,946	1,837	18.1	7.2	88.9	33.4	17.1	7.5	1.52
New entrants .....	930	907	15.5	3.7	76.8	27.7	20.0	2.9	1.47
Men, 16 years and over .....	3,308	2,813	23.6	7.0	73.3	36.9	23.3	5.8	1.70
Job losers <sup>1</sup> .....	1,651	1,228	28.3	7.9	73.9	37.0	23.9	5.9	1.77
Job leavers .....	490	471	24.8	5.7	74.1	45.6	22.9	4.9	1.78
Reentrants .....	765	717	19.9	7.4	88.3	33.8	24.1	7.7	1.61
New entrants .....	403	396	14.4	4.5	80.1	31.8	20.7	3.0	1.55
Women, 16 years and over .....	3,428	3,009	20.5	7.3	71.0	37.5	15.3	5.0	1.57
Job losers <sup>1</sup> .....	1,146	797	23.8	10.5	72.9	44.0	18.8	5.1	1.75
Job leavers .....	574	581	26.5	7.2	68.3	48.2	12.2	2.1	1.65
Reentrants .....	1,181	1,120	17.0	7.1	69.4	33.2	12.7	7.4	1.47
New entrants .....	527	511	16.4	3.1	74.4	24.5	19.4	2.7	1.41

<sup>1</sup> 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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
All industries .....	117,066	119,502	65,164	66,265	51,902	53,237
16 to 19 years .....	8,661	8,465	4,541	4,554	4,119	3,911
16 to 17 years .....	3,672	3,409	1,963	1,644	1,709	1,565
18 to 19 years .....	4,986	5,056	2,578	2,710	2,410	2,346
20 to 24 years .....	13,926	13,808	7,397	7,240	6,530	6,568
25 to 54 years .....	80,072	82,432	44,691	45,841	35,381	36,591
25 to 34 years .....	33,590	34,071	18,905	19,187	14,684	14,884
35 to 44 years .....	28,080	29,232	15,541	16,047	12,539	13,185
45 to 54 years .....	18,402	19,130	10,244	10,607	8,158	8,523
55 to 64 years .....	11,269	11,425	6,596	6,616	4,673	4,810
55 to 59 years .....	6,874	6,839	4,013	3,928	2,861	2,911
60 to 64 years .....	4,396	4,586	2,583	2,687	1,813	1,899
65 years and over .....	3,137	3,370	1,939	2,014	1,198	1,357
Agriculture .....	3,541	3,713	2,827	2,903	714	810
16 to 19 years .....	438	425	373	357	64	68
16 to 17 years .....	236	237	205	202	31	36
18 to 19 years .....	202	187	168	155	33	32
20 to 24 years .....	394	451	336	364	58	87
25 to 54 years .....	1,935	2,059	1,475	1,542	460	518
25 to 34 years .....	849	859	683	669	166	190
35 to 44 years .....	637	691	472	507	166	185
45 to 54 years .....	448	508	320	366	128	142
55 to 64 years .....	428	454	345	357	84	97
55 to 59 years .....	236	234	186	180	50	54
60 to 64 years .....	192	220	159	177	34	43
65 years and over .....	347	324	298	282	48	42
Nonagricultural industries .....	113,524	115,789	62,336	63,362	51,188	52,427
16 to 19 years .....	8,223	8,041	4,168	4,197	4,055	3,843
16 to 17 years .....	3,437	3,172	1,759	1,642	1,678	1,530
18 to 19 years .....	4,786	4,869	2,410	2,555	2,377	2,314
20 to 24 years .....	13,532	13,357	7,061	6,876	6,472	6,481
25 to 54 years .....	78,137	80,374	43,216	44,299	34,922	36,075
25 to 34 years .....	32,741	33,212	18,222	18,518	14,519	14,693
35 to 44 years .....	27,443	28,540	15,070	15,540	12,373	13,001
45 to 54 years .....	17,954	18,622	9,924	10,241	8,030	8,381
55 to 64 years .....	10,841	10,971	6,251	6,258	4,590	4,712
55 to 59 years .....	6,638	6,604	3,827	3,748	2,810	2,856
60 to 64 years .....	4,203	4,366	2,424	2,510	1,779	1,856
65 years and over .....	2,790	3,046	1,641	1,731	1,150	1,315

**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	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
<b>Total</b> .....	117,066	119,502	65,164	66,265	60,622	61,710	51,902	53,237	47,783	49,326
<b>Managerial and professional specialty</b> .....	29,006	30,068	16,181	16,708	16,023	16,567	12,824	13,360	12,675	13,174
Executive, administrative, and managerial .....	14,541	15,163	8,837	9,159	8,768	9,106	5,704	6,003	5,655	5,946
Officials and administrators, public administration .....	555	693	328	394	329	392	227	300	228	297
Other executive, administrative, and managerial .....	10,134	10,493	6,602	6,787	6,540	6,742	3,532	3,705	3,489	3,659
Management-related occupations .....	3,851	3,977	1,907	1,978	1,899	1,972	1,944	1,999	1,938	1,990
Professional specialty .....	14,465	14,906	7,344	7,549	7,255	7,462	7,121	7,357	7,021	7,228
Engineers .....	1,850	1,813	1,723	1,674	1,717	1,674	127	138	126	135
Mathematical and computer scientists .....	793	822	517	553	514	551	276	269	276	267
Natural scientists .....	410	453	315	344	315	340	96	109	96	109
Health diagnosing occupations .....	797	863	651	736	651	736	146	126	144	126
Health assessment and treating occupations .....	2,210	2,268	349	351	344	348	1,861	1,917	1,858	1,910
Teachers, college and university .....	594	573	347	358	345	356	247	215	247	214
Teachers, except college and university .....	3,034	3,286	752	854	724	826	2,282	2,432	2,239	2,390
Lawyers and judges .....	720	764	594	573	593	573	126	191	124	191
Other professional specialty occupations .....	4,056	4,066	2,096	2,106	2,053	2,057	1,960	1,961	1,910	1,887
<b>Technical, sales, and administrative support</b> .....	35,880	36,552	12,632	12,864	11,876	12,072	23,248	23,688	21,153	21,716
Technicians and related support .....	3,659	3,797	1,960	1,959	1,917	1,914	1,699	1,838	1,673	1,802
Health technologists and technicians .....	1,246	1,310	225	250	225	244	1,022	1,060	1,010	1,051
Engineering and science technicians .....	1,173	1,215	930	922	903	897	243	293	234	277
Technicians, except health, engineering, and science .....	1,240	1,272	805	788	790	773	435	485	429	475
Sales occupations .....	13,928	14,181	7,070	7,202	6,605	6,714	6,856	6,979	5,711	5,841
Supervisors and proprietors .....	3,680	3,845	2,369	2,531	2,326	2,502	1,311	1,314	1,274	1,276
Sales representatives, finance and business services .....	2,407	2,392	1,423	1,357	1,396	1,342	984	1,036	951	990
Sales representatives, commodities, except retail .....	1,580	1,505	1,273	1,212	1,262	1,206	307	294	294	283
Sales workers, retail and personal services .....	6,195	6,363	1,985	2,087	1,601	1,651	4,210	4,276	3,152	3,232
Sales-related occupations .....	65	75	20	16	20	13	45	59	40	60
Administrative support, including clerical .....	18,295	18,574	3,602	3,703	3,354	3,444	14,693	14,871	13,770	14,073
Supervisors .....	832	738	369	311	365	310	463	426	462	426
Computer equipment operators .....	849	979	300	377	284	360	549	602	507	566
Secretaries, stenographers, and typists .....	4,916	4,722	95	74	87	68	4,822	4,649	4,561	4,433
Financial records processing .....	2,464	2,467	220	211	211	191	2,244	2,255	2,194	2,201
Mail and message distributing .....	893	875	564	554	524	531	328	321	308	307
Other administrative support, including clerical .....	8,341	8,794	2,054	2,176	1,883	1,984	6,287	6,619	5,739	6,140
<b>Service occupations</b> .....	15,635	16,195	6,230	6,491	5,121	5,263	9,405	9,703	7,918	8,316
Private household .....	992	942	39	39	32	30	953	903	719	719
Protective service .....	2,028	2,013	1,672	1,669	1,588	1,560	356	344	272	275
Service, except private household and protective .....	12,615	13,239	4,519	4,783	3,502	3,674	8,096	8,456	6,928	7,322
Food service .....	5,269	5,505	2,007	2,191	1,287	1,420	3,262	3,314	2,464	2,571
Health service .....	1,987	2,141	192	235	179	203	1,795	1,906	1,699	1,780
Cleaning and building service .....	3,189	3,230	1,840	1,889	1,643	1,687	1,348	1,341	1,248	1,256
Personal service .....	2,170	2,363	480	468	393	364	1,690	1,895	1,517	1,716
<b>Precision production, craft, and repair</b> .....	14,134	14,059	12,899	12,843	12,472	12,350	1,235	1,216	1,190	1,166
Mechanics and repairers .....	4,623	4,452	4,505	4,321	4,376	4,178	119	130	117	129
Construction trades .....	5,364	5,500	5,235	5,369	5,000	5,068	129	131	120	115
Other precision production, craft, and repair .....	4,146	4,108	3,159	3,153	3,096	3,104	987	955	953	922
<b>Operators, fabricators, and laborers</b> .....	18,432	18,488	13,869	13,900	12,310	12,573	4,563	4,588	4,281	4,356
Machine operators, assemblers, and inspectors .....	8,211	8,266	4,942	4,977	4,703	4,768	3,269	3,289	3,141	3,191
Manufacturing industries .....	6,920	6,775	4,106	4,056	3,932	3,924	2,814	2,719	2,720	2,636
Durable goods .....	3,787	3,700	2,635	2,584	2,550	2,506	1,152	1,115	1,116	1,091
Nondurable goods .....	3,133	3,076	1,471	1,472	1,382	1,418	1,662	1,604	1,604	1,545
Nonmanufacturing industries .....	1,291	1,491	836	921	771	844	455	570	421	555
Transportation and material moving occupations .....	4,900	5,028	4,505	4,629	4,298	4,479	395	399	383	384
Motor vehicle operators .....	3,661	3,657	3,306	3,300	3,123	3,184	354	357	347	344
Other transportation and material moving occupations .....	1,239	1,371	1,199	1,329	1,175	1,296	40	42	36	41
Handlers, equipment cleaners, helpers, and laborers .....	5,321	5,194	4,422	4,294	3,308	3,325	899	900	757	780
Construction laborers .....	971	866	929	838	738	700	42	28	34	29
Other handlers, equipment cleaners, helpers, and laborers .....	4,350	4,328	3,492	3,456	2,571	2,625	857	872	723	751
<b>Farming, forestry, and fishing</b> .....	3,979	4,139	3,352	3,458	2,819	2,885	627	681	564	598
Farm operators and managers .....	1,360	1,385	1,146	1,157	1,129	1,144	214	228	212	221
Other farming, forestry, and fishing occupations .....	2,619	2,754	2,206	2,301	1,691	1,741	413	454	352	377

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	July 1988	July 1989	July 1988	July 1989	July 1988	July 1989
<b>TOTAL</b>						
Total, 16 years and over (thousands) .....	117,066	119,502	65,164	66,265	51,902	53,237
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	24.8	25.2	24.8	25.2	24.7	25.1
Executive, administrative, and managerial .....	12.4	12.7	13.6	13.8	11.0	11.3
Professional specialty .....	12.4	12.5	11.3	11.4	13.7	13.8
Technical, sales, and administrative support .....	30.6	30.6	19.4	19.4	44.8	44.5
Technicians and related support .....	3.1	3.2	3.0	3.0	3.3	3.5
Sales occupations .....	11.9	11.9	10.8	10.9	13.2	13.1
Administrative support, including clerical .....	15.6	15.5	5.5	5.6	28.3	27.9
Service occupations .....	13.4	13.6	9.6	9.8	18.1	18.2
Private household .....	.8	.8	.1	.1	1.8	1.7
Protective service .....	1.7	1.7	2.6	2.5	.7	.6
Service, except private household and protective .....	10.8	11.1	8.9	7.2	15.6	15.9
Precision production, craft, and repair .....	12.1	11.8	19.8	19.4	2.4	2.3
Operators, fabricators, and laborers .....	15.7	15.5	21.3	21.0	8.8	8.6
Machine operators, assemblers, and inspectors .....	7.0	6.9	7.6	7.5	6.3	6.2
Transportation and material moving occupations .....	4.2	4.2	6.9	7.0	.8	.7
Handlers, equipment cleaners, helpers, and laborers .....	4.5	4.3	6.8	6.5	1.7	1.7
Farming, forestry, and fishing .....	3.4	3.5	5.1	5.2	1.2	1.3
<b>White</b>						
Total, 16 years and over (thousands) .....	101,432	103,215	57,125	57,909	44,307	45,306
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	25.8	26.3	25.8	26.6	25.7	25.9
Executive, administrative, and managerial .....	13.1	13.4	14.3	14.7	11.5	11.7
Professional specialty .....	12.7	12.9	11.5	11.8	14.2	14.2
Technical, sales, and administrative support .....	31.0	30.9	19.6	19.4	45.7	45.5
Technicians and related support .....	3.0	3.1	3.0	2.9	3.1	3.4
Sales occupations .....	12.5	12.4	11.5	11.4	13.8	13.7
Administrative support, including clerical .....	15.5	15.3	5.2	5.1	28.8	28.4
Service occupations .....	12.2	12.3	8.6	8.6	16.8	16.9
Private household .....	.7	.7	.1	.1	1.6	1.5
Protective service .....	1.6	1.6	2.4	2.3	.8	.6
Service, except private household and protective .....	9.8	10.0	6.1	8.3	14.6	14.9
Precision production, craft, and repair .....	12.5	12.2	20.4	20.0	2.3	2.2
Operators, fabricators, and laborers .....	15.0	14.7	20.3	19.9	8.2	8.0
Machine operators, assemblers, and inspectors .....	6.6	6.5	7.3	7.2	5.8	5.6
Transportation and material moving occupations .....	4.0	4.1	6.6	6.7	.7	.7
Handlers, equipment cleaners, helpers, and laborers .....	4.4	4.1	6.4	6.0	1.7	1.7
Farming, forestry, and fishing .....	3.6	3.7	5.3	5.5	1.3	1.4
<b>Black</b>						
Total, 16 years and over (thousands) .....	12,031	12,364	6,029	6,220	6,002	6,144
Percent .....	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty .....	15.9	15.2	13.8	11.5	18.1	19.0
Executive, administrative, and managerial .....	7.4	7.1	7.0	6.2	7.8	8.0
Professional specialty .....	8.5	8.2	6.8	5.4	10.2	11.0
Technical, sales, and administrative support .....	27.0	28.2	16.4	17.8	37.6	38.7
Technicians and related support .....	3.1	2.9	2.9	2.5	3.3	3.4
Sales occupations .....	6.8	7.8	5.1	6.3	8.4	9.3
Administrative support, including clerical .....	17.1	17.5	8.3	9.1	25.8	26.0
Service occupations .....	23.0	23.5	17.9	19.7	28.1	27.3
Private household .....	2.0	1.8	.1	.1	3.9	3.5
Protective service .....	2.8	3.0	4.2	5.0	1.2	.9
Service, except private household and protective .....	18.2	18.7	13.6	14.5	22.9	22.9
Precision production, craft, and repair .....	8.9	9.1	15.4	15.5	2.4	2.6
Operators, fabricators, and laborers .....	23.1	22.3	32.8	32.5	13.2	11.9
Machine operators, assemblers, and inspectors .....	10.4	9.8	11.0	10.3	9.9	9.3
Transportation and material moving occupations .....	6.1	5.7	11.1	10.4	1.1	.9
Handlers, equipment cleaners, helpers, and laborers .....	6.5	6.8	10.8	11.7	2.2	1.7
Farming, forestry, and fishing .....	2.2	1.7	3.8	3.0	.6	.5

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	July 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 .....	106,868	1,207	16,688	88,774	8,675	245	1,982	1,556	175
16 to 19 years .....	7,929	260	607	7,062	96	16	337	44	44
16 to 17 years .....	3,128	165	271	2,692	34	9	194	17	27
18 to 19 years .....	4,801	95	335	4,370	62	6	143	27	17
20 to 24 years .....	13,050	152	1,104	11,794	303	4	388	52	11
25 to 34 years .....	31,335	184	4,090	27,061	1,823	54	548	299	13
35 to 44 years .....	25,690	181	5,101	20,408	2,775	76	331	330	30
45 to 54 years .....	16,782	151	3,565	13,066	1,790	50	188	289	31
55 to 64 years .....	9,675	150	2,001	7,524	1,266	30	142	286	27
55 to 59 years .....	5,893	90	1,220	4,582	688	24	72	141	22
60 to 64 years .....	3,782	60	781	2,941	578	7	70	146	5
65 years and over .....	2,409	129	422	1,858	622	16	49	255	20
Men, 16 years and over .....	57,692	190	8,000	49,502	5,644	26	1,560	1,289	54
16 to 19 years .....	4,126	71	326	3,729	65	7	289	38	30
16 to 17 years .....	1,622	49	157	1,416	17	4	165	15	21
18 to 19 years .....	2,504	22	169	2,314	48	2	124	22	9
20 to 24 years .....	6,683	25	478	6,180	192	1	314	47	4
25 to 34 years .....	17,353	31	1,962	15,360	1,161	5	424	245	1
35 to 44 years .....	13,804	17	2,349	11,438	1,734	2	238	267	2
45 to 54 years .....	9,065	18	1,722	7,326	1,173	2	145	217	4
55 to 64 years .....	5,390	14	955	4,421	866	2	110	242	6
55 to 59 years .....	3,268	4	570	2,694	478	2	53	121	6
60 to 64 years .....	2,122	10	385	1,727	388	-	57	121	-
65 years and over .....	1,271	15	209	1,047	453	7	41	234	7
Women, 16 years and over .....	49,176	1,016	8,888	39,272	3,031	220	423	266	121
16 to 19 years .....	3,803	189	281	3,333	31	9	48	6	13
16 to 17 years .....	1,507	116	114	1,277	18	5	29	2	5
18 to 19 years .....	2,296	73	167	2,056	14	4	19	5	8
20 to 24 years .....	6,367	127	626	5,614	112	2	74	5	7
25 to 34 years .....	13,982	153	2,128	11,701	662	49	124	54	12
35 to 44 years .....	11,886	164	2,752	8,970	1,041	74	93	63	28
45 to 54 years .....	7,717	134	1,843	5,740	617	47	43	72	27
55 to 64 years .....	4,284	136	1,046	3,102	400	28	32	44	21
55 to 59 years .....	2,625	86	650	1,889	210	22	19	19	16
60 to 64 years .....	1,660	50	396	1,214	190	7	13	25	5
65 years and over .....	1,137	114	213	811	168	9	7	21	13



**A-25. Employed civilians by industry and occupation**

(In thousands)

Industry	July 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 <sup>1</sup>		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture .....	3,713	70	101	21	19	128	-	13	39	17	44	31	3,230
Mining .....	753	90	73	37	6	85	-	3	249	43	127	41	-
Construction .....	8,175	1,094	126	47	49	463	-	39	4,662	112	592	973	19
Manufacturing .....	22,030	2,685	1,867	793	754	2,482	-	396	4,049	6,775	878	1,245	107
Durable goods .....	12,951	1,609	1,261	551	312	1,378	-	232	2,749	3,700	481	577	100
Nondurable goods .....	9,079	1,076	605	242	443	1,103	-	163	1,300	3,076	397	668	7
Transportation and public utilities .....	8,275	971	494	263	371	2,236	-	286	1,247	118	1,797	477	17
Wholesale and retail trade .....	24,679	2,128	413	109	10,173	2,374	-	4,669	1,542	324	1,029	1,873	46
Wholesale trade .....	4,663	527	77	45	1,810	797	-	49	319	148	510	366	16
Retail trade .....	20,016	1,601	336	63	8,363	1,577	-	4,619	1,223	176	519	1,507	30
Finance, insurance, and real estate .....	8,198	2,083	210	139	1,873	3,286	-	322	143	16	14	24	90
Services .....	37,914	4,720	10,888	2,098	919	6,011	942	8,163	1,867	830	481	449	547
Private households .....	1,216	7	7	1	2	7	942	96	19	-	5	20	109
Other service industries .....	36,698	4,713	10,881	2,098	916	6,003	-	8,068	1,848	829	475	429	438
Professional services .....	23,601	2,645	9,402	1,691	93	4,284	-	4,352	453	215	223	94	150
Public administration .....	5,766	1,323	735	290	18	1,511	-	1,363	261	32	67	82	84

<sup>1</sup> 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					
	July 1988	July 1989	Total		Wage and salary workers <sup>1</sup>			
			July 1988	July 1989	Paid absences		Unpaid absences	
					July 1988	July 1989	July 1988	July 1989
Total, 16 years and over .....	11,661	12,092	11,510	11,964	6,896	7,138	3,891	4,112
Vacation .....	9,021	9,536	8,949	9,473	6,056	6,338	2,475	2,674
Illness .....	1,336	1,261	1,312	1,228	523	498	691	652
Bad weather .....	42	35	22	26	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Industrial dispute .....	49	86	46	86	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
All other reasons .....	1,212	1,175	1,181	1,152	316	302	726	786
Men, 16 years and over .....	5,139	5,140	5,021	5,049	3,414	3,436	1,224	1,256
Vacation .....	3,845	3,959	3,797	3,918	2,981	3,017	609	684
Illness .....	717	681	897	653	296	295	349	309
All other reasons <sup>3</sup> .....	578	499	527	477	137	124	266	264
Women, 16 years and over .....	6,522	6,952	6,489	6,915	3,484	3,702	2,666	2,855
Vacation .....	5,177	5,576	5,152	5,555	3,076	3,321	1,865	1,990
Illness .....	619	580	615	575	228	203	341	344
All other reasons <sup>3</sup> .....	726	795	722	786	180	178	460	521

<sup>1</sup> Excludes private household workers.

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

<sup>3</sup> 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	July 1989					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over .....	107,409	3,584	103,825	100.0	100.0	100.0
1 to 34 hours .....	23,799	944	22,854	22.2	26.3	22.0
1 to 4 hours .....	694	46	648	.6	1.3	.6
5 to 14 hours .....	3,559	229	3,329	3.3	6.4	3.2
15 to 29 hours .....	11,981	433	11,548	11.2	12.1	11.1
30 to 34 hours .....	7,565	236	7,329	7.0	6.6	7.1
35 hours and over .....	83,611	2,640	80,971	77.8	73.7	78.0
35 to 39 hours .....	7,317	173	7,144	6.8	4.8	6.9
40 hours .....	43,329	734	42,595	40.3	20.5	41.0
41 hours and over .....	32,965	1,733	31,232	30.7	48.4	30.1
41 to 48 hours .....	11,463	239	11,224	10.7	6.7	10.8
49 to 59 hours .....	11,974	502	11,472	11.1	14.0	11.0
60 hours and over .....	9,528	992	8,536	8.9	27.7	8.2
Average hours, total at work .....	40.0	45.4	39.8	-	-	-
Average hours, workers on full-time schedules .....	44.0	52.7	43.7	-	-	-

**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	July 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 .....	23,799	7,260	16,538	22,854	6,964	15,890
Economic reasons .....	5,500	1,844	3,656	5,199	1,728	3,471
Slack work .....	2,299	1,432	867	2,161	1,337	824
Material shortages or repairs to plant and equipment .....	51	51	-	47	47	-
New job started during week .....	226	226	-	212	212	-
Job terminated during week .....	135	135	-	132	132	-
Could find only part-time work .....	2,788	-	2,788	2,647	-	2,647
Other reasons .....	18,300	5,418	12,882	17,655	5,236	12,419
Does not want, or unavailable for, full-time work .....	10,063	-	10,063	9,718	-	9,718
Vacation .....	2,117	2,117	-	2,084	2,084	-
Illness .....	1,241	1,113	128	1,197	1,079	118
Bad weather .....	400	400	-	336	336	-
Industrial dispute .....	2	2	-	2	2	-
Legal or religious holiday .....	81	81	-	81	81	-
Full time for this job .....	1,866	-	1,866	1,827	-	1,827
All other reasons .....	2,527	1,702	825	2,409	1,654	755
Average hours:						
Economic reasons .....	22.2	24.1	21.2	22.4	24.3	21.4
Other reasons .....	22.0	25.7	20.5	22.1	25.7	20.6
Worked 30 to 34 hours:						
Economic reasons .....	1,735	776	959	1,673	747	926
Other reasons .....	5,830	2,757	3,073	5,656	2,670	2,986

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

(Numbers in thousands)

Industry	July 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 .....	103,825	5,199	12,419	86,207	54,975	11,224	20,008	39.8	43.7
Wage and salary workers .....	95,516	4,649	11,053	79,814	52,168	10,554	17,092	39.7	43.3
Mining .....	615	11	14	590	276	85	229	47.3	48.2
Construction .....	6,316	370	252	5,694	3,749	735	1,210	40.8	43.0
Manufacturing .....	19,408	475	603	18,330	11,635	2,923	3,772	42.2	43.4
Durable goods .....	11,340	203	216	10,921	6,850	1,759	2,312	42.8	43.6
Nondurable goods .....	8,068	272	387	7,409	4,784	1,164	1,461	41.4	43.2
Transportation and public utilities .....	7,292	208	379	6,705	4,145	850	1,710	42.8	44.6
Wholesale and retail trade .....	21,143	1,790	4,025	15,328	9,293	2,274	3,761	38.0	44.0
Finance, insurance, and real estate .....	7,043	132	694	6,217	4,219	761	1,237	40.1	42.6
Service industries .....	28,394	1,575	4,815	22,004	15,266	2,394	4,344	37.6	42.6
Private households .....	1,115	208	487	420	256	30	134	27.3	47.2
All other industries .....	27,279	1,367	4,328	21,584	15,010	2,364	4,210	38.0	42.5
Public administration .....	5,305	88	271	4,946	3,585	532	829	41.1	42.5
Self-employed workers .....	8,064	541	1,271	6,252	2,717	656	2,879	41.9	48.6
Unpaid family workers .....	245	9	95	141	91	14	36	34.9	44.2

**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	July 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		
<b>TOTAL</b>								
Total, 16 years and over .....	103,825	5,199	12,419	86,207	54,975	31,232	39.8	43.7
16 to 19 years .....	7,636	1,282	2,630	3,724	2,950	774	30.5	40.5
16 to 17 years .....	2,982	559	1,456	967	809	158	26.2	39.2
18 to 19 years .....	4,654	724	1,174	2,756	2,142	614	33.2	41.0
20 years and over .....	96,189	3,916	9,789	82,484	52,025	30,459	40.6	43.8
20 to 24 years .....	12,601	827	1,612	10,162	7,212	2,950	38.5	42.2
25 years and over .....	83,587	3,088	8,176	72,321	44,812	27,509	41.0	44.0
25 to 44 years .....	55,413	2,096	4,319	48,998	29,876	19,122	41.5	44.1
45 to 64 years .....	25,529	907	2,587	22,035	14,048	7,987	40.8	44.0
65 years and over .....	2,646	86	1,271	1,289	891	398	29.5	42.6
<b>Men, 16 years and over</b> .....	56,314	2,455	3,617	52,242	29,553	22,689	42.7	45.2
16 to 19 years .....	4,008	641	1,187	2,180	1,692	488	31.9	41.0
16 to 17 years .....	1,569	301	701	567	482	85	27.0	38.7
18 to 19 years .....	2,439	339	486	1,614	1,211	403	35.1	41.8
20 years and over .....	54,305	1,814	2,430	50,061	27,859	22,202	43.5	45.4
20 to 24 years .....	6,553	404	595	5,554	3,566	1,988	40.4	43.5
25 years and over .....	47,752	1,409	1,835	44,508	24,294	20,214	43.9	45.6
25 to 44 years .....	31,518	982	586	29,948	15,912	14,036	44.6	45.8
45 to 64 years .....	14,691	380	590	13,721	7,861	5,860	43.7	45.3
65 years and over .....	1,546	47	659	840	522	318	31.9	44.1
<b>Women, 16 years and over</b> .....	45,512	2,743	8,802	33,967	25,425	8,542	36.2	41.3
16 to 19 years .....	3,628	642	1,443	1,543	1,257	286	28.9	39.9
16 to 17 years .....	1,413	257	754	402	327	75	25.4	39.8
18 to 19 years .....	2,215	385	688	1,142	931	211	31.2	40.0
20 years and over .....	41,864	2,103	7,359	32,422	24,165	8,257	36.8	41.4
20 to 24 years .....	6,048	422	1,017	4,609	3,646	963	36.4	40.6
25 years and over .....	35,835	1,679	6,342	27,814	20,519	7,295	36.9	41.6
25 to 44 years .....	23,897	1,113	3,734	19,050	13,963	5,067	37.4	41.5
45 to 64 years .....	10,837	528	1,997	8,312	6,164	2,128	36.8	41.7
65 years and over .....	1,100	39	612	449	368	81	26.2	39.7
<b>RACE</b>								
White, 16 years and over .....	89,386	4,147	10,923	74,316	45,980	26,336	40.1	43.9
Men .....	50,762	1,939	3,087	45,736	24,991	20,745	43.1	45.5
Women .....	38,623	2,208	7,835	28,580	20,989	7,591	36.1	41.5
Black, 16 years and over .....	10,879	851	1,126	8,902	6,847	2,055	38.0	41.7
Men .....	5,594	417	392	4,785	3,409	1,376	39.7	42.7
Women .....	5,285	435	734	4,116	3,435	681	36.2	40.5
<b>MARITAL STATUS</b>								
Men, 16 years and over:								
Married, spouse present .....	35,910	833	1,281	33,796	17,929	15,867	44.3	45.8
Widowed, divorced, or separated .....	5,902	261	274	5,367	2,933	2,434	43.6	46.0
Single (never married) .....	16,502	1,361	2,062	13,079	8,692	4,387	36.9	43.3
Women, 16 years and over:								
Married, spouse present .....	23,739	1,045	5,194	17,500	13,248	4,252	35.8	41.2
Widowed, divorced, or separated .....	9,069	549	1,092	7,428	5,325	2,103	38.2	42.0
Single (never married) .....	12,703	1,149	2,516	9,036	6,851	2,187	35.5	41.1

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

(Numbers in thousands)

Occupation and sex	July 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 <sup>1</sup> .....	103,418	5,107	12,339	85,972	54,739	11,209	20,025	39.9	43.7
Managerial and professional specialty .....	25,591	432	2,135	23,023	12,547	2,900	7,576	42.7	45.3
Executive, administrative, and managerial .....	14,036	161	626	13,249	6,710	1,692	4,847	44.8	46.2
Professional specialty .....	11,555	272	1,510	9,774	5,837	1,208	2,729	40.3	44.1
Technical, sales, and administrative support .....	33,487	1,489	5,281	26,716	18,284	3,407	5,026	38.4	42.7
Technicians and related support .....	3,501	79	301	3,120	2,131	464	525	40.5	42.6
Sales occupations .....	13,139	817	2,406	9,916	5,284	1,352	3,279	39.6	45.6
Administrative support, including clerical .....	16,847	593	2,574	13,680	10,868	1,591	1,221	37.0	40.6
Service occupations .....	14,673	1,591	3,350	9,733	7,121	974	1,638	35.3	42.5
Private household .....	868	144	392	333	208	27	98	27.3	46.5
Protective service .....	1,831	78	127	1,626	994	225	408	42.6	45.2
Service, except private household and protective .....	11,974	1,370	2,830	7,774	5,920	722	1,132	34.7	41.8
Precision production, craft, and repair .....	12,979	535	415	12,030	7,428	1,756	2,846	42.3	43.9
Operators, fabricators, and laborers .....	16,688	1,060	1,158	14,470	9,358	2,172	2,940	40.8	43.6
Machine operators, assemblers, and inspectors .....	7,336	395	273	6,668	4,710	1,016	942	40.5	42.2
Transportation and material moving occupations .....	4,539	191	229	4,119	2,037	649	1,433	44.6	47.0
Handlers, equipment cleaners, helpers, and laborers .....	4,813	474	656	3,683	2,611	507	565	37.6	42.3
Men, 16 years and over <sup>1</sup> .....	57,791	2,370	3,505	51,916	29,263	7,232	15,420	42.8	45.2
Managerial and professional specialty .....	15,098	237	659	14,202	6,820	1,684	5,697	45.3	46.9
Executive, administrative, and managerial .....	8,520	84	232	8,204	3,632	957	3,614	46.8	47.8
Professional specialty .....	6,578	153	427	5,998	3,188	727	2,083	43.4	45.6
Technical, sales, and administrative support .....	11,997	366	954	10,678	5,674	1,618	3,386	43.0	45.7
Technicians and related support .....	1,820	34	78	1,708	1,057	293	358	42.6	43.9
Sales occupations .....	6,759	227	572	5,961	2,526	865	2,570	44.7	47.8
Administrative support, including clerical .....	3,419	105	305	3,009	2,091	460	459	39.8	42.4
Service occupations .....	6,057	567	835	4,656	3,168	518	969	38.7	43.9
Private household .....	39	5	16	17	6	-	11	( <sup>2</sup> )	( <sup>2</sup> )
Protective service .....	1,514	67	77	1,370	812	185	374	43.5	45.8
Service, except private household and protective .....	4,504	495	741	3,268	2,351	334	583	37.2	43.0
Precision production, craft, and repair .....	11,914	484	284	11,146	6,774	1,653	2,720	42.6	44.1
Operators, fabricators, and laborers .....	12,725	716	775	11,234	6,828	1,758	2,648	41.8	44.3
Machine operators, assemblers, and inspectors .....	4,465	187	100	4,178	2,748	698	733	41.8	43.0
Transportation and material moving occupations .....	4,254	163	169	3,922	1,901	625	1,396	45.2	47.2
Handlers, equipment cleaners, helpers, and laborers .....	4,006	367	505	3,134	2,178	436	520	38.2	42.6
Women, 16 years and over <sup>1</sup> .....	45,627	2,737	8,833	34,057	25,475	3,976	4,605	36.2	41.4
Managerial and professional specialty .....	10,493	195	1,476	8,821	5,727	1,215	1,879	39.0	42.7
Executive, administrative, and managerial .....	5,515	76	394	5,045	3,078	735	1,233	41.6	43.5
Professional specialty .....	4,977	118	1,083	3,776	2,649	481	646	36.1	41.6
Technical, sales, and administrative support .....	21,490	1,124	4,327	16,039	12,610	1,789	1,640	35.8	40.7
Technicians and related support .....	1,681	45	224	1,412	1,074	171	167	38.3	41.1
Sales occupations .....	6,380	591	1,834	3,956	2,758	488	710	34.3	42.2
Administrative support, including clerical .....	13,428	488	2,269	10,671	8,778	1,130	763	36.2	40.1
Service occupations .....	8,616	1,024	2,515	5,077	3,953	455	669	32.8	41.3
Private household .....	829	138	375	316	202	27	86	26.9	45.5
Protective service .....	317	11	51	256	182	40	33	38.0	41.9
Service, except private household and protective .....	7,470	875	2,089	4,506	3,569	388	549	33.3	41.0
Precision production, craft, and repair .....	1,066	51	131	884	655	103	126	38.3	41.7
Operators, fabricators, and laborers .....	3,963	343	384	3,236	2,531	413	292	37.5	40.9
Machine operators, assemblers, and inspectors .....	2,871	208	173	2,490	1,962	319	209	38.4	40.9
Transportation and material moving occupations .....	285	28	60	197	136	24	37	36.1	43.0
Handlers, equipment cleaners, helpers, and laborers .....	807	107	150	549	433	71	45	34.6	40.4

<sup>1</sup> Excludes farming, forestry, and fishing occupations.

<sup>2</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>TOTAL</b>													
Noninstitutional population <sup>1</sup> .....	186,402	186,522	186,666	186,801	186,949	187,098	187,340	187,461	187,581	187,708	187,854	187,995	188,149
Labor force <sup>1</sup> .....	123,331	123,692	123,688	123,778	124,215	124,259	125,124	124,865	124,948	125,343	125,283	125,768	125,822
Percent of population <sup>2</sup> .....	66.2	66.3	66.3	66.3	66.4	66.4	66.8	66.6	66.6	66.6	66.7	66.9	66.8
Total employed <sup>1</sup> .....	116,707	116,895	117,074	117,260	117,652	117,705	118,407	118,537	118,820	118,797	118,888	119,207	119,125
Employment-population ratio <sup>3</sup> .....	62.6	62.7	62.7	62.8	62.9	62.9	63.2	63.2	63.3	63.3	63.3	63.4	63.3
Resident Armed Forces .....	1,673	1,692	1,704	1,687	1,705	1,696	1,696	1,684	1,684	1,684	1,673	1,666	1,666
Civilian employed .....	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459
Agriculture .....	3,060	3,142	3,176	3,238	3,238	3,193	3,300	3,223	3,206	3,104	3,112	3,096	3,219
Nonagricultural industries .....	111,974	112,061	112,194	112,335	112,709	112,816	113,411	113,630	113,930	114,009	114,102	114,445	114,240
Unemployed .....	6,624	6,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497
Unemployment rate <sup>4</sup> .....	5.4	5.5	5.3	5.3	5.3	5.3	5.4	5.1	4.9	5.2	5.1	5.2	5.2
Not in labor force .....	63,071	62,830	62,978	63,023	62,734	62,839	62,216	62,596	62,633	62,365	62,571	62,228	62,527
<b>Men</b>													
Noninstitutional population <sup>1</sup> .....	89,445	89,504	89,577	89,637	89,716	89,792	89,914	89,973	90,032	90,094	90,167	90,237	90,315
Labor force <sup>1</sup> .....	68,461	68,685	68,604	68,569	68,686	68,638	69,032	69,113	69,190	69,360	69,114	69,507	69,245
Percent of population <sup>2</sup> .....	76.5	76.7	76.6	76.5	76.6	76.4	76.8	76.8	76.9	77.0	76.7	77.0	76.7
Total employed <sup>1</sup> .....	64,941	64,931	65,015	64,976	65,074	65,055	65,322	65,572	65,920	65,767	65,713	66,110	65,961
Employment-population ratio <sup>3</sup> .....	72.6	72.5	72.6	72.5	72.5	72.5	72.6	72.9	73.2	73.0	72.9	73.3	73.0
Resident Armed Forces .....	1,512	1,529	1,540	1,526	1,542	1,534	1,532	1,521	1,521	1,521	1,511	1,501	1,499
Civilian employed .....	63,429	63,402	63,475	63,450	63,532	63,521	63,790	64,051	64,399	64,246	64,202	64,609	64,462
Unemployed .....	3,520	3,754	3,589	3,593	3,612	3,583	3,710	3,540	3,270	3,593	3,401	3,397	3,284
Unemployment rate <sup>4</sup> .....	5.1	5.5	5.2	5.2	5.3	5.2	5.4	5.1	4.7	5.2	4.9	4.9	4.7
Not in labor force .....	20,984	20,819	20,973	21,068	21,030	21,154	20,882	20,860	20,842	20,734	21,053	20,730	21,070
<b>Women</b>													
Noninstitutional population <sup>1</sup> .....	96,957	97,018	97,089	97,164	97,234	97,306	97,427	97,488	97,550	97,614	97,687	97,758	97,834
Labor force <sup>1</sup> .....	54,870	55,007	55,084	55,209	55,529	55,621	56,091	55,752	55,758	55,983	56,169	56,261	56,377
Percent of population <sup>2</sup> .....	56.6	56.7	56.7	56.8	57.1	57.2	57.6	57.2	57.2	57.4	57.5	57.6	57.6
Total employed <sup>1</sup> .....	51,766	51,964	52,059	52,284	52,578	52,650	53,085	52,965	52,900	53,029	53,175	53,097	53,164
Employment-population ratio <sup>3</sup> .....	53.4	53.6	53.6	53.8	54.1	54.1	54.5	54.3	54.2	54.3	54.4	54.3	54.3
Resident Armed Forces .....	161	163	164	161	163	162	164	163	163	163	162	165	167
Civilian employed .....	51,605	51,801	51,895	52,123	52,415	52,488	52,921	52,802	52,737	52,866	53,013	52,932	52,997
Unemployed .....	3,104	3,043	3,025	2,925	2,951	2,971	3,006	2,787	2,858	2,953	2,994	3,164	3,213
Unemployment rate <sup>4</sup> .....	5.7	5.5	5.5	5.3	5.3	5.3	5.4	5.0	5.1	5.3	5.3	5.6	5.7
Not in labor force .....	42,087	42,011	42,005	41,955	41,705	41,685	41,336	41,736	41,792	41,631	41,518	41,497	41,457

<sup>1</sup> Includes members of the Armed Forces stationed in the United States.

<sup>2</sup> Labor force as a percent of the noninstitutional population.

<sup>3</sup> Total employment as a percent of the noninstitutional population.

<sup>4</sup> 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.

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>TOTAL</b>													
Civilian noninstitutional population <sup>1</sup> .....	184,729	184,830	184,962	185,114	185,244	185,402	185,644	185,777	185,897	186,024	186,181	186,329	186,483
Civilian labor force .....	121,658	122,000	121,984	122,091	122,510	122,563	123,428	123,181	123,264	123,659	123,610	124,102	123,956
Percent of population .....	65.9	66.0	66.0	66.0	66.1	66.1	66.5	66.3	66.3	66.5	66.4	66.6	66.5
Employed .....	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459
Employment-population ratio <sup>2</sup> .....	62.3	62.3	62.4	62.4	62.6	62.6	62.9	62.9	63.0	63.0	63.0	63.1	63.0
Unemployed .....	6,624	8,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497
Unemployment rate .....	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2
<b>Men, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> .....	80,608	80,669	80,751	80,851	80,924	81,001	81,162	81,256	81,333	81,413	81,524	81,592	81,679
Civilian labor force .....	62,729	62,916	62,884	62,915	62,995	63,002	63,358	63,490	63,557	63,709	63,503	63,831	63,656
Percent of population .....	77.8	78.0	77.9	77.8	77.8	77.8	78.1	78.1	78.1	78.3	77.9	78.2	77.9
Employed .....	59,897	59,839	59,979	60,004	59,999	60,049	60,420	60,636	60,869	60,757	60,798	61,093	60,921
Employment-population ratio <sup>2</sup> .....	74.3	74.2	74.3	74.2	74.1	74.1	74.4	74.6	74.8	74.6	74.6	74.9	74.6
Agriculture .....	2,252	2,273	2,249	2,315	2,313	2,292	2,277	2,320	2,317	2,252	2,284	2,256	2,342
Nonagricultural industries .....	57,645	57,566	57,730	57,689	57,686	57,757	58,143	58,316	58,552	58,505	58,514	58,837	58,579
Unemployed .....	2,832	3,077	2,905	2,911	2,996	2,953	2,938	2,853	2,688	2,952	2,705	2,737	2,734
Unemployment rate .....	4.5	4.9	4.6	4.6	4.8	4.7	4.6	4.5	4.2	4.6	4.3	4.3	4.3
Not in labor force .....	17,879	17,753	17,867	17,936	17,929	17,999	17,804	17,766	17,776	17,704	18,021	17,761	18,023
<b>Women, 20 years and over</b>													
Civilian noninstitutional population <sup>1</sup> .....	89,588	89,670	89,735	89,807	89,887	89,954	90,072	90,153	90,242	90,318	90,432	90,526	90,607
Civilian labor force .....	50,807	50,959	50,991	51,201	51,558	51,587	51,998	51,821	51,851	51,992	52,171	52,231	52,463
Percent of population .....	56.7	56.8	56.8	57.0	57.4	57.3	57.7	57.5	57.5	57.6	57.7	57.7	57.9
Employed .....	48,242	48,492	48,535	48,788	49,113	49,165	49,543	49,514	49,484	49,544	49,690	49,661	49,850
Employment-population ratio <sup>2</sup> .....	53.8	54.1	54.1	54.3	54.6	54.7	55.0	54.9	54.8	54.9	54.9	54.9	55.0
Agriculture .....	549	609	638	640	640	646	715	666	664	615	628	610	627
Nonagricultural industries .....	47,693	47,883	47,897	48,148	48,473	48,519	48,827	48,849	48,819	48,929	49,062	49,051	49,223
Unemployed .....	2,565	2,467	2,456	2,413	2,445	2,422	2,455	2,306	2,367	2,448	2,480	2,570	2,613
Unemployment rate .....	5.0	4.8	4.8	4.7	4.7	4.7	4.7	4.5	4.6	4.7	4.8	4.9	5.0
Not in labor force .....	38,781	38,711	38,744	38,806	38,329	38,367	38,074	38,332	38,391	38,326	38,261	38,295	38,144
<b>Both sexes, 16 to 19 years</b>													
Civilian noninstitutional population <sup>1</sup> .....	14,533	14,491	14,477	14,456	14,433	14,447	14,410	14,367	14,323	14,293	14,224	14,211	14,196
Civilian labor force .....	8,122	8,125	8,109	7,975	7,957	7,974	8,071	7,871	7,856	7,958	7,936	8,040	7,837
Percent of population .....	55.9	56.1	56.0	55.2	55.1	55.2	56.0	54.8	54.9	55.7	55.8	56.6	55.2
Employed .....	6,895	6,872	6,856	6,781	6,835	6,795	6,748	6,703	6,783	6,812	6,726	6,786	6,687
Employment-population ratio <sup>2</sup> .....	47.4	47.4	47.4	46.9	47.4	47.0	46.8	46.7	47.4	47.7	47.3	47.8	47.1
Agriculture .....	259	260	289	283	285	255	307	237	224	237	200	230	249
Nonagricultural industries .....	6,636	6,612	6,567	6,498	6,550	6,540	6,441	6,466	6,559	6,575	6,526	6,556	6,438
Unemployed .....	1,227	1,253	1,253	1,194	1,122	1,179	1,323	1,168	1,073	1,146	1,210	1,254	1,150
Unemployment rate .....	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7
Not in labor force .....	6,411	6,366	6,368	6,481	6,476	6,473	6,339	6,496	6,467	6,335	6,288	6,171	6,359

<sup>1</sup> The population figures are not adjusted for seasonal variation.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

NOTE: The corrected May 1989 seasonal adjustment factor for unemployed men, 20 years and over is .962.

**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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>WHITE</b>													
Civilian noninstitutional population <sup>1</sup> .....	158,279	158,340	158,422	158,524	158,603	158,705	158,865	158,947	159,020	159,098	159,200	159,297	159,400
Civilian labor force .....	104,651	105,013	105,036	105,051	105,395	105,411	106,106	105,798	105,988	106,312	106,164	106,455	106,424
Percent of population .....	66.1	66.3	66.3	66.3	66.5	66.4	66.8	66.6	66.7	66.8	66.7	66.8	66.8
Employed .....	99,761	99,907	100,058	100,199	100,543	100,567	101,183	101,278	101,554	101,458	101,465	101,693	101,581
Employment-population ratio <sup>2</sup> .....	63.0	63.1	63.2	63.2	63.4	63.4	63.7	63.7	63.9	63.8	63.7	63.8	63.7
Unemployed .....	4,890	5,106	4,978	4,852	4,852	4,844	4,923	4,521	4,434	4,854	4,699	4,762	4,843
Unemployment rate .....	4.7	4.9	4.7	4.6	4.6	4.6	4.6	4.3	4.2	4.6	4.4	4.5	4.6
<b>Men, 20 years and over</b>													
Civilian labor force .....	54,712	54,864	54,839	54,861	54,922	54,898	55,213	55,308	55,382	55,448	55,249	55,557	55,437
Percent of population .....	78.2	78.4	78.3	78.3	78.3	78.2	78.5	78.6	78.6	78.7	78.3	78.7	78.4
Employed .....	52,557	52,487	52,579	52,612	52,624	52,636	53,007	53,197	53,387	53,246	53,248	53,500	53,343
Employment-population ratio <sup>2</sup> .....	75.2	75.0	75.1	75.1	75.0	75.0	75.4	75.6	75.8	75.5	75.5	75.8	75.5
Unemployed .....	2,155	2,377	2,260	2,249	2,298	2,262	2,205	2,111	1,995	2,202	2,001	2,057	2,094
Unemployment rate .....	3.9	4.3	4.1	4.1	4.2	4.1	4.0	3.8	3.6	4.0	3.6	3.7	3.8
<b>Women, 20 years and over</b>													
Civilian labor force .....	42,958	43,149	43,191	43,298	43,625	43,644	43,936	43,770	43,780	44,016	44,084	44,050	44,302
Percent of population .....	58.2	56.4	56.4	56.5	56.9	56.9	57.2	56.9	56.9	57.2	57.2	57.1	57.4
Employed .....	41,124	41,378	41,413	41,583	41,889	41,930	42,201	42,177	42,115	42,207	42,282	42,236	42,411
Employment-population ratio <sup>2</sup> .....	53.8	54.1	54.1	54.2	54.6	54.6	54.9	54.8	54.8	54.7	54.8	54.9	55.0
Unemployed .....	1,834	1,771	1,778	1,715	1,736	1,714	1,734	1,593	1,665	1,810	1,803	1,814	1,891
Unemployment rate .....	4.3	4.1	4.1	4.0	4.0	3.9	3.9	3.6	3.8	4.1	4.1	4.1	4.3
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	6,981	7,000	7,006	6,892	6,848	6,869	6,958	6,720	6,826	6,848	6,831	6,848	6,685
Percent of population .....	58.9	59.2	59.4	58.5	58.3	58.6	59.6	57.7	58.7	59.0	59.0	59.2	57.9
Employed .....	6,080	6,042	6,066	6,004	6,030	6,001	5,975	5,904	6,052	6,005	5,936	5,957	5,827
Employment-population ratio <sup>2</sup> .....	51.3	51.1	51.4	51.0	51.3	51.2	51.1	50.7	52.1	51.8	51.3	51.5	50.5
Unemployed .....	901	958	940	888	818	868	983	816	774	843	895	891	858
Unemployment rate .....	12.9	13.7	13.4	12.9	11.9	12.6	14.1	12.1	11.3	12.3	13.1	13.0	12.8
Men .....	14.3	13.9	14.5	14.4	12.6	13.4	16.4	14.0	12.3	13.1	14.8	13.4	12.4
Women .....	11.4	13.5	12.3	11.3	11.3	11.8	11.7	10.2	10.2	11.5	11.2	12.6	13.4
<b>BLACK</b>													
Civilian noninstitutional population <sup>1</sup> .....	20,715	20,736	20,762	20,786	20,811	20,842	20,877	20,905	20,930	20,956	20,986	21,012	21,038
Civilian labor force .....	13,283	13,236	13,201	13,290	13,330	13,405	13,477	13,476	13,425	13,287	13,444	13,600	13,555
Percent of population .....	64.1	63.8	63.6	63.9	64.1	64.3	64.6	64.5	64.1	63.4	64.1	64.7	64.4
Employed .....	11,761	11,733	11,758	11,807	11,831	11,856	11,860	11,873	11,961	11,846	11,968	11,982	12,082
Employment-population ratio <sup>2</sup> .....	56.8	56.6	56.6	56.8	56.8	56.9	56.8	56.8	57.1	56.5	57.0	57.0	57.4
Unemployed .....	1,522	1,503	1,443	1,483	1,499	1,549	1,617	1,603	1,464	1,442	1,476	1,618	1,473
Unemployment rate .....	11.5	11.4	10.9	11.2	11.2	11.6	12.0	11.9	10.9	10.8	11.0	11.9	10.9
<b>Men, 20 years and over</b>													
Civilian labor force .....	6,080	6,131	6,117	6,157	6,146	6,179	6,226	6,199	6,230	6,171	6,207	6,200	6,205
Percent of population .....	73.9	74.5	74.2	74.6	74.3	74.6	75.0	74.6	74.8	74.0	74.3	74.1	74.1
Employed .....	5,495	5,539	5,563	5,566	5,545	5,561	5,576	5,549	5,620	5,554	5,622	5,619	5,629
Employment-population ratio <sup>2</sup> .....	66.8	67.3	67.5	67.4	67.1	67.1	67.2	66.7	67.5	66.6	67.3	67.2	67.2
Unemployed .....	585	592	554	591	601	618	650	650	611	617	586	581	576
Unemployment rate .....	9.6	9.7	9.1	9.6	9.8	10.0	10.4	10.5	9.8	10.0	9.4	9.4	9.3
<b>Women, 20 years and over</b>													
Civilian labor force .....	6,286	6,188	6,174	6,234	6,280	6,316	6,369	6,349	6,315	6,227	6,340	6,405	6,394
Percent of population .....	61.0	60.0	59.8	60.2	60.6	60.9	61.2	61.0	60.5	59.6	60.6	61.2	61.0
Employed .....	5,640	5,571	5,575	5,620	5,663	5,654	5,706	5,697	5,739	5,677	5,740	5,732	5,759
Employment-population ratio <sup>2</sup> .....	54.7	54.0	54.0	54.3	54.6	54.5	54.9	54.7	55.0	54.3	54.9	54.7	54.9
Unemployed .....	646	617	599	614	617	662	663	651	576	550	600	674	635
Unemployment rate .....	10.3	10.0	9.7	9.8	9.8	10.5	10.4	10.3	9.1	8.8	9.5	10.5	9.9

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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>BLACK—Continued</b>													
<b>Both sexes, 16 to 19 years</b>													
Civilian labor force .....	917	917	910	899	904	910	881	928	880	889	897	994	956
Percent of population .....	42.0	42.0	41.7	41.2	41.5	41.7	40.5	42.7	40.5	40.9	41.3	45.7	44.0
Employed .....	626	623	620	621	623	641	577	627	602	615	606	631	694
Employment-population ratio <sup>2</sup> .....	28.7	28.5	28.4	28.5	28.6	29.4	26.5	28.8	27.7	28.3	27.9	29.0	31.9
Unemployed .....	291	294	290	278	281	269	304	301	278	274	291	363	262
Unemployment rate .....	31.7	32.1	31.9	30.9	31.1	29.6	34.5	32.4	31.6	30.8	32.4	36.5	27.4
Men .....	31.2	32.1	31.9	32.8	32.1	29.8	36.7	33.1	28.6	35.5	36.9	33.5	22.1
Women .....	32.4	32.0	31.9	28.6	29.9	29.3	32.0	31.6	34.8	26.2	28.4	40.2	33.1
<b>HISPANIC ORIGIN</b>													
Civilian noninstitutional population <sup>1</sup> .....	13,344	13,381	13,419	13,458	13,495	13,533	13,564	13,606	13,649	13,690	13,731	13,772	13,813
Civilian labor force .....	8,997	8,963	9,061	9,075	9,148	9,133	9,205	9,219	9,210	9,262	9,428	9,272	9,433
Percent of population .....	67.4	67.0	67.5	67.4	67.8	67.5	67.9	67.8	67.5	67.7	68.7	67.3	68.3
Employed .....	8,265	8,214	8,378	8,368	8,419	8,441	8,434	8,596	8,607	8,495	8,686	8,524	8,587
Employment-population ratio <sup>2</sup> .....	61.9	61.4	62.4	62.2	62.4	62.4	62.2	63.2	63.1	62.1	63.3	61.9	62.2
Unemployed .....	732	749	683	707	729	692	771	624	603	767	742	748	846
Unemployment rate .....	8.1	8.4	7.5	7.8	8.0	7.6	8.4	8.8	6.5	8.3	7.9	8.1	9.0

<sup>1</sup> The population figures are not adjusted for seasonal variation.

<sup>2</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>CHARACTERISTIC</b>													
Total .....	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459
Married men, spouse present .....	40,518	40,511	40,513	40,504	40,407	40,483	40,925	40,928	41,083	40,890	40,902	41,102	41,089
Married women, spouse present .....	28,669	28,809	28,836	28,890	28,995	29,053	29,589	29,412	29,589	29,656	29,739	29,481	29,552
Women who maintain families .....	6,170	6,280	6,253	6,344	6,375	6,399	6,416	6,385	6,258	6,243	6,331	6,403	6,456
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>													
Agriculture:													
Wage and salary workers .....	1,572	1,607	1,612	1,661	1,672	1,698	1,684	1,645	1,656	1,554	1,610	1,550	1,695
Self-employed workers .....	1,362	1,411	1,421	1,405	1,450	1,349	1,387	1,419	1,403	1,419	1,358	1,412	1,434
Unpaid family workers .....	149	158	137	177	125	149	189	150	138	124	127	126	126
Nonagricultural industries:													
Wage and salary workers .....	103,189	103,207	103,501	103,733	103,770	103,904	104,510	104,797	104,982	104,985	105,245	105,519	105,321
Government .....	17,031	17,111	17,145	17,240	17,387	17,423	17,393	17,311	17,382	17,180	17,230	17,261	17,519
Private industries .....	86,158	86,096	86,356	86,493	86,383	86,481	87,117	87,486	87,600	87,806	88,015	88,259	87,803
Private households .....	1,132	1,128	1,119	1,152	1,209	1,210	1,196	1,135	1,163	1,117	1,128	1,140	1,093
Other industries .....	85,028	84,968	85,237	85,341	85,174	85,271	85,921	86,350	86,437	86,689	86,887	87,118	86,710
Self-employed workers .....	8,531	8,508	8,570	8,479	8,619	8,602	8,718	8,517	8,645	8,671	8,516	8,570	8,606
Unpaid family workers .....	251	241	230	232	300	266	298	285	332	281	322	241	239
<b>PERSONS AT WORK PART TIME<sup>1</sup></b>													
All industries:													
Part time for economic reasons .....	5,341	5,192	5,097	4,963	5,061	5,321	5,097	4,981	4,968	5,143	4,837	4,957	4,750
Slack work .....	2,471	2,315	2,266	2,220	2,279	2,549	2,302	2,303	2,232	2,373	2,296	2,318	2,311
Could only find part-time work .....	2,538	2,473	2,389	2,399	2,375	2,410	2,352	2,333	2,393	2,425	2,343	2,289	2,138
Voluntary part time .....	15,026	14,999	15,270	15,161	15,446	15,363	15,401	15,126	15,561	15,498	15,318	15,416	15,652
Nonagricultural industries:													
Part time for economic reasons .....	5,102	4,972	4,862	4,727	4,819	5,033	4,837	4,697	4,709	4,930	4,609	4,801	4,505
Slack work .....	2,334	2,171	2,102	2,095	2,116	2,377	2,144	2,105	2,048	2,243	2,102	2,190	2,185
Could only find part-time work .....	2,493	2,408	2,317	2,319	2,268	2,307	2,283	2,272	2,317	2,369	2,301	2,236	2,057
Voluntary part time .....	14,606	14,564	14,819	14,679	14,986	14,928	14,970	14,688	15,127	15,060	14,976	14,977	15,219

<sup>1</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and over .....	115,034	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459
16 to 24 years .....	20,137	20,123	20,050	19,930	19,877	19,852	19,741	19,797	19,996	19,899	19,784	19,959	19,796
16 to 19 years .....	6,895	6,872	6,856	6,781	6,835	6,795	6,748	6,703	6,783	6,812	6,726	6,786	6,687
16 to 17 years .....	2,700	2,671	2,669	2,689	2,770	2,686	2,602	2,563	2,639	2,639	2,593	2,526	2,439
18 to 19 years .....	4,182	4,148	4,195	4,090	4,045	4,150	4,125	4,163	4,186	4,177	4,123	4,221	4,244
20 to 24 years .....	13,242	13,251	13,194	13,149	13,042	13,057	12,993	13,095	13,213	13,088	13,059	13,173	13,109
25 years and over .....	94,979	95,145	95,332	95,619	96,062	96,151	96,988	97,020	97,125	97,167	97,384	97,602	97,740
25 to 54 years .....	80,456	80,608	80,687	80,950	81,242	81,399	82,036	82,160	82,165	82,204	82,436	82,721	82,852
55 years and over .....	14,514	14,583	14,664	14,690	14,790	14,771	14,924	14,803	14,933	14,928	14,948	14,863	14,912
Men, 16 years and over .....	63,429	63,402	63,475	63,450	63,532	63,521	63,790	64,051	64,399	64,246	64,202	64,609	64,462
16 to 24 years .....	10,441	10,475	10,401	10,303	10,379	10,288	10,198	10,377	10,530	10,385	10,243	10,412	10,303
16 to 19 years .....	3,532	3,563	3,496	3,446	3,533	3,472	3,370	3,415	3,530	3,489	3,403	3,515	3,540
16 to 17 years .....	1,392	1,395	1,397	1,404	1,433	1,385	1,270	1,298	1,377	1,338	1,304	1,296	1,273
18 to 19 years .....	2,133	2,126	2,106	2,040	2,105	2,135	2,088	2,134	2,179	2,149	2,089	2,206	2,264
20 to 24 years .....	6,909	6,912	6,905	6,857	6,846	6,816	6,828	6,962	7,000	6,896	6,839	6,897	6,763
25 years and over .....	53,016	52,983	53,072	53,136	53,152	53,227	53,573	53,659	53,897	53,842	53,949	54,222	54,208
25 to 54 years .....	44,509	44,471	44,577	44,669	44,712	44,779	45,001	45,091	45,278	45,163	45,398	45,619	45,644
55 years and over .....	8,524	8,514	8,502	8,482	8,436	8,470	8,563	8,536	8,603	8,643	8,543	8,589	8,605
Women, 16 years and over .....	51,605	51,801	51,895	52,123	52,415	52,488	52,921	52,802	52,737	52,866	53,013	52,932	52,997
16 to 24 years .....	9,696	9,648	9,649	9,627	9,498	9,564	9,543	9,420	9,466	9,515	9,541	9,547	9,493
16 to 19 years .....	3,363	3,309	3,360	3,335	3,302	3,323	3,378	3,287	3,253	3,323	3,322	3,271	3,147
16 to 17 years .....	1,308	1,276	1,272	1,285	1,337	1,301	1,332	1,265	1,262	1,301	1,289	1,230	1,166
18 to 19 years .....	2,049	2,022	2,089	2,050	1,940	2,015	2,037	2,029	2,007	2,028	2,034	2,015	1,980
20 to 24 years .....	6,333	6,339	6,289	6,292	6,196	6,241	6,165	6,133	6,213	6,192	6,219	6,276	6,346
25 years and over .....	41,963	42,162	42,260	42,483	42,910	42,924	43,415	43,361	43,228	43,325	43,434	43,379	43,533
25 to 54 years .....	35,947	36,137	36,120	36,281	36,530	36,620	37,035	37,069	36,886	37,042	37,039	37,102	37,208
55 years and over .....	5,990	6,069	6,162	6,208	6,354	6,301	6,361	6,267	6,331	6,285	6,404	6,274	6,306

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

(In thousands)

Sex and age	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and over .....	6,624	6,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497
16 to 24 years .....	2,465	2,476	2,457	2,429	2,363	2,421	2,663	2,316	2,182	2,344	2,303	2,544	2,381
16 to 19 years .....	1,227	1,253	1,253	1,194	1,122	1,179	1,323	1,168	1,073	1,146	1,210	1,254	1,150
16 to 17 years .....	571	605	650	559	520	535	581	572	477	463	500	535	529
18 to 19 years .....	628	660	615	629	599	637	751	605	597	667	701	737	603
20 to 24 years .....	1,238	1,223	1,204	1,235	1,241	1,242	1,340	1,148	1,109	1,198	1,093	1,290	1,231
25 years and over .....	4,143	4,334	4,179	4,061	4,193	4,125	4,101	4,026	3,921	4,191	4,074	4,036	4,099
25 to 54 years .....	3,702	3,828	3,733	3,651	3,739	3,687	3,632	3,559	3,542	3,761	3,628	3,503	3,641
55 years and over .....	457	475	436	419	433	457	474	466	396	451	453	515	485
Men, 16 years and over .....	3,520	3,754	3,589	3,593	3,612	3,583	3,710	3,540	3,270	3,593	3,401	3,397	3,284
16 to 24 years .....	1,331	1,351	1,329	1,376	1,274	1,280	1,494	1,302	1,128	1,238	1,270	1,358	1,196
16 to 19 years .....	688	677	684	682	616	630	772	687	582	641	696	660	550
16 to 17 years .....	307	301	367	318	300	290	330	317	258	274	301	323	268
18 to 19 years .....	359	362	329	360	314	333	455	379	330	368	390	347	270
20 to 24 years .....	643	674	645	694	658	650	722	615	546	597	574	698	646
25 years and over .....	2,191	2,417	2,270	2,195	2,331	2,296	2,245	2,246	2,136	2,344	2,099	2,057	2,095
25 to 54 years .....	1,936	2,088	2,014	1,946	2,050	1,999	1,986	1,943	1,890	2,076	1,845	1,768	1,840
55 years and over .....	278	298	255	266	275	286	269	303	246	283	258	270	274
Women, 16 years and over .....	3,104	3,043	3,025	2,925	2,951	2,971	3,006	2,787	2,858	2,953	2,994	3,164	3,213
16 to 24 years .....	1,134	1,125	1,128	1,053	1,089	1,141	1,169	1,014	1,054	1,106	1,034	1,186	1,185
16 to 19 years .....	539	576	569	512	506	549	551	481	491	505	514	594	600
16 to 17 years .....	264	304	283	241	220	245	251	255	219	189	199	212	261
18 to 19 years .....	269	298	286	269	285	304	296	226	267	299	311	390	333
20 to 24 years .....	595	549	559	541	583	592	618	533	563	601	520	592	585
25 years and over .....	1,952	1,917	1,909	1,866	1,862	1,829	1,856	1,780	1,784	1,847	1,975	1,979	2,004
25 to 54 years .....	1,766	1,740	1,719	1,705	1,689	1,688	1,646	1,616	1,652	1,685	1,782	1,735	1,801
55 years and over .....	179	177	181	153	158	171	205	164	151	169	195	245	211

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

(Civilian workers)

Sex and age	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 18 years and over .....	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2
16 to 24 years .....	10.9	11.0	10.9	10.9	10.6	10.9	11.9	10.5	9.8	10.5	10.4	11.3	10.7
16 to 19 years .....	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7
16 to 17 years .....	17.5	18.5	19.6	17.2	15.8	16.6	18.3	18.2	15.3	14.9	16.2	17.5	17.8
18 to 19 years .....	13.1	13.7	12.8	13.3	12.9	13.3	15.4	12.7	12.5	13.8	14.5	14.9	12.4
20 to 24 years .....	8.5	8.4	8.4	8.6	8.7	8.7	9.3	8.1	7.7	8.4	7.7	8.9	8.6
25 years and over .....	4.2	4.4	4.2	4.1	4.2	4.1	4.1	4.0	3.9	4.1	4.0	4.0	4.0
25 to 54 years .....	4.4	4.5	4.4	4.3	4.4	4.3	4.2	4.2	4.1	4.4	4.2	4.1	4.2
55 years and over .....	3.1	3.2	2.9	2.8	2.8	3.0	3.1	3.1	2.6	2.9	2.9	3.3	3.1
Men, 16 years and over .....	5.3	5.6	5.4	5.4	5.4	5.3	5.5	5.2	4.8	5.3	5.0	5.0	4.8
16 to 24 years .....	11.3	11.4	11.3	11.8	10.9	11.1	12.8	11.1	9.7	10.7	11.0	11.5	10.4
16 to 19 years .....	18.3	16.0	16.4	16.5	14.8	15.4	18.6	16.7	14.2	15.5	17.0	15.8	13.4
16 to 17 years .....	18.1	17.7	20.8	18.5	17.3	17.3	20.6	19.6	15.8	17.0	18.8	20.0	17.4
18 to 19 years .....	14.4	14.5	13.5	15.0	13.0	13.5	17.9	15.1	13.2	14.6	15.7	13.6	10.7
20 to 24 years .....	8.5	8.9	8.5	9.2	8.8	8.7	9.6	8.1	7.2	8.0	7.7	9.2	8.7
25 years and over .....	4.0	4.4	4.1	4.0	4.2	4.1	4.0	4.0	3.8	4.2	3.7	3.7	3.7
25 to 54 years .....	4.2	4.5	4.3	4.2	4.4	4.3	4.2	4.1	4.0	4.4	3.9	3.7	3.9
55 years and over .....	3.2	3.4	2.9	3.0	3.2	3.3	3.0	3.4	2.8	3.2	2.9	3.0	3.1
Women, 16 years and over .....	5.7	5.5	5.5	5.3	5.3	5.4	5.4	5.0	5.1	5.3	5.3	5.8	5.7
16 to 24 years .....	10.5	10.4	10.5	9.9	10.3	10.7	10.9	9.7	10.0	10.4	9.8	11.0	11.1
16 to 19 years .....	13.8	14.8	14.5	13.3	13.3	14.2	14.0	12.8	13.1	13.2	13.4	15.4	16.0
16 to 17 years .....	16.8	19.2	18.2	15.8	14.1	15.8	15.9	16.8	14.8	12.7	13.4	14.7	18.3
18 to 19 years .....	11.6	12.8	12.0	11.6	12.8	13.1	12.7	10.0	11.7	12.8	13.3	16.2	14.4
20 to 24 years .....	8.6	8.0	8.2	7.9	8.6	8.7	9.1	8.0	8.3	8.9	7.7	8.6	8.4
25 years and over .....	4.4	4.3	4.3	4.2	4.2	4.1	4.1	3.9	4.0	4.1	4.4	4.4	4.4
25 to 54 years .....	4.7	4.6	4.5	4.5	4.4	4.4	4.3	4.2	4.3	4.4	4.6	4.5	4.6
55 years and over .....	2.9	2.8	2.9	2.4	2.4	2.6	3.1	2.5	2.3	2.6	3.0	3.8	3.2

**A-39. Selected unemployment indicators, seasonally adjusted**

(Unemployment rates)

Category	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>CHARACTERISTIC</b>													
Total (all civilian workers) .....	5.4	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2
Men, 20 years and over .....	4.5	4.9	4.6	4.6	4.8	4.7	4.6	4.5	4.2	4.6	4.3	4.3	4.3
Women, 20 years and over .....	5.0	4.8	4.8	4.7	4.7	4.7	4.7	4.5	4.6	4.7	4.8	4.9	5.0
Both sexes, 16 to 19 years .....	15.1	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7
White .....	4.7	4.9	4.7	4.6	4.6	4.6	4.6	4.3	4.2	4.6	4.4	4.5	4.8
Black and other .....	10.1	10.0	9.5	9.8	10.0	10.0	10.6	10.6	9.8	9.6	9.5	10.3	9.6
Black .....	11.5	11.4	10.9	11.2	11.2	11.6	12.0	11.9	10.9	10.8	11.0	11.9	10.9
Hispanic origin .....	8.1	8.4	7.5	7.8	8.0	7.6	8.4	6.8	6.5	8.3	7.9	8.1	9.0
Married men, spouse present .....	3.1	3.4	3.1	3.1	3.3	3.1	3.1	3.1	2.9	3.2	2.9	2.8	2.9
Married women, spouse present .....	4.0	4.0	3.8	3.7	3.8	3.7	3.6	3.4	3.5	4.0	3.8	3.8	3.8
Women who maintain families .....	8.5	7.5	8.1	7.9	7.7	8.2	8.0	8.0	7.9	7.6	8.3	7.9	8.7
Full-time workers .....	5.0	5.3	5.1	5.0	5.0	5.1	5.0	4.8	4.8	5.0	4.8	4.8	4.9
Part-time workers .....	8.0	7.4	7.4	7.4	7.1	7.0	7.9	7.3	6.2	7.2	6.9	7.7	7.2
Unemployed 15 weeks and over <sup>1</sup> .....	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.2	1.1	1.0	1.2
Labor force time lost <sup>2</sup> .....	6.4	6.4	6.3	6.1	6.2	6.3	6.2	5.9	5.8	6.0	5.9	6.1	6.0
<b>INDUSTRY</b>													
Nonagricultural private wage and salary workers .....	5.4	5.6	5.4	5.4	5.5	5.4	5.6	5.1	5.0	5.4	5.2	5.3	5.4
Goods-producing industries .....	6.3	6.7	6.4	6.4	6.4	6.4	6.4	6.1	5.8	6.0	5.8	6.2	6.2
Mining .....	5.4	7.0	8.6	8.8	8.9	7.7	6.1	8.0	7.0	5.6	4.5	3.7	5.5
Construction .....	10.4	10.7	9.6	10.0	10.6	10.4	10.4	10.0	9.4	9.7	9.3	10.0	10.5
Manufacturing .....	5.2	5.5	5.4	5.3	5.1	5.2	5.3	4.9	4.8	4.9	4.9	5.2	5.0
Durable goods .....	4.9	5.0	5.2	5.0	4.9	5.0	5.0	4.4	4.7	4.7	4.5	4.6	4.7
Nondurable goods .....	5.6	8.3	5.8	5.7	5.3	5.5	5.7	5.5	4.9	5.2	5.5	6.1	5.5
Service-producing industries .....	5.0	5.1	5.0	4.9	5.1	4.9	5.2	4.7	4.6	5.1	4.9	4.9	5.0
Transportation and public utilities .....	3.6	3.8	3.8	3.5	4.0	3.8	3.8	3.9	3.9	4.0	4.0	4.4	4.2
Wholesale and retail trade .....	6.2	6.4	6.2	6.0	6.2	6.3	6.3	5.6	5.6	5.9	5.5	6.0	6.2
Finance and service industries .....	4.5	4.4	4.4	4.5	4.6	4.1	4.7	4.3	4.1	4.8	4.7	4.3	4.4
Government workers .....	3.0	2.9	2.7	2.6	2.5	2.7	2.7	2.7	2.6	2.7	2.9	3.0	2.8
Agricultural wage and salary workers .....	11.0	11.0	10.8	10.2	9.3	8.8	9.5	8.9	8.9	10.5	10.3	11.0	8.5

<sup>1</sup> Unemployment as a percent of the civilian labor force.

<sup>2</sup> 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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>DURATION</b>													
Less than 5 weeks .....	2,985	3,158	3,116	3,059	3,117	3,029	3,181	3,247	3,055	3,090	3,041	3,309	3,149
5 to 14 weeks .....	2,041	1,956	1,896	1,835	1,935	2,039	2,081	1,865	1,821	2,034	2,017	1,999	1,927
15 weeks and over .....	1,619	1,636	1,568	1,554	1,502	1,495	1,512	1,304	1,310	1,426	1,313	1,258	1,472
15 to 26 weeks .....	826	831	775	788	787	758	757	665	648	689	702	659	846
27 weeks and over .....	793	805	793	766	715	737	755	639	663	737	611	599	626
Average (mean) duration, in weeks .....	13.5	13.5	13.5	13.4	12.6	12.8	12.7	12.1	12.4	12.7	11.8	11.1	12.0
Median duration, in weeks .....	6.2	5.9	5.7	5.7	5.6	5.8	5.7	5.3	5.4	5.4	5.3	5.5	5.6
<b>PERCENT DISTRIBUTION</b>													
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 .....	44.9	46.8	47.4	47.4	47.6	46.2	47.0	50.6	49.4	47.2	47.7	50.4	48.1
5 to 14 weeks .....	30.7	29.0	28.8	28.5	29.5	31.1	30.7	29.1	29.4	31.1	31.7	30.4	29.4
15 weeks and over .....	24.4	24.2	23.8	24.1	22.9	22.8	22.3	20.3	21.2	21.8	20.6	19.2	22.5
15 to 26 weeks .....	12.4	12.3	11.8	12.2	12.0	11.5	11.2	10.4	10.5	10.5	11.0	10.0	12.9
27 weeks and over .....	11.9	11.9	12.1	11.9	10.9	11.2	11.1	10.0	10.7	11.3	9.6	9.1	9.6

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

(Numbers in thousands)

Reasons for unemployment	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
<b>NUMBER OF UNEMPLOYED</b>													
Job losers .....	3,085	3,112	3,079	2,951	3,031	3,066	3,121	2,876	2,831	2,984	2,724	2,765	2,920
On layoff .....	853	680	833	844	814	819	827	774	808	847	790	806	822
Other job losers .....	2,232	2,232	2,246	2,107	2,217	2,247	2,294	2,102	2,023	2,137	1,934	1,958	2,097
Job leavers .....	923	986	985	984	963	998	985	985	885	978	1,114	1,023	1,010
Reentrants .....	1,883	1,843	1,767	1,747	1,766	1,725	1,835	1,740	1,730	1,894	1,852	2,051	1,934
New entrants .....	799	800	761	747	799	799	780	765	713	671	683	742	724
<b>PERCENT DISTRIBUTION</b>													
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 .....	46.1	46.2	46.7	45.9	46.2	46.5	46.4	45.2	46.0	45.7	42.7	42.0	44.3
On layoff .....	12.8	13.1	12.6	13.1	12.4	12.4	12.3	12.2	13.1	13.0	12.4	12.3	12.5
Other job losers .....	33.4	33.1	34.1	32.8	33.8	34.1	34.1	33.0	32.8	32.7	30.3	29.8	31.8
Job leavers .....	13.8	14.6	14.9	15.3	14.7	15.1	14.7	15.5	14.4	15.0	17.5	15.5	15.3
Reentrants .....	28.1	27.3	26.8	27.2	26.9	26.2	27.3	27.3	28.1	29.0	29.1	31.2	29.4
New entrants .....	11.9	11.9	11.5	11.6	12.2	12.1	11.6	12.0	11.6	10.3	10.7	11.3	11.0
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>													
Job losers .....	2.5	2.6	2.5	2.4	2.5	2.5	2.5	2.3	2.3	2.4	2.2	2.2	2.4
Job leavers .....	.8	.8	.8	.8	.8	.8	.8	.8	.7	.8	.9	.8	.8
Reentrants .....	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.7	1.6
New entrants .....	.7	.7	.6	.6	.7	.7	.6	.6	.6	.5	.6	.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	1,906	(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 <sup>2</sup>	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	24,600	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	21,400	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	69,769	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	102,200	85,190	24,708	717	4,967	19,024	77,492	5,372	5,844	18,483	6,547	24,236	2,943	3,967	10,100
1988	105,584	88,212	25,249	721	5,125	19,403	80,335	5,548	6,029	19,110	6,676	25,600	2,971	4,063	10,339
Monthly data, seasonally adjusted															
<b>1988:</b>															
July	105,768	88,418	25,323	725	5,150	19,448	80,445	5,557	6,038	19,139	6,678	25,683	2,958	4,071	10,321
August	105,954	88,578	25,303	725	5,153	19,425	80,651	5,572	6,051	19,182	6,686	25,784	2,967	4,079	10,330
September	106,207	88,736	25,313	719	5,163	19,431	80,894	5,581	6,071	19,188	6,695	25,888	2,985	4,088	10,398
October	106,475	88,991	25,384	717	5,162	19,505	81,091	5,596	6,086	19,229	6,710	25,986	2,986	4,081	10,417
November	106,824	89,299	25,460	712	5,191	19,557	81,364	5,616	6,104	19,282	6,726	26,111	2,983	4,085	10,457
December	107,097	89,574	25,513	711	5,213	19,589	81,584	5,634	6,125	19,328	6,744	26,230	2,981	4,085	10,457
<b>1989:</b>															
January	107,442	89,897	25,626	711	5,267	19,648	81,816	5,654	6,146	19,407	6,746	26,318	2,978	4,084	10,483
February	107,711	90,124	25,629	711	5,270	19,648	82,082	5,667	6,171	19,460	6,763	26,434	2,982	4,095	10,510
March	107,888	90,291	25,646	714	5,252	19,680	82,242	5,666	6,197	19,488	6,774	26,520	2,982	4,102	10,513
April	108,101	90,475	25,671	720	5,279	19,672	82,430	5,682	6,206	19,489	6,776	26,651	2,982	4,111	10,533
May	108,310	90,623	25,672	722	5,283	19,667	82,638	5,700	6,222	19,528	6,790	26,711	2,989	4,119	10,569
June <sup>P</sup>	108,560	90,868	25,651	715	5,281	19,655	82,909	5,716	6,229	19,548	6,801	26,923	2,994	4,134	10,564
July <sup>P</sup>	108,729	91,062	25,680	704	5,318	19,658	83,049	5,739	6,234	19,600	6,812	26,997	2,976	4,138	10,553

<sup>1</sup> Not available.  
<sup>2</sup> 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.  
P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1988) and all seasonally adjusted data (beginning January 1985) 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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Total</b> .....		106,459	105,560	108,745	109,484	108,507					
<b>Total private</b> .....		89,033	89,120	90,715	91,724	91,779	72,161	72,201	73,428	74,317	74,339
<b>Mining</b> .....		730	732	719	719	712	527	528	518	514	506
Metal mining .....	10	51.5	52.7	61.1	63.2		39.7	40.6	48.5	50.2	
Iron ores .....	101	8.3	8.4	9.3	9.6		6.8	6.8	7.6	7.9	
Copper ores .....	102	13.3	13.4	14.0	14.1		10.3	10.4	11.1	11.2	
Coal mining .....	11,12	150.7	150.0	144.0	134.2		122.5	122.4	117.9	108.1	
Bituminous coal and lignite mining .....	12	148.6	148.0	141.8	132.0		120.7	120.7	116.0	106.2	
Oil and gas extraction .....	13	409.7	411.4	395.9	400.6	404.0	273.5	274.3	260.6	262.6	
Crude petroleum, natural gas, and natural gas liquids ...	131,2	201.8	202.7	196.1	199.1	-	101.5	101.7	97.1	97.9	
Oil and gas field services .....	138	207.9	208.7	199.8	201.5		172.0	172.6	163.5	164.7	
Nonmetallic minerals, except fuels .....	14	117.9	118.3	118.3	120.9		90.9	91.1	91.0	92.9	
Crushed and broken stone .....	142	43.0	43.2	42.7	43.5		34.1	34.2	34.0	34.6	
Sand and gravel .....	144	37.7	37.9	37.2	38.5		-	-	-	-	
Chemical and fertilizer minerals .....	147	16.8	16.8	17.8	18.0						
<b>Construction</b> .....		5,341	5,451	5,325	5,492	5,626	4,207	4,311	4,152	4,305	4,424
General building contractors .....	15	1,423.0	1,443.6	1,383.9	1,431.0	1,465.5	1,053.3	1,072.6	1,004.4	1,047.2	-
Residential building construction .....	152	768.0	773.8	748.1	776.7	-	557.2	563.9	529.7	556.5	-
Operative builders .....	153	49.8	50.0	45.3	46.3	-	23.7	23.4	20.0	20.5	-
Nonresidential building construction .....	154	605.2	619.8	590.5	608.0	-	472.4	485.3	454.7	470.2	-
Heavy construction contractors .....	16	821.2	833.0	822.8	848.4	-	695.3	705.5	688.7	712.3	-
Highway and street construction .....	161	291.1	294.1	265.4	281.5	-	246.4	248.8	219.5	235.2	-
Heavy construction, except highway .....	162	530.1	538.9	557.4	566.9	-	448.9	456.7	469.2	477.1	-
Special trade contractors .....	17	3,096.9	3,174.1	3,118.2	3,213.0	-	2,458.4	2,532.9	2,459.2	2,545.4	-
Plumbing, heating, and air conditioning .....	171	662.1	678.3	671.1	680.2	-	490.2	506.0	495.8	503.5	-
Painting, paper hanging, and decorating .....	172	183.2	188.4	179.6	188.0	-	155.2	161.0	150.5	157.9	-
Electrical work .....	173	549.7	563.5	549.7	563.1	-	427.6	441.4	423.3	436.0	-
Masonry, stonework, and plastering .....	174	513.0	533.3	511.5	531.4	-	444.2	463.9	439.8	457.9	-
Carpentering and flooring .....	175	198.8	202.0	198.8	208.0	-	155.8	158.2	154.5	163.2	-
Roofing and sheet metal work .....	176	214.7	222.2	215.5	224.8	-	171.2	178.3	170.7	179.3	-
<b>Manufacturing</b> .....		19,510	19,364	19,619	19,761	19,577	13,336	13,179	13,390	13,492	13,316
<b>Durable goods</b> .....		11,497	11,415	11,587	11,629	11,490	7,683	7,591	7,738	7,760	7,624
Lumber and wood products .....	24	779.3	782.4	769.1	786.3	787.0	650.9	653.5	638.8	653.9	654.5
Logging camps and logging contractors .....	241	93.1	96.9	89.6	97.3	-	77.3	80.7	73.4	80.4	-
Sawmills and planing mills .....	242	205.6	206.4	208.4	211.6	-	181.0	182.0	182.4	185.1	-
Sawmills and planing mills, general .....	2421	167.1	168.8	169.1	172.1	-	147.0	149.0	148.0	150.6	-
Hardwood dimension and flooring .....	2426	35.0	33.9	35.6	35.9	-	31.0	29.8	31.3	31.5	-
Millwork, plywood, and structural members .....	243	275.8	276.8	271.6	276.6	-	227.6	228.4	222.2	226.7	-
Millwork .....	2431	111.7	112.0	109.0	110.3	-	90.6	91.2	88.1	88.9	-
Wood kitchen cabinets .....	2434	73.3	73.4	72.7	72.7	-	58.8	58.8	57.9	58.1	-
Hardwood veneer and plywood .....	2435	24.5	24.0	24.9	24.9	-	21.5	21.0	21.6	21.7	-
Softwood veneer and plywood .....	2436	36.7	37.1	35.2	37.6	-	33.2	33.5	31.5	33.8	-
Wood containers .....	244	45.1	44.4	43.8	43.9	-	38.5	37.8	37.2	37.2	-
Wood buildings and mobile homes .....	245	72.4	72.8	70.0	70.7	-	54.9	55.3	53.3	53.9	-
Mobile homes .....	2451	47.4	47.4	49.3	49.6	-	38.6	38.6	40.2	40.4	-
Miscellaneous wood products .....	249	87.3	85.1	85.7	86.2	-	71.6	69.3	70.3	70.6	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Durable goods—Continued</b>											
Furniture and fixtures .....	25	527.2	519.0	531.3	531.4	522.9	420.3	412.1	423.8	423.7	415.1
Household furniture .....	251	306.6	297.6	310.0	307.9	-	259.2	250.5	262.0	260.1	-
Wood household furniture .....	2511	138.2	132.6	137.7	137.2	-	120.9	115.3	120.4	120.0	-
Upholstered household furniture .....	2512	100.1	98.4	101.7	102.4	-	83.9	82.6	85.1	85.8	-
Metal household furniture .....	2514	26.4	24.0	26.7	24.4	-	21.1	19.0	21.6	19.4	-
Mattresses and bedsprings .....	2515	30.1	30.3	30.3	30.4	-	23.3	23.5	23.3	23.4	-
Office furniture .....	252	70.5	70.9	69.4	70.2	-	53.1	53.3	51.9	52.5	-
Public building and related furniture .....	253	33.3	33.3	34.7	34.7	-	25.8	25.9	27.2	27.2	-
Partitions and fixtures .....	254	79.2	79.6	79.2	80.3	-	57.1	57.3	57.0	58.0	-
Miscellaneous furniture and fixtures .....	259	37.6	37.6	38.0	38.3	-	25.1	25.1	25.7	25.9	-
Stone, clay, and glass products .....	32	613.0	612.4	609.2	616.0	611.2	478.9	478.4	474.8	480.9	475.8
Flat glass .....	321	15.8	16.0	16.3	16.5	-	12.4	12.5	13.2	13.3	-
Glass and glassware, pressed or blown .....	322	87.2	85.4	84.3	84.6	-	75.7	73.9	72.9	73.2	-
Glass containers .....	3221	45.3	44.4	42.6	42.9	-	41.2	40.4	38.8	39.0	-
Pressed and blown glass, nec .....	3229	41.9	41.0	41.7	41.7	-	34.5	33.5	34.1	34.2	-
Products of purchased glass .....	323	54.8	54.9	55.5	56.3	-	41.0	41.6	42.6	43.3	-
Cement, hydraulic .....	324	20.0	20.2	19.4	20.0	-	15.4	15.6	14.7	15.4	-
Structural clay products .....	325	39.5	39.5	38.6	38.8	-	30.8	30.9	30.0	30.1	-
Pottery and related products .....	326	37.8	37.4	38.3	38.7	-	30.4	29.9	30.6	30.8	-
Concrete, gypsum, and plaster products .....	327	224.3	224.7	219.6	222.9	-	174.0	174.6	169.3	172.5	-
Concrete block and brick .....	3271	21.2	21.4	19.9	19.8	-	14.0	14.1	13.0	13.1	-
Concrete products, nec .....	3272	75.0	74.8	75.8	76.7	-	57.0	57.2	57.8	58.7	-
Ready-mixed concrete .....	3273	108.1	108.4	104.2	106.5	-	87.5	87.7	83.2	85.3	-
Misc. nonmetallic mineral products .....	329	119.6	120.4	121.4	122.3	-	88.2	88.6	89.2	89.9	-
Abrasive products .....	3291	22.1	22.2	22.8	22.9	-	15.4	15.4	16.2	16.4	-
Asbestos products .....	3292	9.1	9.0	8.9	8.9	-	6.8	6.8	6.7	6.7	-
Mineral wool .....	3296	26.3	26.5	26.5	26.7	-	-	-	-	-	-
Primary metal industries .....	33	777.2	770.1	786.9	790.9	778.9	595.8	588.2	601.7	605.5	592.1
Blast furnaces and basic steel products .....	331	279.0	279.2	275.5	277.9	275.3	216.7	216.8	212.7	214.8	211.0
Blast furnaces and steel mills .....	3312	209.6	209.5	206.4	208.7	-	164.0	164.1	160.8	162.7	-
Steel pipe and tubes .....	3317	25.1	25.1	24.8	24.9	-	19.1	18.9	18.7	18.7	-
Iron and steel foundries .....	332	138.9	137.0	144.8	145.1	-	111.5	109.5	115.5	116.4	-
Gray iron foundries .....	3321	85.9	83.9	87.6	88.1	-	70.4	68.3	71.9	72.3	-
Malleable iron foundries .....	3322	9.6	9.1	9.8	9.3	-	7.1	6.8	7.4	7.4	-
Steel foundries, nec .....	3325	28.6	29.2	31.3	31.5	-	22.4	22.8	24.6	24.9	-
Primary nonferrous metals .....	333	43.9	44.4	45.4	46.1	-	32.4	32.6	34.1	34.5	-
Primary aluminum .....	3334	26.0	26.3	27.0	27.3	-	19.5	19.8	20.9	21.1	-
Nonferrous rolling and drawing .....	335	181.3	177.6	182.1	182.9	-	130.4	126.6	130.8	131.3	-
Copper rolling and drawing .....	3351	23.6	22.9	23.5	23.8	-	18.1	17.3	18.1	18.4	-
Aluminum sheet, plate, and foil .....	3353	28.1	28.0	28.3	28.0	-	19.6	19.4	19.1	18.7	-
Nonferrous wire drawing and insulating .....	3357	77.5	74.4	77.7	77.6	-	56.2	53.3	56.7	56.6	-
Nonferrous foundries .....	336	88.7	86.9	91.7	91.8	-	71.3	69.6	73.4	73.6	-
Aluminum foundries .....	3361	54.8	53.9	54.8	54.8	-	44.9	44.2	44.6	44.7	-
Fabricated metal products .....	34	1,438.6	1,422.1	1,451.0	1,456.3	1,434.4	1,073.6	1,057.1	1,077.6	1,081.2	1,061.0
Metal cans and shipping containers .....	341	53.7	53.4	52.8	54.0	-	46.1	45.9	45.4	46.4	-
Metal cans .....	3411	43.1	42.8	41.6	42.8	-	37.4	37.2	36.1	37.2	-
Cutlery, hand tools, and hardware .....	342	140.5	137.8	135.9	135.2	-	104.6	101.4	100.3	99.6	-
Hand and edge tools, and hand saws and blades .....	3423.5	47.5	47.1	45.9	45.8	-	34.8	33.8	33.3	33.3	-
Hardware, nec .....	3429	82.0	79.9	78.8	78.1	-	62.2	60.3	59.3	58.4	-
Plumbing and heating, except electric .....	343	59.7	60.0	60.0	60.6	-	43.1	43.4	43.4	44.0	-
Plumbing fittings and brass goods .....	3432	24.9	24.8	25.9	26.2	-	18.1	18.0	19.3	19.5	-
Heating equipment, except electric .....	3433	21.3	21.8	21.4	21.8	-	14.6	15.1	14.4	14.8	-
Fabricated structural metal products .....	344	431.4	432.4	434.4	439.1	-	309.4	310.0	310.1	314.1	-
Fabricated structural metal .....	3441	77.1	77.0	79.0	79.2	-	55.7	55.8	56.7	56.6	-
Metal doors, sash, and trim .....	3442	85.8	86.3	83.5	84.4	-	63.4	63.7	60.9	61.6	-
Fabricated plate work (boiler shops) .....	3443	102.6	102.5	107.3	108.3	-	68.7	68.6	72.5	73.4	-
Sheet metal work .....	3444	99.8	100.3	99.2	100.7	-	75.1	75.3	74.3	75.6	-
Architectural metal work .....	3446	32.6	32.5	33.1	33.2	-	24.1	24.0	23.9	24.1	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Durable goods—Continued</b>											
Fabricated metal products—Continued											
Screw machine products, bolts, etc .....	345	100.6	98.7	101.4	101.5		77.0	75.4	77.3	77.5	
Screw machine products .....	3451	50.1	49.1	50.2	49.9		41.1	40.4	40.8	40.7	
Bolts, nuts, rivets, and washers .....	3452	50.5	49.6	51.2	51.6		35.9	35.0	36.5	36.8	
Metal forgings and stampings .....	346	230.8	223.5	236.6	233.9		184.9	177.3	189.2	186.3	
Iron and steel forgings .....	3462	32.1	30.9	33.4	33.1		24.7	23.6	25.7	25.5	
Automotive stampings .....	3465	103.6	98.2	106.3	104.2		88.2	82.4	90.0	87.5	
Metal stampings, nec .....	3469	82.4	81.8	84.2	83.8		62.6	62.0	63.9	63.6	
Metal services, nec .....	347	122.4	119.0	130.0	130.5		98.2	94.9	103.4	103.8	
Plating and polishing .....	3471	79.4	77.4	83.9	84.8		64.1	62.2	67.1	67.8	
Metal coating and allied services .....	3479	43.0	41.6	46.1	45.7		34.1	32.7	36.3	36.0	
Ordnance and accessories, nec .....	348	77.0	76.3	72.3	72.1		47.9	48.2	43.4	43.3	
Ammunition, except for small arms, nec .....	3483	42.9	42.3	40.1	40.0		23.8	24.0	21.1	21.0	
Misc. fabricated metal products .....	349	222.5	221.0	227.6	229.4		162.4	160.6	165.1	166.2	
Valves and pipe fittings .....	3494	75.2	75.8	78.5	79.2		50.7	51.1	52.7	53.1	
Misc. fabricated wire products .....	3496	54.2	53.5	55.6	56.2		41.6	40.7	42.6	43.0	
Machinery, except electrical .....	35	2,087.1	2,082.9	2,153.9	2,161.7	2,147.3	1,254.0	1,247.6	1,306.2	1,309.2	1,293.1
Engines and turbines .....	351	93.2	93.0	98.2	97.8	-	61.9	61.6	64.8	64.0	-
Turbines and turbine generator sets .....	3511	24.6	24.7	27.7	28.3		14.3	14.4	16.3	16.6	
Internal combustion engines, nec .....	3519	68.6	68.3	70.5	69.5		47.6	47.2	48.5	47.4	
Farm and garden machinery .....	352	104.4	102.0	110.3	108.2		73.8	71.7	80.1	78.2	
Farm machinery and equipment .....	3523	76.3	76.3	80.3	80.6		51.9	52.0	56.7	57.0	
Construction and related machinery .....	353	230.0	229.3	238.0	239.8		140.0	140.2	146.6	147.4	
Construction machinery .....	3531	84.3	82.8	86.8	87.4		51.7	51.6	54.2	54.5	
Mining machinery .....	3532	16.5	16.5	16.7	16.8		10.1	10.1	10.4	10.4	
Oil field machinery .....	3533	42.0	42.3	42.6	42.5		25.2	25.6	25.1	25.0	
Conveyors and conveying equipment .....	3535	34.7	35.3	36.2	37.1		18.7	18.9	19.9	20.2	
Industrial trucks and tractors .....	3537	27.3	27.1	28.6	28.6		18.9	18.7	19.6	19.6	
Metalworking machinery .....	354	312.6	312.0	335.6	337.5		223.5	222.8	243.0	244.2	
Machine tools, metal cutting types .....	3541	48.8	49.0	53.6	54.3		31.0	30.9	35.2	35.6	
Machine tools, metal forming types .....	3542	18.5	18.5	19.4	19.6		11.8	11.8	12.6	12.7	
Special dies, tools, jigs, and fixtures .....	3544	146.9	146.8	157.5	157.7		112.4	112.3	121.5	121.9	
Machine tool accessories .....	3545	57.8	57.6	61.7	62.2		40.8	40.8	44.1	44.4	
Power driven hand tools .....	3546	22.6	22.2	23.7	23.9		16.4	16.0	17.0	17.1	
Special industry machinery .....	355	171.0	171.2	179.4	180.3		102.5	102.3	107.5	107.9	
Food products machinery .....	3551	34.8	35.1	36.2	36.5		21.1	21.0	21.9	22.0	
Textile machinery .....	3552	21.0	20.6	21.2	21.2		14.0	13.7	14.0	14.0	
Printing trades machinery .....	3555	28.7	28.8	29.5	29.7		17.3	17.5	17.4	17.5	
General industrial machinery .....	356	249.2	249.7	256.9	258.0		160.9	160.6	166.6	167.4	
Pumps and pumping equipment .....	3561	44.1	44.3	46.1	46.3		25.7	25.7	26.7	26.9	
Ball and roller bearings .....	3562	42.7	42.2	43.9	44.2		33.2	32.6	34.4	34.5	
Air and gas compressors .....	3563	22.7	22.7	22.6	23.0		13.3	13.2	12.8	13.1	
Blowers and fans .....	3564	30.8	30.8	31.5	31.8		19.7	19.8	21.1	21.4	
Speed changers, drives, and gears .....	3566	16.9	16.9	17.7	17.7		11.6	11.7	12.2	12.3	
Power transmission equipment, nec .....	3568	18.3	18.2	18.9	18.8		12.4	12.2	13.0	12.7	
Office and computing machines .....	357	474.9	475.6	475.2	477.2		155.7	154.2	154.6	155.2	
Electronic computing equipment .....	3573	418.9	420.0	420.4	421.9		129.1	128.3	129.0	129.3	
Refrigeration and service machinery .....	358	186.8	185.9	189.6	191.6		134.8	134.3	137.0	138.8	
Refrigeration and heating equipment .....	3585	130.3	129.8	132.7	134.7		96.7	96.4	99.0	100.6	
Misc. machinery, except electrical .....	359	265.0	264.2	270.7	271.3		200.9	199.9	206.0	206.1	
Carburetors, pistons, rings, and valves .....	3592	31.0	30.2	30.3	30.0		24.8	23.8	24.1	23.7	
Machinery, except electrical, nec .....	3599	234.0	234.0	240.4	241.3		176.1	176.1	181.9	182.4	
Electrical and electronic equipment .....	36	2,074.8	2,059.3	2,039.6	2,041.6	2,019.5	1,223.9	1,209.8	1,198.0	1,198.3	1,180.9
Electric distributing equipment .....	361	105.9	105.8	107.2	107.3	-	75.8	76.0	75.6	75.5	-
Transformers .....	3612	52.5	52.7	53.2	52.9		37.8	38.2	38.0	37.8	
Switchgear and switchboard apparatus .....	3613	53.4	53.1	54.0	54.4		38.0	37.8	37.6	37.7	
Electrical industrial apparatus .....	362	185.1	184.0	186.9	187.7		129.5	128.4	131.3	131.9	
Motors and generators .....	3621	91.4	90.3	91.1	91.6		71.6	70.9	71.8	72.3	
Industrial controls .....	3622	59.4	59.3	60.9	61.1		34.8	34.4	36.4	36.2	
Household appliances .....	363	138.2	136.8	137.5	136.9		110.6	109.3	109.9	109.5	
Household refrigerators and freezers .....	3632	29.2	29.5	28.7	28.6		24.0	23.8	23.4	23.2	
Household laundry equipment .....	3633	22.8	22.9	21.5	22.4		18.5	18.7	17.2	17.9	
Electric housewares and fans .....	3634	36.8	35.6	37.4	37.7		28.7	27.9	29.5	29.9	

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Durable goods—Continued</b>											
<b>Electrical and electronic equipment—Continued</b>											
Electric lighting and wiring equipment .....	364	198.1	192.5	198.9	198.2		143.7	138.6	143.5	142.9	
Electric lamps .....	3641	27.1	26.2	26.5	26.3		23.2	22.3	22.6	22.5	
Current-carrying wiring devices .....	3643	78.8	76.3	78.0	77.7		51.8	49.7	50.8	50.3	
Noncurrent-carrying wiring devices .....	3644	16.2	15.3	16.9	17.0		12.0	11.1	12.6	12.7	
Residential lighting fixtures .....	3645	26.9	26.8	27.1	26.8		20.2	20.2	19.9	19.8	
Radio and TV receiving equipment .....	365	84.0	84.0	92.2	92.5		57.6	57.9	64.8	64.6	
Radio and TV receiving sets .....	3651	61.6	61.8	68.4	68.7		40.6	41.0	46.7	46.6	
Communication equipment .....	366	568.9	567.5	541.6	541.2		238.3	235.9	219.3	219.7	
Telephone and telegraph apparatus .....	3661	111.9	112.6	103.7	103.5		66.8	66.0	62.3	62.7	
Radio and TV communication equipment .....	3662	457.0	454.9	437.9	437.7		171.5	169.9	157.0	157.0	
Electronic components and accessories .....	367	639.3	636.0	619.9	621.9		359.1	356.8	344.5	345.1	
Electronic tubes .....	3671-3	39.7	38.0	38.6	38.4		25.3	24.5	24.6	24.3	
Semiconductors and related devices .....	3674	263.7	264.6	257.7	259.4		104.1	104.1	96.2	96.9	
Electronic components, nec .....	3679	258.4	256.6	250.0	250.5		172.7	171.5	169.3	169.8	
Misc. electrical equipment and supplies .....	369	155.3	152.7	155.4	155.9		109.3	106.9	109.1	109.1	
Storage batteries .....	3691	28.3	27.3	26.4	27.8		21.5	20.4	19.7	21.2	
Engine electrical equipment .....	3694	68.9	67.9	70.0	69.2		52.8	51.9	53.8	53.0	
Transportation equipment .....	37	2,060.0	2,035.0	2,078.0	2,068.1	2,027.8	1,287.1	1,257.0	1,303.4	1,289.7	1,247.2
Motor vehicles and equipment .....	371	863.2	846.6	879.4	868.1	832.9	672.9	655.3	684.8	673.5	637.4
Motor vehicles and car bodies .....	3711	359.0	347.9	369.1	362.2	-	269.2	258.0	277.2	270.2	-
Truck and bus bodies .....	3713	44.3	44.0	44.5	45.2		34.7	34.3	34.4	35.5	
Motor vehicle parts and accessories .....	3714	408.6	402.8	414.6	411.1		328.3	321.8	332.6	328.7	
Truck trailers .....	3715	30.9	31.1	30.6	30.1		24.5	24.7	24.3	23.9	
Aircraft and parts .....	372	695.2	694.5	700.0	703.6		337.7	335.7	341.8	342.7	
Aircraft .....	3721	367.2	367.3	378.0	380.3		161.6	160.6	167.1	167.8	
Aircraft engines and engine parts .....	3724	155.0	154.4	150.1	150.6		76.0	75.4	75.7	75.5	
Aircraft equipment, nec .....	3728	173.0	172.8	171.9	172.7		100.1	99.7	99.0	99.4	
Ship and boat building and repairing .....	373	196.7	188.7	191.1	189.0		149.4	139.2	143.1	139.9	
Ship building and repairing .....	3731	124.0	117.4	120.8	121.1		89.6	80.6	84.4	83.5	
Boat building and repairing .....	3732	72.7	71.3	70.3	67.9		59.8	58.6	58.7	56.4	
Railroad equipment .....	374	31.6	32.3	38.7	39.3		23.1	23.6	28.8	29.2	
Guided missiles, space vehicles, and parts .....	376	211.6	212.2	207.3	207.0		61.9	62.5	62.8	62.6	
Guided missiles and space vehicles .....	3761	154.1	154.7	152.3	152.2		42.1	42.6	42.4	42.1	
Miscellaneous transportation equipment .....	379	50.8	50.0	48.1	47.9		34.6	33.5	32.5	32.3	
Travel trailers and campers .....	3792	21.4	21.2	19.4	19.4		16.8	16.5	15.1	15.1	
Instruments and related products .....	38	751.7	751.3	776.0	782.4	782.1	414.6	411.8	429.7	430.8	431.5
Engineering and scientific instruments .....	381	94.5	95.6	99.3	99.6	-	42.6	43.0	46.3	45.9	-
Measuring and controlling devices .....	382	260.6	260.8	270.1	272.0		149.1	148.7	155.5	155.5	
Environmental controls .....	3822	48.3	48.5	49.6	50.2		31.6	31.7	33.3	33.7	
Process control instruments .....	3823	59.2	59.6	62.9	63.8		32.0	32.1	33.9	34.3	
Instruments to measure electricity .....	3825	107.2	106.9	109.1	109.5		54.2	54.0	55.7	55.0	
Optical instruments and lenses .....	383	29.8	29.8	30.5	30.6		15.2	15.3	16.3	16.3	
Medical instruments and supplies .....	384	201.5	200.6	210.5	212.5		122.7	120.7	126.5	127.3	
Surgical and medical instruments .....	3841	99.6	100.0	104.9	105.7		58.0	57.2	61.2	61.2	
Surgical appliances and supplies .....	3842	87.3	86.0	90.6	91.7		56.4	55.2	56.9	57.6	
Ophthalmic goods .....	385	39.7	39.1	39.3	39.7		27.1	26.5	26.9	27.3	
Photographic equipment and supplies .....	386	114.2	114.2	115.6	117.2		49.5	49.3	49.7	50.5	
Watches, clocks, and watchcases .....	387	11.4	11.2	11.3	10.8		8.4	8.3	8.5	8.0	
Miscellaneous manufacturing .....	39	388.2	380.5	391.4	394.4	379.3	283.8	275.9	283.5	287.2	272.3
Jewelry, silverware, and plated ware .....	391	53.4	50.6	53.7	53.8	-	37.5	34.9	38.1	38.4	-
Jewelry, precious metal .....	3911	38.0	35.7	38.7	38.9		26.6	24.4	27.4	27.6	
Musical instruments .....	393	13.2	12.7	13.4	13.5		11.0	10.5	11.0	11.2	
Toys and sporting goods .....	394	104.4	104.4	105.2	106.6		78.1	77.7	77.0	78.5	
Dolls, games, toys, and children's vehicles .....	3942,4	45.3	45.8	44.7	45.0		32.8	32.8	31.3	31.9	
Sporting and athletic goods, nec .....	3949	59.1	58.6	60.5	61.6		45.3	44.9	45.7	46.6	
Pens, pencils, office, and art supplies .....	395	34.6	34.2	34.7	34.9	-	24.6	24.3	24.0	24.5	-
Costume jewelry and notions .....	396	41.4	37.9	42.2	42.7		32.3	28.9	33.0	33.5	
Costume jewelry .....	3961	21.5	18.7	23.0	23.0		16.6	13.9	17.7	17.7	
Miscellaneous manufactures .....	399	141.2	140.7	142.2	142.9		100.3	99.6	100.4	101.1	
Signs and advertising displays .....	3993	61.1	61.4	61.9	61.9		42.2	42.5	42.3	42.5	

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Nondurable goods</b> .....		8,013	7,949	8,032	8,132	8,087	5,653	5,588	5,652	5,732	5,692
Food and kindred products .....	20	1,638.8	1,661.1	1,616.4	1,668.8	1,708.7	1,163.3	1,184.3	1,145.1	1,192.3	1,230.6
Meat products .....	201	401.4	404.1	413.8	421.5	-	340.2	342.4	350.7	357.7	-
Meat packing plants .....	2011	140.1	140.8	143.1	143.9		117.2	117.6	119.6	120.3	
Sausages and other prepared meats .....	2013	81.2	80.9	82.8	84.2		59.8	59.8	60.8	62.0	
Poultry dressing plants .....	2016	157.7	159.8	164.7	170.1		143.3	144.8	149.6	154.6	
Dairy products .....	202	162.8	162.6	158.0	161.8		100.0	99.2	97.2	100.7	
Cheese, natural and processed .....	2022	42.9	42.9	42.1	43.5		33.0	32.8	32.1	33.6	
Fluid milk .....	2026	77.3	76.9	74.6	75.3		38.4	38.1	37.6	38.1	
Preserved fruits and vegetables .....	203	246.7	266.0	231.7	254.0		201.6	221.0	186.6	208.1	
Canned specialties .....	2032	22.1	23.0	23.1	23.1		15.5	16.2	16.5	16.7	
Canned fruits and vegetables .....	2033	79.2	95.1	72.7	81.4		64.5	80.6	59.4	67.5	
Frozen fruits and vegetables .....	2037	53.2	52.6	45.8	54.2		47.0	46.4	39.4	47.9	
Grain mill products .....	204	125.0	124.9	124.7	127.4		86.4	86.7	87.0	89.1	
Flour and other grain mill products .....	2041	21.9	22.0	22.0	22.7		15.1	15.3	15.0	15.5	
Prepared feeds, nec .....	2048	43.0	42.9	42.0	42.7		27.1	27.1	26.6	27.2	
Bakery products .....	205	203.4	203.2	200.4	203.5		124.0	123.8	122.5	125.4	
Bread, cake, and related products .....	2051	158.4	158.0	156.2	158.1		89.4	89.0	89.2	90.7	
Cookies and crackers .....	2052	45.0	45.2	44.2	45.4		34.6	34.8	33.3	34.7	
Sugar and confectionery products .....	206	91.6	90.8	91.7	92.9		71.1	70.4	70.1	71.0	
Cane and beet sugar .....	2061-3	18.5	17.0	17.1	16.7		14.1	12.9	12.9	12.6	
Confectionery products .....	2065	51.6	51.7	53.4	54.7		42.6	42.5	43.1	44.2	
Fats and oils .....	207	31.7	31.8	31.8	31.9		23.2	23.2	23.1	23.1	
Beverages .....	208	205.8	205.9	199.1	203.6		88.4	88.3	84.8	87.5	
Malt beverages .....	2082	42.2	42.7	41.0	42.0		25.7	25.6	24.9	25.9	
Bottled and canned soft drinks .....	2086	118.2	119.0	113.0	115.2		40.1	40.6	37.5	38.7	
Misc. food and kindred products .....	209	170.4	171.8	165.2	172.2		128.4	129.3	123.1	129.7	
Tobacco manufactures .....	21	52.3	51.7	49.2	49.5	49.7	38.6	37.7	35.2	35.1	35.3
Cigarettes .....	211	41.1	41.1	38.5	38.9	-	31.0	30.7	27.8	27.9	-
Textile mill products .....	22	734.7	717.3	728.5	733.1	717.8	636.9	621.4	630.3	634.4	619.8
Weaving mills, cotton .....	221	100.8	98.8	96.2	96.2	-	91.3	89.2	86.3	86.6	-
Weaving mills, synthetics .....	222	89.5	88.1	90.3	91.0		79.2	78.0	80.2	80.7	
Weaving and finishing mills, wool .....	223	19.1	18.3	19.7	19.6		15.7	14.8	16.0	15.9	
Narrow fabric mills .....	224	24.0	23.0	24.5	24.9		20.6	19.5	21.0	21.1	
Knitting mills .....	225	214.3	210.3	212.2	214.3		189.2	185.7	187.3	189.1	
Women's hosiery, except socks .....	2251	33.9	32.9	33.5	33.3		31.1	30.1	30.2	30.0	
Hosiery, nec .....	2252	36.7	36.4	37.0	37.4		33.0	32.8	33.6	33.9	
Knit outerwear mills .....	2253	72.1	71.1	70.8	71.9		64.2	63.5	63.2	64.2	
Knit underwear mills .....	2254	26.4	26.0	25.1	25.4		22.3	21.9	21.1	21.4	
Circular knit fabric mills .....	2257	25.8	25.4	27.0	27.4		22.5	22.1	23.6	23.9	
Textile finishing, except wool .....	226	60.6	57.6	61.5	62.3		50.3	47.7	50.7	51.2	
Finishing plants, cotton .....	2261	25.3	23.7	25.6	25.9		20.9	19.5	21.0	21.2	
Finishing plants, synthetics .....	2262	21.5	20.7	21.8	22.1		17.4	16.7	17.6	17.8	
Floor covering mills .....	227	60.4	59.8	61.6	62.8		48.7	48.5	50.1	51.3	
Yarn and thread mills .....	228	109.4	106.5	106.4	106.0		97.9	95.5	95.3	95.1	
Yarn mills, except wool .....	2281	82.1	80.3	80.0	79.5		74.4	72.7	72.1	71.8	
Throwing and winding mills .....	2282	15.0	14.7	14.6	14.6		13.1	12.9	13.0	12.9	
Miscellaneous textile goods .....	229	56.6	54.9	56.1	56.0		44.0	42.5	43.4	43.4	
Apparel and other textile products .....	23	1,103.8	1,057.8	1,099.5	1,104.1	1,064.6	928.5	885.1	928.5	931.7	894.9
Men's and boys' suits and coats .....	231	59.0	56.8	57.6	56.9	-	51.0	48.9	49.5	48.9	-
Men's and boys' furnishings .....	232	304.9	294.8	301.2	303.7		263.1	253.7	260.5	262.2	
Men's and boys' shirts and nightwear .....	2321	77.7	74.7	75.1	75.6		66.7	63.9	64.3	65.0	
Men's and boys' separate trousers .....	2327	51.1	48.8	50.0	50.2		44.5	42.5	43.2	43.2	
Men's and boys' work clothing .....	2328	92.5	89.4	92.2	93.2		80.8	78.1	80.9	81.6	
Women's and misses' outerwear .....	233	349.6	324.9	339.2	340.0		291.6	268.7	284.1	285.3	
Women's and misses' blouses and waists .....	2331	45.1	43.2	42.6	42.8		37.2	35.3	35.2	35.3	
Women's and misses' dresses .....	2335	79.0	69.8	75.6	77.4		65.7	56.9	62.9	64.5	
Women's and misses' suits and coats .....	2337	38.3	36.9	38.6	39.6		31.4	30.3	32.2	33.2	
Women's and misses' outerwear, nec .....	2339	187.2	175.0	182.4	180.2		157.3	146.2	153.8	152.3	

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Nondurable goods—Continued</b>											
Apparel and other textile products—Continued											
Women's and children's undergarments .....	234	72.0	69.9	70.4	70.3		59.4	57.6	58.3	58.0	
Women's and children's underwear .....	2341	58.0	57.0	56.4	56.3		49.7	48.8	48.5	48.3	
Brassieres and allied garments .....	2342	14.0	12.9	14.0	14.0		9.7	8.8	9.8	9.7	
Children's outerwear .....	236	59.2	57.9	56.8	58.1		50.0	48.7	47.8	48.9	
Children's dresses and blouses .....	2361	22.8	22.6	22.5	22.6		20.0	19.7	19.6	19.7	
Misc. apparel and accessories .....	238	43.4	41.8	44.5	45.0		35.9	34.2	36.9	37.1	
Misc. fabricated textile products .....	239	198.3	194.6	210.7	211.2		163.7	159.7	175.8	175.9	
Curtains and draperies .....	2391	25.6	25.0	26.3	26.8		21.0	20.5	21.9	22.4	
House furnishings, nec .....	2392	51.9	51.9	55.6	55.5		44.0	43.6	46.8	46.6	
Automotive and apparel trimmings .....	2396	42.3	40.7	44.6	44.4		35.2	33.4	37.9	37.6	
Paper and allied products .....	26	700.8	696.4	694.6	703.9	700.2	530.8	526.7	523.1	530.7	528.6
Paper and pulp mills .....	261,2,6	198.3	197.5	193.3	197.0	-	151.6	150.8	147.0	150.3	-
Paper mills, except building paper .....	262	176.7	176.1	173.0	176.5		134.4	133.8	131.0	134.0	
Paperboard mills .....	263	53.6	53.7	52.6	53.8		40.6	40.9	40.3	41.3	
Misc. converted paper products .....	264	240.5	239.6	238.5	241.0		176.6	175.6	173.2	174.7	
Paper coating and glazing .....	2641	60.3	61.0	59.8	61.7		37.1	37.3	34.4	35.7	
Envelopes .....	2642	27.2	26.5	26.8	26.7		20.8	20.3	20.8	20.7	
Bags, except textile bags .....	2643	52.7	52.3	52.8	53.1		41.3	40.9	41.2	41.3	
Paperboard containers and boxes .....	265	208.4	205.6	210.2	212.1		162.0	159.4	162.6	164.4	
Folding paperboard boxes .....	2651	46.0	45.2	46.7	46.9		36.6	35.8	37.3	37.4	
Corrugated and solid fiber boxes .....	2653	112.7	111.6	113.7	114.6		84.9	83.9	85.3	86.2	
Sanitary food containers .....	2654	23.2	23.4	22.6	23.1		19.9	20.0	19.0	19.5	
Printing and publishing .....	27	1,562.3	1,560.7	1,601.8	1,612.6	1,607.9	873.8	869.0	892.0	895.3	891.0
Newspapers .....	271	476.4	475.2	475.4	479.4	-	170.9	170.3	167.9	168.5	-
Periodicals .....	272	128.9	130.0	134.6	135.7		46.2	46.2	47.9	47.9	
Books .....	273	116.7	116.2	123.0	123.2		63.1	62.0	65.6	65.5	
Book publishing .....	2731	86.3	85.9	91.1	90.9		38.7	37.7	40.2	39.8	
Book printing .....	2732	30.4	30.3	31.9	32.3		24.4	24.3	25.4	25.7	
Miscellaneous publishing .....	274	79.5	79.3	82.3	82.8		41.0	40.1	42.1	42.0	
Commercial printing .....	275	553.3	551.4	571.8	574.2		403.6	400.9	415.6	416.4	
Commercial printing, letterpress .....	2751	170.2	169.9	176.6	178.0		122.1	121.4	127.1	127.8	
Commercial printing, lithographic .....	2752	356.2	355.2	367.1	368.3		259.9	258.7	265.9	266.1	
Manifold business forms .....	276	49.2	49.1	49.1	49.3		33.7	33.5	33.3	33.4	
Blankbooks and bookbinding .....	278	76.9	77.4	80.7	81.9		61.1	61.0	62.8	63.9	
Printing trade services .....	279	57.4	57.7	60.5	61.2		42.3	42.6	44.3	44.9	
Chemicals and allied products .....	28	1,073.5	1,074.6	1,092.2	1,103.4	1,101.9	602.4	601.1	612.5	622.1	619.4
Industrial inorganic chemicals .....	281	133.9	134.2	134.5	135.4	-	67.6	67.6	68.9	69.7	-
Industrial inorganic chemicals, nec .....	2819	91.0	90.9	90.5	91.0		49.2	49.1	48.1	48.3	
Plastics materials and synthetics .....	282	179.1	179.6	186.3	188.9		117.1	117.7	122.2	123.7	
Plastics materials and resins .....	2821	83.7	84.1	86.5	88.2		49.2	49.7	51.3	51.9	
Organic fibers, noncellulosic .....	2824	66.9	66.9	70.4	71.1		47.4	47.5	50.1	50.8	
Drugs .....	283	232.4	233.4	240.1	243.2		102.7	102.7	104.2	108.1	
Pharmaceutical preparations .....	2834	191.6	191.7	197.8	200.3		83.1	82.9	85.5	89.3	
Soap, cleaners, and toilet goods .....	284	161.9	161.3	162.4	164.4		105.4	104.0	103.2	104.8	
Soap and other detergents .....	2841	44.4	44.5	43.6	44.3		27.8	27.8	27.3	27.7	
Polishing, sanitation, and finishing preparations .....	2842,3	43.9	43.8	46.3	46.1		25.4	24.9	26.5	26.1	
Toilet preparations .....	2844	73.6	73.0	72.5	74.0		52.2	51.3	49.4	51.0	
Paints and allied products .....	285	64.5	65.1	63.3	63.9		32.2	32.6	31.8	32.7	
Industrial organic chemicals .....	286	146.6	147.6	149.5	151.0		84.8	85.3	87.5	88.2	
Cyclic crudes and intermediates .....	2865	30.0	30.1	30.6	30.8		18.5	18.5	18.9	18.9	
Gum, wood, and industrial organic chemicals, nec .....	2861,9	116.6	117.5	118.9	120.2		66.3	66.8	68.6	69.3	
Agricultural chemicals .....	287	53.0	51.5	54.8	54.3		33.9	32.7	34.6	33.9	
Miscellaneous chemical products .....	289	102.1	101.9	101.3	102.3		58.7	58.5	60.1	61.0	
Petroleum and coal products .....	29	164.6	165.3	162.9	165.6	166.2	107.7	108.1	106.5	109.5	110.6
Petroleum refining .....	291	123.2	123.8	121.9	123.7	-	78.6	79.0	77.5	79.6	-
Paving and roofing materials .....	295	28.8	28.9	28.1	28.9		22.2	22.2	21.7	22.5	

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Nondurable goods—Continued</b>											
Rubber and misc. plastics products .....	30	835.7	825.9	844.3	847.4	833.8	650.4	640.9	661.0	661.8	649.3
Tires and inner tubes .....	301	84.6	84.8	85.3	86.0	-	61.0	61.6	64.2	65.2	-
Rubber and plastics footwear .....	302	12.0	11.2	10.9	11.0	-	9.9	9.0	8.9	9.0	-
Reclaimed rubber, and rubber and plastics hose and belting .....	303,4	26.2	26.4	27.7	28.0	-	19.5	19.6	20.9	20.9	-
Fabricated rubber products, nec .....	306	101.5	100.3	100.7	100.6	-	78.5	77.1	77.7	77.4	-
Miscellaneous plastics products .....	307	611.4	603.2	619.7	621.8	-	481.5	473.6	489.3	489.3	-
Leather and leather products .....	31	146.2	138.4	142.2	143.5	136.4	120.6	113.4	117.9	119.2	112.9
Leather tanning and finishing .....	311	13.7	12.7	14.4	14.5	-	11.4	10.5	12.1	12.3	-
Footwear, except rubber .....	314	85.3	79.8	80.6	81.7	-	72.6	67.4	68.8	69.7	-
Men's footwear, except athletic .....	3143	37.5	35.3	35.5	36.0	-	30.1	28.1	28.9	29.3	-
Women's footwear, except athletic .....	3144	29.6	28.4	27.8	28.1	-	26.1	24.9	24.6	25.0	-
Luggage .....	316	11.3	10.8	11.8	12.1	-	7.9	7.6	8.5	8.8	-
Handbags and personal leather goods .....	317	16.9	16.7	16.1	15.8	-	13.1	12.9	12.5	12.4	-
<b>Transportation and public utilities .....</b>		<b>5,579</b>	<b>5,561</b>	<b>5,699</b>	<b>5,754</b>	<b>5,740</b>	<b>4,636</b>	<b>4,616</b>	<b>4,752</b>	<b>4,801</b>	<b>4,784</b>
Transportation .....		3,349	3,322	3,487	3,525	3,503	-	-	-	-	-
Railroad transportation .....	40	305.0	304.0	299.1	300.2	-	-	-	-	-	-
Class I railroads <sup>a</sup> .....	4011	264.4	263.3	255.6	256.5	-	-	-	-	-	-
Local and interurban passenger transit .....	41	313.1	266.1	344.0	328.3	-	288.5	241.4	316.4	300.6	-
Local and suburban transportation .....	411	119.8	119.5	129.5	130.2	-	109.5	108.7	118.0	117.9	-
Taxicabs .....	412	35.4	35.5	34.8	34.2	-	-	-	-	-	-
Intercity highway transportation .....	413	29.0	29.3	29.6	29.8	-	26.0	26.4	26.5	26.9	-
School buses .....	415	101.0	54.7	117.8	101.9	-	-	-	-	-	-
Trucking and warehousing .....	42	1,569.5	1,580.0	1,637.1	1,669.3	-	1,368.2	1,378.8	1,427.8	1,458.1	-
Trucking and trucking terminals .....	421,3	1,460.8	1,470.9	1,519.9	1,550.7	-	1,277.2	1,287.7	1,329.8	1,359.4	-
Public warehousing .....	422	108.7	109.1	117.2	118.6	-	91.0	91.1	98.0	98.7	-
Water transportation .....	44	180.3	184.7	181.3	184.7	-	-	-	-	-	-
Local water transportation .....	445	29.7	31.0	30.1	32.4	-	-	-	-	-	-
Water transportation services .....	446	98.7	101.2	101.1	100.8	-	-	-	-	-	-
Transportation by air .....	45	645.3	649.8	668.0	679.4	-	-	-	-	-	-
Air transportation .....	451,2	558.2	562.6	573.0	582.4	-	-	-	-	-	-
Air transportation services .....	458	87.1	87.2	95.0	97.0	-	-	-	-	-	-
Pipe lines, except natural gas .....	46	18.8	19.1	18.4	19.3	-	13.1	13.4	13.0	13.8	-
Transportation services .....	47	317.1	318.7	339.3	343.6	-	-	-	-	-	-
Freight forwarding .....	471	69.0	70.3	75.0	75.4	-	-	-	-	-	-
Communication and public utilities .....		2,230	2,239	2,212	2,229	2,237	-	-	-	-	-
Communication .....	48	1,286.6	1,291.6	1,279.3	1,284.7	-	971.9	975.2	974.1	981.0	-
Telephone communication .....	481	902.8	906.1	884.0	887.9	-	663.1	664.4	654.1	659.4	-
Radio and television broadcasting .....	483	239.3	240.2	244.5	245.4	-	196.9	197.6	202.1	203.1	-
Radio broadcasting .....	4832	119.2	120.4	121.8	122.5	-	-	-	-	-	-
Television broadcasting .....	4833	120.1	119.8	122.7	122.9	-	-	-	-	-	-
Electric, gas, and sanitary services .....	49	943.4	946.9	933.0	944.4	-	748.0	751.2	736.5	746.4	-
Electric services .....	491	457.6	458.4	449.5	453.2	-	349.7	350.3	343.9	347.4	-
Gas production and distribution .....	492	167.5	168.6	166.0	169.5	-	133.0	134.0	130.5	133.6	-
Combination utility services .....	493	195.8	196.7	193.1	195.0	-	161.0	162.0	156.7	157.9	-
Sanitary services .....	495	93.5	94.1	94.8	96.5	-	81.2	81.7	82.3	83.6	-
<b>Wholesale trade .....</b>		<b>6,062</b>	<b>6,077</b>	<b>6,217</b>	<b>6,265</b>	<b>6,276</b>	<b>4,891</b>	<b>4,906</b>	<b>5,007</b>	<b>5,049</b>	<b>5,058</b>
Durable goods .....	50	3,579	3,590	3,685	3,711	3,718	2,861	2,872	2,945	2,967	-
Motor vehicles and automotive equipment .....	501	435.1	436.0	437.6	439.6	-	349.2	350.7	354.0	356.1	-
Automobiles and other motor vehicles .....	5012	120.3	120.3	123.4	123.7	-	-	-	-	-	-
Automotive parts and supplies .....	5013	284.5	285.2	283.7	285.0	-	-	-	-	-	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Wholesale trade—Continued</b>											
<b>Durable goods—Continued</b>											
Furniture and home furnishings .....	502	152.2	152.1	154.9	155.7	-	122.7	122.4	125.2	126.1	-
Furniture .....	5021	70.7	70.4	72.3	72.5	-	-	-	-	-	-
Home furnishings .....	5023	81.5	81.7	82.6	83.2	-	-	-	-	-	-
Lumber and construction materials .....	503	229.4	230.9	235.7	239.7	-	188.1	189.5	193.5	197.0	-
Lumber, plywood, and millwork .....	5031	119.4	120.3	122.0	123.7	-	-	-	-	-	-
Construction materials, nec .....	5039	110.0	110.6	113.7	116.0	-	-	-	-	-	-
Sporting goods, toys, and hobby goods .....	504	89.6	90.0	97.7	98.9	-	73.7	73.5	78.1	79.9	-
Metals and minerals, except petroleum .....	505	140.6	141.0	146.6	146.0	-	111.4	111.9	116.1	115.8	-
Electrical goods .....	506	503.8	506.5	521.8	525.2	-	386.3	389.6	398.3	398.5	-
Electrical apparatus and equipment .....	5063	261.3	264.3	273.1	275.8	-	-	-	-	-	-
Electrical appliances, TV and radios .....	5064	66.5	65.9	68.4	68.4	-	-	-	-	-	-
Electronic parts and equipment .....	5065	176.0	176.3	180.3	181.0	-	-	-	-	-	-
Hardware, plumbing, and heating equipment .....	507	280.7	281.0	284.5	285.8	-	227.1	227.2	230.3	232.1	-
Hardware .....	5072	98.8	98.8	98.1	98.5	-	-	-	-	-	-
Plumbing and hydronic heating supplies .....	5074	113.7	113.7	117.9	117.8	-	-	-	-	-	-
Machinery, equipment, and supplies .....	508	1,524.6	1,529.4	1,569.8	1,580.1	-	1,221.4	1,226.2	1,259.2	1,267.8	-
Commercial machines and equipment .....	5081	548.7	549.6	556.8	559.0	-	-	-	-	-	-
Construction and mining machinery .....	5082	81.8	83.0	85.5	86.7	-	-	-	-	-	-
Farm machinery and equipment .....	5083	121.3	120.3	124.8	126.9	-	-	-	-	-	-
Industrial machinery and equipment .....	5084	335.4	336.8	347.3	349.5	-	-	-	-	-	-
Industrial supplies .....	5085	138.2	139.0	145.9	147.2	-	-	-	-	-	-
Professional equipment and supplies .....	5086	173.8	175.0	179.7	179.3	-	-	-	-	-	-
Miscellaneous durable goods .....	509	223.3	223.5	236.6	240.0	-	180.6	180.8	190.7	193.9	-
Scrap and waste materials .....	5093	104.3	104.4	112.1	114.0	-	-	-	-	-	-
<b>Nondurable goods .....</b>	<b>51</b>	<b>2,483</b>	<b>2,487</b>	<b>2,532</b>	<b>2,554</b>	<b>2,558</b>	<b>2,030</b>	<b>2,034</b>	<b>2,062</b>	<b>2,082</b>	<b>-</b>
Paper and paper products .....	511	220.1	220.3	226.2	229.5	-	178.4	178.9	182.4	184.3	-
Drugs, proprietaries, and sundries .....	512	180.2	181.1	186.6	188.3	-	151.0	152.1	156.5	158.0	-
Apparel, piece goods, and notions .....	513	191.6	192.1	198.3	200.5	-	147.2	148.2	153.1	154.9	-
Groceries and related products .....	514	830.5	833.6	835.4	844.5	-	705.4	706.5	704.4	713.9	-
Groceries, general line .....	5141	262.2	265.3	271.8	273.9	-	-	-	-	-	-
Meats and meat products .....	5147	65.3	65.7	66.8	67.7	-	-	-	-	-	-
Fresh fruits and vegetables .....	5148	107.4	106.7	103.6	105.8	-	-	-	-	-	-
Chemicals and allied products .....	516	126.8	127.8	131.1	132.6	-	94.3	94.4	94.7	96.3	-
Petroleum and petroleum products .....	517	202.7	204.4	208.2	210.0	-	158.9	160.4	162.8	165.2	-
Petroleum bulk stations and terminals .....	5171	84.1	85.3	87.5	88.5	-	-	-	-	-	-
Petroleum products, nec .....	5172	118.6	119.1	120.7	121.5	-	-	-	-	-	-
Beer, wine, and distilled beverages .....	518	153.3	154.9	152.7	156.3	-	126.3	128.0	125.1	128.0	-
Beer and ale .....	5181	98.3	99.1	97.3	100.6	-	-	-	-	-	-
Wines and distilled beverages .....	5182	55.0	55.8	55.4	55.7	-	-	-	-	-	-
Miscellaneous nondurable goods .....	519	452.8	450.9	474.3	475.0	-	367.5	366.7	385.8	386.2	-
Farm supplies .....	5191	154.1	153.7	166.5	162.3	-	-	-	-	-	-
<b>Retail trade .....</b>	<b>52</b>	<b>19,263</b>	<b>19,240</b>	<b>19,528</b>	<b>19,724</b>	<b>19,698</b>	<b>17,080</b>	<b>17,053</b>	<b>17,280</b>	<b>17,466</b>	<b>17,444</b>
Building materials and garden supplies .....	52	807.3	798.8	789.5	796.8	-	672.5	663.8	656.3	663.2	-
Lumber and other building materials .....	521	448.4	448.9	431.7	438.9	-	378.7	378.9	364.4	371.4	-
Hardware stores .....	525	164.7	164.4	168.7	171.2	-	137.2	136.8	139.8	141.9	-
General merchandise stores .....	53	2,399.5	2,398.9	2,416.3	2,430.5	2,430.8	2,220.4	2,216.6	2,231.1	2,251.5	-
Department stores .....	531	1,985.8	1,984.5	1,994.8	2,008.6	-	1,850.1	1,845.6	1,852.5	1,872.1	-
Variety stores .....	533	237.8	237.7	234.9	234.1	-	217.0	217.2	215.3	214.8	-
Misc. general merchandise stores .....	539	175.9	176.7	186.6	187.8	-	153.3	153.8	163.3	164.6	-
Food stores .....	54	3,099.8	3,118.9	3,228.5	3,271.6	3,291.0	2,851.3	2,869.2	2,971.2	3,011.8	-
Grocery stores .....	541	2,743.1	2,763.8	2,851.7	2,886.5	-	2,536.4	2,555.7	2,639.5	2,672.7	-
Meat markets and freezer provisioners .....	542	54.7	55.1	57.5	58.0	-	-	-	-	-	-
Dairy products stores .....	545	27.8	28.3	32.3	34.9	-	-	-	-	-	-
Retail bakeries .....	546	173.5	171.8	175.7	178.5	-	156.8	155.3	158.1	160.8	-
Automotive dealers and service stations .....	55	2,103.0	2,123.4	2,162.9	2,175.5	2,184.6	1,760.1	1,778.5	1,809.1	1,818.9	-
New and used car dealers .....	551,2	1,027.1	1,036.6	1,045.4	1,045.6	-	852.5	860.1	868.4	868.4	-
Auto and home supply stores .....	553	335.4	339.6	353.1	358.1	-	271.8	275.6	283.2	287.5	-
Gasoline service stations .....	554	632.2	637.1	643.3	646.7	-	548.3	553.8	559.7	562.2	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Retail trade—Continued</b>											
Apparel and accessory stores .....	56	1,156.5	1,156.4	1,170.6	1,184.8	-	978.8	978.2	981.4	994.1	-
Men's and boys' clothing and furnishings .....	561	107.9	107.1	105.8	105.6	-	87.9	87.1	85.1	85.0	-
Women's ready-to-wear stores .....	562	409.1	407.4	416.5	419.6	-	345.3	342.9	348.4	350.8	-
Family clothing stores .....	565	273.0	275.7	270.7	279.6	-	238.1	240.6	233.3	241.5	-
Shoe stores .....	566	220.1	219.9	229.3	229.5	-	183.3	183.4	189.3	189.7	-
Furniture and home furnishings stores .....	57	795.0	794.2	802.6	803.4	-	651.4	650.1	656.9	657.8	-
Furniture and home furnishings stores .....	571	459.8	461.2	470.2	473.5	-	374.6	375.7	383.0	384.7	-
Furniture stores .....	5712	283.0	283.4	290.1	291.7	-	-	-	-	-	-
Household appliance stores .....	572	89.0	86.2	77.3	77.9	-	75.4	72.6	64.4	65.1	-
Radio, television, and music stores .....	573	246.2	246.8	255.1	252.0	-	201.4	201.8	209.5	208.0	-
Radio and television stores .....	5732	172.8	173.7	177.2	175.9	-	-	-	-	-	-
Music stores .....	5733	73.4	73.1	77.9	76.1	-	-	-	-	-	-
Eating and drinking places .....	58	6,493.1	6,446.8	6,462.2	6,572.0	6,535.4	5,923.4	5,880.5	5,880.6	5,983.6	-
Miscellaneous retail .....	59	2,408.9	2,402.8	2,495.5	2,489.0	-	2,021.7	2,015.9	2,093.1	2,084.8	-
Drug stores and proprietary stores .....	591	594.3	590.6	602.5	605.3	-	507.0	503.5	510.8	513.4	-
Liquor stores .....	592	123.6	122.7	124.0	126.1	-	-	-	-	-	-
Miscellaneous shopping goods stores .....	594	835.8	841.9	873.1	882.6	-	696.5	701.7	725.9	734.4	-
Sporting goods and bicycle shops .....	5941	147.4	149.8	158.6	160.3	-	-	-	-	-	-
Book stores .....	5942	81.7	81.0	90.5	87.8	-	-	-	-	-	-
Stationery stores .....	5943	82.0	82.1	85.1	85.0	-	-	-	-	-	-
Jewelry stores .....	5944	152.2	153.5	160.4	160.9	-	-	-	-	-	-
Gift, novelty, and souvenir shops .....	5947	185.8	188.2	186.4	196.8	-	-	-	-	-	-
Sewing, needlework, and piece goods .....	5949	62.0	60.8	64.2	64.0	-	-	-	-	-	-
Nonstore retailers .....	596	283.8	280.6	261.0	258.4	-	254.0	251.0	230.7	228.3	-
Mail order houses .....	5961	140.1	139.5	127.7	125.8	-	-	-	-	-	-
Merchandising machine operators .....	5962	86.7	85.3	85.7	85.5	-	-	-	-	-	-
Fuel and ice dealers .....	598	107.4	107.3	115.5	115.4	-	89.1	88.8	95.9	95.7	-
Retail stores, nec .....	599	385.5	380.0	435.3	414.9	-	310.4	306.0	360.4	340.2	-
<b>Finance, insurance, and real estate<sup>3</sup></b> .....		<b>6,739</b>	<b>6,773</b>	<b>6,790</b>	<b>6,871</b>	<b>6,910</b>	<b>4,905</b>	<b>4,937</b>	<b>4,913</b>	<b>4,988</b>	<b>5,029</b>
Finance .....		3,308	3,317	3,313	3,341	3,355	-	-	-	-	-
Banking .....	60	1,747.5	1,753.0	1,762.2	1,783.6	-	1,250.6	1,254.4	1,251.9	1,272.4	-
Commercial and stock savings banks .....	602	1,567.4	1,571.5	1,563.8	1,581.3	-	1,118.7	1,121.5	1,108.0	1,125.3	-
State banks, Federal Reserve .....	6022	317.0	318.3	314.2	315.1	-	-	-	-	-	-
State banks, not Federal Reserve .....	6023,4	363.7	364.7	365.2	370.7	-	-	-	-	-	-
Mutual savings banks .....	603	80.3	80.5	80.1	81.2	-	-	-	-	-	-
Credit agencies other than banks .....	61	901.3	903.0	904.4	910.0	-	672.0	675.6	675.4	681.1	-
Savings and loan associations .....	612	403.9	403.9	402.7	405.9	-	306.8	307.1	305.0	307.2	-
Federal savings and loan associations .....	6122	232.5	232.9	233.0	234.4	-	-	-	-	-	-
State associations, insured .....	6123	166.0	165.8	164.5	166.2	-	-	-	-	-	-
Personal credit institutions .....	614	255.5	256.6	265.3	266.8	-	198.0	198.7	206.0	207.4	-
Business credit institutions .....	615	57.5	58.7	65.9	67.1	-	-	-	-	-	-
Mortgage bankers and brokers .....	616	160.5	160.0	148.4	148.1	-	-	-	-	-	-
Security, commodity brokers, and services .....	62	451.9	451.9	436.2	434.7	-	-	-	-	-	-
Security brokers and dealers .....	621	356.0	355.3	338.4	336.0	-	-	-	-	-	-
Holding and other investment offices .....	67	206.8	209.2	209.8	212.7	-	-	-	-	-	-
Insurance .....		2,087	2,094	2,123	2,134	2,142	-	-	-	-	-
Insurance carriers .....	63	1,445.9	1,450.1	1,463.9	1,472.1	-	969.0	972.0	971.2	977.9	-
Life insurance .....	631	578.1	579.2	575.8	577.9	-	348.0	349.4	344.0	347.5	-
Medical service and health insurance .....	632	217.8	218.9	232.1	233.8	-	175.9	177.1	187.8	188.9	-
Fire, marine, and casualty insurance .....	633	541.9	543.3	545.0	548.5	-	363.0	363.0	354.8	356.4	-
Title insurance .....	636	58.5	59.0	58.4	58.7	-	-	-	-	-	-
Insurance agents, brokers, and service .....	64	640.6	643.8	659.3	662.0	-	-	-	-	-	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Finance, insurance, and real estate—Continued</b>											
Real estate, and combined real estate, insurance, etc ....		1,344	1,362	1,354	1,396	1,413					
Real estate .....	65	1,334.0	1,352.7	1,345.2	1,387.1						
Real estate operators and lessors .....	651	575.7	581.2	581.7	601.5						
Real estate agents and managers .....	653	550.4	559.8	547.7	561.9						
Subdividers and developers .....	655	176.3	179.8	183.8	191.0						
Combined real estate, insurance, etc .....	66	9.6	9.6	9.0	9.0						
<b>Services .....</b>		<b>25,809</b>	<b>25,922</b>	<b>26,818</b>	<b>27,138</b>	<b>27,240</b>	<b>22,579</b>	<b>22,671</b>	<b>23,416</b>	<b>23,702</b>	<b>23,778</b>
Hotels and other lodging places .....	70	1,638.0	1,675.7	1,598.4	1,693.8		-	-	-	-	
Hotels, motels, and tourist courts .....	701	1,578.4	1,600.3	1,551.2	1,621.2		1,413.6	1,433.7	1,379.5	1,447.4	
Personal services .....	72	1,166.3	1,150.0	1,179.8	1,181.2		-	-	-	-	
Laundry, cleaning, and garment services .....	721	415.8	412.4	412.4	414.8		370.3	367.2	366.4	369.2	
Photographic studios, portrait .....	722	59.0	55.9	56.7	58.2		-	-	-	-	
Beauty shops .....	723	366.2	362.5	367.9	370.8		326.5	323.6	328.2	331.0	
Funeral service and crematories .....	726	80.5	79.7	81.2	82.0		-	-	-	-	
Business services .....	73	5,594.8	5,635.5	5,758.5	5,827.5	5,843.0	4,803.2	4,836.2	4,906.1	4,966.3	-
Advertising .....	731	233.8	238.1	255.1	259.9		173.8	176.4	188.1	192.2	-
Advertising agencies .....	7311	168.7	171.6	184.7	188.8		-	-	-	-	-
Credit reporting and collection .....	732	92.2	92.7	95.6	97.1		-	-	-	-	-
Mailing, reproduction, and stenographic .....	733	207.5	208.3	238.1	240.8		-	-	-	-	-
Services to buildings .....	734	790.7	794.8	812.4	817.6		716.5	718.1	735.8	740.3	-
Personnel supply services .....	736	1,393.4	1,396.9	1,350.5	1,365.0		-	-	-	-	-
Employment agencies .....	7361	220.9	223.7	218.5	218.5		-	-	-	-	-
Temporary help supply services .....	7362	1,068.1	1,067.5	1,029.0	1,043.3		-	-	-	-	-
Computer and data processing services .....	737	670.3	682.0	749.1	761.5		521.8	531.9	580.5	589.9	-
Computer programming and software .....	7372	306.1	310.7	345.8	351.8		-	-	-	-	-
Data processing services .....	7374	252.2	257.0	278.7	285.3		-	-	-	-	-
Miscellaneous business services .....	739	2,196.2	2,211.2	2,244.3	2,272.1		-	-	-	-	-
Research development laboratories, nec .....	7391	214.9	216.8	217.6	220.3		-	-	-	-	-
Management and public relations .....	7392	541.5	543.2	553.1	557.3		-	-	-	-	-
Detective and protective services .....	7393	463.6	466.9	472.3	475.7		-	-	-	-	-
Equipment rental and leasing .....	7394	267.2	268.5	275.9	282.1		-	-	-	-	-
Photofinishing laboratories .....	7395	82.6	83.0	80.6	82.1		-	-	-	-	-
Auto repair, services, and garages .....	75	840.3	846.5	895.5	904.6		696.9	702.9	736.6	743.6	
Automotive rentals, without drivers .....	751	165.2	166.6	182.4	186.3		-	-	-	-	
Automotive repair shops .....	753	487.2	493.5	519.0	525.7		402.3	408.7	425.0	429.7	
Miscellaneous repair services .....	76	348.6	351.0	357.2	361.8		285.5	287.3	291.0	296.1	
Electrical repair shops .....	762	109.6	111.8	119.9	122.6		-	-	-	-	
Motion pictures .....	78	250.9	246.5	266.2	270.3		210.3	206.7	225.5	228.4	-
Motion picture production and services .....	781	113.7	109.7	140.2	135.0		88.3	85.1	114.5	108.6	-
Motion picture theaters .....	783	118.5	118.5	108.6	117.9		-	-	-	-	-
Amusement and recreation services .....	79	1,044.8	1,081.8	1,006.4	1,127.8		897.3	931.6	878.2	995.2	-
Health services .....	80	7,150.0	7,188.1	7,555.0	7,645.7	7,682.0	6,356.5	6,391.8	6,708.4	6,796.7	-
Offices of physicians .....	801	1,112.0	1,115.9	1,195.0	1,205.5		913.4	915.9	977.9	985.8	-
Offices of dentists .....	802	487.7	490.4	508.6	514.6		427.7	430.5	443.8	449.9	-
Nursing and personal care facilities .....	805	1,320.5	1,326.7	1,369.3	1,388.4		1,192.6	1,199.6	1,236.8	1,255.3	-
Skilled nursing care facilities .....	8051	913.9	918.5	948.9	962.0		-	-	-	-	-
Nursing and personal care, nec .....	8059	406.6	408.2	420.4	426.4		-	-	-	-	-
Hospitals .....	806	3,304.6	3,323.2	3,456.2	3,497.1		3,020.0	3,037.2	3,158.2	3,199.5	-
General medical and surgical hospitals .....	8062	3,057.8	3,074.7	3,195.9	3,233.7		-	-	-	-	-
Psychiatric hospitals .....	8063	92.5	92.7	96.7	97.6		-	-	-	-	-
Specialty hospitals, excluding psychiatric .....	8069	154.3	155.8	163.6	165.8		-	-	-	-	-
Medical and dental laboratories .....	807	148.7	149.6	167.6	170.5		-	-	-	-	-
Outpatient care facilities .....	808	264.0	268.9	308.9	315.2		-	-	-	-	-

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 <sup>1</sup>				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Services—Continued</b>											
Legal services .....	81	869.7	871.8	882.0	913.9		730.6	731.6	733.7	760.1	
Educational services .....	82	1,421.4	1,349.1	1,656.1	1,479.9						
Elementary and secondary schools .....	821	387.1	348.0	411.2	393.1						
Colleges and universities .....	822	837.9	796.4	1,005.2	849.1						
Correspondence and vocational schools .....	824	91.1	89.1	105.6	103.5						
Social services .....	83	1,606.3	1,607.3	1,738.7	1,731.8						
Individual and family services .....	832	337.8	344.2	351.3	354.2						
Job training and related services .....	833	258.5	266.5	242.4	253.1						
Residential care .....	836	394.1	396.2	421.6	428.8						
Museums, botanical and zoological gardens .....	84	53.8	54.5	53.9	57.4						
Membership organizations .....	86	1,753.0	1,786.6	1,753.9	1,790.1						
Business associations .....	861	101.3	101.1	99.2	102.0						
Labor organizations .....	863	133.2	129.6	136.8	135.5						
Civic and social associations .....	864	398.0	433.7	398.3	427.9						
Miscellaneous services .....	89	1,388.5	1,397.9	1,441.7	1,459.7		1,120.3	1,126.7	1,151.6	1,168.4	
Engineering and architectural services .....	891	732.3	737.0	750.6	766.8		612.8	616.6	620.1	635.8	
Noncommercial research organizations .....	892	136.4	138.3	144.3	147.1		-	-	-	-	
Accounting, auditing, and bookkeeping .....	893	487.7	489.8	512.9	511.0		374.6	374.5	392.0	390.1	
<b>Government</b> .....		17,426	16,440	18,030	17,760	16,728					
Federal Government <sup>4</sup> .....		2,986	2,992	3,005	3,024	3,009					
Executive, by agency <sup>4</sup> .....		2,925.6	2,931.5	2,945.3							
Department of Defense .....		967.1	963.6	974.6							
Postal Service <sup>5</sup> .....		829.8	831.5	838.6							
Other executive agencies .....		1,128.7	1,136.4	1,132.1							
Legislative .....		39.4	39.4	38.0							
Judicial .....		20.9	21.0	21.3							
Federal government, by industry:											
Manufacturing activities .....		121.8	121.4	123.8	124.4						
Shipbuilding and repairing .....	3731	74.0	73.9	74.3	74.2						
Transportation and public utilities, except Postal Service .....		42.8	42.1	38.4	38.1						
Services .....		426.3	425.1	435.0	434.0						
Hospitals .....	806	248.8	248.8	248.9	249.7						
State government .....		3,943	3,853	4,181	4,014	3,915					
Hospitals .....	806	446.4	449.8	447.4	448.1	-					
Education .....	82	1,461.1	1,344.5	1,688.5	1,479.6						
General administration, including executive, legislative, and judicial functions .....		1,496.3	1,514.2	1,511.7	1,540.0						
Local government .....		10,497	9,595	10,844	10,722	9,804					
Transportation and public utilities .....		492.9	496.1	493.3	500.2	-					
Hospitals .....	806	624.7	626.8	642.1	647.9						
Education .....	82	5,752.2	4,707.4	6,174.2	5,854.8						
General administration, including executive, legislative, and judicial functions .....		3,281.2	3,400.5	3,184.9	3,348.3						

<sup>1</sup> 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.

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

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

<sup>4</sup> Prepared by the Office of Personnel Management. Data relate to

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

<sup>5</sup> Includes rural mail carriers.

- Data not available.

<sup>p</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 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	Apr. 1988	May 1988	Mar. 1989	Apr. 1989	May 1989
<b>Total</b> .....	48,852	49,108	50,371	50,646	50,923
<b>Total private</b> .....	39,706	39,949	41,003	41,271	41,520
<b>Goods-producing</b> .....	6,961	6,994	7,106	7,121	7,141
<b>Mining</b> .....	96	96	97	97	97
<b>Construction</b> .....	535	545	558	568	576
<b>Manufacturing</b> .....	6,330	6,353	6,451	6,456	6,468
<b>Durable goods</b> .....	3,050	3,059	3,099	3,104	3,104
Lumber and wood products .....	123	124	124	125	126
Furniture and fixtures .....	164	164	167	168	167
Stone, clay, and glass products .....	120	121	122	123	124
Primary metal industries .....	104	105	108	108	108
Fabricated metal products .....	321	324	327	327	327
Machinery, except electrical .....	458	460	472	473	474
Electrical and electronic equipment .....	861	861	856	854	849
Transportation equipment .....	399	400	407	409	409
Instruments and related products .....	322	324	337	338	338
Miscellaneous manufacturing .....	178	178	179	181	182
<b>Nondurable goods</b> .....	3,280	3,294	3,352	3,352	3,364
Food and kindred products .....	499	505	509	509	515
Tobacco manufactures .....	17	17	18	17	16
Textile mill products .....	352	353	353	353	353
Apparel and other textile products .....	874	875	880	879	877
Paper and allied products .....	167	168	169	170	171
Printing and publishing .....	672	672	701	704	706
Chemicals and allied products .....	306	308	319	320	324
Petroleum and coal products .....	23	24	26	26	26
Rubber and misc. plastics products .....	286	288	293	292	292
Leather and leather products .....	85	86	83	83	84
<b>Service-producing</b> .....	41,891	42,114	43,265	43,525	43,782
<b>Transportation and public utilities</b> .....	1,580	1,590	1,622	1,628	1,640
<b>Wholesale trade</b> .....	1,774	1,786	1,859	1,867	1,880
<b>Retail trade</b> .....	9,931	10,082	10,067	10,182	10,342
<b>Finance, insurance, and real estate</b> .....	4,138	4,147	4,232	4,239	4,257
<b>Services</b> .....	15,322	15,350	16,117	16,234	16,260
<b>Government</b> .....	9,146	9,159	9,368	9,375	9,403
Federal .....	1,057	1,059	1,061	1,063	1,073
State .....	2,039	2,011	2,083	2,086	2,065
Local .....	6,050	6,089	6,224	6,226	6,265

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1988 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	1988								1989				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>Total</b> .....	48,871	49,119	49,207	49,338	49,488	49,586	49,799	49,963	50,130	50,302	50,414	50,515	50,670
<b>Total private</b> .....	39,966	40,191	40,296	40,393	40,503	40,602	40,776	40,943	41,093	41,239	41,340	41,418	41,530
<b>Goods-producing</b> .....	7,018	7,035	7,053	7,049	7,054	7,069	7,095	7,112	7,141	7,152	7,159	7,161	7,166
<b>Mining</b> .....	96	97	97	98	97	97	97	97	97	97	97	97	97
<b>Construction</b> .....	545	548	551	554	555	555	557	561	566	571	571	573	577
<b>Manufacturing</b> .....	6,377	6,390	6,405	6,397	6,402	6,417	6,441	6,454	6,478	6,484	6,491	6,491	6,492
<b>Durable goods</b> .....	3,062	3,073	3,084	3,084	3,082	3,087	3,097	3,103	3,113	3,111	3,109	3,111	3,108
Lumber and wood products .....	124	125	125	125	125	125	127	127	127	127	127	126	126
Furniture and fixtures .....	164	164	165	164	165	165	165	165	166	166	167	167	167
Stone, clay, and glass products .....	121	121	122	122	121	122	122	123	123	123	123	124	124
Primary metal industries .....	104	106	106	106	106	106	106	107	108	107	108	108	108
Fabricated metal products .....	323	324	326	325	325	325	327	327	330	329	328	327	327
Machinery, except electrical .....	458	460	463	464	465	467	469	469	471	471	471	471	472
Electrical and electronic equipment .....	865	868	868	868	867	868	869	866	864	863	860	859	853
Transportation equipment .....	401	401	401	401	399	401	402	405	407	407	408	409	410
Instruments and related products .....	324	326	328	330	330	331	332	335	337	337	337	338	339
Miscellaneous manufacturing .....	178	178	180	179	179	177	178	179	180	181	180	182	182
<b>Nondurable goods</b> .....	3,315	3,317	3,321	3,313	3,320	3,330	3,344	3,351	3,365	3,373	3,382	3,380	3,384
Food and kindred products .....	527	526	525	520	524	531	535	532	536	537	537	537	537
Tobacco manufactures .....	18	18	18	18	18	18	18	19	18	19	19	18	17
Textile mill products .....	352	352	351	349	349	349	350	350	352	352	354	353	353
Apparel and other textile products .....	871	869	867	863	863	862	867	869	871	874	877	875	873
Paper and allied products .....	169	169	170	170	171	171	171	171	171	171	171	171	171
Printing and publishing .....	672	675	678	681	682	685	688	692	697	698	700	702	706
Chemicals and allied products .....	309	311	312	313	314	315	315	316	318	319	321	322	325
Petroleum and coal products .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rubber and misc. plastics products .....	287	288	290	289	289	289	291	292	292	292	293	292	292
Leather and leather products .....	86	85	86	85	85	85	84	84	84	85	84	84	84
<b>Service-producing</b> .....	41,853	42,084	42,154	42,289	42,434	42,517	42,704	42,851	42,989	43,150	43,255	43,354	43,504
<b>Transportation and public utilities</b> .....	1,585	1,597	1,598	1,604	1,604	1,608	1,614	1,621	1,626	1,630	1,629	1,628	1,635
<b>Wholesale trade</b> .....	1,793	1,801	1,808	1,811	1,820	1,827	1,835	1,845	1,854	1,862	1,866	1,876	1,888
<b>Retail trade</b> .....	10,116	10,137	10,149	10,171	10,179	10,190	10,213	10,238	10,287	10,318	10,336	10,337	10,373
<b>Finance, insurance, and real estate</b> .....	4,149	4,164	4,169	4,178	4,188	4,199	4,212	4,222	4,227	4,242	4,249	4,247	4,257
<b>Services</b> .....	15,305	15,457	15,519	15,580	15,658	15,709	15,807	15,905	15,958	16,035	16,101	16,169	16,211
<b>Government</b> .....	8,905	8,928	8,911	8,945	8,985	8,984	9,023	9,020	9,037	9,063	9,074	9,097	9,140
Federal .....	1,056	1,054	1,055	1,059	1,065	1,067	1,066	1,065	1,063	1,064	1,064	1,064	1,070
State .....	1,982	1,989	1,998	2,003	2,015	2,009	2,013	2,013	2,012	2,017	2,020	2,023	2,034
Local .....	5,867	5,885	5,858	5,883	5,905	5,908	5,944	5,942	5,962	5,982	5,990	6,010	6,036

<sup>1</sup> 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 1988 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 forward are subject to revision.

**ESTABLISHMENT DATA  
EMPLOYMENT  
SEASONALLY ADJUSTED**

**B-6. Production or nonsupervisory workers <sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(In thousands)

Industry	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>p</sup>	July <sup>p</sup>
<b>Total private</b> .....	71,593	71,723	71,825	72,021	72,273	72,494	72,774	72,949	73,101	73,204	73,315	73,530	73,683
<b>Goods-producing</b> .....	17,844	17,815	17,813	17,865	17,929	17,963	18,065	18,048	18,052	18,053	18,058	18,023	18,058
<b>Mining</b> .....	523	522	518	515	511	510	510	510	514	519	521	510	500
<b>Construction</b> .....	4,026	4,023	4,032	4,026	4,053	4,068	4,132	4,112	4,096	4,104	4,111	4,108	4,131
<b>Manufacturing</b> .....	13,295	13,270	13,263	13,324	13,365	13,385	13,423	13,426	13,442	13,430	13,426	13,405	13,427
<b>Durable goods</b> .....	7,672	7,658	7,653	7,690	7,717	7,730	7,758	7,749	7,749	7,744	7,735	7,706	7,702
Lumber and wood products .....	635	634	635	641	645	647	652	648	646	642	641	638	636
Furniture and fixtures .....	425	422	424	425	426	426	426	427	428	428	427	426	427
Stone, clay, and glass products .....	469	468	466	469	470	472	473	474	472	471	469	469	467
Primary metal industries .....	599	595	597	600	601	602	603	602	603	603	601	602	602
Blast furnaces and basic steel products .....	214	216	217	216	217	216	215	215	213	211	210	211	208
Fabricated metal products .....	1,073	1,070	1,069	1,076	1,079	1,082	1,089	1,087	1,086	1,080	1,079	1,075	1,077
Machinery, except electrical .....	1,261	1,260	1,261	1,270	1,279	1,285	1,292	1,298	1,298	1,298	1,302	1,303	1,306
Electrical and electronic equipment .....	1,226	1,227	1,227	1,228	1,233	1,224	1,222	1,218	1,214	1,213	1,205	1,198	1,196
Transportation equipment .....	1,287	1,284	1,276	1,283	1,283	1,285	1,294	1,286	1,292	1,297	1,297	1,283	1,277
Motor vehicles and equipment .....	674	673	671	676	676	676	687	677	675	680	681	666	656
Instruments and related products .....	414	416	417	419	421	425	424	425	427	428	430	428	434
Miscellaneous manufacturing .....	283	282	281	279	280	282	283	284	283	284	284	284	280
<b>Nondurable goods</b> .....	5,623	5,612	5,610	5,634	5,648	5,655	5,665	5,677	5,693	5,686	5,691	5,699	5,725
Food and kindred products .....	1,157	1,158	1,156	1,169	1,173	1,172	1,175	1,177	1,182	1,184	1,184	1,191	1,203
Tobacco manufactures .....	41	41	40	41	42	42	41	41	41	40	38	38	38
Textile mill products .....	634	626	629	629	628	628	630	630	630	630	630	631	632
Apparel and other textile products .....	917	912	912	912	916	919	922	926	930	927	925	922	926
Paper and allied products .....	526	525	523	524	525	525	524	524	525	524	525	524	528
Printing and publishing .....	874	877	878	881	883	886	887	888	891	889	891	894	896
Chemicals and allied products .....	598	600	600	602	602	604	607	608	610	609	614	617	616
Petroleum and coal products .....	106	106	106	106	106	105	104	105	105	105	106	107	108
Rubber and misc. plastics products .....	651	649	647	652	655	656	656	659	660	660	660	657	660
Leather and leather products .....	119	118	119	118	118	118	119	119	119	118	118	118	118
<b>Service-producing</b> .....	53,749	53,908	54,012	54,156	54,344	54,531	54,709	54,901	55,049	55,151	55,257	55,507	55,625
<b>Transportation and public utilities</b> .....	4,618	4,631	4,635	4,653	4,671	4,691	4,704	4,718	4,718	4,735	4,752	4,768	4,784
<b>Wholesale trade</b> .....	4,867	4,876	4,890	4,903	4,917	4,931	4,948	4,970	4,990	4,996	5,007	5,014	5,018
<b>Retail trade</b> .....	16,959	17,001	16,997	17,017	17,066	17,106	17,171	17,215	17,244	17,235	17,280	17,310	17,340
<b>Finance, insurance, and real estate</b> .....	4,850	4,856	4,858	4,866	4,873	4,879	4,886	4,893	4,900	4,902	4,918	4,924	4,940
<b>Services</b> .....	22,455	22,544	22,632	22,717	22,817	22,924	23,000	23,105	23,197	23,283	23,300	23,491	23,543

<sup>1</sup> 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.

<sup>p</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 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—Continued**

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Alabama</b>	70.6	71.3	71.6	286.6	294.8	296.2	313.0	316.8	314.9
Birmingham	28.7	27.9	28.0	94.9	96.0	97.1	62.7	62.8	63.6
Huntsville	3.7	3.8	3.9	30.3	31.4	31.7	29.8	31.0	30.6
Mobile	7.9	7.9	7.8	38.5	39.2	39.3	28.4	29.1	28.9
Montgomery	7.6	7.6	7.6	27.5	28.6	28.5	32.1	32.5	31.8
Tuscaloosa	2.1	2.1	2.2	8.5	9.0	8.9	18.4	20.8	19.0
<b>Alaska</b>	10.8	10.5	10.6	45.1	44.2	46.0	65.0	68.4	66.6
<b>Arizona</b>	93.8	92.3	92.0	360.9	368.8	367.7	221.3	255.3	225.8
Phoenix	74.6	73.7	73.4	244.1	247.4	246.1	114.5	130.2	119.5
Tucson	12.3	11.6	11.7	66.6	69.3	69.1	48.1	55.8	50.0
<b>Arkansas</b>	38.2	38.0	38.5	163.9	171.0	172.3	146.6	154.4	149.1
Fayetteville-Springdale	1.5	1.5	1.4	7.7	8.1	8.1	9.7	10.7	9.9
Fort Smith	2.7	2.6	2.7	16.5	16.5	16.8	7.6	8.2	7.6
Little Rock-North Little Rock	15.9	15.9	15.9	56.8	58.7	59.4	45.8	47.7	46.4
Pine Bluff	1.4	1.4	1.3	6.5	6.7	6.8	7.4	7.4	7.3
<b>California</b>	815.5	823.4	827.5	3,078.1	3,171.5	3,184.4	1,970.3	2,039.3	2,037.6
Anaheim-Santa Ana	92.6	91.0	91.5	285.0	290.4	294.3	121.1	124.3	123.6
Bakersfield	6.5	6.5	6.5	34.0	33.8	33.7	40.9	42.7	42.5
Fresno	12.1	11.8	11.8	48.0	51.6	51.4	46.4	49.6	47.9
Los Angeles-Long Beach	286.4	287.7	289.1	1,095.0	1,127.7	1,126.8	515.7	530.8	533.8
Modesto	4.4	4.2	4.3	22.7	23.4	23.4	19.9	19.1	19.6
Oakland	55.7	56.2	56.4	199.5	210.0	210.8	163.0	169.6	169.7
Oxnard-Ventura	11.3	11.3	11.4	51.2	53.6	54.1	41.1	41.8	41.8
Riverside-San Bernardino	27.6	28.3	28.3	147.5	153.7	151.9	126.8	133.7	132.1
Sacramento	35.6	37.1	37.3	124.5	130.9	131.9	173.1	181.6	181.8
San Diego	64.0	65.1	65.5	242.7	255.4	257.2	166.4	171.7	171.9
San Francisco	112.1	110.3	110.6	292.4	298.7	299.7	135.2	139.6	137.8
San Jose	32.8	32.7	32.9	211.5	214.6	214.5	86.7	88.2	87.9
Santa Barbara-Santa Maria-Lompoc	8.6	8.7	8.7	40.0	41.0	41.0	27.9	28.7	28.7
Santa Rosa-Petaluma	8.6	8.4	8.5	29.4	29.2	29.4	23.5	24.1	24.0
Stockton	8.8	8.5	8.6	30.4	31.0	30.9	32.0	32.6	32.6
Vallejo-Fairfield-Napa	4.6	4.6	4.6	29.0	30.5	30.9	38.4	38.5	38.7
<b>Colorado</b>	95.8	93.9	94.9	357.9	358.0	364.9	265.4	277.5	269.8
Boulder-Longmont	4.0	4.1	4.1	23.3	23.4	23.7	21.0	23.4	22.0
Denver	63.8	62.4	63.0	214.7	213.5	215.4	126.9	129.9	128.9
<b>Connecticut</b>	155.7	154.4	156.5	413.3	418.7	423.0	208.3	212.9	213.1
Bridgeport-Milford	13.1	13.3	13.5	49.1	50.5	51.0	20.1	20.0	20.0
Hartford	77.4	76.0	76.6	114.0	116.6	117.0	63.1	63.4	63.7
New Britain	4.3	4.6	4.6	14.1	14.5	14.6	6.7	6.8	6.8
New Haven-Meriden	16.3	16.9	17.1	71.6	73.8	74.3	32.5	32.6	32.2
Stamford	14.0	14.4	14.7	38.2	38.2	39.0	10.8	10.8	10.8
Waterbury	4.6	4.7	4.8	21.2	22.1	22.3	12.8	12.9	13.0
<b>Delaware</b>	29.4	32.8	33.5	77.5	78.9	81.1	48.8	48.6	49.5
Wilmington	26.1	28.3	29.0	68.1	68.6	69.7	38.2	38.9	39.1
<b>District of Columbia</b>	35.0	34.8	35.2	243.1	253.3	254.8	278.1	275.6	280.3
Washington MSA	128.0	130.7	132.7	707.1	735.1	742.8	572.3	587.1	590.5
<b>Florida</b>	365.8	372.8	375.0	1,394.7	1,474.5	1,472.7	766.7	818.8	810.0
Daytona Beach	6.4	6.3	6.3	33.0	34.0	34.2	19.4	20.4	20.6
Fort Lauderdale-Hollywood-Pompano Beach	39.9	39.8	39.8	130.5	134.3	134.3	61.8	65.0	65.5
Fort Myers-Cape Coral	8.0	8.7	8.9	32.4	35.0	34.6	17.4	18.2	18.3
Jacksonville	39.1	39.2	39.5	104.9	109.2	109.3	58.7	61.5	60.7
Melbourne-Titusville-Palm Bay	5.7	5.7	5.7	45.5	47.9	48.0	21.4	21.9	22.5
Miami-Hialeah	70.8	72.7	73.2	231.7	243.3	241.3	111.7	120.1	120.5
Orlando	33.3	33.8	34.0	163.8	170.8	174.0	57.2	60.1	60.0
Pensacola	5.6	5.6	5.6	32.0	32.5	32.7	29.3	30.1	29.6
Sarasota	8.5	8.5	8.5	33.4	34.5	34.5	13.7	14.1	13.8
Tallahassee	5.0	5.0	5.0	23.7	24.1	24.2	46.0	50.2	49.0
Tampa-St. Petersburg-Clearwater	65.7	66.1	66.6	239.3	252.1	252.7	102.5	108.9	107.1
West Palm Beach-Boca Raton-Delray Beach	28.0	28.9	28.8	99.1	110.3	109.0	42.6	46.8	46.6

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Georgia</b> .....	2,888.2	2,934.2	2,937.6	8.9	8.8	8.9	153.0	143.1	145.7
Athens .....	64.6	66.3	65.6	.1	.1	.1	2.6	2.3	2.4
Atlanta .....	1,424.4	1,434.5	1,438.0	1.5	1.4	1.4	71.9	67.5	68.2
Augusta .....	159.4	159.1	159.0	.5	.5	.5	10.2	10.4	10.6
Columbus .....	95.8	95.7	95.9	.1	.1	.1	5.3	5.0	5.1
Macon-Warner Robins .....	121.8	123.5	124.2	.1	.1	.1	5.2	5.1	5.3
Savannah .....	106.0	106.0	106.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.5	6.2	6.4
<b>Hawaii</b> .....	478.9	492.7	493.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	23.5	26.4	26.7
Honolulu .....	380.1	388.6	388.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	18.6	20.2	20.5
<b>Idaho</b> .....	354.1	360.2	364.9	3.4	3.8	4.0	15.7	15.1	16.4
Boise City .....	93.2	97.1	98.3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5.1	4.8	5.0
<b>Illinois</b> .....	5,093.2	5,156.7	5,172.1	21.5	20.5	20.5	213.8	209.3	217.6
Aurora-Elgin .....	144.9	147.3	149.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.4	8.1	8.4
Bloomington-Normal .....	58.4	63.1	61.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	2.4	2.5
Champaign-Urbana-Rantoul .....	84.7	89.9	86.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.8	2.6	2.8
Chicago .....	3,130.9	3,155.4	3,178.6	2.3	2.2	2.3	132.6	134.9	139.3
Davenport-Rock Island-Moline .....	156.0	157.7	157.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.9	4.9	5.0
Decatur .....	52.2	52.4	52.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.7	2.7	2.7
Joliet .....	98.9	99.6	99.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.5	5.7	5.7
Kankakee .....	33.9	34.1	34.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.3	1.3	1.3
Lake County .....	201.4	204.8	204.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.8	11.4	11.8
Peoria .....	142.2	143.9	144.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.0	6.4	6.5
Rockford .....	132.3	130.6	131.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.5	4.4	4.7
Springfield .....	100.9	100.9	101.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.0	3.0	3.1
<b>Indiana</b> .....	2,412.7	2,482.0	2,477.0	8.6	8.4	8.4	116.9	118.4	123.2
Anderson .....	48.9	50.2	50.2	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1.5	1.6	1.7
Bloomington .....	51.9	57.3	57.7	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.4	3.1	3.3
Elkhart-Goshen .....	104.5	106.6	107.4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3.0	3.0	3.1
Evansville .....	130.0	133.0	133.7	2.2	2.0	2.0	7.5	7.7	7.8
Fort Wayne .....	192.8	199.0	199.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	10.0	10.2	10.7
Gary-Hammond .....	230.6	239.5	241.2	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	13.7	14.7	15.6
Indianapolis .....	628.0	647.7	650.0	.9	.9	.9	33.2	34.6	35.4
Lafayette-West Lafayette .....	62.2	67.4	64.7	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3.2	3.7	3.9
Muncie .....	50.7	53.5	51.1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.2	2.1	2.2
South Bend-Mishawaka .....	112.5	120.1	118.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5.7	7.0	7.3
Terre Haute .....	53.3	55.1	55.2	.3	.3	.3	2.1	2.5	2.6
<b>Iowa</b> .....	1,169.2	1,201.6	1,199.2	2.4	2.3	2.3	41.7	41.3	43.0
Cedar Rapids .....	89.3	91.5	91.4	.1	.1	.1	3.2	3.0	3.0
Des Moines .....	215.6	221.2	222.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.4	6.9	7.2
Dubuque .....	40.9	42.8	42.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.2	1.1	1.1
Sioux City .....	51.8	53.2	52.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	1.7	1.8
Waterloo-Cedar Falls .....	62.6	66.5	63.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.2	2.5	2.7
<b>Kansas</b> .....	1,039.8	1,061.1	1,060.2	10.4	10.0	9.9	45.6	42.2	44.1
Topeka .....	90.4	90.8	90.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.7	3.0	3.0
Wichita .....	236.4	242.4	243.6	2.1	2.0	1.9	10.5	9.9	10.2
<b>Kentucky</b> .....	1,377.2	1,398.5	1,400.2	36.6	34.5	34.7	65.3	62.3	64.7
Lexington-Fayette .....	190.2	198.0	194.4	.3	.2	.2	12.0	11.9	12.1
Louisville .....	455.8	458.9	463.3	.9	1.1	1.2	22.2	20.8	21.5
Owensboro .....	33.8	34.5	34.5	.7	.6	.6	2.3	2.0	2.1
<b>Louisiana</b> .....	1,501.1	1,517.9	1,519.3	56.9	56.8	56.9	85.1	89.7	89.7
Alexandria .....	45.5	45.7	45.7	.2	.2	.2	2.3	2.1	2.2
Baton Rouge .....	217.6	222.9	219.1	1.0	1.0	1.0	24.4	24.4	24.0
Houma-Thibodaux .....	54.3	54.4	54.7	5.9	5.9	5.9	1.8	1.8	1.8
Lafayette .....	85.5	86.5	85.5	11.6	11.5	11.4	3.1	3.8	3.7
Monroe .....	54.4	53.8	55.6	.5	.4	.4	2.4	2.3	2.4
New Orleans .....	518.2	519.7	519.7	15.3	15.0	15.1	23.1	23.2	23.0
Shreveport .....	130.7	128.9	128.7	3.4	3.0	3.0	6.6	6.5	6.4
<b>Maine</b> .....	530.9	524.7	535.3	.2	.2	.2	36.7	34.1	35.2
Lewiston-Auburn .....	40.9	41.2	41.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.4	2.2	2.3
Portland .....	130.2	133.2	136.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.7	9.3	9.9

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Georgia</b> .....	578.7	567.0	564.5	182.7	181.5	182.9	733.6	763.8	762.2
Athens .....	14.9	15.1	15.1	1.7	1.9	2.0	14.2	14.6	14.3
Atlanta .....	186.8	176.3	172.8	120.5	116.1	117.0	398.5	409.9	412.0
Augusta .....	36.1	36.2	36.2	4.5	4.4	4.5	35.2	35.0	34.9
Columbus .....	20.4	21.1	21.1	3.6	3.6	3.7	21.3	20.8	20.8
Macon-Warner Robins .....	19.0	18.6	19.2	5.3	5.3	5.3	28.4	28.3	28.4
Savannah .....	17.6	17.6	17.7	9.6	10.2	10.1	26.1	26.1	26.1
<b>Hawaii</b> .....	22.6	22.1	22.3	38.2	39.6	39.8	128.3	128.8	130.2
Honolulu .....	17.0	16.6	16.6	31.2	32.6	32.8	100.1	100.4	101.6
<b>Idaho</b> .....	59.6	59.5	61.9	18.5	18.9	18.8	87.8	89.1	90.4
Boise City .....	13.2	14.1	14.8	5.2	5.4	5.4	23.4	24.6	24.8
<b>Illinois</b> .....	975.3	981.4	984.3	302.2	302.1	304.1	1,253.8	1,286.2	1,291.8
Aurora-Elgin .....	38.8	38.3	39.0	3.1	2.9	3.0	39.0	40.0	40.5
Bloomington-Normal .....	6.1	8.1	8.1	2.7	2.7	2.6	13.3	13.2	13.3
Champaign-Urbana-Rantoul .....	8.2	9.0	9.0	2.3	2.3	2.3	20.1	20.3	20.2
Chicago .....	567.2	565.1	568.3	188.5	189.0	190.6	782.2	783.5	788.2
Davenport-Rock Island-Moline .....	32.3	32.9	32.8	8.0	8.1	8.1	42.7	43.3	43.3
Decatur .....	13.7	13.6	13.8	5.0	5.1	5.1	11.4	11.6	11.6
Joliet .....	19.3	19.4	19.6	8.4	8.3	8.3	22.9	22.9	22.9
Kankakee .....	5.3	5.6	5.6	1.3	1.3	1.3	8.4	8.5	8.5
Lake County .....	44.2	44.3	44.3	7.1	7.1	7.2	55.4	57.7	57.8
Peoria .....	34.8	35.6	35.6	7.0	7.1	7.1	33.9	34.0	34.0
Rockford .....	46.0	45.5	45.8	5.1	5.1	5.1	28.6	28.6	28.7
Springfield .....	4.0	3.7	3.7	4.9	5.0	5.0	22.5	22.3	22.2
<b>Indiana</b> .....	637.5	636.8	639.3	125.0	129.0	129.9	577.5	590.0	594.2
Anderson .....	17.1	17.0	16.8	1.4	1.5	1.5	11.5	11.7	11.8
Bloomington .....	9.7	10.5	10.6	1.7	1.8	1.8	12.0	12.5	12.4
Elkhart-Goshen .....	57.4	57.8	58.2	2.9	2.9	3.0	19.1	19.4	19.7
Evansville .....	31.1	31.7	31.7	6.6	6.7	6.7	33.8	34.8	34.9
Fort Wayne .....	52.9	53.3	54.2	12.8	13.2	13.4	47.8	48.9	49.1
Gary-Hammond .....	56.6	57.2	57.6	15.6	15.7	15.9	55.1	57.6	58.1
Indianapolis .....	106.3	106.6	107.6	39.6	40.8	41.4	163.1	167.5	169.0
Lafayette-West Lafayette .....	12.3	12.3	12.4	1.9	1.9	1.9	13.0	13.2	13.1
Muncie .....	11.0	11.2	11.1	2.4	2.4	2.4	12.9	13.3	13.3
South Bend-Mishawaka .....	24.2	23.3	23.5	5.2	5.4	5.4	30.2	30.9	31.1
Terre Haute .....	10.3	10.1	10.3	3.0	3.2	3.3	14.8	15.0	15.0
<b>Iowa</b> .....	229.8	233.9	236.5	55.2	55.5	56.0	298.4	306.8	308.7
Cedar Rapids .....	23.3	23.7	24.0	5.3	5.5	5.7	21.4	21.8	21.9
Des Moines .....	26.2	26.3	26.4	12.5	12.5	12.6	55.8	57.6	58.1
Dubuque .....	11.9	12.4	12.6	1.8	1.8	1.8	9.9	9.9	10.2
Sioux City .....	9.8	10.5	10.6	3.1	3.4	3.5	13.6	13.8	13.8
Waterloo-Cedar Falls .....	14.8	15.4	15.2	1.8	1.9	1.8	15.1	15.8	15.6
<b>Kansas</b> .....	182.6	184.8	184.6	64.8	65.7	65.7	261.2	260.6	262.6
Topeka .....	9.5	9.3	9.6	6.7	6.6	6.6	21.6	22.1	22.1
Wichita .....	61.4	63.9	64.3	10.9	11.5	11.7	55.1	54.5	55.2
<b>Kentucky</b> .....	275.7	281.7	284.2	73.5	75.4	75.5	328.4	333.7	334.4
Lexington-Fayette .....	31.7	34.6	34.7	8.4	8.2	8.2	42.4	43.3	43.5
Louisville .....	88.5	87.3	88.1	28.7	29.2	29.3	113.9	111.3	112.7
Owensboro .....	5.9	6.3	6.4	2.2	2.1	2.1	8.7	8.7	8.7
<b>Louisiana</b> .....	170.6	171.8	174.2	106.9	108.3	109.0	360.2	363.0	364.4
Alexandria .....	3.3	3.4	3.5	2.1	2.1	2.1	11.0	10.7	10.7
Baton Rouge .....	19.2	19.6	19.8	10.4	10.4	10.4	52.2	53.5	53.5
Houma-Thibodaux .....	4.8	4.5	4.6	6.2	6.2	6.2	14.0	13.8	14.0
Lafayette .....	7.4	6.8	6.9	6.1	6.2	5.9	23.3	23.3	23.4
Monroe .....	7.4	7.2	7.2	2.9	2.8	2.9	14.0	13.3	13.6
New Orleans .....	43.5	43.4	44.0	44.5	44.2	44.6	135.2	134.7	134.9
Shreveport .....	18.2	17.3	17.7	8.1	8.0	8.1	32.0	31.5	31.4
<b>Maine</b> .....	108.9	105.7	108.3	21.5	21.6	22.0	131.2	127.3	132.5
Lewiston-Auburn .....	10.6	10.1	10.1	1.5	1.4	1.4	10.0	10.4	10.4
Portland .....	17.0	17.4	17.5	5.6	5.3	5.5	38.8	39.5	41.0

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		
	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>
<b>Georgia</b> .....	162.4	163.7	164.0	573.7	590.4	594.1	495.3	516.0	515.3
Athens .....	1.9	2.0	2.0	10.2	10.3	10.4	18.9	20.1	19.4
Atlanta .....	103.6	105.1	105.0	338.1	347.9	352.0	203.4	210.3	209.6
Augusta .....	5.9	5.5	5.5	33.0	33.2	33.4	33.9	33.9	33.5
Columbus .....	6.6	6.5	6.5	17.6	17.8	17.6	20.8	20.8	20.9
Macon-Warner Robins .....	7.5	8.0	8.1	23.2	23.6	23.3	33.0	34.4	34.5
Savannah .....	4.7	4.5	4.6	25.3	25.0	25.1	16.2	16.5	16.7
<b>Hawaii</b> .....	35.0	35.6	35.9	132.0	136.7	137.2	99.3	103.5	101.0
Honolulu .....	29.6	29.9	30.1	100.3	102.1	102.7	83.3	86.8	84.5
<b>Idaho</b> .....	19.6	19.2	19.3	73.1	75.9	77.1	76.4	78.7	77.0
Boise City .....	7.7	7.6	7.8	20.9	22.1	22.5	17.7	18.5	18.0
<b>Illinois</b> .....	372.2	371.2	374.7	1,231.5	1,248.8	1,257.1	722.9	737.2	722.0
Aurora-Elgin .....	8.6	8.8	8.9	32.0	33.2	33.8	15.9	16.0	16.0
Bloomington-Normal .....	10.0	10.0	10.1	13.4	13.4	13.4	11.0	13.3	11.0
Champaign-Urbana-Rantoul .....	3.4	3.5	3.5	16.6	16.8	17.1	31.3	35.4	31.2
Chicago .....	272.6	271.6	274.0	818.1	836.8	842.1	367.4	372.3	373.8
Davenport-Rock Island-Moline .....	8.2	8.3	8.3	32.8	33.0	33.0	27.1	27.2	27.2
Decatur .....	2.2	2.1	2.1	11.7	11.6	11.9	5.5	5.7	5.7
Joliet .....	3.8	3.7	3.7	22.2	22.2	22.2	16.5	17.4	16.8
Kankakee .....	1.6	1.5	1.6	9.2	9.2	9.6	6.8	6.7	6.6
Lake County .....	7.1	7.1	7.2	46.5	44.8	44.9	30.9	32.4	31.6
Peoria .....	7.4	7.5	7.6	37.1	36.6	37.4	16.0	16.7	16.5
Rockford .....	5.3	5.3	5.4	30.3	29.7	30.1	12.5	12.0	11.8
Springfield .....	8.0	8.1	8.2	25.6	25.7	26.1	32.8	33.1	33.1
<b>Indiana</b> .....	121.5	123.8	126.1	479.9	500.8	501.6	345.8	374.8	354.3
Anderson .....	1.7	1.7	1.7	9.9	10.3	10.0	5.9	6.5	6.6
Bloomington .....	2.0	2.1	2.3	8.8	9.5	9.6	15.4	17.7	17.8
Elkhart-Goshen .....	2.7	2.8	2.8	13.8	14.7	14.8	5.6	6.0	5.8
Evansville .....	5.2	5.3	5.4	30.8	31.7	32.1	12.7	13.1	13.0
Fort Wayne .....	12.7	12.9	13.2	39.7	41.2	41.8	16.9	19.2	17.3
Gary-Hammond .....	8.4	8.5	8.6	50.6	53.5	53.8	30.7	32.4	31.6
Indianapolis .....	49.1	49.1	50.0	145.1	150.6	151.1	90.6	97.5	94.5
Lafayette-West Lafayette .....	3.1	3.3	3.3	11.3	12.0	12.1	17.4	21.0	18.1
Muncie .....	1.7	1.7	1.7	11.2	11.3	11.4	9.4	11.6	9.1
South Bend-Mishawaka .....	6.1	6.3	6.4	30.5	35.3	33.3	10.5	11.9	11.7
Terre Haute .....	2.0	2.0	2.1	11.3	12.1	12.0	9.4	10.0	9.6
<b>Iowa</b> .....	66.7	67.7	68.6	260.6	273.1	269.3	214.4	221.0	214.8
Cedar Rapids .....	4.8	4.9	5.0	21.1	22.3	21.7	10.1	10.2	10.0
Des Moines .....	29.0	30.5	30.8	53.9	56.5	57.0	30.6	30.7	30.5
Dubuque .....	1.4	1.5	1.5	11.1	12.6	11.5	3.5	3.4	3.3
Sioux City .....	2.6	2.6	2.6	14.2	14.6	13.9	6.6	6.6	6.7
Waterloo-Cedar Falls .....	3.0	2.9	2.9	14.2	14.8	14.4	11.4	13.1	11.2
<b>Kansas</b> .....	58.9	58.4	58.9	213.1	221.7	222.1	203.2	217.7	212.3
Topeka .....	6.5	6.6	6.7	20.8	20.7	20.8	21.5	22.4	21.9
Wichita .....	11.2	10.8	10.9	56.5	59.3	59.5	28.7	30.5	29.9
<b>Kentucky</b> .....	60.0	58.5	59.1	296.0	302.7	304.6	241.7	249.7	243.0
Lexington-Fayette .....	9.2	9.3	9.3	43.2	43.1	42.6	43.0	47.4	43.8
Louisville .....	27.5	26.4	26.7	114.3	119.5	121.0	59.8	63.3	62.8
Owensboro .....	1.4	1.3	1.4	7.8	7.9	7.9	4.8	5.6	5.3
<b>Louisiana</b> .....	82.9	80.3	80.5	324.8	331.0	330.4	313.7	317.0	314.2
Alexandria .....	2.6	2.5	2.6	11.4	11.5	11.5	12.6	13.2	12.9
Baton Rouge .....	13.9	13.6	13.4	46.3	46.1	46.4	50.2	54.3	50.6
Houma-Thibodaux .....	2.2	2.1	2.2	9.1	9.4	9.6	10.3	10.7	10.4
Lafayette .....	3.6	3.5	3.5	18.8	18.7	18.7	11.6	12.7	12.0
Monroe .....	4.4	4.2	4.2	11.6	12.2	12.1	11.2	11.4	12.8
New Orleans .....	33.8	33.3	33.3	136.4	138.6	137.4	86.4	87.3	87.4
Shreveport .....	6.8	6.2	6.2	31.9	30.9	30.5	23.7	25.5	25.4
<b>Maine</b> .....	25.6	25.5	25.8	116.5	115.2	118.3	90.3	95.1	93.0
Lewiston-Auburn .....	2.2	2.3	2.3	10.3	10.8	10.6	3.9	4.0	3.9
Portland .....	12.3	12.0	12.1	31.7	32.7	34.5	15.1	17.0	16.2

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	Total			Mining			Construction		
	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>
<b>Maryland</b> .....	2,106.2	2,126.5	2,140.2	1.8	1.7	1.7	163.3	160.1	162.6
Baltimore MSA .....	1,122.1	1,130.5	1,136.3	.3	.3	.3	77.3	76.3	77.4
Baltimore City .....	469.5	473.8	475.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	20.0	19.5	19.8
Suburban Maryland-D.C. ....	747.9	767.7	768.8	.6	.5	.5	68.3	68.7	69.1
<b>Massachusetts</b> .....	3,153.5	3,154.9	3,176.0	1.7	1.3	1.4	152.4	142.2	146.5
Boston .....	1,765.4	1,769.3	1,770.9	.9	1.0	1.0	76.5	74.1	76.4
Brockton .....	74.4	75.8	76.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.3	4.5	4.6
Fall River .....	56.7	56.9	57.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.3	3.7	3.8
Fitchburg-Leominster .....	42.1	42.5	42.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.8	2.9	2.9
Lawrence-Haverhill .....	169.1	167.7	169.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.1	8.0	8.2
Lowell .....	111.1	111.8	112.2	.2	.2	.2	6.3	6.4	6.7
New Bedford .....	69.0	69.6	70.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.6	4.0	4.1
Pittsfield .....	43.6	43.3	44.6	.1	.1	.1	2.8	2.9	3.1
Springfield .....	244.1	245.0	246.2	.1	.1	.1	10.7	11.1	11.6
Worcester .....	209.5	216.1	217.8	.1	.1	.1	11.1	10.9	11.4
<b>Michigan</b> .....	3,816.4	3,889.4	3,882.3	11.0	10.9	11.2	141.3	136.9	140.3
Ann Arbor .....	168.8	176.3	174.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.6	5.6	6.0
Battle Creek .....	58.4	59.1	59.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	1.9	2.3
Benton Harbor .....	65.9	67.8	67.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.7	1.6	1.7
Detroit .....	1,900.3	1,944.9	1,951.6	.9	.8	.9	65.8	65.7	66.6
Flint .....	163.3	169.3	169.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.4	5.3	5.5
Grand Rapids .....	330.4	340.5	339.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	17.3	17.6	18.1
Jackson .....	52.7	54.9	54.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.6	1.7
Kalamazoo .....	106.8	109.8	109.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.5	3.7	3.8
Lansing-East Lansing .....	209.4	217.5	216.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.9	6.1	6.5
Muskegon .....	57.9	57.9	58.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.4	2.6	2.7
Saginaw-Bay City-Midland .....	155.6	157.9	158.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.8	7.2	7.6
<b>Minnesota</b> .....	2,050.1	2,090.4	2,105.1	7.4	7.3	7.7	86.3	81.2	87.3
Duluth .....	92.1	93.1	93.9	4.8	4.9	5.1	3.6	3.1	3.6
Minneapolis-St. Paul .....	1,332.9	1,360.2	1,371.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	56.0	54.1	57.4
Rochester .....	60.7	62.3	62.5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.3	2.0	2.3
St. Cloud .....	72.2	75.7	74.5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	3.8	4.0	4.2
<b>Mississippi</b> .....	897.4	915.1	913.7	6.4	5.9	5.8	37.9	34.9	34.7
Jackson .....	181.7	185.6	184.6	.9	.9	.9	8.9	8.4	8.4
<b>Missouri</b> .....	2,250.2	2,281.5	2,279.3	5.5	5.3	5.4	98.6	90.8	95.2
Kansas City .....	760.3	768.9	772.6	.6	.6	.5	34.7	32.6	33.5
St. Louis .....	1,147.7	1,156.0	1,156.5	3.3	3.2	3.2	57.4	49.8	55.4
Springfield .....	110.4	115.0	112.3	.1	.1	.1	4.9	4.6	4.7
<b>Montana</b> .....	283.9	283.2	288.4	6.2	6.3	6.4	9.5	8.9	9.6
<b>Nebraska</b> .....	692.8	715.5	718.8	1.8	1.8	1.8	26.5	27.4	28.2
Lincoln .....	115.7	121.8	121.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.6	4.2	4.3
Omaha .....	311.5	320.9	325.0	.2	.2	.2	12.5	12.4	12.6
<b>Nevada</b> .....	538.8	570.2	574.7	11.1	12.7	13.0	37.3	42.6	44.1
Las Vegas .....	305.5	328.4	328.4	.2	.2	.2	22.8	27.5	28.2
Reno .....	137.5	142.8	144.8	1.3	1.4	1.5	7.7	8.3	8.7
<b>New Hampshire</b> .....	532.7	533.4	540.4	.8	.7	.7	38.8	34.4	35.0
Manchester .....	86.3	86.4	86.9	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	6.0	6.2	6.3
Nashua .....	96.9	95.2	96.6	.1	.1	.1	5.2	4.5	4.5
Portsmouth-Dover-Rochester .....	113.5	114.1	115.0	.2	.1	.1	6.5	5.8	5.8
<b>New Jersey</b> .....	3,692.6	3,685.5	3,728.9	2.4	2.5	2.5	180.5	178.2	181.8
Atlantic City .....	179.3	174.8	185.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	11.0	11.5	12.1
Bergen-Passaic .....	677.9	683.9	689.1	.1	.2	.2	33.8	34.1	34.9
Camden .....	436.2	443.3	447.2	.1	.1	.1	24.8	24.6	25.3
Jersey City .....	246.0	248.4	249.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.3	7.8	7.8
Middlesex-Somerset-Hunterdon .....	531.4	541.8	546.7	.7	.6	.6	24.7	25.2	25.5
Monmouth-Ocean .....	340.6	337.7	347.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	22.0	23.3	23.7
Newark .....	958.7	964.5	969.3	.7	.7	.7	40.4	40.6	41.3
Trenton .....	200.5	199.9	200.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.6	5.7	6.0
Vineland-Millville-Bridgeton .....	58.1	59.1	59.4	.4	.4	.4	2.5	2.4	2.4

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		
	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>
<b>Maryland</b> .....	210.7	205.6	207.5	96.6	95.1	95.8	536.5	540.3	545.3
Baltimore MSA .....	134.1	129.6	130.2	55.2	55.6	56.0	275.0	276.5	278.4
Baltimore City .....	45.4	45.5	45.5	27.9	27.8	27.9	96.8	96.2	96.7
Suburban Maryland-D.C. ....	35.8	36.7	36.6	27.6	28.0	28.2	199.3	203.3	204.9
<b>Massachusetts</b> .....	589.8	574.4	576.3	135.8	135.6	137.0	742.9	729.2	740.6
Boston .....	273.8	266.7	267.5	77.8	77.1	76.6	392.9	384.9	387.1
Brockton .....	11.1	11.0	11.0	5.3	5.0	5.1	22.6	22.8	22.9
Fall River .....	15.8	15.1	14.9	2.0	2.0	2.0	14.4	14.4	14.5
Fitchburg-Leominster .....	12.0	12.2	12.4	1.6	1.6	1.5	10.2	10.4	10.4
Lawrence-Haverhill .....	51.2	47.4	47.5	7.1	7.4	7.5	37.4	38.3	38.8
Lowell .....	36.9	36.0	35.9	4.9	5.3	5.7	23.5	24.1	23.9
New Bedford .....	19.2	18.0	18.1	3.1	3.1	3.0	16.6	16.8	17.0
Pittsfield .....	11.2	10.9	11.0	1.2	1.2	1.3	9.8	10.2	10.4
Springfield .....	51.3	50.4	50.3	9.9	10.5	10.6	57.9	58.4	59.0
Worcester .....	45.2	45.9	46.3	9.7	9.8	9.9	50.4	52.1	52.7
<b>Michigan</b> .....	958.1	953.5	951.1	157.8	155.0	155.9	897.8	916.5	923.4
Ann Arbor .....	39.3	38.6	38.4	4.4	3.9	4.0	31.1	33.3	33.4
Battle Creek .....	15.7	15.4	15.4	1.9	1.8	1.8	12.0	12.4	12.4
Benton Harbor .....	22.3	22.3	22.4	2.4	2.4	2.4	14.2	14.8	15.1
Detroit .....	457.3	468.4	470.4	89.0	87.5	88.0	448.8	463.9	466.8
Flint .....	49.0	51.3	50.6	4.1	4.1	4.2	44.0	45.5	46.2
Grand Rapids .....	99.5	99.7	100.6	11.6	12.1	12.1	85.9	89.4	90.1
Jackson .....	13.4	14.0	14.0	4.2	4.2	4.2	11.8	12.4	12.4
Kalamazoo .....	30.7	30.6	30.5	3.2	3.3	3.4	24.4	26.1	26.0
Lansing-East Lansing .....	34.3	32.6	32.8	5.4	5.5	5.5	45.1	47.7	47.7
Muskegon .....	17.2	16.4	16.5	2.4	2.3	2.3	13.6	13.6	13.8
Saginaw-Bay City-Midland .....	43.8	43.4	43.3	6.9	7.0	7.0	36.9	36.7	37.1
<b>Minnesota</b> .....	398.7	397.3	402.3	102.0	105.3	105.3	515.3	523.6	529.0
Duluth .....	8.0	8.2	8.2	5.8	5.8	6.0	23.1	22.6	22.9
Minneapolis-St. Paul .....	265.8	267.6	268.9	70.4	72.8	73.1	331.3	337.3	340.6
Rochester .....	11.2	11.3	11.4	1.8	1.7	1.8	12.3	12.7	12.8
St. Cloud .....	13.4	13.6	13.9	3.6	3.7	3.8	21.9	22.6	22.8
<b>Mississippi</b> .....	240.8	242.6	244.1	44.2	44.5	44.8	192.4	196.2	197.6
Jackson .....	21.2	21.3	21.3	13.3	13.4	13.4	42.8	43.9	44.2
<b>Missouri</b> .....	429.7	434.3	434.3	147.8	148.8	148.9	556.6	559.9	562.1
Kansas City .....	111.6	110.3	111.0	61.5	62.6	63.2	197.8	198.6	199.7
St. Louis .....	223.1	226.8	224.6	74.6	75.1	75.0	278.8	280.9	284.2
Springfield .....	21.6	21.2	21.3	6.9	7.1	7.2	31.7	32.4	32.2
<b>Montana</b> .....	20.6	21.2	21.8	19.5	19.7	20.1	74.2	73.4	75.1
<b>Nebraska</b> .....	95.5	97.5	98.9	45.2	47.2	47.5	178.1	184.1	183.8
Lincoln .....	14.5	14.9	15.0	6.2	6.6	6.7	26.4	27.4	27.4
Omaha .....	35.2	35.4	35.9	24.3	25.9	26.0	78.6	80.0	80.3
<b>Nevada</b> .....	25.2	26.3	26.3	29.1	30.3	30.6	109.1	114.8	116.3
Las Vegas .....	9.4	10.3	10.3	16.4	17.1	17.2	63.7	67.3	67.8
Reno .....	8.8	9.0	9.0	9.4	9.7	9.8	31.3	33.0	33.6
<b>New Hampshire</b> .....	118.7	117.8	118.8	18.3	17.7	18.2	136.3	137.0	140.7
Manchester .....	12.2	11.5	11.5	5.4	5.6	5.6	24.1	23.5	23.7
Nashua .....	36.6	36.2	36.7	2.6	2.7	2.8	22.7	21.5	21.8
Portsmouth-Dover-Rochester .....	20.9	20.7	20.8	3.1	3.2	3.3	29.7	30.0	31.1
<b>New Jersey</b> .....	671.8	661.3	664.2	244.4	243.2	243.5	880.7	872.8	887.5
Atlantic City .....	8.7	8.4	8.5	6.8	6.6	6.7	43.2	39.2	45.8
Bergen-Passaic .....	159.4	156.2	156.5	28.1	28.2	28.2	191.0	192.3	193.5
Camden .....	72.8	72.3	73.2	19.1	20.2	20.3	116.7	118.5	119.0
Jersey City .....	46.0	45.9	46.3	33.3	33.4	33.6	61.4	62.1	62.3
Middlesex-Somerset-Hunterdon .....	116.0	116.2	117.0	43.7	44.9	45.3	125.6	127.4	128.9
Monmouth-Ocean .....	29.7	29.7	29.7	17.7	18.8	18.8	92.8	87.9	91.9
Newark .....	176.5	172.2	173.1	79.5	78.9	78.8	196.4	196.2	197.0
Trenton .....	31.9	30.9	30.4	6.6	6.7	6.7	31.5	32.3	32.8
Vineland-Millville-Bridgeton .....	15.1	15.3	15.5	2.4	2.3	2.4	11.7	12.5	12.5

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Maryland</b>	131.1	131.4	133.4	570.4	576.0	584.8	395.8	416.3	409.1
Baltimore MSA	77.9	77.4	78.2	296.4	302.6	305.2	205.9	212.2	210.6
Baltimore City	46.1	45.4	46.0	142.0	147.1	147.3	91.3	92.3	92.3
Suburban Maryland-D.C.	43.8	44.6	45.4	221.2	222.4	224.4	151.3	163.5	159.7
<b>Massachusetts</b>	228.3	233.2	237.1	892.7	929.4	926.3	409.9	409.6	410.8
Boston	156.5	158.9	161.3	576.4	596.7	589.2	210.6	209.9	211.8
Brockton	3.4	3.4	3.5	15.7	16.7	16.7	12.0	12.4	12.5
Fall River	3.3	3.4	3.6	10.9	11.2	11.5	7.0	7.1	7.1
Fitchburg-Leominster	1.7	1.7	1.7	8.9	9.0	9.2	4.9	4.7	4.8
Lawrence-Haverhill	6.8	7.1	7.3	36.6	37.7	38.7	21.9	21.8	21.6
Lowell	4.0	4.1	4.2	21.5	22.0	21.8	13.8	13.7	13.8
New Bedford	2.6	2.6	2.6	13.9	14.5	14.7	10.0	10.6	10.8
Pittsfield	2.1	2.0	2.0	11.5	11.1	11.7	4.9	4.9	5.0
Springfield	16.0	15.7	15.9	58.9	60.7	60.4	39.3	38.1	38.3
Worcester	14.7	15.4	15.9	53.5	56.6	56.6	24.8	25.3	24.9
<b>Michigan</b>	187.3	187.9	189.8	855.3	883.2	884.5	607.7	645.6	626.0
Ann Arbor	4.7	5.0	5.1	34.9	38.4	38.6	47.6	51.3	49.1
Battle Creek	3.5	3.5	3.6	11.8	12.0	12.1	11.8	12.1	12.1
Benton Harbor	2.6	2.5	2.6	13.8	15.1	14.6	8.6	8.9	8.7
Detroit	111.0	109.5	110.7	483.6	494.8	497.3	244.0	254.3	251.0
Flint	6.0	6.0	6.0	32.4	33.2	33.7	22.5	23.9	23.5
Grand Rapids	15.2	15.6	15.7	69.0	72.2	70.5	31.7	33.6	32.2
Jackson	2.1	1.9	2.0	9.9	10.2	10.2	9.7	10.3	9.9
Kalamazoo	4.8	5.1	5.1	24.3	24.8	25.0	15.8	16.1	16.2
Lansing-East Lansing	12.4	13.1	13.2	40.5	41.6	42.2	64.4	70.5	68.7
Muskegon	1.4	1.4	1.4	12.0	12.2	12.3	8.9	9.3	9.0
Saginaw-Bay City-Midland	6.2	6.3	6.4	33.4	35.6	35.7	20.3	21.4	20.6
<b>Minnesota</b>	120.2	121.4	123.0	494.0	512.2	515.1	326.3	342.1	335.5
Duluth	3.2	3.1	3.2	22.7	22.6	23.0	20.9	22.7	21.9
Minneapolis-St. Paul	93.5	95.2	96.3	335.2	346.1	349.0	180.1	186.6	186.0
Rochester	1.5	1.5	1.5	25.2	26.4	26.2	6.3	6.6	6.6
St. Cloud	2.3	2.2	2.3	15.2	16.0	15.3	11.9	13.6	12.2
<b>Mississippi</b>	39.3	39.1	39.5	148.1	150.7	155.8	188.3	201.2	191.4
Jackson	14.7	14.7	14.8	39.9	42.1	41.8	39.8	40.8	39.9
<b>Missouri</b>	137.3	135.8	137.2	527.9	538.5	542.3	346.8	368.1	353.9
Kansas City	58.6	58.0	58.3	179.7	186.5	187.3	115.8	119.7	119.1
St. Louis	76.5	75.3	76.0	294.1	301.0	302.5	139.9	143.9	135.6
Springfield	5.2	5.3	5.3	27.5	29.3	28.5	12.5	15.0	13.0
<b>Montana</b>	13.5	13.5	13.5	67.7	68.2	69.0	72.7	72.0	72.9
<b>Nebraska</b>	48.2	49.2	49.6	159.4	166.0	167.9	138.1	142.3	141.1
Lincoln	8.4	8.4	8.4	26.2	28.3	28.7	29.4	32.0	31.0
Omaha	28.8	29.6	30.0	85.8	89.8	91.8	46.1	47.6	48.2
<b>Nevada</b>	24.6	26.1	26.4	237.2	245.5	249.2	65.2	71.9	68.8
Las Vegas	15.2	16.6	16.7	145.3	152.8	153.7	32.5	36.6	34.3
Reno	6.9	7.1	7.2	55.7	56.6	58.1	16.4	17.7	16.9
<b>New Hampshire</b>	32.8	33.0	33.6	119.6	120.7	124.5	67.4	72.1	68.9
Manchester	8.1	8.5	8.6	21.7	22.1	22.3	8.8	9.0	8.9
Nashua	3.9	3.7	3.7	19.0	19.2	19.8	6.8	7.3	7.4
Portsmouth-Dover-Rochester	7.0	7.1	7.2	21.8	21.2	22.5	24.3	26.0	24.2
<b>New Jersey</b>	238.4	240.8	245.2	917.7	926.1	939.9	556.7	560.6	564.3
Atlantic City	7.7	7.6	7.8	75.7	76.0	79.4	26.1	25.4	25.5
Bergen-Passaic	39.7	41.0	41.8	156.0	161.2	162.7	69.8	70.7	71.3
Camden	25.1	25.8	26.3	105.1	108.1	108.9	72.5	73.7	74.1
Jersey City	13.3	13.7	13.7	43.3	43.7	44.0	41.4	41.8	41.9
Middlesex-Somerset-Hunterdon	37.6	38.9	39.5	111.2	114.3	116.0	71.9	74.3	73.9
Monmouth-Ocean	18.8	18.9	19.2	95.5	95.3	99.1	64.0	63.7	65.2
Newark	79.3	80.0	80.9	250.7	254.9	257.1	135.2	141.0	140.4
Trenton	9.8	10.0	10.2	58.1	58.6	58.4	57.0	55.7	55.6
Vineland-Millville-Bridgeton	3.4	3.5	3.5	10.8	10.8	10.7	11.8	11.9	12.0

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	Total			Mining			Construction		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>New Mexico</b> .....	541.2	553.7	557.4	15.5	15.3	15.5	31.3	30.0	30.7
Albuquerque .....	235.8	240.4	239.8	.2	.1	.1	15.2	14.8	14.8
Las Cruces .....	39.2	42.2	41.2	.1	.1	.1	2.2	2.3	2.3
Santa Fe .....	56.4	56.0	57.4	.1	.1	.1	2.8	2.5	2.6
<b>New York</b> .....	8,262.9	8,277.2	8,345.3	6.3	6.1	6.2	353.3	347.0	360.3
Albany-Schenectady-Troy .....	417.3	423.7	427.0	.5	.6	.6	21.9	21.4	22.6
Binghamton .....	124.7	123.8	124.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	6.0	5.9	6.1
Buffalo .....	449.6	452.9	456.3	.4	.2	.3	18.6	17.2	18.6
Elmira .....	40.0	41.8	42.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.7	1.8	1.9
Nassau-Suffolk .....	1,162.4	1,155.7	1,165.1	.2	.2	.2	62.8	61.5	62.2
New York PMSA .....	4,160.3	4,145.1	4,170.7	1.1	1.0	1.0	156.1	154.6	157.8
New York City .....	3,620.1	3,612.7	3,631.3	.6	.5	.5	122.2	122.0	124.2
Niagara Falls .....	83.6	84.4	85.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.5	3.5	3.7
Orange County .....	107.0	107.5	108.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5.9	5.8	6.0
Poughkeepsie .....	121.9	121.9	122.7	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7.4	7.3	7.7
Rochester .....	482.2	490.9	491.6	.8	.7	.8	19.9	19.9	20.7
Rockland County .....	101.8	101.2	102.4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5.0	4.9	4.9
Syracuse .....	306.6	309.4	310.4	.2	.2	.2	15.9	15.5	16.2
Utica-Rome .....	126.8	127.8	128.3	.2	.2	.2	4.5	4.1	4.5
Westchester County .....	419.3	412.6	417.9	.2	.2	.2	27.1	26.2	26.9
<b>North Carolina</b> .....	2,983.3	3,020.2	3,035.8	4.8	5.0	5.0	168.7	161.2	163.6
Asheville .....	82.4	83.2	84.7	.1	.1	.1	4.3	4.6	4.7
Charlotte-Gastonia-Rock Hill .....	594.1	606.8	608.5	.4	.4	.4	37.5	37.1	37.7
Greensboro-Winston-Salem-High Point .....	482.2	483.1	483.5	.3	.3	.3	25.2	23.7	23.6
Raleigh-Durham .....	394.1	401.0	402.0	.4	.3	.3	22.6	21.4	21.8
<b>North Dakota</b> .....	260.8	260.9	262.6	4.4	3.9	4.2	11.9	10.1	11.4
Bismarck .....	37.8	38.8	39.2	.2	.2	.2	1.7	1.5	1.7
Fargo-Moorhead .....	72.0	75.9	74.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.8	3.5	4.0
Grand Forks .....	29.6	31.3	30.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.4	1.5
<b>Ohio</b> .....	4,715.4	4,811.3	4,831.2	19.6	19.2	19.7	191.2	197.0	206.2
Akron .....	270.4	283.1	278.9	.6	.6	.6	10.2	10.4	11.0
Canton .....	160.8	165.0	165.6	.9	.9	1.0	6.5	6.9	7.3
Cincinnati .....	704.2	730.7	734.4	.4	.5	.5	32.1	34.5	35.7
Cleveland .....	911.0	926.9	933.2	.9	.9	1.0	29.0	28.4	30.0
Columbus .....	681.6	701.8	705.0	1.0	.9	1.0	29.3	31.2	32.6
Dayton-Springfield .....	437.8	449.7	450.9	.4	.4	.5	18.6	19.9	20.8
Toledo .....	285.5	295.2	294.3	.3	.3	.3	11.0	12.2	12.6
Youngstown-Warren .....	196.9	200.0	200.5	.7	.7	.7	8.2	8.5	9.1
<b>Oklahoma</b> .....	1,141.0	1,146.1	1,146.0	44.7	43.8	43.9	36.1	34.3	34.7
Enid .....	21.7	21.0	21.2	1.1	1.0	1.0	.8	.7	.7
Lawton .....	34.0	34.2	34.6	.3	.3	.3	1.1	1.1	1.1
Oklahoma City .....	409.7	408.2	405.7	12.0	10.1	9.7	13.2	11.0	11.1
Tulsa .....	298.0	300.6	303.1	14.3	14.5	14.6	10.2	8.5	8.8
<b>Oregon</b> .....	1,163.6	1,193.3	1,210.7	1.4	1.5	1.6	40.2	43.2	44.4
Eugene-Springfield .....	111.7	114.0	115.4	.2	.2	.2	3.6	3.8	4.1
Portland .....	584.1	600.6	606.7	.5	.5	.5	21.4	22.8	23.7
Salem .....	101.9	102.7	104.5	.1	.1	.1	3.7	3.8	4.0
<b>Pennsylvania</b> .....	5,077.2	5,112.4	5,134.0	29.6	28.0	28.1	241.0	240.1	251.5
Allentown-Bethlehem .....	281.4	284.1	285.0	.7	.6	.6	14.4	14.3	14.6
Altoona .....	52.2	52.1	52.9	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.4	2.3	2.4
Beaver County .....	50.0	49.4	49.4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.1	1.4	1.5
Erie .....	113.9	116.8	116.7	.2	.2	.2	3.6	3.5	3.7
Harrisburg-Lebanon-Carlisle .....	302.5	306.6	307.9	.3	.3	.3	13.7	13.4	13.9
Johnstown .....	80.5	80.9	81.4	3.1	3.1	3.1	3.1	2.8	3.0
Lancaster .....	186.1	189.9	189.5	.4	.4	.4	11.6	11.9	12.3
Philadelphia PMSA .....	2,179.5	2,189.2	2,195.8	1.1	1.0	1.0	109.6	106.8	110.3
Philadelphia City .....	778.5	780.2	781.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	18.0	17.4	18.1
Pittsburgh .....	882.8	885.6	891.1	4.7	4.4	4.4	42.0	38.6	40.1

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		
	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>
<b>New Mexico</b> .....	39.9	40.9	41.3	28.4	28.6	27.9	131.0	134.2	136.2
Albuquerque .....	20.4	20.5	20.7	12.6	12.8	12.6	60.5	61.9	62.1
Las Cruces .....	3.7	3.6	3.6	1.3	1.4	1.3	8.7	9.2	9.2
Santa Fe .....	1.6	1.6	1.6	1.1	1.1	1.1	11.0	11.3	11.4
<b>New York</b> .....	1,219.1	1,191.9	1,198.2	414.9	412.9	417.2	1,732.1	1,731.4	1,748.7
Albany-Schenectady-Troy .....	47.8	47.7	48.2	16.3	16.8	16.9	88.6	92.4	93.1
Binghamton .....	39.0	36.7	36.9	4.4	4.3	4.4	26.2	26.9	27.0
Buffalo .....	77.4	77.3	77.5	21.9	21.4	21.7	111.0	113.8	114.1
Elmira .....	8.1	9.2	9.5	1.4	1.4	1.4	10.7	10.8	10.9
Nassau-Suffolk .....	171.0	164.3	164.0	49.7	49.4	49.8	311.0	309.7	313.0
New York PMSA .....	451.8	437.1	438.8	245.2	241.5	243.4	760.4	758.9	763.7
New York City .....	368.9	357.7	359.3	219.5	215.6	217.5	635.1	634.1	637.3
Niagara Falls .....	24.1	23.7	23.8	4.1	4.0	4.1	19.5	19.4	19.9
Orange County .....	15.7	15.2	15.3	6.0	6.2	6.2	28.6	29.1	29.5
Poughkeepsie .....	30.7	30.0	30.4	3.4	3.8	3.8	22.5	22.6	23.0
Rochester .....	137.4	137.9	138.9	14.7	14.8	14.9	103.3	103.6	104.6
Rockland County .....	15.5	15.4	15.5	4.6	4.4	4.4	23.7	24.0	24.5
Syracuse .....	54.4	54.2	54.3	18.6	18.6	18.8	73.0	73.9	74.7
Utica-Rome .....	25.0	25.0	25.2	4.3	4.3	4.4	27.8	27.3	27.7
Westchester County .....	65.7	62.2	62.2	20.4	20.8	20.8	97.0	96.3	97.2
<b>North Carolina</b> .....	867.7	865.6	869.5	147.9	149.6	150.6	677.8	692.0	693.4
Asheville .....	19.3	19.1	19.2	3.9	3.9	3.9	19.4	20.1	20.1
Charlotte-Gastonia-Rock Hill .....	155.5	155.4	155.8	48.8	47.1	47.7	144.8	149.9	150.5
Greensboro-Winston-Salem-High Point .....	154.7	150.4	150.8	27.0	26.6	26.6	109.8	110.7	110.4
Raleigh-Durham .....	59.0	61.8	62.6	17.6	17.4	17.4	83.9	84.7	84.6
<b>North Dakota</b> .....	16.6	16.1	16.3	16.7	17.1	17.2	69.5	69.4	69.7
Bismarck .....	2.1	2.2	2.3	2.7	2.7	2.7	10.0	10.3	10.5
Fargo-Moorhead .....	4.9	5.1	5.2	4.6	4.8	4.9	21.4	22.1	22.0
Grand Forks .....	1.8	1.7	1.6	1.6	1.7	1.6	8.5	8.8	8.9
<b>Ohio</b> .....	1,107.6	1,107.5	1,112.2	213.1	214.3	215.8	1,135.5	1,165.5	1,175.6
Akron .....	66.4	66.0	66.2	13.0	13.1	13.2	67.7	70.7	71.1
Canton .....	45.1	45.8	45.8	5.8	6.0	6.1	39.8	41.2	41.7
Cincinnati .....	144.2	146.5	147.4	37.9	40.3	40.8	179.3	187.5	188.8
Cleveland .....	202.2	204.8	205.4	41.6	41.5	41.8	221.4	225.3	227.3
Columbus .....	102.7	102.9	102.8	29.6	30.7	30.9	172.6	179.9	180.6
Dayton-Springfield .....	104.9	104.6	104.4	16.9	17.4	17.5	99.8	102.2	103.0
Toledo .....	63.5	61.4	62.0	13.1	13.1	13.1	70.8	73.4	74.2
Youngstown-Warren .....	51.1	50.1	50.2	7.6	7.8	7.8	50.3	51.8	52.4
<b>Oklahoma</b> .....	163.5	163.7	164.5	62.2	62.5	62.9	276.3	279.1	278.4
Enid .....	1.5	1.5	1.5	2.2	2.0	2.1	6.5	6.1	6.1
Lawton .....	3.5	3.7	3.7	1.3	1.3	1.4	8.7	8.3	8.4
Oklahoma City .....	48.9	49.5	49.1	19.4	20.0	20.0	101.3	102.6	101.5
Tulsa .....	49.5	49.1	49.9	23.3	24.3	24.4	71.5	71.4	71.7
<b>Oregon</b> .....	215.5	211.4	221.6	60.7	62.9	63.6	292.0	304.0	307.5
Eugene-Springfield .....	21.0	20.6	20.7	4.3	4.4	4.4	27.4	28.2	28.5
Portland .....	100.2	100.2	102.8	35.6	36.3	37.0	152.1	157.6	159.8
Salem .....	15.4	13.7	15.1	3.0	3.0	3.0	22.8	23.2	23.7
<b>Pennsylvania</b> .....	1,063.3	1,053.1	1,059.7	254.0	254.0	253.8	1,160.6	1,160.6	1,162.9
Allentown-Bethlehem .....	78.2	76.8	76.9	14.5	13.9	14.3	61.1	61.8	61.8
Altoona .....	11.2	10.9	10.9	4.5	4.6	4.6	13.3	13.7	13.8
Beaver County .....	9.6	9.4	9.5	5.0	4.9	4.9	11.7	11.4	11.3
Erie .....	35.3	35.7	35.8	3.7	3.6	3.5	25.3	26.5	26.7
Harrisburg-Lebanon-Carlisle .....	51.9	51.5	51.6	18.9	18.9	18.9	67.8	68.5	68.3
Johnstown .....	13.7	13.8	13.9	5.0	5.3	4.9	17.2	17.7	17.8
Lancaster .....	60.7	59.3	59.7	7.5	7.6	7.6	44.5	45.6	46.2
Philadelphia PMSA .....	370.5	364.1	365.4	101.1	101.6	102.1	501.7	509.4	508.3
Philadelphia City .....	94.1	91.5	91.3	44.4	42.6	42.4	151.4	156.1	155.9
Pittsburgh .....	126.5	126.5	127.4	48.5	48.0	48.0	225.3	226.8	228.9

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	Finance, insurance, and real estate			Services			Government		
	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>
<b>New Mexico</b> .....	27.3	27.5	27.8	129.6	131.8	134.8	138.2	145.4	143.2
Albuquerque .....	15.1	15.3	15.4	65.8	67.0	67.4	46.0	48.0	46.7
Las Cruces .....	1.7	1.8	1.8	6.3	6.6	6.7	15.2	17.2	16.2
Santa Fe .....	2.0	1.9	2.0	15.5	15.0	15.7	22.3	22.5	22.9
<b>New York</b> .....	800.3	796.6	805.1	2,279.3	2,325.0	2,340.8	1,457.4	1,466.3	1,468.9
Albany-Schenectady-Troy .....	24.4	25.0	25.6	105.2	105.9	106.7	112.5	114.1	113.5
Binghamton .....	4.3	4.4	4.5	23.6	23.7	24.0	21.1	21.8	21.3
Buffalo .....	28.1	28.9	29.1	116.4	118.3	119.2	75.8	75.7	75.7
Elmira .....	1.4	1.4	1.4	9.9	10.2	10.3	6.7	7.1	7.2
Nassau-Suffolk .....	79.2	79.2	80.4	301.1	304.9	308.8	187.2	186.5	186.6
New York PMSA .....	578.5	569.0	573.2	1,279.0	1,295.6	1,303.9	688.2	687.4	688.9
New York City .....	543.4	533.6	537.2	1,126.6	1,144.3	1,150.2	603.8	604.9	605.0
Niagara Falls .....	2.0	2.1	2.1	17.2	18.2	17.8	13.0	13.4	13.6
Orange County .....	4.7	4.7	4.8	22.7	22.8	23.0	23.4	23.6	23.9
Poughkeepsie .....	4.9	5.2	5.2	27.7	28.6	28.3	25.2	24.4	24.4
Rochester .....	23.3	22.9	23.4	116.0	121.9	119.7	66.8	69.2	68.6
Rockland County .....	5.4	5.4	5.5	25.7	25.9	26.1	21.8	21.3	21.5
Syracuse .....	20.3	20.3	20.5	71.5	74.3	72.8	52.6	52.5	52.9
Utica-Rome .....	7.2	7.5	7.6	27.3	28.6	28.2	30.6	30.7	30.6
Westchester County .....	29.0	29.3	29.8	121.4	120.3	122.5	58.6	57.3	58.3
<b>North Carolina</b> .....	131.7	131.7	133.8	525.1	545.9	551.1	459.6	469.2	468.8
Asheville .....	2.7	2.6	2.6	20.6	20.5	21.8	12.1	12.3	12.3
Charlotte-Gastonia-Rock Hill .....	37.5	37.5	37.9	106.8	112.9	113.2	62.8	66.5	65.3
Greensboro-Winston-Salem-High Point .....	24.3	24.8	25.1	89.4	91.0	91.7	51.5	55.6	55.0
Raleigh-Durham .....	23.7	23.2	23.6	98.4	102.3	102.7	88.5	89.9	89.0
<b>North Dakota</b> .....	12.6	12.1	12.2	64.3	65.1	65.9	64.8	67.1	65.7
Bismarck .....	1.6	1.5	1.5	10.8	11.6	11.6	8.7	8.8	8.7
Fargo-Moorhead .....	4.5	4.5	4.5	19.5	21.2	20.3	13.3	14.7	13.7
Grand Forks .....	1.1	1.1	1.1	6.8	6.9	6.9	8.3	9.7	8.5
<b>Ohio</b> .....	251.4	254.6	257.1	1,104.1	1,138.7	1,150.3	692.9	714.4	694.3
Akron .....	10.7	10.8	10.9	63.1	65.1	66.2	38.5	46.3	39.5
Canton .....	6.4	6.3	6.4	37.4	38.4	38.9	18.9	19.4	18.6
Cincinnati .....	42.5	43.3	43.8	180.2	186.1	188.4	87.6	91.9	88.9
Cleveland .....	57.2	58.5	59.2	241.5	250.0	252.0	117.3	117.4	116.6
Columbus .....	58.3	59.3	59.8	162.6	170.3	171.0	125.6	126.6	126.4
Dayton-Springfield .....	18.3	18.3	18.6	106.4	110.5	111.8	72.5	76.4	74.3
Toledo .....	12.3	12.7	12.7	74.4	77.2	78.1	40.0	45.0	41.2
Youngstown-Warren .....	8.4	8.3	8.4	46.1	47.9	48.4	24.4	24.9	23.5
<b>Oklahoma</b> .....	59.5	58.2	58.6	251.6	249.8	254.0	247.1	254.7	249.0
Enid .....	1.0	1.0	1.0	5.2	5.3	5.4	3.4	3.4	3.4
Lawton .....	1.6	1.5	1.5	6.0	6.1	6.4	11.5	11.9	11.8
Oklahoma City .....	24.3	23.9	23.8	96.0	92.8	94.3	94.6	98.3	96.2
Tulsa .....	17.4	17.5	17.6	75.5	78.4	78.9	36.3	36.9	37.2
<b>Oregon</b> .....	74.4	75.1	75.2	260.4	273.2	273.6	219.0	222.0	223.2
Eugene-Springfield .....	5.3	5.4	5.5	25.5	26.7	27.0	24.4	24.7	25.0
Portland .....	48.9	50.0	50.1	143.9	149.7	149.0	81.5	83.5	83.8
Salem .....	5.8	5.9	6.0	20.3	21.5	21.1	30.8	31.5	31.5
<b>Pennsylvania</b> .....	295.5	297.3	300.2	1,337.2	1,373.4	1,383.9	696.0	705.9	693.9
Allentown-Bethlehem .....	12.7	12.7	12.8	69.5	73.0	73.6	30.3	31.0	30.4
Altoona .....	1.9	2.1	2.1	11.3	11.2	11.5	7.6	7.3	7.6
Beaver County .....	1.7	1.6	1.7	11.7	12.6	12.4	8.2	8.1	8.1
Erie .....	5.3	5.4	5.5	27.5	27.6	28.0	13.0	14.3	13.3
Harrisburg-Lebanon-Carlisle .....	18.6	20.2	20.6	65.8	66.9	68.5	65.5	66.9	65.8
Johnstown .....	4.8	4.5	4.6	20.1	20.5	20.5	13.5	13.2	13.6
Lancaster .....	7.2	7.4	7.5	39.0	41.4	40.8	15.2	16.3	15.0
Philadelphia PMSA .....	164.2	162.3	164.0	628.9	642.4	642.2	302.4	301.6	302.5
Philadelphia City .....	72.2	70.4	71.2	255.1	262.7	260.9	143.3	139.5	142.0
Pittsburgh .....	52.7	53.7	54.1	275.4	280.0	281.6	107.7	107.6	106.6

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Pennsylvania-Continued</b>									
Reading .....	150.1	154.5	154.8	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7.5	7.6	7.9
Scranton-Wilkes-Barre .....	301.5	303.6	305.0	0.7	0.6	0.6	14.9	14.8	15.7
Williamsport .....	51.8	52.1	52.3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2.2	2.3	2.4
York .....	175.7	180.2	178.8	.5	.5	.5	9.7	9.8	10.1
<b>Rhode Island</b> .....	459.0	461.3	462.2	.2	.2	.2	21.6	21.9	22.8
Pawtucket-Woonsocket-Attleboro .....	133.0	133.2	133.5	.2	.2	.2	6.3	6.7	6.9
Providence .....	322.7	327.6	328.3	.1	.1	.1	16.2	16.4	16.9
<b>South Carolina</b> .....	1,459.5	1,512.2	1,515.9	1.8	1.9	1.9	94.2	94.2	95.9
Charleston .....	191.2	198.2	198.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	13.6	13.6	13.7
Columbia .....	228.2	235.4	234.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	14.4	14.5	14.7
Greenville-Spartanburg .....	318.4	326.6	327.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	23.2	23.1	23.8
<b>South Dakota</b> .....	271.7	269.0	272.7	2.8	2.7	2.7	10.8	9.5	10.8
Rapid City .....	36.6	36.0	37.5	.3	.2	.2	2.0	1.9	2.1
Sioux Falls .....	69.4	69.3	70.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.0	2.8	3.1
<b>Tennessee</b> .....	2,079.1	2,087.8	2,082.0	7.0	6.6	6.6	96.8	93.0	92.7
Chattanooga .....	197.2	199.0	198.3	.7	.7	.7	8.6	8.4	8.6
Johnson City-Kingsport-Bristol .....	163.6	167.2	166.3	.4	.5	.4	7.3	7.2	7.3
Knoxville .....	262.0	260.7	261.3	1.7	1.7	1.7	12.8	11.7	11.9
Memphis .....	436.5	442.7	440.3	.1	.1	.1	19.0	18.8	18.9
Nashville .....	485.0	484.6	481.3	.8	.7	.7	28.7	27.6	27.7
<b>Texas</b> .....	6,658.3	6,774.8	6,811.4	186.8	175.7	176.7	334.6	314.4	314.1
Abilene .....	48.6	49.2	48.8	2.1	1.9	1.9	2.0	1.9	1.9
Amarillo .....	78.5	77.4	77.8	1.3	1.4	1.4	3.9	4.0	4.0
Austin .....	350.9	354.9	351.2	.7	.7	.7	14.5	13.0	13.2
Beaumont-Port Arthur .....	133.4	134.7	133.8	1.7	1.9	1.9	8.6	8.8	8.9
Brazoria .....	59.2	61.6	61.2	2.1	1.9	1.9	6.8	7.9	7.7
Brownsville-Harlingen .....	68.8	70.2	69.4	.1	.1	.1	2.0	2.2	2.2
Bryan-College Station .....	47.0	51.3	49.2	.6	.6	.6	2.0	1.9	1.8
Corpus Christi .....	124.7	126.4	126.6	4.1	4.3	4.3	8.0	8.7	9.4
Dallas .....	1,348.0	1,350.9	1,350.9	18.9	17.4	17.4	57.3	50.8	51.4
El Paso .....	193.7	196.2	195.9	.1	.1	.1	9.2	8.6	8.8
Ft. Worth-Arlington .....	527.8	538.6	540.2	3.7	4.0	4.0	22.7	22.5	22.8
Galveston-Texas City .....	73.2	72.4	73.0	.6	.5	.5	4.4	4.9	4.8
Houston .....	1,436.7	1,468.4	1,478.2	66.3	65.8	66.1	89.3	88.6	90.7
Killeen-Temple .....	71.0	72.9	73.0	.1	.1	.1	3.5	3.7	3.7
Laredo .....	37.8	39.8	39.6	1.9	1.9	1.9	1.2	1.2	1.2
Longview-Marshall .....	66.7	66.1	66.4	3.8	3.5	3.6	3.5	3.1	3.2
Lubbock .....	92.2	94.9	93.9	.4	.4	.4	3.5	2.9	3.0
McAllen-Edinburg-Mission .....	94.0	98.0	98.6	1.0	.9	.9	4.1	4.2	4.2
Midland .....	45.0	44.1	44.0	10.2	9.6	9.6	1.3	1.4	1.4
Odessa .....	43.7	42.4	42.3	6.1	5.5	5.5	2.2	1.7	1.7
San Angelo .....	36.4	36.6	36.2	.5	.5	.5	1.6	1.3	1.2
San Antonio .....	499.3	513.3	510.2	2.4	2.0	2.0	25.5	22.4	22.7
Sherman-Denison .....	38.0	37.1	36.8	.1	.1	.1	1.7	1.7	1.7
Texarkana .....	45.3	45.7	46.2	.1	.1	.1	1.7	1.6	1.6
Tyler .....	60.6	61.1	61.2	2.1	1.8	1.9	2.1	2.0	2.1
Victoria .....	27.8	28.2	28.0	1.9	1.3	1.2	1.6	1.5	1.5
Waco .....	77.8	80.3	79.4	.1	.1	.1	3.6	3.5	3.4
Wichita Falls .....	50.9	50.6	50.3	1.9	1.8	1.8	2.2	2.0	2.1
<b>Utah</b> .....	664.4	683.1	689.3	8.5	7.7	7.6	26.8	25.3	26.8
Provo-Orem .....	78.9	84.3	85.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.9	3.0	3.1
Salt Lake City-Ogden .....	458.9	469.9	473.9	2.7	2.6	2.6	18.9	17.8	18.7
<b>Vermont</b> .....	253.6	254.7	256.7	.7	.6	.7	18.2	19.3	19.4
Barre-Montpelier .....	34.2	34.8	35.4	.2	.2	.2	2.1	1.8	1.9
Burlington .....	77.6	77.4	77.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4.3	4.6	4.5

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Pennsylvania-Continued</b>									
Reading .....	47.6	48.6	49.0	6.7	6.8	6.9	33.2	34.3	34.4
Scranton-Wilkes-Barre .....	72.1	72.0	72.3	16.5	16.5	16.6	67.9	68.4	68.6
Williamsport .....	16.8	16.3	16.3	1.9	2.0	2.0	11.6	11.6	11.8
York .....	61.2	61.9	61.3	7.4	7.9	7.5	42.3	42.8	42.6
<b>Rhode Island</b>									
.....	114.2	113.3	113.1	16.3	16.3	16.4	105.2	104.2	105.6
Pawtucket-Woonsocket-Attleboro .....	51.3	49.4	49.3	3.6	3.8	3.8	33.3	33.1	33.2
Providence .....	71.9	70.6	70.6	12.8	12.7	13.0	70.9	71.1	72.1
<b>South Carolina</b>									
.....	385.0	383.4	384.2	62.6	65.3	65.8	331.6	347.6	351.5
Charleston .....	21.0	21.4	21.5	11.1	11.4	11.2	46.5	45.8	46.4
Columbia .....	29.2	30.0	30.3	10.4	10.5	10.6	50.7	50.5	50.6
Greenville-Spartanburg .....	103.0	102.4	102.7	12.2	12.6	12.8	73.9	76.0	76.4
<b>South Dakota</b>									
.....	31.0	30.3	30.5	13.6	13.8	13.6	70.7	70.4	71.7
Rapid City .....	3.2	3.2	3.2	2.0	2.0	2.0	11.0	10.7	11.7
Sioux Falls .....	8.5	8.1	8.3	5.3	5.3	5.4	18.5	18.8	18.9
<b>Tennessee</b>									
.....	510.9	510.7	513.5	109.4	109.8	110.8	490.6	491.0	492.4
Chattanooga .....	47.4	47.6	47.6	9.2	9.2	9.2	45.8	45.5	45.3
Johnson City-Kingsport-Bristol .....	53.3	54.4	55.2	6.4	6.3	6.4	37.0	36.6	36.5
Knoxville .....	53.5	52.3	52.4	10.3	10.2	10.2	66.0	66.3	66.9
Memphis .....	55.6	54.2	54.7	40.8	41.5	41.4	117.5	119.9	120.4
Nashville .....	89.6	90.9	91.1	24.6	24.2	24.1	118.5	116.3	116.2
<b>Texas</b>									
.....	982.7	968.3	973.6	391.4	398.8	400.4	1,666.3	1,661.9	1,674.4
Abilene .....	4.8	5.0	5.0	2.4	2.3	2.3	13.5	13.6	13.6
Amarillo .....	10.0	9.0	8.8	5.7	5.7	5.7	22.9	22.4	22.7
Austin .....	40.9	41.3	41.3	10.7	10.4	10.5	77.0	75.7	75.6
Beaumont-Port Arthur .....	26.0	25.5	25.8	9.7	9.8	9.5	32.5	32.8	32.6
Brazoria .....	15.4	16.0	16.0	2.7	2.7	2.7	11.1	11.2	11.3
Brownsville-Harlingen .....	10.0	10.1	10.0	3.1	3.0	3.0	17.8	18.4	18.2
Bryan-College Station .....	3.4	3.5	3.5	1.5	1.5	1.5	10.8	10.5	10.8
Corpus Christi .....	11.5	11.5	11.5	6.4	6.3	6.4	31.7	31.4	31.7
Dallas .....	224.2	221.5	222.3	91.5	93.9	94.2	347.1	348.4	350.7
El Paso .....	40.7	40.0	39.9	10.7	10.7	10.9	46.1	47.8	48.4
Ft. Worth-Arlington .....	120.5	121.2	121.2	30.1	31.8	31.9	137.3	138.6	139.4
Galveston-Texas City .....	8.2	8.5	8.5	4.7	4.7	4.7	14.6	14.3	14.7
Houston .....	154.2	157.8	158.8	100.6	99.9	100.5	358.2	364.0	367.5
Killeen-Temple .....	8.4	8.6	8.6	2.8	2.7	2.7	16.4	16.6	16.7
Laredo .....	1.9	1.9	1.9	4.8	5.2	5.2	11.0	12.1	12.3
Longview-Marshall .....	16.2	15.6	15.7	3.0	3.1	3.1	17.1	17.0	17.1
Lubbock .....	7.2	7.7	7.5	4.7	4.8	4.8	28.2	28.0	28.1
McAllen-Edinburg-Mission .....	13.4	13.9	14.7	2.9	3.1	3.2	29.6	30.1	29.7
Midland .....	2.7	2.4	2.4	2.3	2.3	2.3	10.0	10.0	10.0
Odessa .....	4.1	4.0	4.0	2.1	2.1	2.1	12.7	12.6	12.6
San Angelo .....	5.4	5.5	5.4	3.1	2.8	2.8	9.0	9.2	9.2
San Antonio .....	47.7	48.1	48.4	19.3	19.1	19.1	126.9	129.3	129.2
Sherman-Denison .....	11.5	11.1	11.1	2.0	1.9	1.8	8.1	7.8	8.0
Texarkana .....	7.4	7.4	7.7	1.9	1.9	2.0	10.8	10.8	10.8
Tyler .....	10.4	10.9	10.8	2.6	2.5	2.6	16.1	16.1	16.1
Victoria .....	3.2	3.1	3.1	1.4	1.4	1.4	7.4	7.8	7.7
Waco .....	14.6	15.3	15.3	3.3	3.4	3.4	18.8	18.9	19.1
Wichita Falls .....	8.1	8.2	8.1	2.6	2.5	2.5	11.9	12.1	12.1
<b>Utah</b>									
.....	99.6	101.7	103.0	39.6	39.5	40.3	155.5	161.9	163.7
Provo-Orem .....	13.5	14.5	14.9	2.9	2.8	2.8	16.1	17.9	18.0
Salt Lake City-Ogden .....	64.1	66.2	67.0	30.1	30.6	31.2	112.3	116.6	117.6
<b>Vermont</b>									
.....	50.6	49.0	49.8	10.4	10.5	10.6	60.0	60.2	60.9
Barre-Montpelier .....	4.9	5.0	5.1	.9	.9	.9	7.4	7.6	7.7
Burlington .....	17.2	16.1	16.3	3.3	3.4	3.5	19.0	18.7	18.9

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	Finance, insurance, and real estate			Services			Government		
	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>
<b>Pennsylvania—Continued</b>									
Reading .....	8.3	8.6	8.6	30.5	31.2	31.5	16.3	17.4	16.5
Scranton–Wilkes–Barre .....	13.5	13.7	13.9	74.0	75.1	75.7	41.9	42.5	41.6
Williamsport .....	2.5	2.5	2.5	10.0	10.3	10.5	6.8	7.1	6.8
York .....	4.9	5.0	5.1	31.9	33.4	33.5	17.8	18.9	18.2
<b>Rhode Island</b>									
Pawtucket–Woonsocket–Attleboro .....	26.6	26.6	26.7	115.8	118.4	117.0	59.1	60.4	60.4
Providence .....	3.9	4.0	4.0	24.1	25.7	25.8	10.3	10.3	10.3
Providence .....	22.2	23.1	23.2	64.8	88.6	87.2	43.8	45.0	45.2
<b>South Carolina</b>									
Charleston .....	66.0	67.7	68.4	261.2	276.3	278.7	257.1	275.8	269.5
Columbia .....	8.8	8.9	9.0	40.2	43.3	43.6	49.9	53.7	53.4
Columbia .....	17.9	18.3	18.4	45.0	45.7	45.9	60.3	65.5	63.8
Greenville–Spartanburg .....	12.0	11.9	12.0	54.6	58.0	57.7	39.2	42.3	41.8
<b>South Dakota</b>									
Rapid City .....	14.7	15.0	15.2	66.4	66.0	67.0	61.7	61.3	61.3
Rapid City .....	1.7	1.5	1.6	9.2	8.9	9.3	7.3	7.5	7.4
Sioux Falls .....	6.5	6.7	6.8	19.6	19.9	19.9	8.0	7.7	8.0
<b>Tennessee</b>									
Chattanooga .....	104.9	106.2	106.9	436.0	442.6	443.7	323.5	327.9	315.4
Chattanooga .....	12.4	12.8	12.8	38.7	39.7	39.9	34.3	35.1	34.2
Johnson City–Kingsport–Bristol .....	5.3	5.5	5.6	29.9	32.7	32.2	24.0	24.0	22.7
Knoxville .....	9.9	10.1	10.1	57.0	59.3	59.5	50.8	49.1	48.6
Memphis .....	24.9	25.8	26.0	107.1	108.9	109.6	71.5	73.5	69.2
Nashville .....	34.7	34.4	34.3	122.2	120.4	119.4	65.9	70.1	67.8
<b>Texas</b>									
Abilene .....	441.1	440.1	441.4	1,528.7	1,585.5	1,610.0	1,146.7	1,230.1	1,220.8
Abilene .....	2.4	2.5	2.5	12.6	12.9	12.6	8.8	9.1	9.0
Amarillo .....	4.4	4.1	4.1	17.0	17.1	17.6	13.3	13.7	13.5
Austin .....	24.5	23.8	23.8	84.6	86.4	86.5	98.0	103.6	99.6
Beaumont–Port Arthur .....	5.3	5.1	5.1	30.0	30.3	30.3	19.6	20.7	19.9
Brazoria .....	2.0	1.9	1.9	8.1	8.6	8.5	11.0	11.4	11.2
Brownsville–Harlingen .....	3.7	3.6	3.6	15.9	15.8	15.6	16.3	17.1	16.8
Bryan–College Station .....	1.6	1.7	1.6	8.7	9.4	9.3	18.4	22.2	20.1
Corpus Christi .....	6.9	6.9	6.9	28.4	29.1	28.8	27.7	28.2	27.6
Dallas .....	130.1	126.5	126.6	332.3	339.1	339.0	146.6	153.3	149.3
El Paso .....	8.8	8.4	8.4	39.1	39.1	39.4	39.0	41.5	40.0
Ft. Worth–Arlington .....	26.8	26.9	27.1	119.9	123.4	125.0	66.8	70.2	68.8
Galveston–Texas City .....	4.4	4.2	4.3	14.3	14.3	14.7	22.0	21.0	20.8
Houston .....	101.0	99.8	99.9	381.8	396.1	401.2	185.3	196.4	193.5
Killeen–Temple .....	2.8	3.0	3.1	15.9	16.6	16.7	21.1	21.6	21.4
Laredo .....	1.7	1.4	1.4	6.2	6.3	6.3	9.1	9.8	9.4
Longview–Marshall .....	2.7	2.7	2.7	12.1	12.5	12.5	8.3	8.6	8.5
Lubbock .....	5.4	5.6	5.6	22.5	23.6	23.7	20.3	21.9	20.8
McAllen–Edinburg–Mission .....	3.7	3.7	3.8	15.3	16.2	16.2	24.0	25.9	25.9
Midland .....	2.3	2.2	2.2	9.9	9.7	9.7	6.3	6.5	6.4
Odessa .....	1.7	1.7	1.7	7.2	7.3	7.2	7.6	7.5	7.5
San Angelo .....	1.8	1.8	1.8	8.2	8.2	8.2	6.8	7.3	7.1
San Antonio .....	39.4	39.8	40.4	124.9	130.6	130.4	113.2	122.0	118.0
Sherman–Denison .....	1.8	1.7	1.7	8.4	8.5	8.1	4.4	4.3	4.3
Texarkana .....	1.9	1.9	1.9	9.5	9.5	9.6	12.0	12.5	12.5
Tyler .....	3.4	3.3	3.3	14.7	14.9	15.0	9.2	9.6	9.4
Victoria .....	1.6	1.6	1.6	6.0	6.2	6.2	4.7	5.3	5.3
Waco .....	4.9	4.8	4.8	20.5	21.4	21.0	12.0	12.9	12.3
Wichita Falls .....	2.4	2.3	2.3	11.8	11.9	11.8	10.0	9.8	9.6
<b>Utah</b>									
Provo–Orem .....	33.4	33.3	33.3	156.1	162.9	166.7	144.9	150.8	147.9
Provo–Orem .....	2.3	2.3	2.3	26.9	29.4	30.2	14.3	14.4	14.2
Salt Lake City–Ogden .....	27.5	27.0	27.3	108.2	111.4	113.4	95.1	97.7	96.1
<b>Vermont</b>									
Barre–Montpelier .....	12.7	13.1	13.4	61.1	59.5	61.3	39.9	42.5	40.6
Barre–Montpelier .....	3.0	3.1	3.2	7.3	7.8	8.1	8.4	8.4	8.3
Burlington .....	3.6	3.6	3.6	19.1	18.5	18.8	11.1	12.4	11.4

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Virginia</b> .....	2,801.3	2,886.2	2,916.1	16.1	14.3	14.4	200.5	208.9	215.2
Bristol .....	32.3	32.9	33.1	.1	.1	.1	1.0	.9	1.0
Charlottesville .....	65.3	67.7	66.8	.1	.1	.1	3.9	3.8	4.0
Danville .....	41.8	42.7	43.2	.1	.1	.1	2.3	2.6	2.7
Lynchburg .....	72.6	73.5	74.0	.1	.1	.1	3.8	3.5	3.6
Norfolk-Virginia Beach-Newport News .....	575.4	573.5	581.2	.1	.2	.2	38.7	39.1	40.0
Northern Virginia .....	750.9	785.9	798.2	.5	.6	.6	61.7	67.1	69.0
Richmond-Petersburg .....	451.4	464.0	466.1	.9	1.1	1.1	30.6	32.3	32.7
Roanoke .....	123.8	124.4	125.1	.1	.1	.1	8.1	8.2	8.2
<b>Washington</b> .....	1,961.3	2,034.2	2,053.2	3.4	3.5	3.5	98.9	103.9	108.4
Seattle .....	991.7	1,038.8	1,048.3	.6	.6	.6	52.3	52.4	54.5
<b>West Virginia</b> .....	615.5	617.3	615.8	34.4	33.7	30.9	27.8	27.9	28.4
Charleston .....	107.8	108.3	109.4	2.0	1.9	1.7	4.4	4.2	4.4
Huntington-Ashland .....	104.1	106.5	106.6	1.4	1.5	1.5	3.7	3.4	3.8
Parkersburg-Marietta .....	60.3	60.5	61.3	.6	.6	.7	3.0	2.8	2.9
Wheeling .....	59.9	59.7	59.8	2.5	2.6	2.6	2.1	1.9	2.0
<b>Wisconsin</b> .....	2,179.4	2,202.4	2,223.1	2.5	2.8	2.9	75.2	76.9	79.9
Appleton-Oshkosh-Neenah .....	152.5	154.1	155.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.1	7.4	7.7
Eau Claire .....	56.4	58.9	58.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.7	1.6	1.6
Green Bay .....	97.7	99.1	100.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3.3	3.4	3.5
Janesville-Beloit .....	57.6	57.3	57.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.5	1.4	1.3
Kenosha .....	41.9	39.9	38.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.2	1.8	1.6
La Crosse .....	54.4	57.5	57.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.1	2.3	2.6
Madison .....	205.1	210.1	209.9	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.1	6.1	6.2
Milwaukee .....	723.0	734.8	741.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	23.1	23.5	24.2
Racine .....	73.8	74.9	75.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1.9	2.0	2.1
Wausau .....	48.6	50.6	50.6	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.0	2.1	2.2
<b>Wyoming</b> .....	191.7	190.0	194.5	18.7	18.3	18.6	11.3	10.4	11.1
<b>Puerto Rico</b> .....	840.4	825.6	856.0	.8	.8	.8	41.7	42.3	42.3
Caguas .....	54.1	52.5	53.8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Mayaguez .....	57.8	59.5	61.7	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Ponce .....	54.1	54.0	58.3	.1	.1	.1	3.8	3.8	3.8
San Juan .....	511.5	508.8	519.6	.4	.4	.4	31.0	30.7	30.8
<b>Virgin Islands</b> .....	41.2	41.6	41.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2.3	2.1	2.0

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Virginia</b> .....	429.1	425.1	427.6	146.1	146.9	149.1	636.3	656.1	665.0
Bristol .....	11.2	10.8	10.8	1.1	1.1	1.1	8.1	8.6	8.7
Charlottesville .....	8.7	8.7	8.8	2.3	2.3	2.4	13.1	13.7	13.6
Danville .....	16.5	16.7	16.6	1.0	.9	.9	9.2	9.7	10.0
Lynchburg .....	23.0	22.7	22.7	2.7	2.4	2.5	16.4	16.9	16.9
Norfolk-Virginia Beach-Newport News .....	69.5	67.3	67.7	27.0	26.3	26.6	142.3	141.9	143.4
Northern Virginia .....	35.6	33.8	34.0	52.6	57.3	59.0	165.5	168.3	169.6
Richmond-Petersburg .....	62.3	61.3	61.4	23.8	23.5	23.4	108.8	112.1	112.9
Roanoke .....	19.9	19.4	19.4	8.6	8.4	8.6	33.6	34.1	34.2
<b>Washington</b> .....	340.6	357.4	361.3	102.4	104.7	106.4	480.5	496.8	499.4
Seattle .....	197.4	213.4	216.1	61.7	64.1	65.5	238.9	249.2	247.1
<b>West Virginia</b> .....	87.7	86.5	87.4	37.2	37.4	37.7	144.1	145.2	146.2
Charleston .....	10.9	11.2	11.3	8.6	8.9	8.9	28.5	28.6	28.8
Huntington-Ashland .....	19.4	20.1	20.2	8.0	7.9	8.0	26.9	27.4	27.5
Parkersburg-Marietta .....	14.3	13.9	14.3	2.2	2.2	2.3	14.5	14.4	14.5
Wheeling .....	7.3	7.4	7.5	3.3	3.4	3.4	16.8	16.0	16.3
<b>Wisconsin</b> .....	558.9	550.4	560.4	97.8	100.6	100.8	514.6	518.4	525.6
Appleton-Oshkosh-Neenah .....	53.9	52.8	54.5	5.4	5.8	5.8	31.8	32.6	32.6
Eau Claire .....	11.6	11.8	12.1	3.0	3.3	3.3	15.4	15.5	15.3
Green Bay .....	25.4	25.5	26.4	7.2	7.6	7.5	24.9	24.7	25.0
Janesville-Beloit .....	18.1	17.3	16.6	2.1	2.1	2.2	14.3	14.5	14.7
Kenosha .....	14.0	9.9	9.7	1.5	1.5	1.4	9.5	10.1	10.1
La Crosse .....	11.3	10.7	11.1	2.3	2.3	2.3	15.3	16.7	16.7
Madison .....	24.6	25.0	25.5	7.1	7.3	7.3	46.1	47.2	47.1
Milwaukee .....	174.3	176.5	177.1	35.2	35.7	35.6	164.1	167.6	169.3
Racine .....	25.6	26.3	26.3	2.4	2.3	2.3	16.7	16.7	16.6
Wausau .....	14.1	14.1	14.5	2.7	2.9	2.8	12.0	12.6	12.8
<b>Wyoming</b> .....	8.9	9.0	9.2	13.5	13.7	13.9	42.8	42.1	43.3
<b>Puerto Rico</b> .....	151.6	160.1	159.0	17.8	17.0	17.2	145.0	149.0	148.1
Caguas .....	16.0	16.4	16.3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	10.8	11.2	10.9
Mayaguez .....	18.7	21.3	21.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	7.9	7.9	7.9
Ponce .....	9.4	10.1	10.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	8.6	9.2	9.0
San Juan .....	64.7	67.3	67.0	14.4	13.6	13.8	99.7	102.1	102.0
<b>Virgin Islands</b> .....	2.3	2.4	2.4	2.6	2.6	2.6	9.5	9.4	9.3

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	Finance, insurance, and real estate			Services			Government		
	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>	June 1988	May 1989	June 1989 <sup>p</sup>
<b>Virginia</b> .....	152.2	154.6	157.6	678.2	713.9	724.1	542.8	566.4	563.1
Bristol .....	1.2	1.3	1.3	4.5	4.6	4.6	5.1	5.5	5.5
Charlottesville .....	3.3	3.3	3.3	13.0	12.9	13.1	20.9	22.9	21.5
Danville .....	1.3	1.3	1.3	6.1	6.1	6.2	5.3	5.3	5.4
Lynchburg .....	3.9	4.3	4.4	13.3	14.2	14.4	9.4	9.4	9.4
Norfolk-Virginia Beach-Newport News .....	27.5	26.5	27.1	139.7	140.9	144.4	130.6	131.3	131.8
Northern Virginia .....	49.2	51.2	52.0	242.8	259.6	263.4	143.0	148.0	150.6
Richmond-Petersburg .....	38.8	40.3	41.0	95.2	97.5	97.8	91.0	95.9	95.8
Roanoke .....	8.3	8.6	8.6	29.4	30.2	30.4	15.8	15.4	15.6
<b>Washington</b> .....	110.5	113.9	115.6	449.9	470.2	473.1	375.1	383.8	385.5
Seattle .....	70.3	72.2	73.2	233.8	245.3	249.0	136.7	141.6	142.3
<b>West Virginia</b> .....	24.4	24.1	24.2	132.8	135.2	135.7	127.1	127.3	125.3
Charleston .....	6.3	6.2	6.2	25.8	26.4	26.7	21.3	20.9	21.4
Huntington-Ashland .....	3.7	3.8	3.8	22.5	23.4	23.5	18.5	19.0	18.3
Parkersburg-Marietta .....	2.3	2.4	2.4	13.5	14.0	14.1	9.9	10.2	10.1
Wheeling .....	2.8	2.7	2.8	15.4	16.0	15.7	9.7	9.7	9.5
<b>Wisconsin</b> .....	116.4	118.6	120.7	486.0	492.1	498.9	328.0	342.6	333.9
Appleton-Oshkosh-Neenah .....	7.3	7.4	7.5	29.8	30.2	30.4	16.9	17.6	16.6
Eau Claire .....	1.8	1.9	1.9	12.8	13.3	13.5	10.1	11.5	10.7
Green Bay .....	3.2	3.5	3.6	22.2	22.8	22.5	11.4	11.5	11.6
Janesville-Beloit .....	1.6	1.6	1.7	12.6	12.8	12.8	7.3	7.5	7.6
Kenosha .....	1.2	1.2	1.3	8.2	8.8	8.8	6.3	6.6	5.6
La Crosse .....	1.6	1.6	1.6	14.8	15.9	15.7	7.0	8.0	7.3
Madison .....	18.4	18.5	18.9	45.7	46.8	47.1	55.9	59.0	57.6
Milwaukee .....	50.6	52.0	52.7	191.3	194.8	196.9	84.1	84.4	84.9
Racine .....	2.4	2.3	2.4	16.4	16.9	17.3	8.4	8.4	8.7
Wausau .....	3.5	3.7	3.8	8.5	8.8	8.8	5.8	6.4	5.7
<b>Wyoming</b> .....	7.2	7.3	7.3	36.5	33.1	35.9	52.8	56.1	55.2
<b>Puerto Rico</b> .....	36.1	36.0	36.3	118.5	124.5	121.3	328.8	295.8	331.1
Caguas .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	18.8	16.1	18.4
Mayaguez .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	21.3	19.3	21.6
Ponce .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.7	10.4	10.3	18.9	17.0	21.8
San Juan .....	28.7	28.6	29.0	86.3	89.8	87.9	186.2	176.2	188.7
<b>Virgin Islands</b> .....	1.9	2.0	2.0	9.3	9.7	9.6	13.3	13.4	13.4

<sup>1</sup> Not available.

<sup>2</sup> Combined with construction.

<sup>p</sup> = 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 workers<sup>1</sup> on private nonagricultural payrolls by major industry, 1964 to date**

Year and month	Total private <sup>1</sup>			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
<b>Annual averages</b>									
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	12.54	531.70	37.8	12.71	480.44
1988 .....	34.7	9.29	322.36	42.3	12.75	539.33	37.9	13.01	493.08
<b>Monthly data, not seasonally adjusted</b>									
<b>1988:</b>									
July .....	35.1	\$9.24	\$324.32	42.4	\$12.72	\$539.33	38.6	\$12.96	\$500.26
August .....	35.0	9.24	323.40	42.0	12.69	532.98	38.6	12.99	501.41
September .....	34.8	9.40	327.12	42.2	12.82	541.00	38.4	13.16	505.34
October .....	34.9	9.45	329.81	42.6	12.79	544.85	39.1	13.17	514.95
November .....	34.7	9.46	328.26	41.9	12.89	540.09	37.8	13.08	494.42
December .....	34.9	9.46	330.15	42.8	13.03	557.68	37.3	13.19	491.99
<b>1989:</b>									
January .....	34.5	9.54	329.13	42.2	13.20	557.04	36.5	13.26	483.99
February .....	34.3	9.55	327.57	41.7	13.22	551.27	36.2	13.21	478.20
March .....	34.4	9.56	328.86	42.0	13.15	552.30	37.4	13.26	495.92
April .....	34.8	9.62	334.78	42.8	13.19	564.53	37.9	13.30	504.07
May .....	34.5	9.59	330.86	42.0	13.13	551.46	37.7	13.28	500.66
June <sup>p</sup> .....	34.8	9.58	333.38	42.8	13.04	558.11	38.0	13.23	502.74
July <sup>p</sup> .....	35.1	9.63	338.01	43.4	13.07	567.24	39.0	13.32	519.48

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

**C-1. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> 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
	<b>Annual averages</b>									
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	9.60	365.76
1988 .....	41.1	10.18	9.72	418.40	39.3	12.32	484.18	38.1	9.94	378.71
	<b>Monthly data, not seasonally adjusted</b>									
<b>1988:</b>										
July .....	40.7	\$10.17	\$9.73	\$413.92	39.8	\$12.32	\$490.34	38.3	\$9.95	\$381.09
August .....	40.9	10.13	9.67	414.32	39.7	12.35	490.30	38.0	9.91	376.58
September .....	41.3	10.25	9.75	423.33	39.5	12.40	489.80	38.1	10.04	382.52
October .....	41.3	10.25	9.76	423.33	39.5	12.42	490.59	38.2	10.10	385.82
November .....	41.5	10.31	9.82	427.87	39.3	12.46	489.68	38.0	10.07	382.66
December .....	41.7	10.37	9.88	432.43	39.5	12.42	490.59	38.2	10.14	387.35
<b>1989:</b>										
January .....	41.0	10.37	9.91	425.17	39.3	12.47	490.07	37.9	10.23	387.72
February .....	40.8	10.38	9.92	423.50	39.1	12.50	488.75	37.8	10.23	386.69
March .....	41.0	10.41	9.94	426.81	39.2	12.46	488.43	37.9	10.21	386.96
April .....	41.0	10.41	9.95	426.81	39.8	12.51	497.90	38.2	10.36	395.75
May .....	40.9	10.42	9.98	426.18	39.3	12.49	490.86	37.9	10.28	389.61
June <sup>a</sup> .....	41.1	10.44	9.98	429.08	39.6	12.47	493.81	38.1	10.30	392.43
July <sup>a</sup> .....	40.5	10.47	10.02	424.04	40.3	12.60	507.78	38.3	10.41	398.70

See footnotes at end of table.

**ESTABLISHMENT DATA  
HISTORICAL HOURS AND EARNINGS**

**C-1. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> 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	33.3	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	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988 .....	29.1	6.31	183.62	35.9	9.09	326.33	32.6	8.91	290.47
Monthly data, not seasonally adjusted									
<b>1988:</b>									
July .....	30.0	\$6.28	\$188.40	36.1	\$9.03	\$325.98	33.0	\$8.80	\$290.40
August .....	29.8	6.26	186.55	35.7	9.03	322.37	32.8	8.81	288.97
September .....	29.1	6.38	185.66	35.8	9.14	327.21	32.5	9.00	292.50
October .....	29.1	6.39	185.95	36.0	9.29	334.44	32.7	9.09	297.24
November .....	28.8	6.43	185.18	35.7	9.27	330.94	32.5	9.11	296.08
December .....	29.6	6.43	190.33	35.8	9.32	333.66	32.6	9.16	298.62
<b>1989:</b>									
January .....	28.4	6.48	184.03	36.1	9.46	341.51	32.6	9.25	301.55
February .....	28.3	6.47	183.10	35.8	9.47	339.03	32.4	9.28	300.67
March .....	28.5	6.48	184.68	35.8	9.43	337.59	32.4	9.29	301.00
April .....	28.9	6.52	188.43	36.3	9.59	348.12	32.8	9.34	306.35
May .....	28.8	6.49	186.91	35.6	9.48	337.49	32.4	9.30	301.32
June <sup>p</sup> .....	29.2	6.48	189.22	35.8	9.47	339.03	32.7	9.26	302.80
July <sup>p</sup> .....	29.9	6.48	193.75	36.4	9.58	348.71	33.1	9.33	308.82

<sup>1</sup> 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.

<sup>p</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Total private .....</b>		34.9	35.1	34.5	34.8	35.1					
<b>Mining .....</b>		42.5	42.4	42.0	42.8	43.4					
Metal mining .....	10	42.3	42.9	42.2	42.8						
Iron ores .....	101	41.5	41.6	42.6	43.0						
Copper ores .....	102	43.1	45.3	44.3	45.6						
Coal mining .....	11,12	42.0		42.5	41.7						
Bituminous coal and lignite mining .....	12	42.1		42.5	41.8						
Oil and gas extraction .....	13	41.4	41.7	40.6	42.0						
Crude petroleum, natural gas, and natural gas liquids .....	131,2	41.4	43.5	41.0	44.6						
Oil and gas field services .....	138	41.3	40.7	40.3	40.4						
Nonmetallic minerals, except fuels .....	14	46.9	46.5	45.7	46.3						
Crushed and broken stone .....	142	48.4	48.2	47.2	47.3						
<b>Construction .....</b>		38.7	38.6	37.7	38.0	39.0					
General building contractors .....	15	38.0	37.9	37.1	37.3						
Residential building construction .....	152	37.1	36.8	36.2	36.7						
Operative builders .....	153	38.5	39.1	37.9	37.6						
Nonresidential building construction .....	154	39.0	39.0	38.1	38.0						
Heavy construction contractors .....	16	43.3	42.9	41.3	41.6						
Highway and street construction .....	161	45.3	44.6	41.7	42.3						
Heavy construction, except highway .....	162	42.2	41.9	41.1	41.3						
Special trade contractors .....	17	37.8	37.7	36.9	37.2						
Plumbing, heating, and air conditioning .....	171	39.0	39.2	38.7	38.9						
Painting, paper hanging, and decorating .....	172	36.8	36.6	35.7	36.1						
Electrical work .....	173	38.8	39.2	38.8	38.8						
Masonry, stonework, and plastering .....	174	35.6	35.5	34.6	35.1						
Carpentering and flooring .....	175	35.6	35.5	34.7	35.2						
Roofing and sheet metal work .....	176	35.6	34.6	32.7	32.8						
<b>Manufacturing .....</b>		41.2	40.7	40.9	41.1	40.5	3.9	3.7	3.6	3.8	3.7
<b>Durable goods .....</b>		42.0	41.2	41.5	41.7	40.9	4.1	3.8	3.8	3.9	3.7
Lumber and wood products .....	24	40.9	40.3	40.1	40.4	39.3	3.9	3.8	3.5	3.6	
Logging camps and logging contractors .....	241	41.1	40.3	40.9	41.0	-	4.2	4.4	5.2	4.9	
Sawmills and planing mills .....	242	41.7	40.9	41.6	41.6		4.4	4.2	4.2	4.4	
Sawmills and planing mills, general .....	2421	42.1	41.3	42.0	41.9		4.6	4.5	4.5	4.7	
Hardwood dimension and flooring .....	2426	40.1	39.5	40.3	40.3		3.5	3.1	3.1	3.4	
Millwork, plywood, and structural members .....	243	40.6	40.3	39.5	40.0		3.7	3.6	3.0	3.2	
Millwork .....	2431	40.9	40.6	38.6	38.9		3.3	3.2	2.1	1.9	
Wood kitchen cabinets .....	2434	39.8	39.4	38.9	40.1		3.4	2.8	2.9	3.5	
Hardwood veneer and plywood .....	2435	41.0	40.1	40.2	40.6		3.8	3.4	3.4	3.7	
Softwood veneer and plywood .....	2436	41.6	41.1	42.4	42.6		5.1	5.4	4.9	4.9	
Wood containers .....	244	39.4	38.9	38.9	39.0		3.6	3.4	3.5	3.4	
Wood buildings and mobile homes .....	245	40.6	40.0	38.1	39.1		3.2	3.1	1.9	2.2	
Mobile homes .....	2451	40.1	39.5	38.2	39.0		2.9	2.9	1.8	1.8	
Miscellaneous wood products .....	249	40.5	39.8	39.6	40.0		3.3	3.1	2.7	2.9	
Furniture and fixtures .....	25	39.4	38.9	39.0	39.3	38.3	2.6	2.4	2.3	2.6	
Household furniture .....	251	39.0	38.3	38.7	38.9	-	2.3	1.9	2.1	2.3	
Wood household furniture .....	2511	39.3	38.9	39.5	40.0		2.4	2.0	2.6	2.8	
Upholstered household furniture .....	2512	37.9	36.9	37.1	37.4		1.8	1.3	1.4	1.5	
Metal household furniture .....	2514	40.3	39.4	40.2	40.1		2.7	2.0	2.5	3.0	
Mattresses and bedsprings .....	2515	40.6	38.6	38.7	39.3		3.5	3.1	2.5	2.7	
Office furniture .....	252	39.9	39.8	39.1	39.0		2.4	2.6	2.0	2.1	
Public building and related furniture .....	253	41.4	40.8	39.3	39.7		4.7	4.0	3.5	3.8	
Partitions and fixtures .....	254	39.7	39.4	40.7	40.9		2.9	3.2	3.1	3.7	
Miscellaneous furniture and fixtures .....	259	39.4	39.0	38.2	40.0		2.8	2.9	2.0	3.1	
Stone, clay, and glass products .....	32	42.8	42.4	42.4	42.6	42.5	5.4	5.2	5.0	5.2	
Flat glass .....	321	45.4	44.5	44.7	44.9	-	7.5	7.2	6.0	5.7	
Glass and glassware, pressed or blown .....	322	41.0	41.5	42.1	42.0		4.4	4.9	4.6	4.7	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Total private .....</b>		\$9.23	\$9.24	\$9.59	\$9.58	\$9.63	\$322.13	\$324.32	\$330.86	\$333.38	\$338.01
<b>Mining .....</b>		12.61	12.72	13.13	13.04	13.07	535.93	539.33	551.46	558.11	567.24
Metal mining .....	10	13.25	13.31	13.60	13.65		560.48	571.00	573.92	584.22	
Iron ores .....	101	14.55	14.76	13.78	14.40		603.83	614.02	587.03	619.20	
Copper ores .....	102	11.68	11.60	11.51	11.77		503.41	525.48	509.89	536.71	
Coal mining .....	11,12	15.86		16.16	15.74		666.12	643.92	686.80	656.36	
Bituminous coal and lignite mining .....	12	15.91		16.22	15.79		669.81	647.54	689.35	660.02	
Oil and gas extraction .....	13	11.68	11.92	12.37	12.50		483.55	497.06	502.22	525.00	
Crude petroleum, natural gas, and natural gas liquids .....	131,2	14.35	14.51	15.09	15.24		594.09	631.19	618.69	679.70	
Oil and gas field services .....	138	10.09	10.29	10.73	10.70		416.72	418.80	432.42	432.28	
Nonmetallic minerals, except fuels .....	14	10.91	10.97	11.16	11.29		511.68	510.11	510.01	522.73	
Crushed and broken stone .....	142	10.40	10.45	10.68	10.83		503.36	503.69	504.10	512.26	
<b>Construction .....</b>		12.89	12.96	13.28	13.23	13.32	498.84	500.26	500.66	502.74	519.48
General building contractors .....	15	12.03	12.05	12.51	12.45		457.14	456.70	464.12	464.39	
Residential building construction .....	152	11.34	11.38	11.90	11.87		420.71	418.78	430.78	435.63	
Operative builders .....	153	11.05	10.89	11.85	11.79		425.43	425.80	449.12	443.30	
Nonresidential building construction .....	154	12.86	12.83	13.22	13.14		501.54	500.37	503.68	499.32	
Heavy construction contractors .....	16	12.39	12.53	12.95	13.01		536.49	537.54	534.84	541.22	
Highway and street construction .....	161	12.32	12.42	12.52	12.73		558.10	553.93	522.08	538.48	
Heavy construction, except highway .....	162	12.43	12.59	13.15	13.15		524.55	527.52	540.47	543.10	
Special trade contractors .....	17	13.43	13.48	13.70	13.62		507.65	508.20	505.53	506.66	
Plumbing, heating, and air conditioning .....	171	13.72	13.83	14.20	14.07		535.08	542.14	549.54	547.32	
Painting, paper hanging, and decorating .....	172	12.64	12.69	12.93	12.94		465.15	464.45	461.60	467.13	
Electrical work .....	173	14.76	14.73	14.66	14.69		572.69	577.42	568.81	569.97	
Masonry, stonework, and plastering .....	174	13.69	13.62	13.94	13.83		487.36	483.51	482.32	485.43	
Carpentering and flooring .....	175	12.82	12.82	13.11	12.96		456.39	455.11	454.92	456.19	
Roofing and sheet metal work .....	176	11.83	12.05	11.98	11.92		421.15	416.93	391.75	390.98	
<b>Manufacturing .....</b>		10.16	10.17	10.42	10.44	10.47	418.59	413.92	426.18	429.08	424.04
<b>Durable goods .....</b>		10.70	10.67	10.94	10.98	10.99	449.40	439.60	454.01	457.87	449.49
Lumber and wood products .....	24	8.60	8.66	8.79	8.86	8.92	351.74	349.00	352.48	357.94	350.56
Logging camps and logging contractors .....	241	10.78	11.08	11.14	11.28	-	443.06	446.52	455.63	462.48	-
Sawmills and planing mills .....	242	8.73	8.77	8.95	8.98		364.04	358.69	372.32	373.57	
Sawmills and planing mills, general .....	2421	9.07	9.09	9.27	9.30		381.85	375.42	389.34	389.67	
Hardwood dimension and flooring .....	2426	7.03	7.09	7.33	7.38		281.90	280.06	295.40	297.41	
Millwork, plywood, and structural members .....	243	8.61	8.57	8.72	8.76		349.57	345.37	344.44	350.40	
Millwork .....	2431	8.79	8.76	8.92	8.92		359.51	355.66	344.31	346.99	
Wood kitchen cabinets .....	2434	8.04	7.89	8.14	8.19		319.99	310.87	316.65	328.42	
Hardwood veneer and plywood .....	2435	6.99	7.03	7.28	7.41		286.59	281.90	292.66	300.85	
Softwood veneer and plywood .....	2436	10.20	10.27	10.13	10.19		424.32	422.10	429.51	434.09	
Wood containers .....	244	6.34	6.39	6.51	6.44		249.80	248.57	253.24	251.16	
Wood buildings and mobile homes .....	245	8.08	8.01	8.30	8.31		328.05	320.40	316.23	324.92	
Mobile homes .....	2451	8.22	8.07	8.31	8.33		329.62	318.77	317.44	324.87	
Miscellaneous wood products .....	249	7.41	7.50	7.61	7.69		300.11	298.50	301.36	307.60	
Furniture and fixtures .....	25	7.93	7.99	8.16	8.22	8.26	312.44	310.81	318.24	323.05	316.36
Household furniture .....	251	7.30	7.35	7.53	7.57	-	284.70	281.51	291.41	294.47	-
Wood household furniture .....	2511	6.81	6.91	7.08	7.11		267.63	268.80	279.66	284.40	
Upholstered household furniture .....	2512	7.91	7.90	8.23	8.22		299.79	291.51	305.33	307.43	
Metal household furniture .....	2514	7.37	7.55	7.57	7.93		297.01	297.47	304.31	317.99	
Mattresses and bedsprings .....	2515	7.76	7.69	7.87	7.88		315.06	296.83	304.57	309.68	
Office furniture .....	252	8.98	9.16	9.18	9.31		358.30	364.57	358.94	363.09	
Public building and related furniture .....	253	8.48	8.37	8.78	8.75		351.07	341.50	345.05	347.38	
Partitions and fixtures .....	254	9.34	9.36	9.62	9.66		370.80	368.78	391.53	395.09	
Miscellaneous furniture and fixtures .....	259	8.27	8.21	8.45	8.52		325.84	320.19	322.79	340.80	
Stone, clay, and glass products .....	32	10.47	10.53	10.69	10.74	10.78	448.12	446.47	453.26	457.52	458.15
Flat glass .....	321	15.02	14.83	15.06	14.93	-	681.91	659.94	673.18	670.36	-
Glass and glassware, pressed or blown .....	322	11.69	11.89	12.05	12.04		479.29	493.44	507.31	505.68	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products—Continued											
Glass containers .....	3221	40.8	41.6	42.4	42.5		5.3	5.7	5.4	5.6	
Pressed and blown glass, nec .....	3229	41.2	41.3	41.7	41.4		3.3	4.0	3.6	3.7	
Products of purchased glass .....	323	41.9	41.7	41.5	41.4		3.5	3.4	3.2	3.3	
Cement, hydraulic .....	324	42.5	42.3	41.7	41.5		3.3	3.4	3.0	2.8	
Structural clay products .....	325	42.1	41.9	41.4	42.3		4.4	4.4	3.7	4.0	
Pottery and related products .....	326	40.1	39.5	40.2	39.8		2.9	2.9	2.9	3.0	
Concrete, gypsum, and plaster products .....	327	44.7	43.9	43.4	43.7		7.4	6.9	6.8	7.0	
Concrete block and brick .....	3271	46.6	45.5	44.0	43.4		8.1	7.0	6.7	6.8	
Concrete products, nec .....	3272	43.4	43.1	43.3	43.6		6.3	6.3	6.2	6.4	
Ready-mixed concrete .....	3273	44.7	43.5	42.8	43.1		8.0	7.1	7.0	7.2	
Misc. nonmetallic mineral products .....	329	42.6	41.8	42.2	42.7		4.7	4.5	4.5	4.7	
Abrasive products .....	3291	43.8	42.7	42.7	44.1		3.8	3.6	4.0	4.5	
Asbestos products .....	3292	42.5	40.7	42.1	41.2		3.9	2.9	5.0	3.4	
Primary metal industries .....	33	43.7	43.1	43.1	43.3	42.7	5.6	5.4	5.1	5.4	
Blast furnaces and basic steel products .....	331	44.5	44.0	43.6	43.8	43.2	5.9	5.9	5.6	5.8	
Blast furnaces and steel mills .....	3312	44.7	44.4	43.9	44.2	-	6.0	6.2	5.8	6.0	
Steel pipe and tubes .....	3317	43.9	41.7	41.7	41.7		5.9	5.0	4.2	4.5	
Iron and steel foundries .....	332	43.5	42.6	42.8	42.9		5.7	5.2	5.0	5.2	
Gray iron foundries .....	3321	43.9	42.3	43.0	43.4		6.1	5.3	5.2	5.7	
Malleable iron foundries .....	3322	42.0	42.2	41.3	42.0		4.2	5.1	3.4	3.8	
Steel foundries, nec .....	3325	43.1	43.1	42.4	42.4		5.7	5.1	4.7	4.9	
Primary nonferrous metals .....	333	43.4	43.6	42.9	42.8		4.6	5.1	4.7	4.8	
Primary aluminum .....	3334	43.8	43.8	43.1	42.6		4.8	5.1	4.9	4.9	
Nonferrous rolling and drawing .....	335	43.8	43.1	43.5	43.8		6.2	6.0	5.7	6.2	
Copper rolling and drawing .....	3351	43.7	42.3	43.3	43.9		6.7	6.2	4.8	5.8	
Aluminum sheet, plate, and foil .....	3353	45.3	45.2	45.3	44.8		7.7	8.2	7.7	7.6	
Nonferrous wire drawing and insulating .....	3357	43.4	42.5	42.7	42.7		5.7	5.2	5.1	5.4	
Nonferrous foundries .....	336	42.0	40.5	41.5	41.7		4.1	3.2	3.7	3.7	
Aluminum foundries .....	3361	42.8	40.8	42.0	42.2		4.5	3.3	3.7	3.9	
Fabricated metal products .....	34	42.2	41.1	41.5	41.7	40.7	4.2	3.6	3.7	3.8	
Metal cans and shipping containers .....	341	44.8	45.0	44.2	44.7	-	5.8	6.1	5.7	6.0	
Metal cans .....	3411	45.1	45.5	44.2	45.1		6.0	6.3	5.4	6.0	
Cutlery, hand tools, and hardware .....	342	41.9	40.5	41.0	40.9		3.6	3.1	2.8	2.8	
Hand and edge tools, and hand saws and blades .....	3423.5	41.4	40.4	40.9	40.9		3.1	2.8	2.6	2.6	
Hardware, nec .....	3429	41.8	40.2	40.6	40.6		3.7	3.2	2.6	2.7	
Plumbing and heating, except electric .....	343	40.9	40.6	40.4	40.7		3.5	3.2	3.0	3.3	
Plumbing fittings and brass goods .....	3432	40.7	40.5	41.1	40.9		3.1	2.8	3.4	3.1	
Heating equipment, except electric .....	3433	40.5	40.6	39.5	39.8		3.3	3.6	2.4	3.1	
Fabricated structural metal products .....	344	41.3	40.9	41.1	41.5		3.8	3.8	3.4	3.7	
Fabricated structural metal .....	3441	42.3	42.2	41.5	41.9		5.0	5.1	4.0	4.1	
Metal doors, sash, and trim .....	3442	40.6	40.2	40.3	40.8		3.3	3.3	2.6	3.1	
Fabricated plate work (boiler shops) .....	3443	42.9	42.0	42.3	42.4		4.4	4.2	3.8	4.0	
Sheet metal work .....	3444	39.9	39.6	40.3	40.6		3.0	3.1	3.0	3.2	
Architectural metal work .....	3446	40.3	39.7	40.9	41.6		3.5	3.1	4.4	4.5	
Screw machine products, bolts, etc .....	345	43.4	42.7	42.4	42.7		5.4	4.9	4.7	4.9	
Screw machine products .....	3451	42.3	41.4	41.0	41.0		4.5	4.0	3.7	3.5	
Bolts, nuts, rivets, and washers .....	3452	44.7	44.1	44.0	44.6		6.5	5.9	5.9	6.4	
Metal forgings and stampings .....	346	43.7	40.8	42.4	42.2		5.6	3.5	4.4	4.2	
Iron and steel forgings .....	3462	43.4	42.9	42.7	43.1		5.1	4.8	4.6	5.0	
Automotive stampings .....	3465	45.9	40.2	43.4	42.9		7.0	2.9	5.0	4.5	
Metal stampings, nec .....	3469	40.8	40.4	40.6	40.5		3.8	3.5	3.3	3.3	
Metal services, nec .....	347	41.3	40.3	41.3	41.3		3.7	3.2	3.8	3.6	
Plating and polishing .....	3471	41.3	40.1	41.3	41.0		3.6	3.1	3.7	3.4	
Metal coating and allied services .....	3479	41.2	40.6	41.2	41.8		3.8	3.5	3.9	4.0	
Ordnance and accessories, nec .....	348	41.7	41.2	41.4	41.8		3.3	2.8	2.8	3.1	
Ammunition, except for small arms, nec .....	3483	40.4	40.7	40.7	41.6		2.5	2.4	2.3	2.8	
Misc. fabricated metal products .....	349	42.1	40.7	40.9	41.1		3.7	3.2	3.3	3.2	
Valves and pipe fittings .....	3494	43.0	41.7	41.6	41.6		4.1	3.8	3.3	3.1	
Misc. fabricated wire products .....	3496	41.5	40.0	39.3	40.0		3.6	3.0	3.2	3.2	
Machinery, except electrical .....	35	42.7	42.3	42.3	42.6	41.8	4.4	4.1	4.2	4.3	
Engines and turbines .....	351	44.2	45.3	43.0	42.6	-	4.7	3.9	4.0	3.6	
Turbines and turbine generator sets .....	3511	44.0	43.3	42.1	42.7		5.2	5.1	4.8	4.6	
Internal combustion engines, nec .....	3519	44.2	45.9	43.3	42.6		4.6	3.5	3.8	3.2	
Farm and garden machinery .....	352	42.3	41.7	41.8	42.2	-	3.8	3.8	3.9	4.1	
Farm machinery and equipment .....	3523	43.4	43.4	42.3	43.3	-	4.8	4.7	4.5	4.9	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Durable goods—Continued</b>											
Stone, clay, and glass products—Continued											
Glass containers .....	3221	\$12.18	\$12.38	\$12.57	\$12.58		\$496.94	\$515.01	\$532.97	\$534.65	
Pressed and blown glass, nec .....	3229	11.12	11.30	11.45	11.40		458.14	466.69	477.47	471.96	
Products of purchased glass .....	323	9.13	9.15	9.29	9.32		382.55	381.56	385.54	385.85	
Cement, hydraulic .....	324	13.03	13.17	13.50	13.49		553.78	557.09	562.95	559.84	
Structural clay products .....	325	8.89	8.96	9.15	9.14		374.27	375.42	378.81	386.62	
Pottery and related products .....	326	9.28	9.41	9.54	9.59		372.13	371.70	383.51	381.68	
Concrete, gypsum, and plaster products .....	327	10.25	10.28	10.49	10.55		458.18	451.29	455.27	461.04	
Concrete block and brick .....	3271	9.32	9.36	9.67	9.80		434.31	425.88	425.48	425.32	
Concrete products, nec .....	3272	9.19	9.22	9.48	9.51		398.85	397.38	410.48	414.64	
Ready-mixed concrete .....	3273	11.05	11.10	11.29	11.36		493.94	482.85	483.21	489.62	
Misc. nonmetallic mineral products .....	329	10.57	10.61	10.65	10.76		450.28	443.50	449.43	459.45	
Abrasive products .....	3291	9.96	9.99	10.24	10.25		436.25	426.57	437.25	452.03	
Asbestos products .....	3292	10.48	10.54	11.20	11.07		445.40	428.98	471.52	456.08	
Primary metal industries .....	33	12.14	12.22	12.25	12.32	\$12.35	530.52	526.68	527.98	533.46	\$527.35
Blast furnaces and basic steel products .....	331	13.95	14.09	14.06	14.15	14.17	620.78	619.96	613.02	619.77	612.14
Blast furnaces and steel mills .....	3312	14.70	14.88	14.81	14.87	-	657.09	660.67	650.16	657.25	-
Steel pipe and tubes .....	3317	11.01	10.82	10.85	11.00		483.34	451.19	452.45	458.70	
Iron and steel foundries .....	332	10.98	10.92	11.10	11.19		477.63	465.19	475.08	480.05	
Gray iron foundries .....	3321	11.52	11.44	11.64	11.73		505.73	483.91	500.52	509.08	
Malleable iron foundries .....	3322	11.75	12.22	12.15	12.05		493.50	515.68	501.80	506.10	
Steel foundries, nec .....	3325	10.22	10.15	10.31	10.44		440.48	437.47	437.14	442.66	
Primary nonferrous metals .....	333	13.21	13.33	13.57	13.68		573.31	581.19	582.15	585.50	
Primary aluminum .....	3334	13.57	13.60	13.85	13.98		594.37	595.68	596.94	595.55	
Nonferrous rolling and drawing .....	335	11.66	11.66	11.78	11.81		510.71	502.55	512.43	517.28	
Copper rolling and drawing .....	3351	10.96	10.92	11.06	11.11		478.95	461.92	478.90	487.73	
Aluminum sheet, plate, and foil .....	3353	14.02	14.00	14.24	14.22		635.11	632.80	645.07	637.06	
Nonferrous wire drawing and insulating .....	3357	11.82	11.78	11.84	11.96		512.99	500.65	505.57	510.69	
Nonferrous foundries .....	336	9.58	9.50	9.72	9.72		402.36	384.75	403.38	405.32	
Aluminum foundries .....	3361	9.78	9.62	9.94	9.94		418.58	392.50	417.48	419.47	
Fabricated metal products .....	34	10.29	10.20	10.49	10.50	10.54	434.24	419.22	435.34	437.85	428.98
Metal cans and shipping containers .....	341	13.51	13.42	13.75	13.86	-	605.25	603.90	607.75	619.54	-
Metal cans .....	3411	14.32	14.21	14.69	14.77		645.83	646.56	649.30	666.13	
Cutlery, hand tools, and hardware .....	342	10.20	10.03	10.43	10.38		427.38	406.22	427.63	424.54	
Hand and edge tools, and hand saws and blades .....	3423,5	9.28	9.19	9.56	9.63		384.19	371.28	391.00	393.87	
Hardware, nec .....	3429	10.63	10.41	10.85	10.74		444.33	418.48	440.51	436.04	
Plumbing and heating, except electric .....	343	9.37	9.38	9.43	9.48		383.23	380.83	380.97	385.84	
Plumbing fittings and brass goods .....	3432	8.93	9.01	9.07	9.04		363.45	364.91	372.78	369.74	
Heating equipment, except electric .....	3433	9.12	9.13	9.30	9.40		369.36	370.68	367.35	374.12	
Fabricated structural metal products .....	344	9.58	9.61	9.84	9.91		395.65	393.05	404.42	411.27	
Fabricated structural metal .....	3441	10.27	10.25	10.45	10.44		434.42	432.55	433.68	437.44	
Metal doors, sash, and trim .....	3442	8.04	8.10	8.23	8.26		326.42	325.62	331.67	337.01	
Fabricated plate work (boiler shops) .....	3443	10.29	10.34	10.46	10.57		441.44	434.28	442.46	448.17	
Sheet metal work .....	3444	9.89	9.92	10.15	10.34		394.61	392.83	409.05	419.80	
Architectural metal work .....	3446	8.93	8.86	9.32	9.32		359.88	351.74	381.19	387.71	
Screw machine products, bolts, etc .....	345	10.00	9.96	10.25	10.30		434.00	425.29	434.60	439.81	
Screw machine products .....	3451	9.27	9.31	9.63	9.64		392.12	385.43	394.83	395.24	
Bolts, nuts, rivets, and washers .....	3452	10.80	10.66	10.90	10.98		482.76	470.11	479.60	489.71	
Metal forgings and stampings .....	346	12.46	12.10	12.57	12.49		544.50	493.68	532.97	527.08	
Iron and steel forgings .....	3462	12.94	12.97	13.27	13.32		561.60	556.41	566.63	574.09	
Automotive stampings .....	3465	14.20	13.79	14.24	14.05		651.78	554.36	618.02	602.75	
Metal stampings, nec .....	3469	9.46	9.44	9.67	9.74		385.97	381.38	392.60	394.47	
Metal services, nec .....	347	8.20	8.26	8.50	8.50		338.66	332.88	351.05	351.05	
Plating and polishing .....	3471	8.16	8.23	8.46	8.47		337.01	330.02	349.40	347.27	
Metal coating and allied services .....	3479	8.28	8.32	8.57	8.55		341.14	337.79	353.08	357.39	
Ordnance and accessories, nec .....	348	11.29	11.30	11.59	11.56		470.79	465.56	479.83	483.21	
Ammunition, except for small arms, nec .....	3483	10.96	10.94	11.37	11.23		442.78	445.26	462.76	467.17	
Misc. fabricated metal products .....	349	9.43	9.50	9.70	9.74		397.00	386.65	396.73	400.31	
Valves and pipe fittings .....	3494	10.31	10.41	10.51	10.49		443.33	434.10	437.22	436.38	
Misc. fabricated wire products .....	3496	8.38	8.39	8.64	8.64		347.77	335.60	339.55	345.60	
Machinery, except electrical .....	35	10.97	10.98	11.29	11.32	11.34	468.42	464.45	477.57	482.23	474.01
Engines and turbines .....	351	13.69	13.71	13.98	14.08	-	605.10	621.06	601.14	599.81	-
Turbines and turbine generator sets .....	3511	13.75	13.90	14.19	14.15	-	605.00	601.87	597.40	604.21	-
Internal combustion engines, nec .....	3519	13.67	13.66	13.91	14.05	-	604.21	626.99	602.30	598.53	-
Farm and garden machinery .....	352	10.04	10.30	10.47	10.60		424.69	429.51	437.65	447.32	-
Farm machinery and equipment .....	3523	10.69	10.91	11.37	11.36		463.95	473.49	480.95	491.89	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Durable goods—Continued</b>											
Machinery, except electrical—Continued											
Construction and related machinery .....	353	43.4	42.9	42.3	42.8		4.3	4.1	4.0	4.4	
Construction machinery .....	3531	44.5	44.2	42.7	43.0		4.0	3.9	4.3	4.5	
Mining machinery .....	3532	41.1	40.8	42.0	42.7		3.7	4.0	4.0	4.5	
Oil field machinery .....	3533	44.3	42.4	41.3	42.6		6.3	5.3	3.7	4.5	
Conveyors and conveying equipment .....	3535	43.0	43.9	43.3	43.9		4.5	5.1	5.2	5.4	
Industrial trucks and tractors .....	3537	41.3	41.3	40.9	41.1		3.4	3.4	3.0	3.5	
Metalworking machinery .....	354	43.3	42.9	43.3	43.6		5.0	5.0	5.3	5.4	
Machine tools, metal cutting types .....	3541	42.8	42.2	44.3	44.2		4.3	4.3	5.3	5.4	
Machine tools, metal forming types .....	3542	44.1	44.9	43.4	44.0		5.3	5.9	5.3	5.9	
Special dies, tools, jigs, and fixtures .....	3544	43.9	43.7	43.7	44.0		5.8	5.8	5.9	6.0	
Machine tool accessories .....	3545	42.3	41.6	42.4	42.6		4.4	4.1	4.8	4.7	
Power driven hand tools .....	3546	42.4	41.6	42.0	42.8		3.3	3.4	3.5	3.6	
Special industry machinery .....	355	42.4	41.7	42.0	42.4		4.8	4.5	4.4	4.5	
Food products machinery .....	3551	42.1	41.8	41.8	42.6		4.1	4.0	4.2	4.3	
Textile machinery .....	3552	42.6	41.8	42.4	42.5		3.8	3.2	3.5	3.4	
Printing trades machinery .....	3555	40.1	39.5	38.7	38.7		5.1	5.0	4.0	3.8	
General industrial machinery .....	356	42.9	42.5	42.3	42.8		4.8	4.5	4.2	4.4	
Pumps and pumping equipment .....	3561	43.8	43.7	42.5	43.0		4.7	4.5	3.9	4.2	
Ball and roller bearings .....	3562	44.1	43.0	43.4	43.6		6.2	5.4	5.8	6.0	
Air and gas compressors .....	3563	42.0	41.9	43.6	45.9		4.8	4.2	4.4	4.7	
Blowers and fans .....	3564	42.0	41.1	40.9	41.4		3.2	3.2	2.6	3.2	
Speed changers, drives, and gears .....	3566	43.4	42.1	41.6	42.2		5.6	5.3	4.3	4.8	
Power transmission equipment, nec .....	3568	41.8	42.0	41.7	42.0		5.1	4.8	4.3	4.3	
Office and computing machines .....	357	41.5	41.5	41.4	41.8		3.2	2.8	2.7	3.1	
Electronic computing equipment .....	3573	41.6	41.5	41.4	41.6		3.2	2.8	2.7	3.1	
Refrigeration and service machinery .....	358	42.4	41.5	42.0	42.2		4.1	3.5	3.5	3.7	
Refrigeration and heating equipment .....	3585	43.0	42.2	42.7	42.9		4.3	3.8	4.1	4.3	
Misc. machinery, except electrical .....	359	42.1	41.8	41.7	42.3		4.4	4.3	4.4	4.4	
Carburetors, pistons, rings, and valves .....	3592	43.2	42.7	42.2	42.4		5.1	4.9	4.3	4.4	
Machinery, except electrical, nec .....	3599	41.9	41.7	41.7	42.2		4.3	4.3	4.4	4.4	
Electrical and electronic equipment .....	36	41.1	40.4	40.4	40.8	40.1	3.3	2.9	2.8	3.0	
Electric distributing equipment .....	361	42.3	41.9	41.6	41.9	-	3.5	3.7	2.7	3.1	
Transformers .....	3612	42.5	41.8	42.1	42.5		3.4	3.2	2.8	3.3	
Switchgear and switchboard apparatus .....	3613	42.2	42.0	41.1	41.3		3.6	4.1	2.6	2.9	
Electrical industrial apparatus .....	362	42.6	41.8	41.7	42.1		4.4	3.8	3.4	3.8	
Motors and generators .....	3621	42.5	41.6	41.9	42.0		5.1	3.9	3.9	4.3	
Industrial controls .....	3622	41.9	41.0	40.3	41.7		2.8	2.6	2.2	3.0	
Household appliances .....	363	39.7	39.2	39.3	39.4		2.9	2.5	2.6	2.6	
Household refrigerators and freezers .....	3632	39.8	38.8	38.2	38.2		4.5	3.6	3.2	2.9	
Household laundry equipment .....	3633	39.9	40.3	41.0	41.3		2.0	2.2	2.6	2.9	
Electric housewares and fans .....	3634	39.4	39.7	40.4	40.5		2.9	2.7	2.8	2.8	
Electric lighting and wiring equipment .....	364	40.4	39.3	39.7	40.0		3.2	2.5	2.5	2.8	
Electric lamps .....	3641	41.0	40.2	40.4	39.9		3.6	2.9	2.5	2.8	
Current-carrying wiring devices .....	3643	39.7	38.9	39.6	40.0		2.9	2.6	2.4	2.8	
Noncurrent-carrying wiring devices .....	3644	40.9	39.6	39.9	40.5		2.7	2.4	2.4	2.5	
Residential lighting fixtures .....	3645	38.7	38.2	37.7	37.9		1.7	1.3	1.7	2.5	
Radio and TV receiving equipment .....	365	41.3	40.8	39.4	40.0		3.2	2.7	2.8	3.0	
Radio and TV receiving sets .....	3651	40.8	40.5	38.7	39.3		2.7	1.9	2.3	2.6	
Communication equipment .....	366	41.0	40.7	40.7	41.1		2.5	2.3	2.2	2.5	
Telephone and telegraph apparatus .....	3661	42.7	42.2	41.5	42.3		3.0	2.6	2.3	2.9	
Radio and TV communication equipment .....	3662	40.4	40.1	40.3	40.6		2.4	2.2	2.2	2.3	
Electronic components and accessories .....	367	40.5	39.9	39.9	40.2		3.3	3.0	3.0	3.2	
Electronic tubes .....	3671-3	41.6	41.1	41.3	41.0		3.3	2.9	3.4	3.3	
Semiconductors and related devices .....	3674	40.1	40.0	39.6	40.0		3.4	3.4	3.5	3.8	
Electronic components, nec .....	3679	40.8	39.9	40.2	40.5		3.3	3.0	2.9	3.2	
Misc. electrical equipment and supplies .....	369	42.6	41.2	41.6	42.2		4.1	3.2	3.2	3.4	
Storage batteries .....	3691	41.8	40.9	41.8	43.0		3.3	2.9	2.9	3.4	
Engine electrical equipment .....	3694	43.6	41.1	41.8	42.4		5.2	3.5	4.0	4.0	

See footnotes at end of table.

















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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		June 1988	July 1988	May 1989	June 1989 <sup>a</sup>	July 1989 <sup>a</sup>	June 1988	July 1988	May 1989	June 1989 <sup>a</sup>	July 1989 <sup>a</sup>
<b>Transportation and public utilities—Continued</b>											
Communication .....	48	39.9	40.3	39.2	39.7						
Telephone communication .....	481	41.4	42.0	40.8	41.4						
Radio and television broadcasting .....	483	35.7	36.1	34.8	35.1						
Electric, gas, and sanitary services .....	49	41.5	41.7	41.8	41.9						
Electric services .....	491	41.4	42.0	42.1	42.1						
Gas production and distribution .....	492	41.1	41.3	41.2	41.4						
Combination utility services .....	493	42.0	41.3	42.0	42.4						
Sanitary services .....	495	42.3	42.6	41.9	41.8						
<b>Wholesale trade .....</b>		<b>38.1</b>	<b>38.3</b>	<b>37.9</b>	<b>38.1</b>	<b>38.3</b>					
Durable goods .....	50	38.6	38.7	38.4	38.6						
Motor vehicles and automotive equipment .....	501	38.1	38.4	37.2	37.5						
Furniture and home furnishings .....	502	37.3	37.2	37.1	37.6						
Lumber and construction materials .....	503	40.0	39.7	39.4	39.6						
Sporting goods, toys, and hobby goods .....	504	35.7	36.3	34.9	34.9						
Metals and minerals, except petroleum .....	505	40.5	39.8	40.3	40.2						
Electrical goods .....	506	38.0	38.2	37.9	38.2						
Hardware, plumbing, and heating equipment .....	507	38.7	38.9	38.4	38.9						
Machinery, equipment, and supplies .....	508	38.9	39.0	39.0	39.1						
Miscellaneous durable goods .....	509	38.0	38.1	38.3	38.3						
Nondurable goods .....	51	37.5	37.6	37.2	37.4						
Paper and paper products .....	511	37.0	37.0	36.6	37.2						
Drugs, proprietaries, and sundries .....	512	36.8	36.9	37.1	37.0						
Apparel, piece goods, and notions .....	513	36.7	36.6	35.7	36.3						
Groceries and related products .....	514	37.9	38.4	37.6	37.9						
Chemicals and allied products .....	516	40.0	40.1	39.7	40.4						
Petroleum and petroleum products .....	517	38.5	38.8	38.1	38.3						
Beer, wine, and distilled beverages .....	518	36.3	36.5	36.1	36.3						
Miscellaneous nondurable goods .....	519	36.9	36.7	37.0	36.8						
<b>Retail trade .....</b>		<b>29.4</b>	<b>30.0</b>	<b>28.8</b>	<b>29.2</b>	<b>29.9</b>					
Building materials and garden supplies .....	52	37.0	37.3	36.2	36.9						
Lumber and other building materials .....	521	38.9	39.0	38.0	38.7						
Hardware stores .....	525	33.3	33.8	32.1	33.2						
General merchandise stores .....	53	28.0	28.5	27.3	27.9						
Department stores .....	531	27.7	28.1	27.2	27.8						
Variety stores .....	533	29.3	30.1	27.7	27.6						
Misc. general merchandise stores .....	539	30.1	31.1	28.4	29.4						
Food stores .....	54	30.7	31.5	29.9	30.5						
Grocery stores .....	541	30.9	31.6	30.0	30.7						
Retail bakeries .....	546	28.9	29.4	29.4	29.8						
Automotive dealers and service stations .....	55	36.8	36.9	35.8	36.4						
New and used car dealers .....	551,2	37.5	37.3	36.7	37.1						
Auto and home supply stores .....	553	38.9	39.4	37.9	38.7						
Gasoline service stations .....	554	34.7	35.0	33.3	34.2						
Apparel and accessory stores .....	56	27.1	27.8	26.6	27.2						
Men's and boys' clothing and furnishings .....	561	29.3	30.2	28.2	29.1						
Women's ready-to-wear stores .....	562	25.3	26.1	24.7	25.0						
Family clothing stores .....	565	27.2	27.8	26.4	27.3						
Shoe stores .....	566	28.7	29.4	28.6	29.1						
Furniture and home furnishings stores .....	57	32.8	33.4	32.6	33.1						
Furniture and home furnishings stores .....	571	33.4	33.9	33.3	33.6						
Household appliance stores .....	572	33.6	33.9	33.1	33.9						
Radio, television, and music stores .....	573	31.6	32.4	31.3	32.0						
Eating and drinking places <sup>d</sup> .....	58	26.0	26.8	25.4	25.8						

See footnotes at end of table.



**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Transportation and public utilities—Continued</b>											
Communication .....	48	\$12.68	\$12.73	\$13.04	\$13.06		\$505.93	\$513.02	\$511.17	\$518.48	
Telephone communication .....	481	13.30	13.42	13.69	13.74		550.62	563.64	558.55	568.84	
Radio and television broadcasting .....	483	11.55	11.35	12.12	12.02		412.34	409.74	421.78	421.90	
Electric, gas, and sanitary services .....	49	14.08	14.16	14.65	14.52		584.32	590.47	612.37	608.39	
Electric services .....	491	14.22	14.32	14.98	14.85		588.71	601.44	630.66	625.19	
Gas production and distribution .....	492	13.16	13.14	13.52	13.39		540.88	542.68	557.02	554.35	
Combination utility services .....	493	16.54	16.77	17.10	16.92		694.68	692.60	718.20	717.41	
Sanitary services .....	495	10.94	11.00	11.16	11.16		462.76	468.60	467.60	466.49	
<b>Wholesale trade .....</b>		<b>9.88</b>	<b>9.95</b>	<b>10.28</b>	<b>10.30</b>	<b>\$10.41</b>	<b>376.43</b>	<b>381.09</b>	<b>389.61</b>	<b>392.43</b>	<b>\$398.70</b>
Durable goods .....	50	10.09	10.16	10.54	10.54		389.47	393.19	404.74	406.84	-
Motor vehicles and automotive equipment .....	501	9.15	9.20	9.53	9.62		348.62	353.28	354.52	360.75	
Furniture and home furnishings .....	502	9.46	9.49	9.66	9.73		352.86	353.03	358.39	365.85	
Lumber and construction materials .....	503	9.56	9.59	9.99	10.04		382.40	380.72	393.61	397.58	
Sporting goods, toys, and hobby goods .....	504	9.80	9.69	9.65	9.71		349.86	351.75	336.79	338.88	
Metals and minerals, except petroleum .....	505	10.55	10.56	10.88	10.93		427.28	420.29	438.46	439.39	
Electrical goods .....	506	10.48	10.58	10.93	11.05		398.24	404.16	414.25	422.11	
Hardware, plumbing, and heating equipment .....	507	9.48	9.50	9.89	9.86		366.88	369.55	379.78	383.55	
Machinery, equipment, and supplies .....	508	10.76	10.86	11.33	11.24		418.56	423.54	441.87	439.48	
Miscellaneous durable goods .....	509	7.96	8.02	8.29	8.37		302.48	305.56	317.51	320.57	
Nondurable goods .....	51	9.57	9.65	9.91	9.94		358.88	362.84	368.65	371.76	
Paper and paper products .....	511	10.22	10.44	10.80	10.88		378.14	386.28	395.28	404.74	
Drugs, proprietaries, and sundries .....	512	11.06	11.12	11.20	11.33		407.01	410.33	415.52	419.21	
Apparel, piece goods, and notions .....	513	9.46	9.44	9.92	9.84		347.18	345.50	354.14	357.19	
Groceries and related products .....	514	9.71	9.79	10.06	10.08		368.01	375.94	378.26	382.03	
Chemicals and allied products .....	516	12.22	12.28	12.39	12.34		488.80	492.43	491.88	498.54	
Petroleum and petroleum products .....	517	9.70	9.62	9.87	9.90		373.45	373.26	376.05	379.17	
Beer, wine, and distilled beverages .....	518	11.11	11.20	11.51	11.65		403.29	408.80	415.51	422.90	
Miscellaneous nondurable goods .....	519	7.78	7.84	8.15	8.13		287.08	287.73	301.55	299.18	
<b>Retail trade .....</b>		<b>6.27</b>	<b>6.28</b>	<b>6.49</b>	<b>6.48</b>	<b>6.48</b>	<b>184.34</b>	<b>188.40</b>	<b>186.91</b>	<b>189.22</b>	<b>193.75</b>
Building materials and garden supplies .....	52	7.33	7.36	7.61	7.61		271.21	274.53	275.48	280.81	
Lumber and other building materials .....	521	7.67	7.69	8.01	7.98		298.36	299.91	304.38	308.83	
Hardware stores .....	525	6.19	6.19	6.36	6.33		206.13	209.22	204.16	210.16	
General merchandise stores .....	53	6.50	6.52	6.73	6.70		182.00	185.82	183.73	186.93	
Department stores .....	531	6.81	6.83	7.00	6.97		188.64	191.92	190.40	193.17	
Variety stores .....	533	4.93	4.92	5.28	5.24		144.45	148.09	146.26	144.62	
Misc. general merchandise stores .....	539	5.26	5.29	5.65	5.57		158.33	164.52	160.46	163.76	
Food stores .....	54	6.94	6.91	7.13	7.06		213.06	217.67	213.19	215.33	
Grocery stores .....	541	7.04	7.01	7.24	7.16		217.54	221.52	217.20	219.81	
Retail bakeries .....	546	5.99	5.97	6.04	6.09		173.11	175.52	177.58	181.48	
Automotive dealers and service stations .....	55	8.29	8.36	8.52	8.55		305.07	308.48	305.02	311.22	
New and used car dealers .....	551.2	10.22	10.37	10.34	10.46		383.25	386.80	379.48	388.07	
Auto and home supply stores .....	553	6.98	7.01	7.48	7.42		271.52	276.19	283.49	287.15	
Gasoline service stations .....	554	5.72	5.74	5.94	5.95		198.48	200.90	197.80	203.49	
Apparel and accessory stores .....	56	5.78	5.75	5.96	5.98		156.64	159.85	158.54	162.66	
Men's and boys' clothing and furnishings .....	561	7.06	6.94	7.44	7.43		206.86	209.59	209.81	216.21	
Women's ready-to-wear stores .....	562	5.44	5.39	5.61	5.57		137.63	140.68	138.57	139.25	
Family clothing stores .....	565	5.66	5.68	5.84	5.92		153.95	157.90	154.18	161.62	
Shoe stores .....	566	5.94	5.91	6.02	6.07		170.48	173.75	172.17	176.64	
Furniture and home furnishings stores .....	57	7.81	7.90	8.16	8.18		256.17	263.86	266.02	270.76	
Furniture and home furnishings stores .....	571	7.93	8.01	8.15	8.13		264.86	271.54	271.40	273.17	
Household appliance stores .....	572	7.81	7.85	8.26	8.40		262.42	266.12	273.41	284.76	
Radio, television, and music stores .....	573	7.59	7.72	8.16	8.20		239.84	250.13	255.41	262.40	
Eating and drinking places <sup>4</sup> .....	58	4.53	4.55	4.71	4.72		117.78	121.94	119.63	121.78	

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Retail trade—Continued</b>											
Miscellaneous retail .....	59	30.0	30.5	29.9	29.8					-	
Drug stores and proprietary stores .....	591	27.7	28.4	26.9	27.6						
Miscellaneous shopping goods stores .....	594	29.0	29.9	28.1	28.7					-	
Nonstore retailers .....	596	32.0	31.8	32.8	33.0						
Fuel and ice dealers .....	598	38.1	38.5	37.5	37.3						
Retail stores, nec .....	599	31.9	32.0	33.5	31.1					-	
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		<b>35.8</b>	<b>36.1</b>	<b>35.6</b>	<b>35.8</b>	<b>36.4</b>					
Banking .....	60	35.6	36.3	35.4	35.7						
Commercial and stock savings banks .....	602	35.5	36.2	35.4	35.7					-	-
Credit agencies other than banks .....	61	36.3	36.6	36.1	36.5						
Savings and loan associations .....	612	35.9	36.1	35.8	36.0						
Personal credit institutions .....	614	36.5	36.7	36.0	36.3						
Insurance carriers .....	63	37.1	37.2	37.1	37.1						
Life insurance .....	631	36.6	36.8	37.0	36.9						
Medical service and health insurance .....	632	37.6	38.2	37.7	37.8						
Fire, marine, and casualty insurance .....	633	37.1	36.9	36.9	37.0						
<b>Services</b> .....		<b>32.7</b>	<b>33.0</b>	<b>32.4</b>	<b>32.7</b>	<b>33.1</b>					-
Hotels and other lodging places:											
Hotels, motels, and tourist courts <sup>4</sup> .....	701	31.6	32.2	31.0	31.2					-	-
Personal services:											
Laundry, cleaning, and garment services .....	721	34.4	34.3	34.5	34.5						
Beauty shops <sup>4</sup> .....	723	30.1	30.0	30.0	29.8					-	-
Business services .....	73	34.0	33.9	33.6	33.8						
Advertising .....	731	37.0	37.2	36.7	36.7						
Services to buildings .....	734	29.4	29.7	29.7	29.9					-	-
Computer and data processing services .....	737	37.8	37.9	37.6	37.6						
Auto repair, services, and garages .....	75	36.5	36.9	36.2	37.0						
Automotive repair shops .....	753	38.1	38.1	37.7	38.4						
Miscellaneous repair services .....	76	38.4	38.5	37.9	38.2						
Motion pictures .....	78	28.7	29.5	28.2	29.7					-	-
Motion picture production and services .....	781	36.9	37.8	35.4	37.6					-	-
Amusement and recreation services .....	79	28.8	30.4	27.5	29.0						
Health services .....	80	32.4	32.7	32.2	32.4						
Offices of physicians .....	801	31.2	31.2	31.2	31.4						
Offices of dentists .....	802	28.4	28.3	28.6	28.5						
Nursing and personal care facilities .....	805	31.7	32.2	31.5	31.7						
Hospitals .....	806	34.1	34.3	33.8	34.0					-	-
Legal services .....	81	34.7	35.0	34.5	34.9						
Miscellaneous services .....	89	38.0	38.1	37.7	37.8						
Engineering and architectural services .....	891	39.4	39.2	38.8	39.1					-	-
Accounting, auditing, and bookkeeping .....	893	36.5	36.9	36.3	36.3					-	-

See footnotes at end of table.

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

**C-2. Average hours and earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by detailed industry—Continued**

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Retail trade—Continued</b>											
Miscellaneous retail .....	59	\$6.55	\$6.56	\$6.76	\$6.75		\$196.50	\$200.08	\$202.12	\$201.15	
Drug stores and proprietary stores .....	591	6.25	6.28	6.41	6.38		173.13	178.35	172.43	176.09	
Miscellaneous shopping goods stores .....	594	6.11	6.10	6.37	6.35		177.19	182.39	179.00	182.25	
Nonstore retailers .....	596	7.51	7.54	7.77	7.75		240.32	239.77	254.86	255.75	
Fuel and ice dealers .....	598	9.01	9.04	9.29	9.25		343.28	348.04	348.38	345.03	
Retail stores, nec .....	599	6.66	6.74	6.82	6.91		212.45	215.68	228.47	214.90	
<b>Finance, insurance, and real estate<sup>5</sup></b> .....		8.97	9.03	9.48	9.47	\$9.58	321.13	325.98	337.49	339.03	\$348.71
Banking .....	60	7.81	7.85	8.23	8.20		278.04	284.96	291.34	292.74	
Commercial and stock savings banks .....	602	7.51	7.54	7.84	7.80		266.61	272.95	277.54	278.46	
Credit agencies other than banks .....	61	8.18	8.24	8.55	8.58		296.93	301.58	308.66	313.17	
Savings and loan associations .....	612	7.66	7.74	8.01	8.02		274.99	279.41	286.76	288.72	
Personal credit institutions .....	614	7.71	7.73	8.12	8.14		281.42	283.69	292.32	295.48	
Insurance carriers .....	63	10.13	10.18	10.58	10.67		375.82	378.70	392.52	395.86	
Life insurance .....	631	9.58	9.66	9.95	9.99		350.63	355.49	368.15	368.63	
Medical service and health insurance .....	632	9.78	9.75	10.25	10.26		367.73	372.45	386.43	387.83	
Fire, marine, and casualty insurance .....	633	10.67	10.71	11.31	11.40		395.86	395.20	417.34	421.80	
<b>Services</b> .....		8.79	8.80	9.30	9.26	9.33	287.43	290.40	301.32	302.80	308.82
Hotels and other lodging places:											
Hotels, motels, and tourist courts <sup>4</sup> .....	701	6.38	6.32	6.65	6.58		201.61	203.50	206.15	205.30	
Personal services:											
Laundry, cleaning, and garment services .....	721	6.33	6.36	6.55	6.57		217.75	218.15	225.98	226.67	
Beauty shops <sup>4</sup> .....	723	6.92	6.84	6.88	6.90		208.29	205.20	206.40	205.62	
Business services .....	73	9.03	9.10	9.53	9.53		307.02	308.49	320.21	322.11	
Advertising .....	731	12.15	12.28	12.97	12.86		449.55	456.82	476.00	471.96	
Services to buildings .....	734	6.95	6.95	7.13	7.18		204.33	206.42	211.76	214.68	
Computer and data processing services .....	737	13.00	13.15	13.93	14.01		491.40	498.39	523.77	526.78	
Auto repair, services, and garages .....	75	8.07	8.13	8.37	8.38		294.56	300.00	302.99	310.06	
Automotive repair shops .....	753	8.81	8.82	9.22	9.26		335.66	336.04	347.59	355.58	
Miscellaneous repair services .....	76	9.51	9.49	9.88	9.86		365.18	365.37	374.45	376.65	
Motion pictures .....	78	10.90	10.59	12.52	11.96		312.83	312.41	353.06	355.21	
Motion picture production and services .....	781	15.21	14.87	15.99	15.66		561.25	562.09	566.05	588.82	
Amusement and recreation services .....	79	6.88	6.74	7.86	7.23		198.14	204.90	216.15	209.67	
Health services .....	80	9.15	9.23	9.69	9.72		296.46	301.82	312.02	314.93	
Offices of physicians .....	801	8.72	8.80	9.20	9.23		272.06	274.56	287.04	289.82	
Offices of dentists .....	802	8.85	8.90	9.35	9.39		251.34	251.87	267.41	267.62	
Nursing and personal care facilities .....	805	6.30	6.37	6.72	6.72		199.71	205.11	211.68	213.02	
Hospitals .....	806	10.43	10.53	11.04	11.06		355.66	361.18	373.15	376.04	
Legal services .....	81	12.68	12.75	13.21	13.42		440.00	446.25	455.75	468.36	
Miscellaneous services .....	89	12.43	12.60	13.09	13.09		472.34	480.06	493.49	494.80	
Engineering and architectural services .....	891	13.17	13.30	13.94	13.82		518.90	521.36	540.87	540.36	
Accounting, auditing, and bookkeeping .....	893	10.82	11.11	11.27	11.38	-	394.93	409.96	409.10	413.09	

<sup>1</sup> 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.

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

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

<sup>4</sup> Money payments only; tips, not included.

<sup>5</sup> Data for nonoffice sales agents are excluded from all series in this division.

- Data not available.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 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)			
	May 1988	June 1988	May 1989	June 1989 <sup>p</sup>	May 1988	June 1988	May 1989	June 1989 <sup>p</sup>
Average hourly earnings, excluding lump-sum payments .....	\$14.04	\$13.93	\$14.69	\$14.73	\$13.40	\$13.51	\$14.09	\$14.17
Average hourly earnings, including lump-sum payments .....	14.50	14.38	15.14	15.18	13.67	13.79	14.53	14.62

<sup>p</sup> = preliminary.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**C-3. Average hourly earnings, excluding overtime,<sup>1</sup> of production workers on manufacturing payrolls**

Industry	June 1988	July 1988	May 1989	June 1989 <sup>P</sup>	July 1989 <sup>P</sup>
<b>Manufacturing</b> .....	\$9.70	\$9.73	\$9.98	\$9.98	\$10.02
<b>Durable goods</b> .....	10.19	10.21	10.47	10.49	10.52
Lumber and wood products .....	8.21	8.27	8.42	8.48	(2)
Furniture and fixtures .....	7.67	7.76	7.92	7.95	(2)
Stone, clay, and glass products .....	9.86	9.92	10.10	10.12	(2)
Primary metal industries .....	11.42	11.50	11.56	11.60	(2)
Fabricated metal products .....	9.79	9.77	10.05	10.05	(2)
Machinery, except electrical .....	10.43	10.47	10.76	10.77	(2)
Electrical and electronic equipment .....	9.76	9.78	9.99	10.01	(2)
Transportation equipment .....	12.59	12.55	12.91	12.97	(2)
Instruments and related products .....	9.56	9.64	9.85	9.93	(2)
Miscellaneous manufacturing .....	7.71	7.77	8.01	7.99	(2)
<b>Nondurable goods</b> .....	9.00	9.05	9.28	9.27	\$9.33
Food and kindred products .....	8.66	8.63	8.90	8.89	(2)
Tobacco manufactures .....	15.37	15.23	15.67	16.06	(2)
Textile mill products .....	7.00	7.00	7.26	7.27	(2)
Apparel and other textile products .....	5.95	5.91	6.17	6.17	(2)
Paper and allied products .....	11.03	11.08	11.24	11.25	(2)
Printing and publishing .....	10.07	10.10	10.39	10.39	(2)
Chemicals and allied products .....	12.01	12.11	12.39	12.35	(2)
Petroleum and coal products .....	14.04	14.02	14.40	14.39	(2)
Rubber and misc. plastics products .....	8.66	8.72	8.99	8.98	(2)
Leather and leather products .....	6.09	6.06	6.43	6.40	(2)

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

<sup>2</sup> Not available.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA  
EARNINGS  
NOT SEASONALLY ADJUSTED**

**C-4. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry, in current and constant (1977) dollars.**

INDUSTRY	Average hourly earnings					Average weekly earnings				
	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	June 1988	July 1988	May 1989	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>
<b>Total private:</b>										
Current dollars .....	\$9.23	\$9.24	\$9.59	\$9.58	\$9.63	\$322.13	\$324.32	\$330.86	\$333.38	\$338.01
Constant (1977) dollars .....	4.82	4.80	4.77	4.75	( <sup>2</sup> )	168.13	168.57	164.53	165.37	( <sup>2</sup> )
<b>Mining:</b>										
Current dollars .....	12.61	12.72	13.13	13.04	\$13.07	535.93	539.33	551.46	558.11	\$567.24
Constant (1977) dollars .....	6.58	6.61	6.53	6.47	( <sup>2</sup> )	279.71	280.32	274.22	276.84	( <sup>2</sup> )
<b>Construction:</b>										
Current dollars .....	12.89	12.96	13.28	13.23	\$13.32	498.84	500.26	500.66	502.74	\$519.48
Constant (1977) dollars .....	6.73	6.74	6.60	6.56	( <sup>2</sup> )	260.35	260.01	248.96	249.38	( <sup>2</sup> )
<b>Manufacturing:</b>										
Current dollars .....	10.16	10.17	10.42	10.44	\$10.47	418.59	413.92	426.18	429.08	\$424.04
Constant (1977) dollars .....	5.30	5.29	5.18	5.18	( <sup>2</sup> )	218.47	215.14	211.92	212.84	( <sup>2</sup> )
<b>Transportation and public utilities:</b>										
Current dollars .....	12.27	12.32	12.49	12.47	\$12.60	484.67	490.34	490.86	493.81	\$507.78
Constant (1977) dollars .....	6.40	6.40	6.21	6.19	( <sup>2</sup> )	252.96	254.85	244.09	244.95	( <sup>2</sup> )
<b>Wholesale trade:</b>										
Current dollars .....	9.88	9.95	10.28	10.30	\$10.41	376.43	381.09	389.61	392.43	\$398.70
Constant (1977) dollars .....	5.16	5.17	5.11	5.11	( <sup>2</sup> )	196.47	198.07	193.74	194.66	( <sup>2</sup> )
<b>Retail trade:</b>										
Current dollars .....	6.27	6.28	6.49	6.48	\$6.48	184.34	188.40	186.91	189.22	\$193.75
Constant (1977) dollars .....	3.27	3.26	3.23	3.21	( <sup>2</sup> )	96.21	97.92	92.94	93.86	( <sup>2</sup> )
<b>Finance, insurance, and real estate:</b>										
Current dollars .....	8.97	9.03	9.48	9.47	\$9.58	321.13	325.98	337.49	339.03	\$348.71
Constant (1977) dollars .....	4.68	4.69	4.71	4.70	( <sup>2</sup> )	167.60	169.43	167.82	168.17	( <sup>2</sup> )
<b>Services:</b>										
Current dollars .....	8.79	8.80	9.30	9.26	\$9.33	287.43	290.40	301.32	302.80	\$308.82
Constant (1977) dollars .....	4.59	4.57	4.62	4.59	( <sup>2</sup> )	150.02	150.94	149.84	150.20	( <sup>2</sup> )

<sup>1</sup> 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.

<sup>2</sup> Not available.

<sup>p</sup> = 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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**C-5. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

Industry	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>p</sup>	July <sup>p</sup>
<b>Total private</b> .....	34.8	34.6	34.7	34.8	34.7	34.7	34.8	34.6	34.7	34.9	34.6	34.6	34.9
<b>Mining</b> .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Construction</b> .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Manufacturing</b> .....	41.1	41.0	41.1	41.2	41.2	41.0	41.1	41.1	41.0	41.3	41.0	41.0	41.0
<i>Overtime hours</i> .....	3.9	3.9	3.9	4.0	3.9	3.9	3.9	3.9	4.0	3.9	3.8	3.8	3.9
<b>Durable goods</b> .....	41.8	41.7	41.9	41.9	41.9	41.7	41.8	41.8	41.7	41.9	41.5	41.5	41.5
<i>Overtime hours</i> .....	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.1	4.1	4.1	3.9	3.9	4.0
Lumber and wood products .....	40.4	40.1	40.1	40.7	40.3	40.3	40.3	39.6	40.0	40.5	39.7	39.8	39.4
Furniture and fixtures .....	39.6	39.2	39.6	39.4	39.5	39.4	39.8	39.7	39.8	39.9	39.4	39.3	39.0
Stone, clay, and glass products .....	42.2	42.2	42.3	42.5	42.6	42.4	42.5	42.2	42.2	42.5	41.9	42.2	42.3
Primary metal industries .....	43.5	43.5	43.9	43.7	43.7	43.5	43.6	43.4	43.5	43.3	43.2	43.3	43.1
Blast furnaces and basic steel products ..	44.0	44.1	44.5	44.2	44.0	43.8	44.0	43.8	44.1	43.5	43.6	43.6	43.2
Fabricated metal products .....	41.9	41.8	42.0	41.9	42.1	41.8	41.9	41.9	41.8	41.9	41.7	41.5	41.5
Machinery, except electrical .....	42.8	42.5	42.7	42.7	42.5	42.5	42.5	42.6	42.5	42.7	42.5	42.5	42.3
Electrical and electronic equipment .....	41.0	40.9	40.9	41.0	41.0	40.8	40.9	40.9	40.6	41.0	40.7	40.7	40.7
Transportation equipment .....	42.7	42.7	43.0	43.1	43.1	42.8	42.8	43.1	43.1	42.8	42.5	42.5	42.7
Motor vehicles and equipment .....	42.9	43.6	44.1	43.9	44.1	43.7	43.6	43.9	43.9	43.3	42.8	42.7	42.5
Instruments and related products .....	41.7	41.5	41.6	41.8	41.6	41.1	41.5	41.5	41.1	41.5	41.1	41.3	41.6
Miscellaneous manufacturing .....	39.3	39.3	39.2	39.1	39.3	39.0	39.4	39.5	39.5	39.8	39.6	39.4	38.9
<b>Nondurable goods</b> .....	40.2	40.1	40.2	40.2	40.2	40.0	40.1	40.2	40.1	40.4	40.2	40.2	40.3
<i>Overtime hours</i> .....	3.7	3.6	3.7	3.7	3.6	3.6	3.6	3.7	3.8	3.8	3.7	3.6	3.8
Food and kindred products .....	40.4	40.3	40.3	40.4	40.6	40.2	40.1	40.3	40.4	40.7	40.5	40.6	41.3
Tobacco manufactures .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Textile mill products .....	41.0	41.0	41.0	41.0	41.0	40.5	40.9	40.8	41.1	41.7	41.4	41.4	41.4
Apparel and other textile products .....	37.0	36.9	37.1	36.9	37.0	36.8	37.0	37.1	36.9	37.6	37.1	37.0	37.1
Paper and allied products .....	43.2	43.2	43.2	43.2	43.1	43.2	43.1	43.2	43.3	43.4	43.3	43.4	43.2
Printing and publishing .....	38.0	38.0	38.1	38.0	37.9	37.8	38.0	38.0	37.9	37.9	37.7	37.8	37.6
Chemicals and allied products .....	42.3	42.2	42.3	42.5	42.3	42.3	42.3	42.3	42.3	42.6	42.1	42.5	42.5
Petroleum and coal products .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Rubber and misc. plastics products .....	41.7	41.6	41.7	41.6	41.7	41.4	41.7	41.7	41.6	41.6	41.5	41.4	41.3
Leather and leather products .....	37.2	37.5	37.5	37.8	37.3	37.7	38.0	38.6	38.0	38.3	37.4	37.9	37.5
<b>Transportation and public utilities</b> .....	39.4	39.3	39.4	39.4	39.3	39.4	39.6	39.4	39.4	40.1	39.5	39.4	39.9
<b>Wholesale trade</b> .....	38.1	37.9	38.1	38.1	38.0	38.1	38.1	38.1	38.1	38.3	37.9	38.0	38.1
<b>Retail trade</b> .....	29.3	29.0	29.1	29.2	29.0	29.1	29.1	28.9	28.9	29.1	28.9	28.9	29.2
<b>Finance, insurance, and real estate</b> .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Services</b> .....	32.7	32.5	32.6	32.7	32.5	32.7	32.7	32.5	32.6	32.8	32.5	32.5	32.8

<sup>1</sup> 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.

<sup>2</sup> 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.  
<sup>p</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 forward are subject to revision.

**ESTABLISHMENT DATA  
HOURS  
SEASONALLY ADJUSTED**

**C-6. Indexes of aggregate weekly hours of production or nonsupervisory workers <sup>1</sup> on private nonagricultural payrolls by major industry and manufacturing group, seasonally adjusted**

(1977 = 100)

Industry	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>P</sup>	July <sup>P</sup>
<b>Total private</b> .....	125.6	125.1	125.6	126.3	126.3	126.8	127.4	127.2	127.6	128.7	127.6	128.0	129.4
<b>Goods-producing</b> .....	102.0	101.5	101.8	102.4	102.8	102.3	103.0	102.9	102.9	103.5	102.4	102.5	103.2
<b>Mining</b> .....	83.5	81.6	81.1	81.2	80.0	80.2	79.9	80.1	81.1	83.4	81.8	81.4	81.7
<b>Construction</b> .....	137.9	137.8	138.1	139.4	141.1	139.4	141.2	140.5	140.3	141.0	138.2	139.2	143.0
<b>Manufacturing</b> .....	95.9	95.5	95.7	96.2	96.5	96.2	96.7	96.7	96.7	97.2	96.4	96.3	96.5
<b>Durable goods</b> .....	94.2	93.7	94.1	94.6	94.9	94.6	95.2	95.0	94.9	95.2	94.3	94.0	93.8
Lumber and wood products .....	104.5	103.6	103.7	106.3	105.9	106.2	107.0	104.5	105.3	105.9	103.7	103.4	102.1
Furniture and fixtures .....	112.9	111.0	112.6	112.3	112.9	112.6	113.8	113.7	114.3	114.6	112.9	112.3	111.7
Stone, clay, and glass products .....	90.0	89.8	89.6	90.6	91.0	91.0	91.4	90.9	90.5	91.0	89.3	90.0	89.8
Primary metal industries .....	68.5	68.0	68.9	68.9	69.0	68.8	69.1	68.7	68.9	68.6	68.2	68.5	68.2
Blast furnaces and basic steel products .....	54.5	54.0	54.2	54.1	54.0	53.1	53.8	53.4	53.6	52.4	52.3	52.5	51.3
Fabricated metal products .....	91.6	91.1	91.5	91.8	92.5	92.1	93.0	92.8	92.5	92.2	91.7	90.9	91.1
Machinery, except electrical .....	91.4	90.7	91.2	91.9	92.1	92.5	93.0	93.7	93.4	93.9	93.7	93.8	93.6
Electrical and electronic equipment .....	100.8	100.6	100.6	101.0	101.4	100.2	100.2	99.9	98.8	99.7	98.4	97.8	97.6
Transportation equipment .....	100.2	99.9	100.0	100.8	100.8	100.3	101.0	101.0	101.5	101.2	100.5	99.4	99.4
Motor vehicles and equipment .....	89.1	91.5	92.3	92.7	93.6	89.9	91.8	91.1	91.7	91.1	90.2	88.0	86.3
Instruments and related products .....	113.1	113.1	113.7	114.8	114.8	114.5	115.3	115.6	115.0	116.4	115.8	115.8	118.3
Miscellaneous manufacturing .....	85.7	85.4	84.8	84.0	84.8	84.7	85.9	86.4	86.1	87.1	86.6	86.2	83.9
<b>Nondurable goods</b> .....	98.4	98.0	98.2	98.6	98.8	98.4	98.9	99.3	99.5	100.1	99.5	99.8	100.5
Food and kindred products .....	100.7	100.5	100.4	101.7	102.6	101.5	101.5	102.2	102.9	103.8	103.3	104.2	107.0
Tobacco manufactures .....	77.0	77.5	74.3	75.1	76.5	76.7	73.4	74.1	69.6	73.0	69.6	66.9	62.7
Textile mill products .....	81.3	80.2	80.6	80.6	80.5	79.5	80.6	80.4	81.0	82.1	81.5	81.7	81.8
Apparel and other textile products .....	84.5	83.8	84.2	83.8	84.4	84.2	84.9	85.5	85.4	86.8	85.4	84.9	85.5
Paper and allied products .....	102.3	102.1	101.7	101.9	101.9	102.1	101.7	101.9	102.3	102.4	102.3	102.4	102.7
Printing and publishing .....	136.2	136.7	137.2	137.3	137.3	137.4	138.3	138.4	138.5	138.2	137.8	138.6	138.2
Chemicals and allied products .....	98.4	98.5	98.7	99.5	99.0	99.4	99.9	100.0	100.4	100.9	100.5	102.0	101.8
Petroleum and coal products .....	84.5	84.1	84.1	84.1	83.5	82.7	81.2	83.3	82.2	82.9	83.5	84.9	87.6
Rubber and misc. plastics products .....	118.6	117.9	117.8	118.5	119.3	118.6	119.5	120.0	119.9	119.9	119.6	118.8	119.0
Leather and leather products .....	54.9	54.9	55.4	55.3	54.6	55.2	56.1	57.0	56.1	56.0	54.7	55.5	54.9
<b>Service-producing</b> .....	138.7	138.1	138.8	139.6	139.2	140.3	140.9	140.6	141.2	142.6	141.5	142.2	143.9
<b>Transportation and public utilities</b> .....	113.7	113.7	114.1	114.6	114.7	115.5	116.4	116.2	116.2	118.6	117.3	117.4	119.3
<b>Wholesale trade</b> .....	123.3	122.8	123.8	124.2	124.2	124.9	125.3	125.9	126.4	127.2	126.1	126.6	127.1
<b>Retail trade</b> .....	126.5	125.5	125.9	126.5	126.0	126.7	127.2	126.7	126.9	127.7	127.2	127.4	128.9
<b>Finance, insurance, and real estate</b> .....	141.5	140.1	140.9	141.6	140.6	141.2	142.1	140.8	141.8	143.8	141.9	142.5	145.3
<b>Services</b> .....	162.4	162.1	163.2	164.3	164.0	165.8	166.4	166.1	167.3	168.9	167.5	168.9	170.8

<sup>1</sup> 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.

<sup>P</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 forward are subject to revision.



**ESTABLISHMENT DATA  
EARNINGS  
SEASONALLY ADJUSTED**

**C-7. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls, seasonally adjusted**

Industry	1988						1989						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June <sup>p</sup>	July <sup>p</sup>
Average hourly earnings													
<b>Total private</b> (in current dollars) .....	\$9.31	\$9.32	\$9.37	\$9.43	\$9.42	\$9.45	\$9.49	\$9.52	\$9.54	\$9.61	\$9.60	\$9.62	\$9.70
<b>Mining</b> .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>Construction</b> .....	\$13.05	\$13.03	\$13.07	\$13.08	\$13.10	\$13.15	\$13.18	\$13.22	\$13.26	\$13.33	\$13.32	\$13.31	\$13.41
<b>Manufacturing</b> .....	10.18	10.21	10.25	10.29	10.30	10.31	10.33	10.37	10.40	10.40	10.42	10.45	10.48
<b>Excluding overtime<sup>3</sup></b> .....	9.72	9.75	9.78	9.80	9.83	9.85	9.87	9.89	9.92	9.92	9.97	9.99	10.01
<b>Transportation and public utilities</b> .....	12.35	12.37	12.37	12.41	12.39	12.36	12.45	12.48	12.50	12.52	12.54	12.53	12.63
<b>Wholesale trade</b> .....	9.98	9.95	10.03	10.14	10.06	10.11	10.19	10.18	10.21	10.36	10.28	10.32	10.45
<b>Retail trade</b> .....	6.32	6.33	6.36	6.38	6.40	6.43	6.44	6.45	6.47	6.51	6.49	6.51	6.53
<b>Finance, insurance, and real estate</b> .....	9.11	9.09	9.18	9.35	9.26	9.35	9.40	9.35	9.36	9.54	9.45	9.52	9.67
<b>Services</b> .....	8.93	8.95	9.00	9.07	9.05	9.10	9.15	9.19	9.24	9.32	9.33	9.34	9.46
<b>Total private</b> (in constant dollars) <sup>4</sup> .....	4.84	4.82	4.83	4.84	4.82	4.82	4.81	4.81	4.80	4.80	4.77	4.77	( <sup>5</sup> )
Average weekly earnings													
<b>Total private:</b>													
In current dollars .....	323.99	322.47	325.14	328.16	326.87	327.92	330.25	329.39	331.04	335.39	332.16	332.85	338.53
In constant (1977) dollars <sup>4</sup> .....	168.39	166.82	167.68	168.55	167.28	167.39	167.55	166.44	166.44	167.53	165.01	165.10	( <sup>5</sup> )

<sup>1</sup> 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.

<sup>2</sup> 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.

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

<sup>4</sup> The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate these series.

<sup>5</sup> Not available.

<sup>p</sup> = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 forward are subject to revision.

**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		
	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>	June 1988	May 1989	June 1989 <sup>a</sup>
<b>Alabama</b> .....	41.6	41.1	41.1	\$8.99	\$9.10	\$9.11	\$373.98	\$374.01	\$374.42
Birmingham .....	41.5	40.4	40.9	9.10	9.29	9.28	377.65	375.32	379.55
Mobile .....	40.6	41.5	41.6	10.60	10.45	10.64	430.36	433.68	442.62
<b>Alaska</b> .....	43.9	46.0	38.4	11.81	12.83	12.70	518.46	590.18	487.68
<b>Arizona</b> .....	41.2	40.8	41.0	9.87	9.91	9.92	406.64	404.33	406.72
<b>Arkansas</b> .....	40.9	40.8	40.1	8.05	8.19	8.21	329.25	334.15	329.22
Fayetteville-Springdale .....	41.2	42.9	41.6	7.15	7.32	7.39	294.58	314.03	307.42
Fort Smith .....	40.4	40.1	40.7	8.62	8.70	8.87	348.25	348.87	361.01
Little Rock-North Little Rock .....	41.0	41.0	41.1	8.46	8.73	8.86	346.86	357.93	364.15
Pine Bluff .....	43.4	43.4	43.5	10.44	10.63	10.49	453.10	461.34	456.32
<b>California</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Colorado</b> .....	40.4	39.6	40.3	10.20	10.70	10.55	412.08	423.72	425.17
Denver .....	40.9	40.2	40.5	10.74	11.18	10.87	439.27	449.44	440.24
<b>Connecticut</b> .....	41.6	41.8	42.1	10.82	11.16	11.21	450.11	466.49	471.94
Bridgeport-Milford .....	41.8	42.4	42.7	11.10	11.50	11.53	463.98	487.60	492.33
Hartford .....	42.5	42.2	42.4	11.21	11.89	11.91	476.43	501.76	504.98
New Britain .....	42.0	42.0	42.1	11.25	11.50	11.46	472.50	483.00	482.47
New Haven-Meriden .....	40.8	40.4	40.5	10.29	10.62	10.65	419.83	429.05	431.33
Stamford .....	40.4	42.7	42.9	12.10	12.25	12.18	488.84	523.08	522.52
Waterbury .....	43.3	42.9	42.9	9.62	10.08	10.15	416.55	432.43	435.44
<b>Delaware</b> .....	40.4	40.2	40.9	10.61	10.80	10.89	428.64	434.16	445.40
Wilmington .....	40.9	41.3	42.1	13.28	12.96	12.99	543.15	535.25	546.88
<b>District of Columbia:</b>									
Washington MSA .....	39.1	39.5	39.8	11.21	12.03	12.01	438.31	475.19	478.00
<b>Florida</b> .....	41.1	40.5	40.6	8.37	8.64	8.64	344.01	349.92	350.78
Fort Lauderdale-Hollywood-Pompano Beach .....	41.5	40.9	41.2	8.34	8.60	8.61	346.11	351.74	354.73
Jacksonville .....	41.7	40.3	41.3	9.09	9.26	9.30	379.05	373.18	384.09
Miami-Hialeah .....	40.0	39.0	39.0	7.10	7.38	7.33	284.00	287.82	285.87
Orlando .....	39.9	41.1	41.3	8.87	9.61	9.67	353.91	394.97	399.37
Pensacola .....	43.1	42.7	42.5	10.75	11.00	10.95	463.33	469.70	465.38
Tampa-St. Petersburg-Clearwater .....	41.0	40.4	40.4	8.09	8.56	8.62	331.69	345.82	348.25
West Palm Beach-Boca Raton-Delray Beach .....	40.2	40.8	41.0	9.21	9.36	9.37	370.24	381.89	384.17
<b>Georgia</b> .....	41.5	40.5	41.0	8.69	8.73	8.71	360.64	353.57	357.11
Atlanta .....	41.8	40.9	41.3	10.35	10.17	10.10	432.63	415.95	417.13
Savannah .....	49.1	47.4	48.0	11.40	11.58	11.59	559.74	548.89	556.32
<b>Hawaii</b> .....	39.4	39.4	38.9	9.95	10.26	10.35	392.03	404.24	402.62
Honolulu .....	39.5	39.7	39.3	10.08	10.43	10.57	398.16	414.07	415.40
<b>Idaho</b> .....	39.3	37.9	38.5	10.07	9.91	10.24	395.75	375.59	394.24
<b>Illinois</b> .....	41.9	41.5	41.7	11.04	11.23	11.23	462.58	466.05	468.29
Aurora-Elgin .....	41.6	41.5	41.7	10.49	10.41	10.44	436.38	432.02	435.35
Bloomington-Normal .....	43.3	40.1	39.1	11.52	11.58	12.23	498.82	464.36	478.19
Champaign-Urbana-Rantoul .....	39.6	38.5	40.2	9.17	9.53	9.56	363.13	366.91	384.31
Chicago .....	42.3	41.4	41.4	10.78	10.82	10.84	455.99	447.95	448.78
Davenport-Rock Island-Moline .....	39.4	40.9	39.3	12.80	12.61	12.82	504.32	515.75	503.83
Decatur .....	42.1	42.3	42.7	14.28	14.58	14.90	601.19	616.73	636.23
Joliet .....	42.2	42.0	42.9	12.10	12.25	12.26	510.62	514.50	525.95
Kankakee .....	42.4	41.6	40.3	10.72	11.05	11.16	454.53	459.68	449.75
Lake County .....	41.0	40.5	40.6	11.45	11.78	11.77	469.45	477.09	477.86
Peoria .....	47.3	43.8	43.6	13.50	13.80	13.79	638.55	604.44	601.24
Rockford .....	43.5	42.4	41.9	11.77	11.94	11.78	512.00	506.26	493.58
Springfield .....	43.2	39.8	39.6	11.87	11.55	11.64	512.78	459.69	460.94
<b>Indiana</b> .....	42.3	41.0	41.2	11.37	11.55	11.53	480.95	473.55	475.04

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Iowa</b> .....	41.4	40.6	40.9	\$10.59	\$10.88	\$10.98	\$438.43	\$441.73	\$449.08
Cedar Rapids .....	40.0	39.6	39.0	12.21	12.38	12.67	488.40	490.25	494.13
Des Moines .....	42.2	40.2	40.7	11.93	11.75	11.92	503.45	472.35	485.14
Dubuque .....	40.8	40.0	41.6	11.84	11.76	12.03	483.07	470.40	500.45
Sioux City .....	36.8	34.4	34.0	8.67	8.34	8.40	319.06	286.90	285.60
<b>Kansas</b> .....	41.3	40.3	40.1	10.12	10.51	10.30	417.96	423.55	413.03
Topeka .....	43.4	43.8	42.4	11.25	11.27	11.41	488.25	493.63	483.78
Wichita .....	40.9	41.2	40.9	10.65	11.36	11.36	435.59	468.03	464.62
<b>Kentucky</b> .....	40.8	40.3	40.5	10.19	10.28	10.29	415.75	414.28	416.75
Lexington-Fayette .....	39.6	39.5	39.4	10.31	10.75	10.80	408.28	424.63	425.52
Louisville .....	42.1	41.1	40.9	11.81	11.72	11.78	497.20	481.69	481.80
<b>Louisiana</b> .....	42.8	42.3	42.1	10.99	10.95	10.93	470.37	463.19	460.15
Baton Rouge .....	42.6	43.0	43.0	12.90	12.93	12.94	549.54	555.99	556.42
New Orleans .....	41.2	40.7	40.8	10.43	10.65	10.64	429.72	433.46	434.11
Shreveport .....	41.7	42.8	42.4	11.94	10.71	11.20	497.90	458.39	474.88
<b>Maine</b> .....	40.8	40.2	41.0	9.29	9.76	9.90	379.03	392.35	405.90
Lewiston-Auburn .....	39.9	39.1	42.5	7.97	8.17	8.86	318.00	319.45	376.55
Portland .....	41.2	40.0	40.3	9.37	10.28	10.25	386.04	411.20	413.08
<b>Maryland</b> .....	41.6	41.1	41.2	10.47	10.82	10.82	435.55	444.70	445.78
Baltimore MSA .....	41.5	41.2	41.4	11.16	11.31	11.42	463.14	465.97	472.79
<b>Massachusetts</b> .....	41.5	40.9	41.1	10.23	10.67	10.74	424.55	436.40	441.41
Boston .....	41.8	40.5	40.8	10.90	11.37	11.43	455.62	460.49	466.34
Springfield .....	43.0	42.4	42.3	9.70	9.90	9.94	417.10	419.76	420.46
Worcester .....	40.5	41.5	41.6	10.41	10.87	10.97	421.61	451.11	456.35
<b>Michigan</b> .....	43.9	43.2	43.0	13.52	13.61	13.65	593.53	587.95	586.95
Ann Arbor .....	46.6	45.0	43.5	14.85	14.34	14.34	692.01	645.30	623.79
Battle Creek .....	41.7	42.6	42.6	13.93	14.25	14.59	580.88	607.05	621.53
Detroit .....	45.4	43.8	43.5	14.56	14.48	14.58	661.02	634.22	634.23
Flint .....	43.9	45.4	45.6	16.57	17.46	17.35	727.42	792.68	791.16
Grand Rapids .....	41.7	41.3	41.4	11.38	11.62	11.63	474.55	479.91	481.48
Jackson .....	41.5	42.2	41.0	10.01	11.03	10.81	415.41	465.47	443.21
Kalamazoo .....	43.4	42.2	42.0	12.37	12.83	12.95	536.86	541.43	543.90
Lansing-East Lansing .....	43.5	41.9	40.4	15.40	14.79	14.77	669.90	619.70	596.71
Muskegon .....	40.8	40.9	41.1	12.01	12.32	12.23	490.01	503.89	502.65
Saginaw-Bay City-Midland .....	44.0	44.1	43.9	15.25	15.25	15.30	671.00	672.52	671.67
<b>Minnesota</b> .....	40.8	39.8	40.1	10.52	10.80	10.81	429.22	429.84	433.48
Duluth .....	41.7	39.3	39.4	10.83	11.18	11.13	451.61	439.37	438.52
Minneapolis-St. Paul .....	41.3	40.4	40.5	11.20	11.44	11.48	462.56	462.18	464.94
St. Cloud .....	40.1	38.3	38.4	9.90	9.88	9.84	396.99	378.40	377.86
<b>Mississippi</b> .....	40.7	39.7	40.2	7.82	8.01	8.01	318.27	318.00	322.00
Jackson .....	40.4	40.3	40.0	8.94	8.97	9.07	361.18	361.49	362.80
<b>Missouri</b> .....	40.9	40.8	41.3	10.14	10.45	10.43	414.73	426.36	430.76
Kansas City .....	41.4	40.1	39.7	11.39	11.67	11.65	471.55	467.97	462.51
St. Louis .....	41.1	41.5	41.4	11.81	12.18	12.32	485.39	505.47	510.05
Springfield .....	40.3	39.5	40.1	8.48	8.71	8.72	341.74	344.05	349.67
<b>Montana</b> .....	39.1	39.3	39.7	10.82	10.84	10.74	423.06	426.01	426.38
<b>Nebraska</b> .....	40.7	40.2	41.5	9.45	9.54	9.64	384.62	383.51	400.06
Lincoln .....	40.0	39.0	39.0	9.79	9.97	10.06	391.60	388.83	392.34
Omaha .....	41.0	41.9	42.0	10.23	10.28	10.35	419.43	430.73	434.70
<b>Nevada</b> .....	39.0	41.9	41.1	10.01	10.23	10.20	390.39	428.64	419.22
Las Vegas .....	39.8	43.5	41.8	12.47	12.42	12.95	496.31	540.27	541.31
<b>New Hampshire</b> .....	40.6	40.3	40.7	9.68	10.13	10.10	393.01	408.24	411.07
Manchester .....	40.7	39.8	41.3	9.98	10.36	10.18	406.19	412.33	420.43
Nashua .....	40.5	41.2	41.2	11.72	11.96	11.68	474.66	492.75	481.22
Portsmouth-Dover-Rochester .....	40.4	41.7	42.2	9.42	9.89	9.75	380.57	412.41	411.45

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>New Jersey</b> .....	41.0	41.0	41.1	\$10.85	\$11.27	\$11.28	\$444.85	\$462.07	\$463.61
<b>New Mexico</b> .....	39.8	40.4	40.3	8.79	8.55	8.67	349.84	345.42	349.40
Albuquerque .....	40.7	40.5	40.4	9.21	8.28	9.35	374.85	375.84	377.74
<b>New York</b> .....	40.0	39.9	40.0	10.41	10.69	10.62	416.40	426.53	424.80
Albany-Schenectady-Troy .....	41.0	40.2	41.6	10.89	10.94	10.66	446.49	439.79	443.46
Binghamton .....	39.9	39.9	39.7	9.48	9.90	9.99	378.25	395.01	396.60
Buffalo .....	43.5	42.4	42.4	12.41	12.71	12.54	539.84	538.90	531.70
Elmira .....	41.4	42.3	42.0	9.72	10.01	9.41	402.41	423.42	395.22
Nassau-Suffolk .....	39.3	39.7	39.8	11.01	11.77	11.62	432.69	467.27	462.48
New York PMSA .....	37.1	37.7	37.4	9.77	9.91	9.85	362.47	373.61	368.39
New York City .....	36.9	37.4	37.0	9.49	9.78	9.77	350.18	365.77	361.49
Niagara Falls .....	42.2	41.5	42.0	13.36	13.98	13.86	563.79	580.17	582.12
Orange County .....	39.8	37.9	38.5	8.19	8.86	8.65	325.96	335.79	333.03
Poughkeepsie .....	41.1	40.1	40.0	9.88	10.58	10.60	406.07	424.26	424.00
Rochester .....	43.1	42.5	42.5	12.36	12.48	12.50	532.72	530.40	531.25
Rockland County .....	35.4	38.5	39.4	11.19	9.91	8.48	396.13	381.54	334.11
Syracuse .....	42.0	41.3	41.0	11.92	12.24	12.30	500.64	505.51	504.30
Utica-Rome .....	41.2	40.4	40.6	9.62	9.81	9.75	396.34	396.32	395.85
Westchester County .....	40.3	40.4	40.7	11.53	11.13	11.05	464.66	449.65	449.74
<b>North Carolina</b> .....	40.4	40.5	40.7	8.10	8.39	8.40	327.24	339.80	341.88
Asheville .....	41.1	41.6	41.9	8.12	8.36	8.31	333.73	347.78	348.19
Charlotte-Gastonia-Rock Hill .....	40.3	40.8	40.9	8.36	8.77	8.77	336.91	357.82	358.69
Greensboro-Winston-Salem-High Point .....	40.0	39.5	39.4	9.07	9.19	9.25	362.80	363.01	384.45
Raleigh-Durham .....	41.7	41.3	40.9	9.20	9.36	9.40	383.64	386.57	384.46
<b>North Dakota</b> .....	39.1	40.0	40.4	8.39	8.91	8.91	328.05	356.40	359.96
Fargo-Moorhead .....	39.2	37.9	39.3	8.41	8.67	8.81	329.67	328.59	346.23
<b>Ohio</b> .....	43.3	42.7	42.8	12.05	12.23	12.29	521.77	522.22	526.01
Akron .....	44.1	42.6	41.9	11.76	11.47	11.26	518.62	488.62	471.79
Canton .....	42.8	42.1	42.1	11.35	11.81	11.80	485.78	497.20	496.78
Cincinnati .....	42.0	42.5	43.1	11.11	11.38	11.48	466.62	483.65	494.79
Cleveland .....	43.7	43.0	43.4	11.86	11.97	11.97	518.28	514.71	519.50
Columbus .....	41.5	41.2	41.3	11.57	11.96	11.96	480.16	492.75	493.95
Dayton-Springfield .....	44.0	43.1	43.4	12.71	12.89	12.92	559.24	555.56	560.73
Toledo .....	43.4	43.9	43.2	13.17	13.32	13.24	571.58	584.75	571.97
Youngstown-Warren .....	42.8	43.4	42.6	13.60	13.84	13.92	582.08	600.66	592.99
<b>Oklahoma</b> .....	41.1	41.5	41.8	10.25	10.52	10.56	421.28	436.58	441.41
Oklahoma City .....	41.9	41.8	41.8	11.39	11.40	11.41	477.24	476.52	476.94
Tulsa .....	40.6	41.6	40.3	10.75	10.88	10.79	436.45	452.61	434.84
<b>Oregon</b> .....	39.3	39.6	39.8	10.61	10.84	10.82	416.97	429.26	430.64
Eugene-Springfield .....	40.2	39.1	39.4	10.72	10.79	10.80	430.94	421.89	425.52
Portland .....	39.2	39.8	39.7	10.73	10.96	10.93	420.62	436.21	433.92
Salem .....	38.2	38.0	39.1	8.85	9.76	9.49	338.07	370.88	371.06
<b>Pennsylvania</b> .....	41.2	40.5	40.8	10.23	10.53	10.58	421.48	426.47	431.66
Allentown-Bethlehem .....	40.0	39.1	39.4	10.45	10.55	10.61	418.00	412.51	418.03
Altoona .....	41.2	40.0	40.1	8.81	9.25	9.31	362.97	370.00	373.33
Beaver County .....	42.6	43.2	43.0	10.76	10.85	10.72	458.38	468.72	460.96
Erie .....	42.7	42.5	42.6	10.46	10.73	10.76	446.64	456.03	458.38
Harrisburg-Lebanon-Carlisle .....	39.9	39.3	39.9	9.42	9.86	9.87	375.86	387.50	393.81
Johnstown .....	39.9	39.7	39.5	8.37	8.35	8.34	333.96	331.50	329.43
Lancaster .....	40.3	40.2	40.2	10.05	10.61	10.61	405.02	426.52	426.52
Philadelphia PMSA .....	40.5	40.4	40.6	11.22	11.64	11.71	454.41	470.26	475.43
Pittsburgh .....	42.0	41.6	42.1	11.22	11.27	11.30	471.24	468.83	475.73

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		
	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>	June 1988	May 1989	June 1989 <sup>P</sup>
<b>Pennsylvania-Continued</b>									
Reading .....	41.3	40.8	40.9	\$10.71	\$11.02	\$11.04	\$442.32	\$449.62	\$451.54
Scranton-Wilkes-Barre .....	38.9	38.4	38.9	8.89	9.16	9.24	345.82	351.74	359.44
Williamsport .....	41.6	39.9	39.6	8.92	9.40	9.34	371.07	375.06	369.86
York .....	42.7	41.4	41.2	9.85	10.18	10.18	420.60	421.45	419.42
<b>Rhode Island</b>									
Pawtucket-Woonsocket-Attleboro .....	39.4	39.1	39.3	8.49	9.02	9.03	334.51	352.68	354.88
Providence .....	40.1	40.1	40.4	8.13	8.68	8.71	326.01	348.07	351.88
Providence .....	39.2	38.8	38.8	8.55	8.69	8.70	335.16	337.17	337.56
<b>South Carolina</b>									
Charleston .....	41.4	41.1	41.2	8.29	8.59	8.63	343.21	353.05	355.56
Columbia .....	40.9	41.1	40.9	9.18	9.33	9.37	375.46	383.46	383.23
Columbia .....	41.3	41.2	41.7	8.35	8.74	8.79	344.86	360.09	366.54
Greenville-Spartanburg .....	41.4	40.7	41.2	8.25	8.54	8.61	341.55	347.58	354.73
<b>South Dakota</b>									
Sioux Falls .....	42.1	42.0	42.5	7.89	8.23	8.08	332.17	345.66	343.40
Sioux Falls .....	45.4	43.0	42.4	8.10	8.67	8.42	367.74	372.81	357.01
<b>Tennessee</b>									
Chattanooga .....	41.9	40.8	41.2	8.93	9.26	9.18	374.17	377.81	378.22
Chattanooga .....	41.9	41.8	41.3	8.14	8.24	8.30	341.07	344.43	342.79
Johnson City-Kingsport-Bristol .....	43.3	41.9	42.0	9.59	9.84	9.62	415.25	412.30	404.04
Knoxville .....	41.7	39.1	39.2	8.99	9.07	8.97	374.88	354.64	351.62
Memphis .....	42.7	42.1	42.5	9.01	9.41	9.48	384.73	396.16	402.90
Nashville .....	42.2	41.6	41.9	10.39	10.75	10.70	438.46	447.20	448.33
<b>Texas</b>									
Dallas .....	41.9	41.7	41.8	9.95	10.14	10.19	416.91	422.84	425.94
Dallas .....	41.8	42.0	41.9	9.76	10.07	10.17	407.97	422.94	426.12
Ft. Worth-Arlington .....	42.4	40.9	41.5	10.62	10.89	10.99	450.29	445.40	456.09
Houston .....	43.6	43.1	43.5	11.36	11.75	11.83	495.30	506.43	514.61
San Antonio .....	40.5	40.8	40.5	7.52	7.60	7.54	304.56	310.08	305.37
<b>Utah</b>									
Salt Lake City-Ogden .....	40.0	38.7	39.4	9.88	10.02	10.06	395.20	387.77	396.36
Salt Lake City-Ogden .....	40.9	40.0	40.8	9.86	10.04	10.03	403.27	401.60	409.22
<b>Vermont</b>									
Burlington .....	41.0	40.8	41.1	9.33	10.01	9.95	382.53	408.41	408.95
Burlington .....	41.2	39.4	39.4	9.57	10.64	10.41	394.28	419.22	410.15
<b>Virginia</b>									
Bristol .....	41.1	41.1	41.1	9.31	9.54	9.57	382.64	392.09	393.33
Bristol .....	42.7	40.8	42.1	7.81	7.98	7.85	333.49	325.58	330.49
Charlottesville .....	41.1	41.8	41.8	7.73	7.96	8.08	317.70	332.73	337.74
Danville .....	42.1	41.3	40.5	8.55	8.63	8.55	359.96	356.42	346.28
Lynchburg .....	41.1	40.4	40.7	8.79	9.15	9.09	361.27	369.66	369.96
Northern Virginia .....	39.3	40.0	40.7	10.40	11.00	11.04	408.72	440.00	449.33
Richmond-Petersburg .....	41.6	41.0	41.6	12.02	12.50	12.47	500.03	512.50	518.75
Roanoke .....	39.8	40.7	41.4	9.25	9.53	9.61	368.15	387.87	397.85
<b>Washington</b>									
Seattle .....	39.9	40.9	40.7	11.76	12.04	12.20	469.22	492.44	496.54
<b>West Virginia</b>									
Charleston .....	41.0	41.1	41.4	10.67	11.12	11.20	437.47	457.03	463.68
Charleston .....	43.4	43.2	44.2	13.53	14.36	14.37	587.20	620.35	635.15
Huntington-Ashland .....	42.3	41.4	41.1	12.52	12.58	12.66	529.60	520.81	520.33
Parkersburg-Marietta .....	42.7	42.5	42.1	12.41	13.37	13.09	529.91	568.23	551.09
Wheeling .....	41.2	40.7	41.0	12.02	12.37	12.31	495.22	503.46	504.71
<b>Wisconsin</b>									
Appleton-Oshkosh .....	41.6	41.1	41.2	10.56	10.76	10.69	439.30	442.24	440.43
Appleton-Oshkosh .....	43.1	43.8	43.2	11.13	11.77	11.79	479.70	515.53	509.33
Eau Claire .....	40.8	41.3	41.4	10.66	10.47	10.32	434.93	432.41	427.25
Green Bay .....	42.1	40.0	40.2	11.40	11.75	11.49	479.94	470.00	461.90
Janesville-Beloit .....	42.6	42.1	40.9	13.03	13.32	12.78	555.08	560.77	522.70
Kenosha .....	39.1	39.8	42.2	12.87	12.51	12.06	503.22	497.90	508.93
La Crosse .....	39.1	40.2	40.2	9.18	9.92	9.72	358.94	398.78	390.74
Madison .....	42.1	40.6	39.7	9.77	10.22	10.09	411.32	414.93	400.57
Milwaukee .....	41.4	40.4	40.8	11.51	11.56	11.51	476.51	467.02	469.61
Racine .....	40.7	38.7	40.1	10.89	11.00	11.22	443.22	425.70	449.92
Wausau .....	42.4	42.0	41.5	10.05	10.13	10.28	426.12	425.46	426.62
<b>Wyoming</b>									
Cheyenne .....	38.7	38.0	37.2	10.03	10.04	10.26	388.16	381.52	381.67
<b>Puerto Rico</b>									
San Juan .....	39.1	39.0	39.6	5.53	5.59	5.66	216.22	218.01	224.14
<b>Virgin Islands</b>									
St. John .....	40.4	41.5	42.2	9.59	10.42	10.51	387.44	432.43	443.52

<sup>1</sup> Not available.

<sup>P</sup> = 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) <sup>1</sup>			Percent change		
	May 1989 <sup>p</sup>	June 1989 <sup>p</sup>	July 1989 <sup>p</sup>	July 1988 to July 1989 <sup>p</sup>	May 1989 to June 1989 <sup>r</sup>	June 1989 to July 1989 <sup>p</sup>
Total .....	200,847	201,230	202,695	2.8	0.2	0.7
Private sector .....	165,172	165,887	167,499	3.0	.4	1.0
Mining .....	1,574	1,573	1,574	-.8	.0	.1
Construction .....	10,207	10,314	10,568	4.3	1.1	2.5
Manufacturing .....	41,877	41,899	41,897	.9	.1	.0
Durable goods .....	24,949	24,920	24,840	.1	-.1	-.3
Nondurable goods .....	16,928	16,980	17,057	2.0	.3	.5
Transportation and public utilities .....	11,707	11,765	11,944	4.3	.5	1.5
Wholesale trade .....	12,244	12,303	12,379	3.3	.5	.6
Retail trade .....	29,324	29,344	29,756	2.0	.1	1.4
Finance, insurance, and real estate .....	12,593	12,688	12,914	2.6	.8	1.8
Services .....	45,649	46,000	46,468	5.1	.8	1.0
Government .....	35,675	35,343	35,196	1.7	-.9	-.4

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

<sup>p</sup> = 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).

C-10. Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted<sup>1</sup>

(1977=100)

Item	Annual average		Quarterly index											
	1987'	1988'	1986		1987				1988				1989	
			IV'	I'	II'	III'	IV'	I'	II'	III'	IV'	I'	II <sup>P</sup>	
<b>Business sector</b>														
Output per hour of all persons .....	111.1	113.1	109.8	109.9	110.7	111.7	112.5	113.3	112.7	113.6	113.6	113.9	114.2	
Output .....	133.4	140.0	128.9	130.4	132.2	134.4	136.7	138.2	139.3	140.7	141.9	143.6	144.0	
Hours .....	120.1	123.8	117.4	118.6	119.5	120.3	121.5	122.0	123.6	123.9	124.9	126.0	126.2	
Compensation per hour .....	191.0	200.4	187.4	188.2	189.5	191.8	195.2	196.5	199.3	202.2	204.8	207.2	210.5	
Real compensation per hour .....	101.9	102.7	102.8	101.9	101.4	101.7	102.6	102.3	102.7	102.9	103.1	103.0	103.0	
Unit labor costs .....	171.9	177.2	170.6	171.2	171.3	171.6	173.5	173.5	176.9	178.1	180.2	181.9	184.4	
Unit nonlabor payments .....	166.3	170.8	160.7	162.6	166.5	168.9	167.2	168.9	168.8	171.7	173.6	174.7	176.2	
Implicit price deflator .....	170.0	174.9	167.1	168.2	169.6	170.7	171.3	171.9	174.1	175.8	177.9	179.4	181.5	
<b>Nonfarm business sector</b>														
Output per hour of all persons .....	108.9	111.2	107.6	107.7	108.6	109.5	110.3	111.1	110.7	111.6	112.1	111.8	111.8	
Output .....	133.1	140.3	128.4	130.0	132.0	134.1	136.4	138.0	139.5	141.1	142.8	143.6	144.2	
Hours .....	122.2	126.2	119.3	120.7	121.6	122.4	123.7	124.3	126.1	126.4	127.3	128.5	129.0	
Compensation per hour .....	189.8	198.9	186.4	187.0	188.3	190.5	193.9	195.1	197.8	200.5	203.3	205.7	208.5	
Real compensation per hour .....	101.2	101.9	102.2	101.3	100.7	101.0	101.9	101.6	101.9	102.1	102.4	102.3	102.0	
Unit labor costs .....	174.2	178.8	173.2	173.6	173.4	173.9	175.8	175.7	178.7	179.6	181.3	184.1	186.4	
Unit nonlabor payments .....	167.7	172.2	161.6	164.1	167.6	170.3	168.7	170.2	169.8	172.0	176.2	174.6	176.3	
Implicit price deflator .....	172.0	176.5	169.2	170.3	171.4	172.6	173.4	173.8	175.6	177.0	179.6	180.8	182.9	
<b>Manufacturing</b>														
Output per hour of all persons .....	132.9	137.7	130.1	131.3	133.1	134.3	135.1	136.3	137.5	139.2	140.0	140.7	141.6	
Output .....	130.1	138.1	125.9	127.2	128.7	131.1	133.5	135.0	136.9	139.3	141.1	142.2	142.9	
Hours .....	97.9	100.3	96.8	96.8	96.7	97.6	98.9	99.1	99.6	100.0	100.7	101.0	100.9	
Compensation per hour .....	189.2	197.8	187.8	188.5	188.7	190.4	192.2	195.5	197.1	199.5	202.3	203.9	205.1	
Real compensation per hour .....	100.9	101.3	103.0	102.0	101.0	100.9	101.0	101.8	101.5	101.5	101.9	101.3	100.4	
Unit labor costs .....	142.3	143.6	144.3	143.5	141.8	141.8	142.3	143.5	143.3	143.2	144.5	144.8	144.9	
<b>Durable goods</b>														
Output per hour of all persons .....	139.5	144.8	136.6	138.4	140.0	141.2	142.4	143.8	145.2	146.7	147.2	147.8	149.4	
Output .....	136.0	145.0	131.8	133.3	134.2	136.5	139.9	141.3	144.0	146.4	148.3	149.1	149.9	
Hours .....	97.5	100.2	96.5	96.4	95.9	96.7	98.2	98.3	99.2	99.8	100.7	100.9	100.3	
Compensation per hour .....	187.4	195.3	186.9	187.9	187.4	189.0	190.6	194.5	195.0	197.0	200.2	201.8	202.4	
Real compensation per hour .....	100.0	100.1	102.5	101.7	100.3	100.2	100.1	101.3	100.4	100.3	100.8	100.3	99.1	
Unit labor costs .....	134.3	134.9	136.8	135.8	133.9	133.9	133.9	135.2	134.3	134.4	135.9	136.6	135.5	
<b>Nondurable goods</b>														
Output per hour of all persons .....	123.2	127.3	120.5	121.0	123.1	124.3	124.4	125.3	126.1	128.3	129.3	130.3	130.1	
Output .....	121.4	127.8	117.0	118.0	120.5	123.1	124.0	125.6	126.4	128.8	130.3	131.8	132.5	
Hours .....	98.6	100.4	97.1	97.6	97.9	99.0	99.7	100.2	100.2	100.4	100.8	101.1	101.9	
Compensation per hour .....	192.5	202.2	189.4	189.8	191.5	193.3	195.3	197.8	200.9	203.8	206.1	207.6	210.1	
Real compensation per hour .....	102.7	103.6	103.9	102.8	102.4	102.5	102.6	103.0	103.5	103.8	103.8	103.2	102.8	
Unit labor costs .....	156.2	158.9	157.1	156.9	155.6	155.5	157.0	157.8	159.3	158.9	159.4	159.3	161.5	
<b>Nonfinancial corporations</b>														
Output per all-employee hour .....	112.1	114.9	110.6	110.4	111.6	113.0	113.6	114.8	115.0	115.4	115.3	114.7	( <sup>2</sup> )	
Output .....	135.3	143.5	130.3	131.5	133.9	136.9	138.9	141.2	142.8	144.3	145.4	145.8	( <sup>2</sup> )	
Hours .....	120.8	124.8	117.8	119.2	120.0	121.1	122.3	123.0	124.2	125.1	126.2	127.1	( <sup>2</sup> )	
Compensation per hour .....	186.1	194.5	183.0	183.6	184.7	186.9	189.7	191.2	193.6	196.0	198.3	200.7	( <sup>2</sup> )	
Real compensation per hour .....	99.3	99.7	100.4	99.4	98.8	99.1	99.6	99.6	99.7	99.8	99.9	99.7	( <sup>2</sup> )	
Total unit costs .....	171.2	174.6	170.1	171.0	170.8	170.8	172.1	171.9	173.6	175.2	177.5	180.4	( <sup>2</sup> )	
Unit labor costs .....	166.1	169.3	165.4	166.3	165.5	165.3	167.0	166.6	168.4	169.9	172.1	174.9	( <sup>2</sup> )	
Unit nonlabor costs .....	186.4	190.3	183.7	185.0	186.3	186.9	187.2	187.8	188.9	191.0	193.3	196.9	( <sup>2</sup> )	
Unit profits .....	123.0	128.8	120.4	118.1	122.5	129.3	122.0	127.0	129.1	127.5	131.6	119.6	( <sup>2</sup> )	
Implicit price deflator .....	165.4	169.1	164.1	164.7	165.0	165.8	166.1	166.5	168.2	169.5	172.0	173.1	( <sup>2</sup> )	

<sup>1</sup> The productivity and cost measures incorporate revised output and compensation measures reported by the Bureau of Economic Analysis of the U.S. Department of Commerce; revised data for employees of nonagricultural establishments; and a redefinition of labor input to hours at work.

<sup>2</sup> Not available.

<sup>3</sup> =preliminary.

=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<sup>1</sup>**

Item	Percent change from											
	Previous quarter						Same quarter, previous year					
	I 1988'	II 1988'	III 1988'	IV 1988'	I 1989'	II 1989 <sup>p</sup>	I 1988'	II 1988'	III 1988'	IV 1988'	I 1989'	II 1989 <sup>p</sup>
<b>Business sector</b>												
Output per hour of all persons .....	2.7	-2.0	3.1	0.2	1.0	0.9	3.0	1.8	1.6	1.0	0.6	1.3
Output .....	4.4	3.3	4.0	3.4	4.8	1.4	5.9	5.4	4.7	3.8	3.9	3.4
Hours .....	1.7	5.4	.9	3.2	3.8	.4	2.8	3.5	3.0	2.8	3.3	2.1
Compensation per hour .....	2.8	5.9	5.8	5.2	4.8	6.6	4.4	5.2	5.4	4.9	5.4	5.6
Real compensation per hour .....	-8	1.3	1.0	.7	-6	.3	.4	1.3	1.2	.5	.6	.3
Unit labor costs .....	.1	8.1	2.6	5.0	3.7	5.7	1.3	3.3	3.7	3.9	4.8	4.2
Unit nonlabor payments .....	4.2	-3	7.1	4.6	2.4	3.5	3.9	1.4	1.7	3.9	3.4	4.4
Implicit price deflator .....	1.5	5.1	4.1	4.8	3.3	4.9	2.2	2.6	3.0	3.9	4.3	4.3
<b>Nonfarm business sector</b>												
Output per hour of all persons .....	3.0	-1.5	3.4	1.9	-1.3	.2	3.1	1.9	1.9	1.7	.6	1.0
Output .....	4.8	4.4	4.6	4.8	2.4	1.7	6.1	5.7	5.2	4.7	4.1	3.4
Hours .....	1.8	5.9	1.2	2.8	3.8	1.5	2.9	3.7	3.3	2.9	3.4	2.3
Compensation per hour .....	2.7	5.5	5.5	5.9	4.8	5.5	4.3	5.1	5.2	4.9	5.4	5.4
Real compensation per hour .....	-9	.9	.8	1.4	-6	-9	.4	1.1	1.0	.5	.6	.2
Unit labor costs .....	-3	7.1	2.0	3.9	6.2	5.2	1.2	3.1	3.3	3.1	4.8	4.3
Unit nonlabor payments .....	3.6	-1.0	5.4	10.1	-3.7	3.9	3.7	1.3	1.0	4.4	2.6	3.8
Implicit price deflator .....	1.0	4.3	3.2	5.9	2.8	4.8	2.0	2.5	2.5	3.6	4.0	4.2
<b>Manufacturing</b>												
Output per hour of all persons .....	3.7	3.6	5.2	2.3	2.1	2.4	3.8	3.3	3.7	3.7	3.3	3.0
Output .....	4.6	5.8	7.1	5.1	3.1	2.1	6.2	6.4	6.2	5.6	5.3	4.4
Hours .....	.9	2.2	1.8	2.8	1.1	-3	2.3	3.0	2.5	1.9	2.0	1.3
Compensation per hour .....	7.1	3.2	4.9	5.9	3.1	2.5	3.7	4.4	4.8	5.3	4.3	4.1
Real compensation per hour .....	3.4	-1.3	.2	1.4	-2.2	-3.7	-2	.5	.6	.9	-.5	-1.1
Unit labor costs .....	3.3	-3	-3	3.5	1.0	.1	-1	1.1	1.0	1.5	1.0	1.1
<b>Durable goods</b>												
Output per hour of all persons .....	4.1	3.8	4.1	1.6	1.4	4.6	4.0	3.7	3.9	3.4	2.7	2.9
Output .....	4.3	7.7	6.8	5.3	2.2	2.0	6.0	7.3	7.2	6.0	5.5	4.1
Hours .....	.1	3.7	2.6	3.6	.8	-2.4	2.0	3.4	3.2	2.5	2.7	1.1
Compensation per hour .....	8.4	1.1	4.2	6.5	3.3	1.3	3.5	4.0	4.3	5.0	3.8	3.8
Real compensation per hour .....	4.6	-3.3	-5	1.9	-2.1	-4.8	-4	.2	.1	.7	-1.0	-1.4
Unit labor costs .....	4.1	-2.6	.1	4.8	1.8	-3.1	-4	.3	.4	1.6	1.0	.9
<b>Nondurable goods</b>												
Output per hour of all persons .....	3.0	2.7	7.0	3.2	3.2	-7	3.6	2.5	3.2	4.0	4.0	3.1
Output .....	5.1	2.7	7.7	4.8	4.7	2.3	6.4	4.9	4.6	5.0	5.0	4.8
Hours .....	2.0	.0	.7	1.5	1.4	3.0	2.7	2.4	1.4	1.0	.9	1.7
Compensation per hour .....	5.2	6.4	6.0	4.6	2.9	5.0	4.2	4.9	5.4	5.5	5.0	4.6
Real compensation per hour .....	1.5	1.8	1.2	.2	-2.4	-1.3	.2	1.0	1.2	1.2	.2	-6
Unit labor costs .....	2.1	3.7	-1.0	1.4	-4	5.7	.6	2.4	2.2	1.5	.9	1.4
<b>Nonfinancial corporations</b>												
Output per all-employee hour .....	4.3	.6	1.4	-.4	-1.8	( <sup>q</sup> )	4.0	3.0	2.1	1.5	.0	( <sup>q</sup> )
Output .....	6.8	4.6	4.3	3.2	1.0	( <sup>q</sup> )	7.4	6.6	5.4	4.7	3.2	( <sup>q</sup> )
Hours .....	2.3	4.0	2.8	3.6	2.8	( <sup>q</sup> )	3.2	3.5	3.3	3.2	3.3	( <sup>q</sup> )
Compensation per hour .....	3.3	5.2	5.1	4.8	4.8	( <sup>q</sup> )	4.1	4.8	4.9	4.6	5.0	( <sup>q</sup> )
Real compensation per hour .....	-3	.6	.3	.4	-6	( <sup>q</sup> )	.2	.9	.7	.2	.2	( <sup>q</sup> )
Total unit costs .....	-4	3.9	3.9	5.2	6.9	( <sup>q</sup> )	.5	1.6	2.6	3.1	5.0	( <sup>q</sup> )
Unit labor costs .....	-1.0	4.5	3.6	5.3	6.6	( <sup>q</sup> )	.1	1.7	2.8	3.1	5.0	( <sup>q</sup> )
Unit nonlabor costs .....	1.1	2.5	4.6	4.9	7.5	( <sup>q</sup> )	1.5	1.4	2.2	3.3	4.9	( <sup>q</sup> )
Unit profits .....	17.6	6.8	-4.7	13.3	-31.7	( <sup>q</sup> )	7.5	5.4	-1.3	7.9	-5.8	( <sup>q</sup> )
Implicit price deflator .....	1.1	4.2	3.1	5.9	2.8	( <sup>q</sup> )	1.1	2.0	2.2	3.5	4.0	( <sup>q</sup> )

<sup>1</sup> The productivity and cost measures incorporate revised output and compensation measures reported by the Bureau of Economic Analysis of the U.S. Department of Commerce; revised data for employees of nonagricultural establishments; and a redefinition of labor input to hours at work.

<sup>2</sup> Not available.

<sup>p</sup> = preliminary.

<sup>q</sup> = revised.

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













# 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

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

<sup>2</sup> 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. Bailar, *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 Bailar, 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	<b>Occupation—Continued</b>		
Men, 20 years and over . . . . .	.15	.15	Precision production, craft, and repair . . . . .	0.32	0.36
Women, 20 years and over . . . . .	.16	.17	Machine operators, assemblers, and inspectors . . . . .	.49	.55
Both sexes, 16 to 19 years . . . . .	.67	.81	Transportation and material moving . . . . .	.59	.66
White workers . . . . .	.11	.12	Handlers, equipment cleaners, helpers, and laborers . . . . .	.72	.82
Black workers . . . . .	.51	.54	Farming, forestry, and fishing . . . . .	.68	.76
Married men, spouse present . . . . .	.15	.17	<b>Industry</b>		
Married women, spouse present . . . . .	.19	.21	Nonagricultural private wage and salary workers . . . . .	.12	.13
Full-time workers . . . . .	.12	.12	Mining . . . . .	1.63	1.86
Part-time workers . . . . .	.34	.42	Construction . . . . .	.65	.75
Unemployed 15 weeks and over . . . . .	.06	.07	Manufacturing . . . . .	.26	.29
<b>Occupation</b>			Durable goods . . . . .	.33	.37
Executive, administrative, and managerial . . . . .	.22	.24	Nondurable goods . . . . .	.42	.47
Professional specialty . . . . .	.19	.21	Transportation, communications, and public utilities . . . . .	.42	.48
Technicians and related support . . . . .	.47	.52	Wholesale and retail trade . . . . .	.27	.30
Sales . . . . .	.29	.33	Finance and services . . . . .	.20	.22
Administrative support, including clerical . . . . .	.23	.26	Government workers . . . . .	.23	.25
Private household . . . . .	1.18	1.33	Agricultural wage and salary workers . . . . .	1.16	1.32
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 <sup>1</sup>								
	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	-	-	-	-	-

<sup>1</sup> 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 <sup>1</sup>							
	Unemployment				Labor force data other than unemployment and agricultural employment			
	Total or white	Both sexes 16 to 19 years, or part-time labor force <sup>2</sup>	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	-	-	-

<sup>1</sup> See footnote 1, table D.

<sup>2</sup> 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  $0.11 \times 1.40 = 0.15$  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 141 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. <sup>1</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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. <sup>2</sup>	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.

<sup>1</sup> 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.

<sup>2</sup> 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 in small establishments, the sample design calls for inclu-

**Table M. Comparison of nonagricultural employment benchmarks and estimates for March 1988**

(In thousands)

Industry	Benchmark	Estimate	Percent difference
Total . . . . .	103,835	104,161	-0.3
Mining . . . . .	711	723	-1.7
Construction . . . . .	4,686	4,787	-2.2
Manufacturing . . . . .	19,171	19,302	-.7
Transportation and public utilities . . . . .	5,437	5,473	-.7
Wholesale trade . . . . .	5,926	6,016	-1.5
Retail trade . . . . .	18,551	18,612	-.3
Finance, insurance, and real estate . . . . .	6,594	6,599	-.1
Services . . . . .	25,103	24,978	.5
Government . . . . .	17,656	17,671	-.1

sion 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 latest benchmarks and 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. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1988**

Industry	Bench- marks (thou- sands)	Sample coverage <sup>1</sup>		
		Number of establish- ments	Number (thou- sands)	Percent of benchmarks
Total . . . . .	103,835	262,856	38,922	37
Mining . . . . .	711	3,361	276	39
Construction . . . . .	4,686	24,924	917	20
Manufacturing . . . . .	19,171	49,889	9,483	49
Transportation and public utilities . . . . .	5,437	214,091	22,482	46
Wholesale trade . . . . .	5,926	22,810	1,062	18
Retail trade . . . . .	18,551	49,015	3,704	20
Finance, insurance, and real estate . . . . .	6,594	19,711	2,126	32
Services . . . . .	25,103	58,713	5,795	23
Government:				
Federal . . . . .	2,964	( <sup>3</sup> )	2,964	100
State . . . . .	4,151	4,883	3,406	82
Local . . . . .	10,541	15,459	6,707	64

<sup>1</sup> 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.

<sup>2</sup> The Interstate Commerce Commission provides a complete count of employment for Class I railroads.

<sup>3</sup> 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 5,000 reports covering about 56 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 <sup>1</sup>	Relative error <sup>2</sup>	
		Average weekly hours	Average hourly earnings
Total . . . . .	0.2		
Total private . . . . .	.3	0.1	0.2
Mining . . . . .	2.2	1.0	1.3
Construction . . . . .	1.8	.2	.5
Manufacturing . . . . .	.7	.1	.2
Durable goods . . . . .	.7	.1	.3
Nondurable goods . . . . .	.9	.1	.2
Transportation and public utilities . . . . .	.4	.7	.6
Wholesale trade . . . . .	1.0	.2	.4
Retail trade . . . . .	.7	.2	.4
Finance, insurance, and real estate . . . . .	.3	.2	.4
Services . . . . .	.3	.4	.6
Government <sup>3</sup> . . . . .	.3	—	—

<sup>1</sup> The average percent revision in employment for the 1984-88 benchmarks.

<sup>2</sup> Relative errors relate to 1982 data.

<sup>3</sup> 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:

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

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 <sup>1</sup>	Relative error <sup>2</sup> (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

<sup>1</sup> Assuming 12-month intervals between benchmark revisions.

<sup>2</sup> 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 . . . . .	88,900	89,500	Nondurable goods—Continued		
Total private . . . . .	61,300	58,900	Chemicals and allied products . . . . .	2,600	2,800
Goods-producing industries . . . . .	21,200	19,800	Petroleum and coal products . . . . .	1,200	1,200
Mining . . . . .	4,400	4,200	Rubber and misc. plastics products . . . . .	1,600	1,600
Oil and gas extraction . . . . .	3,800	3,300	Leather and leather products . . . . .	1,700	1,600
Construction . . . . .	14,400	15,100	Service-producing industries . . . . .	85,400	85,700
General building contractors . . . . .	4,900	5,100	Transportation and public utilities . . . . .	14,600	13,000
Manufacturing . . . . .	18,200	18,300	Transportation . . . . .	16,600	16,000
Durable goods . . . . .	13,700	12,300	Communication and public utilities . . . . .	6,500	6,100
Lumber and wood products . . . . .	2,200	2,000	Wholesale trade . . . . .	8,700	7,700
Furniture and fixtures . . . . .	1,700	1,600	Durable goods . . . . .	5,800	5,300
Stone, clay, and glass products . . . . .	1,600	1,500	Nondurable goods . . . . .	5,000	4,400
Primary metal industries . . . . .	4,300	4,300	Retail trade . . . . .	38,600	34,400
Blast furnaces and basic steel products . . . . .	3,300	3,100	General merchandise stores . . . . .	22,800	20,400
Fabricated metal products . . . . .	2,400	2,200	Food stores . . . . .	6,800	6,000
Machinery, except electrical . . . . .	5,700	6,800	Automotive dealers and service stations . . . . .	4,200	5,100
Electrical and electronic equipment . . . . .	4,900	4,900	Eating and drinking places . . . . .	10,100	9,500
Transportation equipment . . . . .	7,700	7,000	Finance, insurance, and real estate	8,700	7,600
Motor vehicles and equipment . . . . .	6,500	6,600	Finance . . . . .	4,100	3,900
Instruments and related products . . . . .	2,100	2,200	Insurance . . . . .	3,700	3,100
Miscellaneous manufacturing . . . . .	1,800	1,800	Real estate . . . . .	5,000	4,000
Nondurable goods . . . . .	8,500	8,400	Services . . . . .	36,600	34,900
Food and kindred products . . . . .	5,600	5,600	Business services . . . . .	11,700	10,700
Tobacco manufactures . . . . .	1,500	1,400	Health services . . . . .	10,200	10,000
Textile mill products . . . . .	1,800	1,700	Government . . . . .	59,700	53,500
Apparel and other textile products . . . . .	4,500	4,000	Federal . . . . .	15,900	11,300
Paper and allied products . . . . .	1,600	1,400	State . . . . .	22,000	20,000
Printing and publishing . . . . .	2,100	2,000	Local . . . . .	34,600	34,500

NOTE: Data are based on differences from December 1983 through December 1988.

## 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 (benchmarking) 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 monthly in *Employment and Earnings*.

Since January 1980, national labor force data have been seasonally adjusted with a procedure called *X-11 ARIMA* (Auto-Regressive Integrated Moving Average), which was developed at Statistics Canada as an extension of the 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.

At the beginning of each calendar year, projected seasonal adjustment factors are calculated for use during the January-June period. In July of each year, BLS calculates and publishes in *Employment and Earnings* projected 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 only 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 a 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 procedure 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.

Since the early 1980's, the BLS has also used the X-11 ARIMA procedure to seasonally adjust establishment-based employment, hours, and earnings data. The X-11 ARIMA program has been run once each year after benchmarking and seasonal adjustment factors have been projected and published for 12 months ahead (April-March). Beginning in June 1989, with the introduction of the March 1988 benchmarks, the Bureau introduced a modification to this procedure to parallel that used in seasonally adjusting household survey data. Projected seasonal adjustment factors are now calculated only for the first 6 months after benchmarking. A second set of projected seasonal adjustment factors, for use during the subsequent period, will be computed based upon data through September and introduced with the publication of data for October. Revisions of historical data for the most recent 5 years will continue to be made once a year, coincident with benchmark revisions, and published in a *Supplement to Employment and Earnings*.

The BLS is also working on an extension to X-11 ARIMA to allow it to adjust more adequately for the effects of the presence or absence of religious holidays in the April survey reference period (as well as for the occasional effects of Labor Day in the September survey reference period). If this research proves successful, this extension will be introduced for the computation of the seasonal adjustment factors to be published in November 1989.

All series are seasonally adjusted using the multiplicative models under X-11 ARIMA. 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, and major industry divisions, 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, however, are used in the aggregation to broader level seasonally adjusted series.

Seasonal adjustment factors for Federal Government employment are derived from unadjusted data which include Christmas temporary workers employed by the Postal Service. The number of temporary census takers for the 1980 decennial census, however, are removed prior to the calculation of seasonal adjustment factors.

Revised seasonally adjusted establishment-based series based on the experience through March 1989, new seasonal adjustment factors for April-September, and a description of the current seasonal adjustment procedure appear in the June 1989 issue of *Employment and Earnings*.

**U.S. DEPARTMENT OF LABOR  
Bureau of Labor Statistics**

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