



EMPLOYMENT AND EARNINGS

September 1988

U.S. Department of Labor
Bureau of Labor Statistics





U.S. DEPARTMENT OF LABOR

Ann McLaughlin, Secretary

BUREAU OF LABOR STATISTICS

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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 Supplement¹

State and area annual averages May

Area definitions May

State and area labor force data

Annual averages May

¹ The latest supplement was published in August 1988.

Employment and Earnings

Vol. 35 No. 9 September 1988

Editors: Gloria Peterson Green, Rosalie K. Epstein

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Employment and Unemployment Developments, August 1988

The number of nonfarm payroll jobs grew moderately in August, and unemployment edged up. The overall jobless rate was 5.5 percent and the civilian worker rate 5.6 percent, compared with 5.4 percent for both measures in July.

Nonagricultural payroll employment, as measured by the monthly survey of business establishments, increased by 220,000 in August to 106.5 million, substantially less than the average monthly gain so far this year. Total civilian employment, as measured by the monthly survey of households, was about unchanged at 115.2 million in August.

Unemployment

Both the number of unemployed persons and the unemployment rate edged up in August. About 6.9 million persons were unemployed, and the civilian worker jobless rate was 5.6 percent, seasonally adjusted. Since March, the rate has moved within the narrow range of 5.3 to 5.6 percent. (See table A-33.)

Most of the over-the-month increase in joblessness occurred among adult men, whose unemployment rate rose 0.4 percentage point to 4.9 percent. In contrast, the rate for adult women edged down to 4.8 percent. The incidence of joblessness rose slightly for whites to 4.9 percent, while it was little changed for blacks (11.3 percent), teenagers (15.8 percent), and Hispanics (8.4 percent). (See tables A-33 and A-34.)

Civilian employment and the labor force

Civilian employment was about unchanged at 115.2 million in August, and the employment-population ratio remained at its high of 62.3 percent. The civilian labor force rose substantially—by almost 350,000—as the labor force participation rate edged up to 66.0 percent, matching the high reached in February. (See table A-33.)

Industry payroll employment

Employment in nonagricultural establishments increased moderately in August, as payroll jobs rose by 220,000 to a level of 106.5 million, seasonally adjusted. This gain, and July's increase of 200,000, followed larger increases during the first half of the year. Employment in private nonfarm industries rose only modestly (155,000), and the goods-

producing sector did not increase for the first time since January. (See table B-4.)

After 4 months of fairly strong growth, factory employment was unchanged in August, on a seasonally adjusted basis. Although job gains were registered in the machinery, electrical equipment, and printing and publishing industries, these were offset by a drop in textile employment and smaller declines in 11 other industries. Elsewhere in the goods-producing sector, employment in the oil and gas component of the mining industry edged down. Construction industry employment, which has risen rather vigorously over the past year, was unchanged in August.

In the service-producing sector, the services industry rose by 95,000 in August, about in line with the recent average for that industry. Both business and health services, however, posted below-average increases. Wholesale trade added 20,000 jobs, nearly all in its durable goods component. Over the year, employment in that industry has risen by 300,000, more than three-fourths of which was in durable-goods distribution. After 2 months of strong growth, employment in retail trade showed little over-the-month movement, as only food stores posted a substantial job increase. Similarly, employment in the other private service sector industries—transportation and public utilities and finance, insurance, and real estate—was little changed in August.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls dropped by 0.3 hour to 34.6 hours in August, seasonally adjusted. The factory workweek declined by 0.2 hour to 41.0 hours, and manufacturing overtime edged down 0.1 hour to 3.8 hours. The average workweek in manufacturing has been at or above 41 hours throughout most of 1987 and 1988, quite high by historical standards. (See table C-5.)

As a result of the August drop in the workweek, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls, at 125.5 (1977=100), declined 0.7 percent, seasonally adjusted. The index for manufacturing was also down, by 0.5 percent to 96.1. (See table C-6.)

Hourly and weekly earnings

Average hourly earnings of private production or

nonsupervisory workers were unchanged in August, seasonally adjusted. Average weekly earnings fell 0.9 percent, reflecting the decline in the average workweek. Prior to seasonal adjustment, average weekly earnings dropped 92 cents to \$323.40, while average hourly earnings were unchanged at \$9.24. (See tables C-1 and C-7.)

The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 179.4 (1977=100) in

August, seasonally adjusted, an increase of 0.1 percent from July. For the 12 months ended in August, the increase was 3.1 percent. In dollars of constant purchasing power, the HEI decreased 0.5 percent during the 12-month period ended in July. The HEI is computed so as to exclude the effects of two types of changes unrelated to underlying wage rate movements—fluctuations in manufacturing overtime and interindustry employment shifts. (Beginning in 1989, the Hourly Earnings Index will no longer be published in this publication.) (See table 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>
September	October 7	December	January 6
October	November 4	January	February 3
November	December 2	February	March 10

**HOUSEHOLD DATA
HISTORICAL**

A-1. Employment status of the noninstitutional population 16 years and over, 1954 to date

(Numbers in thousands)

Year and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
1954	110,463	65,785	59.6	62,251	2,142	60,109	6,205	53,904	3,532	5.4	44,678	
1955	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660	
1956	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402	
1957	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336	
1958	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088	
1959	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960	
1960 ¹	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617	
1961	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312	
1962 ¹	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 ¹	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091	
1973 ¹	148,870	91,203	61.3	86,838	1,774	85,064	3,470	81,594	4,365	4.8	57,667	
1974	151,841	93,670	61.7	88,515	1,721	86,794	3,515	83,279	5,156	5.5	58,171	
1975	154,831	95,453	61.6	87,524	1,678	85,846	3,408	82,438	7,929	8.3	59,377	
1976	157,818	97,826	62.0	90,420	1,668	88,752	3,331	85,421	7,406	7.6	59,991	
1977	160,689	100,665	62.6	93,673	1,656	92,017	3,283	88,734	6,991	6.9	60,025	
1978 ¹	163,541	103,882	63.5	97,679	1,631	96,048	3,387	92,661	6,202	6.0	59,659	
1979	166,460	106,559	64.0	100,421	1,597	98,824	3,347	95,477	6,137	5.8	59,900	
1980	169,349	108,544	64.1	100,907	1,604	99,303	3,364	95,938	7,637	7.0	60,806	
1981	171,775	110,315	64.2	102,042	1,645	100,397	3,368	97,030	8,273	7.5	61,460	
1982	173,939	111,872	64.3	101,194	1,668	99,526	3,401	96,125	10,678	9.5	62,067	
1983	175,891	113,226	64.4	102,510	1,676	100,834	3,383	97,450	10,717	9.5	62,665	
1984	178,080	115,241	64.7	106,702	1,697	105,005	3,321	101,685	8,539	7.4	62,839	
1985	179,912	117,167	65.1	108,856	1,706	107,150	3,179	103,971	8,312	7.1	62,744	
1986 ¹	182,293	119,540	65.6	111,303	1,706	109,597	3,163	106,434	8,237	6.9	62,752	
1987	184,490	121,602	65.9	114,177	1,737	112,440	3,208	109,232	7,425	6.1	62,888	
Monthly data, seasonally adjusted²												
1987:												
August	184,738	122,042	66.1	114,786	1,736	113,050	3,143	109,907	7,256	5.9	62,696	
September	184,904	121,706	65.8	114,615	1,743	112,872	3,184	109,688	7,091	5.8	63,198	
October	185,052	122,128	66.0	114,951	1,741	113,210	3,249	109,961	7,177	5.9	62,924	
November	185,225	122,349	66.1	115,259	1,755	113,504	3,172	110,332	7,090	5.8	62,876	
December	185,370	122,472	66.1	115,494	1,750	113,744	3,215	110,529	6,978	5.7	62,898	
1988:												
January	185,571	122,924	66.2	115,878	1,749	114,129	3,293	110,836	7,046	5.7	62,647	
February	185,705	123,084	66.3	116,145	1,736	114,409	3,228	111,182	6,938	5.6	62,621	
March	185,847	122,639	66.0	115,839	1,736	114,103	3,204	110,899	6,801	5.5	63,208	
April	185,964	123,055	66.2	116,445	1,732	114,713	3,228	111,485	6,610	5.4	62,909	
May	186,088	122,692	65.9	115,909	1,714	114,195	3,035	111,160	6,783	5.5	63,396	
June	186,247	123,157	66.1	116,703	1,685	115,018	3,085	111,933	6,455	5.2	63,090	
July	186,402	123,357	66.2	116,732	1,673	115,059	3,046	112,014	6,625	5.4	63,045	
August	186,522	123,723	66.3	116,872	1,692	115,180	3,151	112,029	6,851	5.5	62,799	

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

² The population and Armed Forces figures are not adjusted for

seasonal variation.

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

A-2. Employment status of the noninstitutional population 16 years and over by sex, 1977 to date

(Numbers in thousands)

Sex, year, and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
MEN												
1977	76,756	59,959	78.1	56,291	1,563	54,728	2,671	52,057	3,667	6.1	16,797	
1978 ¹	78,107	61,151	78.3	58,010	1,531	56,479	2,718	53,761	3,142	5.1	16,956	
1979	79,509	62,215	78.2	59,096	1,489	57,607	2,686	54,921	3,120	5.0	17,293	
1980	80,877	62,932	77.8	58,665	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	63,979	77.0	57,800	1,529	56,271	2,736	53,534	6,179	9.7	19,073	
1983	84,064	64,580	76.8	58,320	1,533	56,787	2,704	54,083	6,260	9.7	19,484	
1984	85,156	65,386	76.8	60,642	1,551	59,091	2,668	56,423	4,744	7.3	19,771	
1985	86,025	65,967	76.7	61,447	1,556	59,891	2,535	57,356	4,521	6.9	20,058	
1986 ¹	87,349	66,973	76.7	62,443	1,551	60,892	2,511	58,381	4,530	6.8	20,376	
1987	88,476	67,784	76.6	63,684	1,577	62,107	2,543	59,564	4,101	6.1	20,692	
Monthly data, seasonally adjusted²												
1987:												
August	88,598	67,937	76.7	63,916	1,575	62,341	2,489	59,852	4,021	5.9	20,661	
September	88,683	67,776	76.4	63,949	1,581	62,368	2,547	59,821	3,827	5.6	20,907	
October	88,756	67,947	76.6	64,048	1,580	62,468	2,569	59,899	3,899	5.7	20,809	
November	88,849	68,019	76.6	64,174	1,593	62,581	2,491	60,090	3,845	5.7	20,830	
December	88,924	68,030	76.5	64,245	1,589	62,656	2,523	60,133	3,785	5.6	20,894	
1988:												
January	89,033	68,243	76.6	64,396	1,588	62,808	2,593	60,216	3,847	5.6	20,790	
February	89,099	68,343	76.7	64,636	1,577	63,059	2,510	60,548	3,707	5.4	20,756	
March	89,168	68,148	76.4	64,332	1,573	62,759	2,474	60,285	3,816	5.6	21,020	
April	89,225	68,445	76.7	64,892	1,569	63,323	2,467	60,856	3,553	5.2	20,780	
May	89,287	68,318	76.5	64,583	1,553	63,030	2,391	60,639	3,736	5.5	20,969	
June	89,367	68,429	76.6	64,934	1,523	63,411	2,422	60,988	3,495	5.1	20,938	
July	89,445	68,521	76.6	65,002	1,512	63,490	2,471	61,019	3,519	5.1	20,924	
August	89,504	68,723	76.8	64,954	1,529	63,425	2,526	60,899	3,768	5.5	20,781	
Annual averages												
WOMEN												
1977	83,932	40,705	48.5	37,381	92	37,289	612	36,677	3,324	8.2	43,227	
1978 ¹	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	661	40,556	3,018	6.8	42,608	
1980	88,472	45,611	51.6	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	90,887	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	43,367	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	43,068	
1985	93,886	51,200	54.5	47,409	150	47,259	644	46,615	3,791	7.4	42,686	
1986 ¹	94,944	52,568	55.4	48,861	155	48,706	652	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	
Monthly data, seasonally adjusted²												
1987:												
August	96,140	54,105	56.3	50,870	161	50,709	654	50,055	3,235	6.0	42,035	
September	96,221	53,930	56.0	50,666	162	50,504	637	49,867	3,264	6.1	42,291	
October	96,295	54,181	56.3	50,903	161	50,742	680	50,062	3,278	6.1	42,114	
November	96,376	54,330	56.4	51,085	162	50,923	681	50,242	3,245	6.0	42,046	
December	96,446	54,442	56.4	51,249	161	51,088	692	50,396	3,193	5.9	42,004	
1988:												
January	96,538	54,681	56.6	51,482	161	51,321	700	50,621	3,200	5.9	41,857	
February	96,606	54,740	56.7	51,509	159	51,350	717	50,633	3,231	5.9	41,866	
March	96,679	54,491	56.4	51,507	163	51,344	730	50,614	2,985	5.5	42,188	
April	96,739	54,610	56.5	51,553	163	51,390	761	50,629	3,057	5.6	42,129	
May	96,801	54,374	56.2	51,327	161	51,166	645	50,521	3,047	5.6	42,427	
June	96,880	54,728	56.5	51,769	162	51,607	662	50,944	2,960	5.4	42,152	
July	96,957	54,836	56.6	51,730	161	51,569	575	50,994	3,106	5.7	42,121	
August	97,018	55,000	56.7	51,918	163	51,755	625	51,130	3,083	5.6	42,018	

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

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

**HOUSEHOLD DATA
HISTORICAL**

A-3. Employment status of the civilian noninstitutional population 16 years and over, 1954 to date

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force				Unemployment rates		
		Total	Percent of population	Employed	Unemployed	Total	Men	Women
Annual averages								
1954	108,321	63,643	58.8	60,109	3,532	5.5	5.3	6.0
1955	109,683	65,023	59.3	62,170	2,852	4.4	4.2	4.9
1956	110,954	66,552	60.0	63,799	2,750	4.1	3.8	4.8
1957	112,265	66,929	59.6	64,071	2,859	4.3	4.1	4.7
1958	113,727	67,639	59.5	63,036	4,602	6.8	6.8	6.8
1959	115,329	68,369	59.3	64,630	3,740	5.5	5.2	5.9
1960 ¹	117,245	69,628	59.4	65,778	3,852	5.5	5.4	5.9
1961	118,771	70,459	59.3	65,746	4,714	6.7	6.4	7.2
1962 ¹	120,153	70,614	58.8	66,702	3,911	5.5	5.2	6.2
1963	122,416	71,833	58.7	67,762	4,070	5.7	5.2	6.5
1964	124,485	73,091	58.7	69,305	3,786	5.2	4.6	6.2
1965	126,513	74,455	58.9	71,088	3,366	4.5	4.0	5.5
1966	128,058	75,770	59.2	72,895	2,875	3.8	3.2	4.8
1967	129,874	77,347	59.6	74,372	2,975	3.8	3.1	5.2
1968	132,028	78,737	59.6	75,920	2,817	3.6	2.9	4.8
1969	134,335	80,734	60.1	77,902	2,832	3.5	2.8	4.7
1970	137,085	82,771	60.4	78,678	4,093	4.9	4.4	5.9
1971	140,216	84,382	60.2	79,367	5,016	5.9	5.3	6.9
1972 ¹	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 ¹	147,096	89,429	60.8	85,064	4,365	4.9	4.2	6.0
1974	150,120	91,949	61.3	86,794	5,156	5.6	4.9	6.7
1975	153,153	93,775	61.2	85,846	7,929	8.5	7.9	9.3
1976	156,150	96,158	61.6	88,752	7,406	7.7	7.1	8.6
1977	159,033	99,009	62.3	92,017	6,991	7.1	6.3	8.2
1978 ¹	161,910	102,251	63.2	96,048	6,202	6.1	5.3	7.2
1979	164,863	104,962	63.7	98,824	6,137	5.8	5.1	6.8
1980	167,745	106,940	63.8	99,303	7,637	7.1	6.9	7.4
1981	170,130	108,670	63.9	100,397	8,273	7.6	7.4	7.9
1982	172,271	110,204	64.0	99,526	10,678	9.7	9.9	9.4
1983	174,215	111,550	64.0	100,834	10,717	9.6	9.9	9.2
1984	176,383	113,544	64.4	105,005	8,539	7.5	7.4	7.6
1985	178,206	115,461	64.8	107,150	8,312	7.2	7.0	7.4
1986 ¹	180,587	117,834	65.3	109,597	8,237	7.0	6.9	7.1
1987	182,753	119,865	65.6	112,440	7,425	6.2	6.2	6.2
Monthly data, seasonally adjusted ²								
1987:								
August	183,002	120,306	65.7	113,050	7,256	6.0	6.1	6.0
September	183,161	119,963	65.5	112,872	7,091	5.9	5.8	6.1
October	183,311	120,387	65.7	113,210	7,177	6.0	5.9	6.1
November	183,470	120,594	65.7	113,504	7,090	5.9	5.8	6.0
December	183,620	120,722	65.7	113,744	6,978	5.8	5.7	5.9
1988:								
January	183,822	121,175	65.9	114,129	7,046	5.8	5.8	5.9
February	183,969	121,348	66.0	114,409	6,938	5.7	5.6	5.9
March	184,111	120,903	65.7	114,103	6,801	5.6	5.7	5.5
April	184,232	121,323	65.9	114,713	6,610	5.4	5.3	5.6
May	184,374	120,978	65.6	114,195	6,783	5.6	5.6	5.6
June	184,562	121,472	65.8	115,018	6,455	5.3	5.2	5.4
July	184,729	121,684	65.9	115,059	6,625	5.4	5.3	5.7
August	184,830	122,031	66.0	115,180	6,851	5.6	5.6	5.6

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

Explanatory Notes.

² The population figures are not adjusted for seasonal variation.

HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

Age, sex, and race	August 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
TOTAL											
16 years and over	184,830	123,396	66.8	116,737	6,659	5.4	61,434	28,426	1,798	3,310	27,900
16 to 19 years	14,491	9,363	64.6	8,140	1,222	13.1	5,128	735	699	41	3,653
16 to 17 years	7,237	3,954	54.6	3,370	584	14.8	3,283	320	346	19	2,598
18 to 19 years	7,254	5,409	74.6	4,771	638	11.8	1,845	415	353	22	1,056
20 to 24 years	18,375	15,028	81.8	13,839	1,189	7.9	3,347	1,534	568	93	1,153
25 to 54 years	101,700	84,054	82.6	80,247	3,807	4.5	17,647	12,207	503	1,200	3,736
25 to 34 years	42,691	35,528	83.2	33,536	1,992	5.6	7,162	5,079	322	351	1,410
25 to 29 years	21,306	17,784	83.5	16,687	1,097	6.2	3,522	2,406	216	159	741
30 to 34 years	21,385	17,744	83.0	16,849	895	5.0	3,640	2,673	106	191	669
35 to 44 years	34,890	29,419	84.3	28,228	1,191	4.0	5,471	3,890	147	348	1,087
35 to 39 years	18,925	15,857	83.8	15,147	708	4.5	3,068	2,216	95	183	583
40 to 44 years	15,965	13,563	85.0	13,081	482	3.6	2,402	1,682	52	165	503
45 to 54 years	24,120	19,106	79.2	18,483	624	3.3	5,013	3,239	34	502	1,239
45 to 49 years	12,999	10,591	81.5	10,223	368	3.5	2,408	1,658	25	196	529
50 to 54 years	11,121	8,515	76.6	8,260	256	3.0	2,605	1,581	9	305	710
55 to 64 years	21,636	11,756	54.3	11,395	361	3.1	9,880	4,787	24	765	4,304
55 to 59 years	10,846	7,141	65.8	6,936	205	2.9	3,705	2,085	19	366	1,235
60 to 64 years	10,791	4,615	42.8	4,459	156	3.4	6,176	2,702	5	399	3,069
65 years and over	28,627	3,195	11.2	3,116	80	2.5	25,431	9,163	4	1,211	15,053
65 to 69 years	9,812	1,931	19.7	1,885	46	2.4	7,881	2,949		299	4,634
70 to 74 years	7,691	801	10.4	781	19	2.4	6,889	2,543	-	227	4,121
75 years and over	11,123	464	4.2	449	14	3.0	10,661	3,670	6	686	6,298
Men											
16 years and over	87,975	68,326	77.7	64,876	3,450	5.0	19,649	658	833	1,833	16,325
16 to 19 years	7,306	4,929	67.5	4,282	647	13.1	2,376	90	341	21	1,925
16 to 17 years	3,698	2,101	56.8	1,804	297	14.1	1,597	51	180	8	1,358
18 to 19 years	3,607	2,828	78.4	2,478	350	12.4	779	39	161	13	566
20 to 24 years	8,886	7,944	89.4	7,324	620	7.8	942	43	280	50	568
25 to 54 years	49,726	46,656	93.8	44,736	1,920	4.1	3,070	212	205	811	1,842
25 to 34 years	20,982	19,846	94.6	18,807	1,039	5.2	1,137	95	146	258	637
25 to 29 years	10,461	9,825	93.9	9,263	563	5.7	635	49	106	116	365
30 to 34 years	10,522	10,020	95.2	9,544	476	4.8	501	46	40	142	273
35 to 44 years	17,063	16,231	95.1	15,650	581	3.6	832	61	48	238	484
35 to 39 years	9,266	8,821	95.2	8,493	327	3.7	445	37	36	130	242
40 to 44 years	7,797	7,411	95.0	7,157	254	3.4	386	24	12	108	242
45 to 54 years	11,681	10,579	90.6	10,279	300	2.8	1,101	56	11	314	720
45 to 49 years	6,311	5,855	92.8	5,693	162	2.8	456	25	9	123	299
50 to 54 years	5,370	4,724	88.0	4,586	138	2.9	645	31	2	191	421
55 to 64 years	10,197	6,837	67.0	6,611	226	3.3	3,360	127	8	488	2,737
55 to 59 years	5,173	4,125	79.7	4,001	124	3.0	1,048	54	9	239	746
60 to 64 years	5,024	2,712	54.0	2,610	102	3.8	2,312	73		249	1,991
65 years and over	11,860	1,959	16.5	1,922	37	1.9	9,901	185	463	9,253	
65 to 69 years	4,443	1,160	26.1	1,143	17	1.5	3,283	55		161	3,068
70 to 74 years	3,322	489	14.7	474	14	2.9	2,832	48		88	2,698
75 years and over	4,095	311	7.6	305	6	1.9	3,785	82		215	3,487
Women											
16 years and over	96,855	55,070	56.9	51,861	3,209	5.8	41,785	27,768	966	1,477	11,575
16 to 19 years	7,185	4,434	61.7	3,858	576	13.0	2,752	645	358	20	1,729
16 to 17 years	3,539	1,853	52.4	1,566	287	15.5	1,686	269	166	12	1,240
18 to 19 years	3,647	2,581	70.8	2,292	288	11.2	1,066	376	192	9	489
20 to 24 years	9,490	7,084	74.7	6,515	570	8.0	2,405	1,490	288	42	584
25 to 54 years	51,974	37,398	72.0	35,511	1,887	5.0	14,577	11,995	298	389	1,894
25 to 34 years	21,708	15,682	72.2	14,729	953	6.1	6,026	4,984	176	93	773
25 to 29 years	10,845	7,959	73.4	7,424	534	6.7	2,887	2,357	110	43	376
30 to 34 years	10,863	7,724	71.1	7,305	419	5.4	3,139	2,627	66	49	396
35 to 44 years	17,827	13,188	74.0	12,578	609	4.6	4,639	3,828	99	109	603
35 to 39 years	9,659	7,036	72.8	6,654	381	5.4	2,623	2,170	59	53	341
40 to 44 years	8,168	6,152	75.3	5,924	228	3.7	2,016	1,658	40	57	261
45 to 54 years	12,439	8,527	68.6	8,203	324	3.8	3,912	3,183	23	187	519
45 to 49 years	6,688	4,736	70.8	4,530	206	4.3	1,952	1,633	16	73	230
50 to 54 years	5,751	3,791	65.9	3,674	118	3.1	1,960	1,550	7	114	289
55 to 64 years	11,440	4,919	43.0	4,784	135	2.7	6,520	4,660	16	277	1,567
55 to 59 years	5,673	3,016	53.2	2,935	81	2.7	2,657	2,031	10	127	489
60 to 64 years	5,767	1,903	33.0	1,849	54	2.8	3,864	2,629	6	150	1,078
65 years and over	16,766	1,236	7.4	1,193	43	3.4	15,531	8,978	5	748	5,800
65 to 69 years	5,369	771	14.4	742	29	3.8	4,598	2,894		138	1,566
70 to 74 years	4,369	312	7.1	307	5	1.6	4,057	2,495	-	139	1,423
75 years and over	7,028	153	2.2	144	8	5.6	6,876	3,588	6	471	2,811

**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	August 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
WHITE											
16 years and over	158,340	106,146	67.0	101,213	4,933	4.6	52,194	24,566	1,209	2,542	23,877
16 to 19 years	11,833	8,028	67.8	7,134	894	11.1	3,805	508	507	36	2,753
16 to 17 years	5,867	3,395	57.9	2,963	432	12.7	2,472	211	247	14	1,999
18 to 19 years	5,966	4,633	77.7	4,171	463	10.0	1,333	297	260	22	754
20 to 24 years	15,210	12,782	84.0	11,957	825	6.5	2,428	1,206	360	50	811
25 to 54 years	86,558	72,099	83.3	69,246	2,852	4.0	14,459	10,327	323	892	2,919
25 to 34 years	35,908	30,165	84.0	28,718	1,447	4.8	5,743	4,222	199	267	1,056
25 to 29 years	17,854	15,100	84.6	14,312	788	5.2	2,755	1,989	124	115	528
30 to 34 years	18,053	15,066	83.5	14,406	659	4.4	2,987	2,234	75	151	528
35 to 44 years	29,902	25,296	84.6	24,388	908	3.6	4,606	3,387	104	274	841
35 to 39 years	16,063	13,944	84.0	12,969	525	6.2	2,569	1,944	62	136	453
40 to 44 years	13,840	11,802	85.3	11,418	384	3.3	2,037	1,499	42	138	388
45 to 54 years	20,748	16,637	80.2	16,141	497	3.0	4,111	2,718	20	352	1,021
45 to 49 years	11,193	9,245	82.6	8,953	291	3.1	1,949	1,382	12	128	436
50 to 54 years	9,555	7,393	77.4	7,187	206	3.9	2,163	1,391	7	224	585
55 to 64 years	18,966	10,368	54.7	10,065	303	2.9	8,598	4,170	15	598	3,815
55 to 59 years	9,407	6,270	66.6	6,101	169	2.7	3,138	1,789	8	279	1,062
60 to 64 years	9,558	4,098	42.9	3,965	134	3.3	5,460	2,381	6	320	2,753
65 years and over	25,773	2,869	11.1	2,811	59	2.0	22,904	8,355	5	965	13,579
65 to 69 years	8,779	1,734	19.8	1,692	42	2.4	7,045	2,677	—	238	4,131
70 to 74 years	6,938	711	10.2	701	11	1.5	6,225	2,310	—	177	3,738
75 years and over	10,056	424	4.2	418	5	1.2	9,634	3,368	6	551	5,710
Men											
16 years and over	75,937	59,438	78.3	56,827	2,611	4.4	16,499	503	558	1,389	14,049
16 to 19 years	5,968	4,205	70.4	3,733	471	11.2	1,764	63	242	21	1,438
16 to 17 years	3,002	1,800	60.0	1,588	212	11.8	1,202	34	119	8	1,041
18 to 19 years	2,967	2,404	81.0	2,145	259	10.8	562	29	124	13	397
20 to 24 years	7,442	6,777	91.1	6,342	435	6.4	665	31	195	18	421
25 to 54 years	42,835	40,592	94.8	39,112	1,480	3.6	2,243	161	118	614	1,351
25 to 34 years	17,886	17,101	95.6	16,321	780	4.6	784	67	84	195	438
25 to 29 years	8,865	8,454	95.4	8,045	409	4.8	412	35	53	83	242
30 to 34 years	9,020	8,648	95.9	8,276	371	4.3	372	32	32	112	197
35 to 44 years	14,787	14,177	95.9	13,719	458	3.2	610	54	32	188	336
35 to 39 years	7,972	7,639	95.8	7,381	258	3.4	333	33	22	104	174
40 to 44 years	6,816	6,538	95.9	6,338	200	3.1	278	22	10	84	161
45 to 54 years	10,162	9,313	91.6	9,071	242	2.6	849	40	2	231	577
45 to 49 years	5,498	5,153	93.7	5,032	120	2.3	346	17	1	87	240
50 to 54 years	4,664	4,161	89.2	4,039	122	2.9	503	22	—	144	337
55 to 64 years	8,989	6,072	67.6	5,877	195	3.2	2,917	88	2	373	2,453
55 to 59 years	4,514	3,650	80.9	3,544	106	2.9	864	39	2	176	647
60 to 64 years	4,475	2,422	54.1	2,333	89	3.7	2,053	49	—	198	1,806
65 years and over	10,702	1,793	16.8	1,763	30	1.6	8,909	160	—	362	8,387
65 to 69 years	4,006	1,069	26.7	1,053	16	1.5	2,937	52	—	130	2,756
70 to 74 years	3,000	438	14.6	429	10	2.3	2,561	31	—	74	2,456
75 years and over	3,696	286	7.7	282	3	1.1	3,411	77	—	159	3,175
Women											
16 years and over	82,403	46,708	56.7	44,386	2,322	5.0	35,695	24,063	652	1,153	9,828
16 to 19 years	5,865	3,824	65.2	3,401	423	11.1	2,041	445	265	15	1,316
16 to 17 years	2,865	1,595	55.7	1,375	220	13.8	1,270	177	128	6	958
18 to 19 years	3,000	2,229	74.3	2,026	203	9.1	771	268	137	9	357
20 to 24 years	7,767	6,005	77.3	5,615	390	6.5	1,762	1,175	164	33	390
25 to 54 years	43,723	31,507	72.1	30,134	1,372	4.4	12,216	10,166	205	278	1,568
25 to 34 years	18,022	13,064	72.5	12,397	667	5.1	4,958	4,155	115	71	617
25 to 29 years	8,989	6,646	73.9	6,267	379	5.7	2,343	1,954	71	32	286
30 to 34 years	9,033	6,418	71.1	6,130	288	4.5	2,615	2,202	43	39	331
35 to 44 years	15,115	11,119	73.6	10,668	451	4.1	3,995	3,333	72	85	506
35 to 39 years	8,091	5,855	72.4	5,588	267	4.6	2,236	1,885	40	32	279
40 to 44 years	7,024	5,264	74.9	5,080	184	3.5	1,759	1,447	32	54	227
45 to 54 years	10,586	7,324	69.2	7,069	255	3.5	3,262	2,678	18	121	445
45 to 49 years	5,695	4,092	71.9	3,921	171	4.2	1,603	1,354	11	41	196
50 to 54 years	4,891	3,232	66.1	3,148	84	2.6	1,660	1,324	7	80	248
55 to 64 years	9,977	4,296	43.1	4,188	107	2.5	5,681	4,082	13	225	1,362
55 to 59 years	4,894	2,620	53.5	2,557	63	2.4	2,274	1,750	6	103	415
60 to 64 years	5,083	1,676	33.0	1,632	44	2.7	3,407	2,332	6	122	947
65 years and over	15,071	1,077	7.1	1,047	29	2.7	13,995	8,195	5	602	5,192
65 to 69 years	4,773	665	13.9	639	26	3.9	4,108	2,625	—	108	1,375
70 to 74 years	3,938	273	6.9	272	1	.4	3,664	2,279	—	103	1,282
75 years and over	6,360	138	2.2	136	2	1.2	6,223	3,291	6	392	2,535

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	August 1988										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
BLACK											
16 years and over	20,736	13,481	65.0	11,962	1,519	11.3	7,255	2,920	395	702	3,238
16 to 19 years	2,183	1,103	50.5	802	302	27.3	1,079	201	134	4	741
16 to 17 years	1,133	475	41.9	335	140	29.5	658	92	71	5	491
18 to 19 years	1,050	629	59.9	467	161	25.7	421	109	63	-	250
20 to 24 years	2,521	1,829	72.5	1,499	330	18.0	682	262	143	42	246
25 to 54 years	11,514	9,190	79.8	8,352	838	9.1	2,325	1,308	117	279	619
25 to 34 years	5,248	4,204	80.1	3,707	497	11.8	1,044	613	82	80	268
25 to 29 years	2,674	2,085	78.0	1,809	274	13.1	589	328	60	44	157
30 to 34 years	2,574	2,120	82.4	1,897	222	10.5	454	284	23	36	111
35 to 44 years	3,734	3,139	84.1	2,896	243	7.7	595	322	28	67	178
35 to 39 years	2,132	1,810	84.9	1,652	158	8.7	321	171	19	42	90
40 to 44 years	1,603	1,329	82.9	1,244	85	6.4	274	152	10	24	88
45 to 54 years	2,532	1,847	72.9	1,749	98	5.3	686	373	7	132	173
45 to 49 years	1,348	1,007	74.7	958	48	4.8	342	203	5	60	74
50 to 54 years	1,185	840	70.9	791	50	6.0	345	171	2	72	99
55 to 64 years	2,111	1,088	51.5	1,053	35	3.3	1,023	470	1	142	410
55 to 59 years	1,100	674	61.3	653	21	3.1	426	217	1	67	141
60 to 64 years	1,011	414	40.9	399	15	3.5	597	253	-	75	270
65 years and over	2,406	270	11.2	257	13	5.0	2,135	679	-	235	1,222
65 to 69 years	882	164	18.6	161	4	2.4	718	220	-	57	441
70 years and over	1,524	106	7.0	96	10	9.4	1,417	459	-	177	780
Men											
16 years and over	9,313	6,794	73.0	6,072	722	10.6	2,519	120	161	402	1,836
16 to 19 years	1,078	582	54.0	428	154	26.5	495	24	72	-	401
16 to 17 years	571	255	44.6	178	77	30.2	317	13	45	-	259
18 to 19 years	506	327	64.7	250	77	23.6	179	11	27	-	142
20 to 24 years	1,149	957	83.3	791	166	17.4	192	11	43	32	107
25 to 54 years	5,163	4,521	87.6	4,137	384	8.5	643	36	45	181	378
25 to 34 years	2,375	2,109	88.8	1,873	237	11.2	265	16	33	61	154
25 to 29 years	1,210	1,048	86.6	911	136	13.0	162	13	26	33	90
30 to 34 years	1,165	1,062	91.1	961	100	9.4	103	3	8	29	64
35 to 44 years	1,664	1,498	90.0	1,395	103	6.9	166	6	8	44	107
35 to 39 years	951	873	91.8	812	61	7.0	78	5	6	22	45
40 to 44 years	713	625	87.6	583	42	6.8	88	2	3	21	62
45 to 54 years	1,124	914	81.2	869	45	4.9	211	14	4	76	117
45 to 49 years	599	511	85.2	482	28	5.5	89	7	2	34	46
50 to 54 years	526	403	76.7	387	17	4.1	123	7	2	42	71
55 to 64 years	951	596	62.7	583	14	2.3	355	30	1	92	232
55 to 59 years	498	363	72.9	354	9	2.4	135	9	1	44	81
60 to 64 years	454	233	51.4	228	5	2.3	220	21	-	48	152
65 years and over	971	137	14.1	134	3	2.0	834	19	-	98	718
65 to 69 years	385	76	19.9	77	-	-	309	4	-	30	275
70 years and over	586	61	10.4	58	3	(¹)	525	15	-	67	442
Women											
16 years and over	11,423	6,687	58.5	5,890	797	11.9	4,736	2,801	234	299	1,402
16 to 19 years	1,105	521	47.1	374	148	28.3	584	177	62	5	340
16 to 17 years	562	220	39.2	157	63	28.8	342	79	26	5	232
18 to 19 years	544	301	55.4	217	84	27.9	243	98	36	-	108
20 to 24 years	1,372	872	63.5	708	164	18.8	500	251	100	10	139
25 to 54 years	6,351	4,669	73.5	4,215	454	9.7	1,682	1,272	72	98	241
25 to 34 years	2,873	2,095	72.9	1,834	261	12.4	778	597	49	19	114
25 to 29 years	1,464	1,037	70.8	898	138	13.3	427	315	34	11	67
30 to 34 years	1,409	1,058	75.1	936	122	11.5	351	281	15	7	47
35 to 44 years	2,070	1,641	79.3	1,501	140	8.5	429	316	20	23	71
35 to 39 years	1,181	937	79.4	840	97	10.4	243	166	13	20	45
40 to 44 years	890	704	79.1	661	43	6.1	186	150	7	3	26
45 to 54 years	1,408	933	66.3	880	53	5.7	475	359	3	56	56
45 to 49 years	749	496	66.3	476	20	4.1	253	196	3	26	28
50 to 54 years	659	437	66.3	404	33	7.5	222	184	-	30	28
55 to 64 years	1,160	492	42.4	470	21	4.4	668	440	-	50	178
55 to 59 years	602	311	51.7	299	12	3.9	291	208	-	23	60
60 to 64 years	557	180	32.4	171	9	5.1	377	232	-	27	118
65 years and over	1,435	133	9.3	123	11	8.0	1,302	660	-	137	504
65 to 69 years	497	88	17.7	84	4	4.3	409	216	-	27	166
70 years and over	938	45	4.8	38	7	(¹)	892	444	-	110	338

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age and sex	August 1988								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	
TOTAL									
16 years and over	26,490	17,250	65.1	15,524	245	15,279	1,726	10.0	9,240
16 to 19 years	2,658	1,335	50.2	1,007	18	989	328	24.6	1,323
16 to 17 years	1,370	559	40.8	407	7	400	152	27.3	811
18 to 19 years	1,288	776	60.2	600	11	589	176	22.7	512
20 to 24 years	3,166	2,246	70.9	1,882	23	1,859	364	16.2	920
25 to 54 years	15,144	11,955	78.9	11,000	151	10,850	954	8.0	3,186
25 to 34 years	6,782	5,363	79.1	4,818	71	4,746	545	10.2	1,420
25 to 29 years	3,451	2,685	77.8	2,376	45	2,330	310	11.5	767
30 to 34 years	3,330	1,444	43.4	2,442	26	2,417	236	16.3	653
35 to 44 years	4,988	4,123	82.7	3,841	41	3,799	282	6.8	865
35 to 39 years	2,863	2,363	82.5	2,178	24	2,155	184	7.8	500
40 to 44 years	2,126	1,761	82.8	1,662	17	1,645	99	5.6	366
45 to 54 years	3,371	2,469	73.2	2,342	39	2,304	127	5.1	902
45 to 49 years	1,806	1,346	74.5	1,270	17	1,253	76	5.6	459
50 to 54 years	1,566	1,124	71.8	1,073	22	1,051	51	4.5	442
55 to 64 years	2,671	1,388	52.0	1,330	33	1,297	58	4.2	1,283
55 to 59 years	1,438	871	60.6	835	18	817	36	4.2	567
60 to 64 years	1,232	517	41.9	495	14	480	22	4.2	716
65 years and over	2,854	326	11.4	305	20	285	21	6.5	2,528
65 to 69 years	1,034	197	19.1	192	12	181	5	2.5	837
70 to 74 years	753	89	11.8	82	7	75	7	7.9	664
75 years and over	1,067	40	3.7	30	1	29	10	(¹)	1,027
Men									
16 years and over	12,038	8,888	73.8	8,049	212	7,836	839	9.4	3,150
16 to 19 years	1,337	725	54.2	549	14	535	176	24.2	612
16 to 17 years	696	301	43.2	216	7	209	85	28.2	396
18 to 19 years	641	424	66.2	333	8	325	91	21.4	217
20 to 24 years	1,444	1,167	80.8	982	18	964	185	15.9	277
25 to 54 years	6,892	6,065	88.0	5,624	134	5,490	440	7.3	826
25 to 34 years	3,097	2,744	88.6	2,486	67	2,418	259	9.4	352
25 to 29 years	1,595	1,372	86.0	1,218	42	1,176	154	11.2	224
30 to 34 years	1,501	1,373	91.4	1,268	25	1,243	105	7.6	129
35 to 44 years	2,276	2,055	90.3	1,931	32	1,899	124	6.0	221
35 to 39 years	1,295	1,182	91.3	1,112	17	1,095	70	5.9	113
40 to 44 years	981	873	88.9	819	15	804	54	6.2	109
45 to 54 years	1,519	1,266	83.4	1,208	35	1,173	58	4.6	253
45 to 49 years	813	702	86.4	661	13	648	41	5.9	110
50 to 54 years	706	564	79.8	547	22	525	17	3.0	142
55 to 64 years	1,208	764	63.3	734	27	707	30	4.0	444
55 to 59 years	659	475	72.0	457	13	444	18	3.8	184
60 to 64 years	549	290	52.8	277	14	263	13	4.3	259
65 years and over	1,158	167	14.4	159	18	141	7	4.5	992
65 to 69 years	438	91	20.8	90	11	80	1	.7	347
70 to 74 years	322	51	15.8	47	6	41	4	(¹)	271
75 years and over	399	25	6.3	22	1	21	3	(¹)	374
Women									
16 years and over	14,452	8,362	57.9	7,475	33	7,443	887	10.6	6,090
16 to 19 years	1,321	610	46.2	457	3	454	153	25.0	711
16 to 17 years	674	258	38.4	191	-	191	68	26.2	415
18 to 19 years	647	352	54.3	267	3	263	85	24.2	295
20 to 24 years	1,722	1,079	62.7	900	5	895	179	16.6	643
25 to 54 years	8,252	5,890	71.4	5,376	17	5,360	514	8.7	2,360
25 to 34 years	3,686	2,618	71.0	2,332	4	2,328	286	10.9	1,067
25 to 29 years	1,856	1,313	70.7	1,158	3	1,154	156	11.8	543
30 to 34 years	1,829	1,305	71.4	1,174	1	1,174	131	10.0	524
35 to 44 years	2,713	2,068	76.3	1,910	9	1,901	159	7.7	644
35 to 39 years	1,568	1,181	75.3	1,066	7	1,060	114	9.7	387
40 to 44 years	1,145	888	77.6	843	2	841	45	5.0	257
45 to 54 years	1,853	1,203	64.9	1,134	4	1,131	69	5.7	649
45 to 49 years	993	644	64.8	609	4	605	35	5.5	349
50 to 54 years	860	560	65.1	526	-	526	34	6.0	300
55 to 64 years	1,463	624	42.6	596	6	591	28	4.4	839
55 to 59 years	779	397	50.9	379	6	373	18	4.6	383
60 to 64 years	684	227	33.2	218	-	218	9	4.1	457
65 years and over	1,695	159	9.4	146	2	143	14	8.5	1,536
65 to 69 years	596	106	17.8	102	1	101	4	3.4	490
70 to 74 years	431	38	8.8	35	1	34	3	(¹)	393
75 years and over	668	15	2.2	8		8	7	(¹)	653

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

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

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
TOTAL								
Civilian noninstitutional population	183,002	184,830	79,668	80,669	88,685	89,670	14,649	14,491
Civilian labor force	121,614	123,396	62,516	63,396	49,683	50,637	9,415	9,363
Percent of population	66.5	66.8	78.5	78.6	56.0	56.5	64.3	64.6
Employed	114,527	116,737	59,546	60,594	46,840	48,003	8,141	8,140
Agriculture	3,452	3,455	2,416	2,438	680	650	356	368
Nonagricultural industries	111,075	113,282	57,130	58,156	46,161	47,354	7,785	7,773
Unemployed	7,088	6,659	2,970	2,803	2,843	2,633	1,274	1,222
Unemployment rate	5.8	5.4	4.8	4.4	5.7	5.2	13.5	13.1
Not in labor force	61,388	61,434	17,152	17,273	39,002	39,033	5,233	5,128
White								
Civilian noninstitutional population	157,134	158,340	69,250	69,968	75,925	76,539	11,959	11,833
Civilian labor force	104,631	106,146	54,558	55,233	42,061	42,884	8,012	8,028
Percent of population	66.6	67.0	78.8	78.9	55.4	56.0	67.0	67.8
Employed	99,482	101,213	52,335	53,094	40,049	40,985	7,098	7,134
Agriculture	3,187	3,210	2,207	2,240	647	620	333	350
Nonagricultural industries	96,295	98,003	50,128	50,854	39,401	40,365	6,765	6,784
Unemployed	5,149	4,933	2,224	2,139	2,012	1,899	913	894
Unemployment rate	4.9	4.6	4.1	3.9	4.8	4.4	11.4	11.1
Not in labor force	52,503	52,194	14,692	14,735	33,864	33,654	3,948	3,805
Black								
Civilian noninstitutional population	20,396	20,736	8,080	8,235	10,147	10,318	2,169	2,183
Civilian labor force	13,393	13,481	6,121	6,212	6,118	6,166	1,154	1,103
Percent of population	65.7	65.0	75.8	75.4	60.3	59.8	53.2	50.5
Employed	11,721	11,962	5,491	5,644	5,379	5,516	852	802
Agriculture	205	181	163	149	23	22	20	11
Nonagricultural industries	11,516	11,781	5,328	5,496	5,356	5,494	832	791
Unemployed	1,671	1,519	630	568	739	650	302	302
Unemployment rate	12.5	11.3	10.3	9.1	12.1	10.5	26.2	27.3
Not in labor force	7,003	7,255	1,959	2,023	4,028	4,152	1,016	1,079

**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	August 1988									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
				Total	Full time ¹	Part time ¹	Total	Looking for full-time work	Looking for part-time work	
TOTAL ENROLLED										
Total, 16 to 24 years	3,328	1,919	57.7	1,776	853	923	143	29	114	7.5
16 to 19 years	1,616	834	51.6	744	292	453	90	9	81	10.8
20 to 24 years	1,712	1,085	63.4	1,032	562	470	54	20	33	4.9
High school	818	348	42.6	292	92	200	56	8	49	16.2
College	2,510	1,571	62.6	1,484	762	722	87	22	65	5.5
Full-time students	1,829	1,016	55.5	952	457	495	63	10	53	6.2
Part-time students	681	555	81.5	532	304	227	23	12	11	4.2
Men, 16 to 24 years	1,637	930	56.8	870	444	425	60	13	47	6.5
16 to 19 years	792	407	51.4	367	165	202	40	7	33	9.8
20 to 24 years	845	523	62.0	503	280	223	21	6	14	3.9
High school	459	210	45.7	172	69	103	38	7	31	18.1
College	1,178	720	61.2	698	376	322	23	7	16	3.1
Full-time students	874	463	53.0	445	244	201	18	6	13	4.0
Part-time students	304	257	84.7	253	132	121	4	1	3	1.7
Women, 16 to 24 years	1,691	989	58.5	906	409	497	83	16	67	8.4
16 to 19 years	824	427	51.8	377	127	250	50	2	48	11.6
20 to 24 years	867	562	64.8	529	282	247	33	14	19	5.9
High school	359	139	38.6	120	23	97	19	1	18	13.4
College	1,332	850	63.8	786	386	400	64	15	49	7.5
Full-time students	955	553	57.9	508	213	294	45	4	41	8.1
Part-time students	377	298	78.9	279	172	106	19	11	9	6.4
White										
Total, 16 to 24 years	2,628	1,638	62.3	1,527	758	769	111	21	90	6.8
16 to 19 years	1,264	718	56.8	651	259	392	66	7	59	9.3
20 to 24 years	1,364	920	67.5	876	499	377	45	14	31	4.8
Men	1,284	786	61.2	742	393	349	44	9	35	5.5
Women	1,344	852	63.4	785	364	421	67	12	55	7.9
High school	591	293	49.6	252	73	179	41	5	36	13.9
College	2,037	1,345	66.0	1,275	685	590	70	16	54	5.2
Full-time students	1,489	876	58.8	824	420	404	51	8	43	5.9
Part-time students	548	469	85.7	450	264	186	19	7	12	4.0
Black										
Total, 16 to 24 years	522	224	42.9	192	80	112	32	6	26	14.2
16 to 19 years	268	91	34.1	69	28	41	22	-	23	24.6
20 to 24 years	254	133	52.2	123	52	71	9	7	3	7.0
Men	252	111	43.9	94	48	46	17	3	14	15.0
Women	269	113	42.0	98	31	67	15	4	12	13.4
High school	182	51	28.1	37	19	18	14	-	15	(²)
College	340	173	50.8	155	61	94	18	7	11	10.3
Full-time students	249	113	45.5	101	27	74	12	2	11	11.1
Part-time students	91	60	65.4	54	34	21	5	5	-	(²)
Hispanic origin										
Total, 16 to 24 years	284	119	41.8	103	42	61	16	1	14	13.1
16 to 19 years	146	39	26.8	32	10	22	8	1	7	(²)
20 to 24 years	138	80	57.8	72	32	40	8	1	7	10.0
Men	130	55	42.3	46	20	26	9	2	8	(²)
Women	154	64	41.4	58	22	36	6	-	6	(²)
High school	117	37	32.0	22	11	11	15	1	14	(²)
College	168	82	48.7	81	30	51	1	1	-	6
Full-time students	116	45	38.8	42	8	34	2	2	-	(²)
Part-time students	52	37	70.5	39	22	17	-	-	-	(²)

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	August 1988									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			
				Total	Full time ¹	Part time ¹	Total	Looking for full-time work	Looking for part-time work	Percent of labor force
TOTAL NOT ENROLLED										
Total, 16 to 24 years	29,538	22,472	76.1	20,203	14,863	5,341	2,269	1,663	605	10.1
16 to 19 years	12,875	8,529	66.2	7,396	3,862	3,535	1,133	657	476	13.3
20 to 24 years	16,663	13,943	83.7	12,807	11,001	1,806	1,136	1,007	129	8.1
Less than 4 years of high school	10,359	6,259	60.4	5,235	2,829	2,406	1,023	621	402	16.3
4 years of high school	11,305	9,280	82.1	8,370	6,727	1,643	909	772	138	9.8
1 to 3 years of college	5,953	5,150	86.5	4,921	3,784	1,137	229	167	62	4.4
4 years of college or more	1,921	1,784	92.9	1,677	1,522	155	107	104	3	6.0
Men, 16 to 24 years	14,555	11,943	82.1	10,737	8,346	2,391	1,206	928	278	10.1
16 to 19 years	6,514	4,523	69.4	3,916	2,240	1,676	607	370	237	13.4
20 to 24 years	8,041	7,420	92.3	6,821	6,106	715	599	559	41	8.1
Less than 4 years of high school	5,537	3,816	68.9	3,228	1,978	1,249	588	400	188	15.4
4 years of high school	5,397	4,863	90.1	4,388	3,768	620	475	412	63	9.8
1 to 3 years of college	2,791	2,478	88.8	2,376	1,904	473	102	74	27	4.1
4 years of college or more	829	787	94.8	745	696	49	42	42	-	5.3
Women, 16 to 24 years	14,984	10,529	70.3	9,467	6,517	2,950	1,062	735	327	10.1
16 to 19 years	6,361	4,007	63.0	3,481	1,621	1,859	526	287	239	13.1
20 to 24 years	8,622	6,523	75.6	5,986	4,896	1,090	536	448	89	8.2
Less than 4 years of high school	4,822	2,443	50.7	2,008	851	1,157	435	220	215	17.8
4 years of high school	5,908	4,417	74.8	3,983	2,960	1,023	434	360	74	9.8
1 to 3 years of college	3,162	2,672	84.5	2,544	1,880	664	127	92	35	4.8
4 years of college or more	1,092	997	91.4	932	826	106	66	62	4	6.6
White										
Total, 16 to 24 years	24,415	19,172	78.5	17,564	13,028	4,536	1,608	1,168	440	8.4
16 to 19 years	10,569	7,311	69.2	6,483	3,434	3,049	828	490	338	11.3
20 to 24 years	13,846	11,862	85.7	11,081	9,594	1,487	781	678	102	6.6
Men	12,127	10,196	84.1	9,333	7,329	2,004	862	656	206	8.5
Women	12,288	8,977	73.1	8,231	5,699	2,532	746	512	234	8.3
Less than 4 years of high school	8,310	5,281	63.6	4,528	2,495	2,033	753	459	294	14.3
4 years of high school	9,380	7,903	84.3	7,286	5,906	1,380	617	524	93	7.8
1 to 3 years of college	5,037	4,398	87.3	4,248	3,259	989	149	99	51	3.4
4 years of college or more	1,688	1,590	94.2	1,502	1,368	133	89	86	3	5.6
Black										
Total, 16 to 24 years	4,183	2,709	64.8	2,109	1,460	649	600	450	150	22.1
16 to 19 years	1,915	1,012	52.8	733	330	402	279	156	123	27.6
20 to 24 years	2,268	1,697	74.8	1,376	1,130	246	321	294	27	18.9
Men	1,974	1,428	72.4	1,124	814	310	304	248	56	21.3
Women	2,208	1,280	58.0	984	646	338	296	202	94	23.1
Less than 4 years of high school	1,719	822	47.8	576	258	319	246	149	97	29.9
4 years of high school	1,652	1,193	72.2	914	696	218	279	239	40	23.4
1 to 3 years of college	700	588	84.1	517	413	104	71	58	12	12.0
4 years of college or more	112	105	93.6	101	93	8	4	4	-	4.1
Hispanic origin										
Total, 16 to 24 years	3,079	2,143	69.6	1,873	1,460	412	270	206	64	12.6
16 to 19 years	1,207	684	56.6	561	321	239	123	79	44	18.0
20 to 24 years	1,871	1,459	78.0	1,312	1,139	173	147	127	20	10.1
Men	1,581	1,279	80.9	1,118	930	188	161	125	36	12.6
Women	1,498	864	57.7	754	530	225	110	81	29	12.7
Less than 4 years of high school	1,626	975	60.0	804	608	196	172	126	45	17.6
4 years of high school	1,011	790	78.1	710	589	121	80	62	17	10.1
1 to 3 years of college	381	323	84.9	309	221	88	14	12	2	4.4
4 years of college or more	61	55	(²)	50	42	8	5	5	-	(²)

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

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

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

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Aug. 1987	Aug. 1988	Total		Employed		Unemployed			
			Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Number		Percent of labor force	
							Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,847	7,896	7,241	7,311	6,934	7,066	307	245	4.2	3.4
30 to 44 years	6,184	5,864	5,904	5,621	5,655	5,416	249	205	4.2	3.6
30 to 34 years	895	655	839	612	777	576	62	36	7.4	5.9
35 to 39 years	2,552	2,106	2,428	2,007	2,310	1,935	118	72	4.9	3.6
40 to 44 years	2,737	3,103	2,637	3,002	2,568	2,905	69	97	2.6	3.2
45 years and over	1,663	2,032	1,337	1,690	1,279	1,650	58	40	4.3	2.4
NONVETERANS										
Total, 30 to 44 years	19,585	20,542	18,601	19,525	17,788	18,739	813	786	4.4	4.0
30 to 34 years	8,910	9,155	8,549	8,747	8,132	8,352	417	395	4.9	4.5
35 to 39 years	6,252	6,888	5,921	6,555	5,692	6,305	229	250	3.9	3.8
40 to 44 years	4,423	4,499	4,131	4,223	3,964	4,082	167	141	4.0	3.3

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

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

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

(In thousands)

Sex, age, and race	August 1988							
	Employed						Unemployed	
	Full time			Part time			Looking for full-time work	Looking for part-time work
	Total	Full-time schedules ¹	Part time for economic reasons, usually work full time	Total	Voluntary ¹	Part time for economic reasons, usually work part time		
TOTAL								
Total, 16 years and over	98,481	96,718	1,763	18,256	14,460	3,796	5,413	1,246
16 to 19 years	4,153	3,957	196	3,987	2,894	1,093	666	557
16 to 17 years	1,169	1,095	74	2,201	1,659	542	207	377
18 to 19 years	2,984	2,862	122	1,786	1,235	551	458	180
20 years and over	94,328	92,761	1,567	14,269	11,566	2,703	4,747	689
20 to 24 years	11,563	11,256	307	2,276	1,537	739	1,027	162
25 years and over	82,766	81,505	1,261	11,993	10,029	1,964	3,720	527
25 to 54 years	71,831	70,736	1,095	8,417	6,830	1,587	3,396	411
55 years and over	10,936	10,770	166	3,575	3,198	377	324	116
Men, 16 years and over	58,973	58,026	947	5,903	4,210	1,693	3,017	433
16 to 19 years	2,405	2,293	112	1,877	1,330	547	377	270
20 years and over	56,568	55,733	835	4,026	2,880	1,146	2,640	163
20 to 24 years	6,385	6,217	168	939	581	358	565	55
25 years and over	50,182	49,515	667	3,086	2,299	787	2,074	109
25 to 54 years	43,190	42,605	585	1,546	936	610	1,867	53
55 years and over	6,992	6,910	82	1,541	1,364	177	207	56
Women, 16 years and over	39,509	38,692	817	12,352	10,249	2,103	2,396	813
16 to 19 years	1,748	1,664	84	2,110	1,564	546	289	287
20 years and over	37,761	37,028	733	10,242	8,685	1,557	2,107	526
20 to 24 years	5,178	5,039	139	1,337	957	380	462	107
25 years and over	32,583	31,989	594	8,905	7,728	1,177	1,645	419
25 to 54 years	28,639	28,130	509	6,871	5,894	977	1,529	358
55 years and over	3,943	3,859	84	2,035	1,835	200	117	60
White								
Men, 16 years and over	51,856	51,069	787	4,971	3,633	1,338	2,280	330
16 to 19 years	2,120	2,033	87	1,613	1,146	467	283	188
20 years and over	49,736	49,036	700	3,358	2,487	871	1,997	142
20 to 24 years	5,602	5,472	130	740	465	275	381	54
25 years and over	44,134	43,564	570	2,618	2,022	596	1,616	88
25 to 54 years	37,888	37,391	497	1,225	786	439	1,441	38
55 years and over	6,246	6,173	73	1,393	1,236	157	175	50
Women, 16 years and over	33,414	32,761	653	10,973	9,238	1,735	1,688	634
16 to 19 years	1,572	1,502	70	1,828	1,364	464	214	209
20 years and over	31,842	31,259	583	9,144	7,874	1,270	1,474	425
20 to 24 years	4,491	4,380	111	1,124	827	297	311	80
25 years and over	27,350	26,879	471	8,021	7,048	973	1,163	346
25 to 54 years	23,923	23,523	400	6,212	5,408	804	1,075	298
55 years and over	3,427	3,356	71	1,808	1,640	168	89	48
Black								
Men, 16 years and over	5,338	5,207	131	735	426	309	636	86
16 to 19 years	219	202	17	208	137	71	85	69
20 years and over	5,118	5,004	114	526	289	237	551	17
20 to 24 years	643	606	37	147	79	68	165	2
25 years and over	4,473	4,397	76	379	210	169	387	16
25 to 54 years	3,882	3,810	72	253	103	150	375	11
55 years and over	591	587	4	126	107	19	12	5
Women, 16 years and over	4,807	4,683	124	1,083	780	303	627	171
16 to 19 years	139	130	9	235	166	69	70	77
20 years and over	4,668	4,553	115	848	614	234	556	93
20 to 24 years	539	518	21	170	108	62	136	28
25 years and over	4,129	4,034	95	678	506	172	421	66
25 to 54 years	3,730	3,647	83	485	339	146	399	56
55 years and over	398	387	11	193	167	26	22	10

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Family relationship	August 1988									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over ¹	100,334	67.4	94,855	5,479	5.5	48,502	23,148	1,585	2,355	21,414
Husbands	40,014	78.5	38,899	1,115	2.8	10,978	225	89	909	9,756
With employed wife	25,285	92.3	24,644	641	2.5	2,097	102	39	295	1,661
With unemployed wife	1,110	91.4	1,019	91	8.2	104	3	6	21	74
With wife not in labor force	13,619	60.8	13,236	383	2.8	8,778	120	44	593	8,021
Wives	28,596	56.1	27,381	1,214	4.2	22,397	17,949	162	358	3,928
With employed husband	25,663	66.0	24,644	1,019	4.0	13,236	11,575	135	105	1,421
With unemployed husband	732	65.7	641	91	12.4	383	337	3	9	34
With husband not in labor force	2,201	20.0	2,097	104	4.7	8,778	6,037	24	244	2,473
Relatives in married-couple families	15,166	71.5	13,865	1,301	8.6	6,041	915	811	343	3,973
16 to 19 years	6,327	66.9	5,700	627	9.9	3,129	251	446	28	2,404
20 to 24 years	5,321	82.9	4,973	348	6.5	1,101	151	310	40	600
25 years and over	3,518	66.0	3,192	326	9.3	1,811	513	55	275	969
Women who maintain families	6,679	62.3	6,152	526	7.9	4,037	2,766	127	214	930
Relatives in families maintained by women	5,824	63.1	4,859	965	16.6	3,409	875	312	323	1,900
16 to 19 years	1,686	55.7	1,297	388	23.0	1,340	196	183	10	950
20 to 24 years	1,624	78.4	1,378	245	15.1	447	165	87	26	169
25 years and over	2,516	60.8	2,184	332	13.2	1,622	514	42	287	781
Men who maintain families	2,186	76.3	2,048	137	6.3	679	50	15	94	520
Relatives in families maintained by men	1,869	66.1	1,649	220	11.8	960	368	69	114	409
16 to 19 years	402	66.5	321	81	20.1	202	31	29	-	142
20 to 24 years	498	79.7	429	70	14.0	127	39	26	10	52
25 years and over	968	60.5	899	69	7.1	631	298	14	104	215

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

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

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

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	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total, 16 years and over	3,696	3,450	5.5	5.0	3,392	3,209	6.3	5.8
Married, spouse present	1,361	1,252	3.2	3.0	1,362	1,325	4.7	4.5
Widowed, divorced, or separated	433	413	6.6	6.0	769	679	7.4	6.4
Single (never married)	1,901	1,785	10.0	9.2	1,260	1,205	8.5	8.1
White, 16 years and over	2,737	2,611	4.7	4.4	2,412	2,322	5.3	5.0
Married, spouse present	1,133	1,033	3.0	2.8	1,121	1,091	4.4	4.2
Widowed, divorced, or separated	282	302	5.2	5.3	535	479	6.5	5.6
Single (never married)	1,322	1,276	8.3	7.9	757	752	6.3	6.3
Black, 16 years and over	804	722	11.9	10.6	867	797	13.0	11.9
Married, spouse present	187	166	5.8	5.2	191	181	8.0	7.5
Widowed, divorced, or separated	134	99	14.0	10.1	217	187	11.6	9.8
Single (never married)	482	457	18.8	17.5	460	430	19.2	18.0
Total, 25 years and over	2,286	2,183	4.2	3.9	2,161	2,064	5.1	4.7
Married, spouse present	1,240	1,158	3.1	2.9	1,115	1,117	4.2	4.1
Widowed, divorced, or separated	408	379	6.5	5.8	712	611	7.2	6.0
Single (never married)	639	646	7.9	7.5	334	336	5.7	5.6
White, 25 years and over	1,736	1,705	3.7	3.5	1,550	1,509	4.3	4.1
Married, spouse present	1,031	958	2.9	2.7	911	921	3.9	3.8
Widowed, divorced, or separated	262	280	5.0	5.1	492	421	6.3	5.2
Single (never married)	442	466	6.7	6.6	147	167	3.3	3.6
Black, 25 years and over	464	401	8.9	7.6	537	486	10.3	9.2
Married, spouse present	168	150	5.5	4.9	156	148	7.1	6.7
Widowed, divorced, or separated	128	87	13.6	9.2	202	176	11.2	9.5
Single (never married)	166	164	14.0	13.3	178	162	14.9	13.1

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-12. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total, 16 years and over	7,088	6,659	5.8	5.4	5.5	5.0	6.3	5.8
Managerial and professional specialty	672	773	2.4	2.6	2.1	2.2	2.7	3.1
Executive, administrative, and managerial	312	379	2.2	2.5	2.0	2.4	2.6	2.7
Professional specialty	360	394	2.5	2.7	2.2	1.9	2.8	3.4
Technical, sales, and administrative support	1,622	1,546	4.4	4.1	3.6	3.7	4.8	4.4
Technicians and related support	112	76	3.1	2.1	2.7	2.0	3.6	2.1
Sales occupations	696	655	4.8	4.4	3.1	2.9	6.6	6.1
Administrative support, including clerical	813	816	4.3	4.3	5.0	6.2	4.1	3.8
Service occupations	1,257	1,107	7.6	6.6	7.1	6.3	7.9	6.8
Private household	63	48	6.2	4.8	(¹)	(¹)	6.4	4.7
Protective service	75	81	3.7	3.6	4.0	3.7	2.4	3.0
Service, except private household and protective	1,119	978	8.3	7.3	8.3	7.3	8.3	7.2
Precision production, craft, and repair	770	615	5.2	4.2	4.9	4.2	8.1	4.3
Mechanics and repairers	188	133	3.9	2.9	3.9	3.0	2.8	.3
Construction trades	360	306	6.3	5.3	6.0	5.4	22.8	3.9
Other precision production, craft, and repair	222	176	5.1	4.1	4.6	3.9	7.0	4.9
Operators, fabricators, and laborers	1,609	1,506	8.1	7.6	7.9	7.0	8.8	9.2
Machine operators, assemblers, and inspectors	709	684	7.8	7.7	7.2	6.5	8.7	9.5
Transportation and material moving occupations	306	288	6.1	5.5	6.0	5.0	6.6	10.9
Handlers, equipment cleaners, helpers, and laborers	594	534	10.5	9.1	10.6	9.5	9.9	7.4
Construction laborers	120	140	11.3	12.3	11.2	12.7	(¹)	(¹)
Other handlers, equipment cleaners, helpers, and laborers	474	394	10.3	8.4	10.4	8.6	9.7	7.6
Farming, forestry, and fishing	242	255	5.7	6.1	5.7	6.0	5.9	6.9
No previous work experience	890	826						
16 to 19 years	582	550						
20 to 24 years	185	143						
25 years and over	124	133						

¹ 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	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total, 16 years and over	7,088	6,659	5.8	5.4	5.5	5.0	6.3	5.8
Nonagricultural private wage and salary workers	5,112	4,868	5.6	5.2	5.5	5.1	5.7	5.4
Mining	71	48	7.9	6.2	8.4	6.3	5.0	5.6
Construction	556	535	8.4	8.1	8.4	8.4	9.0	4.8
Manufacturing	1,169	1,155	5.3	5.2	5.0	4.4	5.9	6.7
Durable goods	703	640	5.4	4.9	5.5	4.3	5.0	6.4
Lumber and wood products	38	44	5.0	5.8	4.8	5.5	5.9	7.4
Furniture and fixtures	33	34	5.1	4.6	6.3	3.5	2.1	7.2
Stone, clay, and glass products	35	32	5.4	5.1	6.6	3.4	1.2	11.1
Primary metal industries	46	46	5.6	5.5	5.7	5.6	5.5	5.1
Fabricated metal products	74	65	5.5	4.6	5.9	4.6	4.5	4.7
Machinery, except electrical	126	112	4.9	4.1	4.9	3.7	5.0	5.2
Electrical machinery, equipment, and supplies	110	100	4.9	4.7	5.0	3.4	4.8	6.6
Transportation equipment	187	156	6.7	5.7	6.3	4.8	8.1	8.5
Automobiles	139	80	10.8	6.3	9.4	4.6	16.8	12.5
Other transportation equipment	48	76	3.2	5.1	3.6	5.0	1.5	5.2
Professional and photographic equipment	17	19	2.3	2.5	1.0	2.7	4.0	2.2
Other durable goods industries	37	32	7.4	6.9	10.1	5.8	4.0	8.2
Nondurable goods	466	515	5.1	5.6	3.9	4.6	6.8	7.0
Food and kindred products	127	121	6.6	6.4	5.5	3.6	8.7	11.6
Textile mill products	32	30	4.4	4.0	3.0	5.4	5.7	2.3
Apparel and other textile products	99	145	7.7	11.0	3.4	18.0	9.0	8.6
Paper and allied products	30	26	3.9	3.3	3.2	2.4	6.1	5.6
Printing and publishing	64	105	3.5	5.5	3.0	5.2	4.2	5.9
Chemicals and allied products	45	27	3.5	2.1	3.1	1.7	4.5	3.2
Rubber and miscellaneous plastics products	39	50	4.5	6.1	4.5	4.2	4.6	9.2
Other nondurable goods industries	32	11	7.6	2.8	4.8	4.1	12.2	-
Transportation and public utilities	258	228	4.1	3.6	4.1	3.8	4.1	2.9
Transportation	185	192	5.0	5.2	5.1	5.2	4.7	4.8
Communications and other public utilities	73	36	2.8	1.4	2.5	1.6	3.4	1.0
Wholesale and retail trade	1,534	1,437	6.6	6.1	5.9	5.6	7.3	6.6
Wholesale trade	204	201	4.5	4.4	4.1	4.0	5.5	5.4
Retail trade	1,330	1,236	7.1	6.5	6.5	6.2	7.6	6.8
Finance, insurance, and real estate	197	254	2.7	3.4	2.9	2.9	2.5	3.7
Service industries	1,328	1,212	5.4	4.7	5.5	4.8	5.3	4.7
Professional services	531	472	4.0	3.4	3.7	3.0	4.1	3.6
Other service industries	797	740	7.0	6.3	6.8	6.0	7.2	6.6
Agricultural wage and salary workers	175	188	8.9	9.6	7.8	9.1	12.7	11.6
Government, self-employed, and unpaid family workers	911	777	3.3	2.8	2.7	2.3	4.2	3.4
No previous work experience	890	826	-	-	-	-	-	-

**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	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
NUMBER OF UNEMPLOYED												
Total unemployed	7,088	6,659	2,970	2,803	2,843	2,633	1,274	1,222	5,149	4,933	1,671	1,519
Job losers	3,145	2,887	1,937	1,767	1,021	905	187	215	2,325	2,195	744	632
On layoff	730	739	429	424	270	256	30	58	587	628	133	96
Other job losers	2,415	2,148	1,508	1,343	751	649	157	157	1,738	1,567	611	536
Job leavers	1,062	1,062	422	449	456	452	184	162	871	840	162	191
Reentrants	1,991	1,888	518	500	1,152	1,089	322	300	1,404	1,400	493	414
New entrants	890	822	94	87	214	188	581	546	549	498	272	282
PERCENT DISTRIBUTION												
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	44.4	43.4	65.3	63.0	35.9	34.3	14.7	17.5	45.2	44.5	44.5	41.6
On layoff	10.3	11.1	14.5	15.1	9.5	9.7	2.4	4.7	11.4	12.7	8.0	6.3
Other job losers	34.1	32.3	50.8	47.9	26.4	24.6	12.3	12.8	33.8	31.8	36.5	35.3
Job leavers	15.0	15.9	14.2	16.0	16.1	17.1	14.4	13.2	16.9	17.0	9.7	12.6
Reentrants	28.1	28.4	17.4	17.8	40.5	41.3	25.3	24.5	27.3	28.4	29.5	27.3
New entrants	12.6	12.3	3.2	3.1	7.5	7.2	45.6	44.7	10.7	10.1	16.3	18.6
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers	2.6	2.3	3.1	2.8	2.0	1.8	2.0	2.3	2.3	2.1	5.6	4.7
Job leavers .....	.9	.9	.7	.7	.9	.9	2.0	1.7	.8	.8	1.2	1.4
Reentrants	1.6	1.5	.8	.8	2.3	2.1	3.4	3.2	1.3	1.3	3.7	3.1
New entrants .....	.7	.7	.2	.1	.4	.4	6.2	5.8	.5	.5	2.0	2.1

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

(Percent distribution)

Reason, sex, and age	August 1988						
	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	6,659	100.0	46.5	31.4	22.1	10.1	12.0
Job losers	2,887	100.0	38.7	29.8	31.6	13.5	18.1
On layoff	739	100.0	59.4	26.1	14.6	8.9	5.7
Other job losers	2,148	100.0	31.6	31.0	37.4	15.1	22.3
Job leavers	1,062	100.0	54.9	29.8	15.3	8.0	7.3
Reentrants	1,888	100.0	52.0	31.5	16.5	8.5	8.0
New entrants	822	100.0	50.4	39.3	10.3	4.1	6.2
Men, 20 years and over	2,803	100.0	38.8	31.1	30.0	12.2	17.8
Job losers	1,767	100.0	34.9	31.1	34.0	13.0	21.0
On layoff	424	100.0	61.5	24.4	14.1	9.1	5.0
Other job losers	1,343	100.0	26.4	33.3	40.3	14.3	26.0
Job leavers	449	100.0	48.2	31.7	20.0	9.3	10.7
Reentrants	500	100.0	44.4	31.1	24.4	10.4	14.0
New entrants	87	100.0	39.1	28.0	32.9	20.0	12.9
Women, 20 years and over	2,633	100.0	49.3	29.1	21.6	11.7	9.9
Job losers	905	100.0	39.5	28.8	31.7	16.6	15.1
On layoff	256	100.0	52.0	29.4	18.6	10.5	8.1
Other job losers	649	100.0	34.6	28.6	36.9	19.0	17.8
Job leavers	452	100.0	54.7	30.4	14.9	8.8	6.1
Reentrants	1,089	100.0	53.7	29.9	16.4	9.9	6.5
New entrants	188	100.0	57.7	22.6	19.7	6.2	13.6
Both sexes, 16 to 19 years	1,222	100.0	58.0	37.2	4.8	1.6	3.3
Job losers	215	100.0	66.4	22.6	11.1	4.4	6.7
On layoff	58	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Other job losers	157	100.0	62.8	22.1	15.1	5.9	9.2
Job leavers	162	100.0	74.0	22.6	3.4	2.3	1.1
Reentrants	300	100.0	58.4	38.0	3.5	.4	3.1
New entrants	546	100.0	49.7	46.9	3.4	.8	2.6

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

A-16. Unemployed persons by duration of unemployment

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total, 16 years and over	7,088	6,659	100.0	100.0	5,735	5,413	100.0	100.0
Less than 5 weeks	3,101	3,095	43.8	46.5	2,315	2,320	40.4	42.9
5 to 14 weeks	2,305	2,094	32.5	31.4	1,880	1,719	32.8	31.8
5 to 10 weeks	1,683	1,506	23.7	22.6	1,356	1,227	23.6	22.7
11 to 14 weeks	622	587	8.8	8.8	524	492	9.1	9.1
15 weeks and over	1,682	1,470	23.7	22.1	1,539	1,374	26.8	25.4
15 to 26 weeks	642	669	9.1	10.1	566	626	9.9	11.6
27 weeks and over	1,040	800	14.7	12.0	973	748	17.0	13.8
27 to 51 weeks	471	285	6.6	4.3	447	270	7.8	5.0
52 weeks and over	569	515	8.0	7.7	526	478	9.2	8.8
Average (mean) duration, in weeks	14.2	13.5			15.6	14.9		
Median duration, in weeks	6.4	5.9		-	7.1	6.8		

**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	
								Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
	August 1988										
Total, 16 years and over	6,659	3,095	2,094	669	800	13.5	5.9	43.8	46.5	23.7	22.1
16 to 19 years	1,222	709	455	19	40	6.4	4.3	54.0	58.0	7.0	4.8
20 to 24 years	1,189	632	362	105	91	9.7	4.7	50.1	53.2	18.9	16.4
25 to 34 years	1,992	897	617	236	242	13.7	6.4	40.5	45.0	24.9	24.0
35 to 44 years	1,191	479	346	165	202	17.9	7.7	39.8	40.2	29.9	30.8
45 to 54 years	624	211	200	91	121	19.3	9.2	36.1	33.9	37.8	34.0
55 to 64 years	361	134	91	42	94	24.5	9.5	30.4	37.2	43.2	37.6
65 years and over	80	33	23	12	11	16.4	7.6	44.3	41.5	36.3	29.4
Men, 16 years and over	3,450	1,459	1,115	352	523	15.8	6.9	39.0	42.3	28.6	25.4
16 to 19 years	647	371	243	10	23	6.8	4.4	50.8	57.3	8.3	5.2
20 to 24 years	620	313	214	44	49	9.4	5.0	43.0	50.4	23.9	15.0
25 to 34 years	1,039	414	348	115	162	16.2	7.3	38.9	39.8	29.1	26.7
35 to 44 years	581	179	177	98	128	22.1	11.1	30.3	30.7	39.1	38.8
45 to 54 years	300	91	79	51	79	25.2	10.2	30.6	30.4	45.4	43.2
55 to 64 years	226	73	47	30	77	29.3	12.9	21.9	32.2	51.2	47.0
65 years and over	37	20	7	4	6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,209	1,636	978	318	277	11.1	4.9	48.9	51.0	18.4	18.5
16 to 19 years	576	338	212	9	16	6.0	4.3	58.2	58.7	5.3	4.4
20 to 24 years	570	320	148	61	41	10.1	4.5	57.2	56.1	13.9	18.0
25 to 34 years	953	483	269	121	80	11.0	4.9	42.3	50.7	20.3	21.1
35 to 44 years	609	300	169	67	74	13.9	5.2	48.8	49.3	21.1	23.1
45 to 54 years	324	120	121	40	42	13.7	8.4	41.7	37.2	30.0	25.5
55 to 64 years	135	62	44	12	18	16.3	6.0	42.4	45.6	32.0	22.0
65 years and over	43	13	16	8	5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	4,933	2,352	1,562	495	523	12.5	5.6	45.5	47.7	23.2	20.6
Men	2,611	1,107	850	279	375	15.3	6.6	40.6	42.4	28.7	25.1
Women	2,322	1,245	713	216	148	9.4	4.7	51.1	53.6	17.0	15.7
Black, 16 years and over	1,519	644	478	159	238	16.5	7.6	36.9	42.4	25.7	26.2
Men	722	297	229	61	135	18.2	8.1	31.6	41.1	29.2	27.1
Women	797	347	248	98	104	14.9	7.2	41.7	43.6	22.5	25.3
Men, 16 years and over:											
Married, spouse present	1,252	407	393	169	283	20.4	9.2	32.8	32.5	37.1	36.1
Widowed, divorced, or separated	413	209	90	35	79	19.7	4.9	32.6	50.7	40.0	27.5
Single (never married)	1,785	843	633	148	161	11.7	5.6	44.9	47.2	19.9	17.3
Women, 16 years and over:											
Married, spouse present	1,325	714	365	139	107	10.6	4.6	48.6	53.9	18.9	18.6
Widowed, divorced, or separated	679	278	221	99	81	14.3	7.4	44.8	41.0	24.9	26.5
Single (never married)	1,205	644	392	79	89	9.8	4.7	51.7	53.5	14.0	14.0

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Occupation and industry	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
								Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
August 1988											
OCCUPATION											
Managerial and professional specialty	773	335	246	108	84	13.3	6.7	37.7	43.4	28.6	24.8
Technical, sales, and administrative support	1,546	676	484	195	191	14.5	6.8	43.9	43.7	23.0	25.0
Service occupations	1,107	579	334	63	131	12.3	4.8	48.6	52.3	20.8	17.6
Precision production, craft, and repair	615	267	176	71	102	15.9	6.3	40.8	43.3	32.6	28.1
Operators, fabricators, and laborers	1,506	679	448	168	211	15.5	6.2	41.1	45.1	28.0	25.2
Farming, forestry, and fishing	255	135	66	26	28	10.7	4.7	50.0	52.8	18.0	21.3
INDUSTRY¹											
Agriculture	188	110	39	21	17	9.9	4.3	58.0	58.6	10.8	20.3
Construction	556	291	137	43	85	14.0	4.8	44.7	52.4	24.8	23.0
Manufacturing	1,159	506	335	147	171	16.0	7.1	38.8	43.7	32.4	27.4
Durable goods	644	245	198	81	119	18.2	8.5	38.9	38.1	32.3	31.1
Nondurable goods	515	261	136	66	52	13.2	4.9	38.7	50.7	32.4	22.8
Transportation and public utilities	275	119	74	42	40	16.7	7.5	36.4	43.1	27.8	30.0
Wholesale and retail trade	1,444	679	455	132	178	13.1	5.6	42.5	47.0	24.3	21.5
Finance and service industries	1,805	816	608	202	179	12.9	6.3	46.3	45.2	21.2	21.1
Public administration	193	71	67	24	32	16.7	9.6	40.2	36.6	30.7	28.7
No previous work experience	826	417	324	34	51	9.2	4.9	46.6	50.5	11.7	10.2

¹ Includes wage and salary workers only.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Sex, age, and race	August 1988								
	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	6,659	5,727	22.1	8.2	74.8	36.1	19.9	4.5	1.66
16 to 19 years	1,222	1,135	12.4	3.7	80.4	24.6	19.1	3.3	1.44
20 to 24 years	1,189	1,033	22.3	9.4	77.6	34.2	21.0	4.2	1.69
25 to 34 years	1,992	1,710	24.8	9.2	72.2	40.1	19.2	4.4	1.70
35 to 44 years	1,191	983	24.3	7.9	72.4	42.8	20.5	5.5	1.74
45 to 54 years	624	510	30.4	12.4	73.9	40.0	20.4	6.1	1.83
55 to 64 years	361	285	22.8	7.7	69.1	35.8	20.4	3.9	1.60
65 years and over	80	70	17.1	12.9	68.6	30.0	18.6	10.0	1.57
Men, 16 years and over	3,450	2,898	25.4	8.0	74.7	34.7	23.4	4.3	1.70
16 to 19 years	647	588	12.9	1.5	78.1	22.3	24.3	3.2	1.42
20 to 24 years	620	533	25.1	9.6	78.6	32.3	24.4	3.4	1.73
25 to 34 years	1,039	853	28.6	10.3	73.9	36.5	22.0	3.6	1.75
35 to 44 years	581	478	28.7	8.2	75.1	43.7	23.0	7.1	1.86
45 to 54 years	300	235	36.2	10.6	68.1	42.1	27.7	6.8	1.91
55 to 64 years	226	179	29.1	7.3	65.4	41.3	22.9	3.4	1.69
65 years and over	37	31	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,209	2,829	18.8	8.3	74.9	37.5	16.3	4.7	1.61
16 to 19 years	576	546	11.9	5.9	83.2	27.1	13.6	3.3	1.45
20 to 24 years	570	500	19.4	9.2	76.6	36.2	17.4	5.2	1.64
25 to 34 years	953	857	21.0	8.3	70.6	43.5	16.3	5.1	1.65
35 to 44 years	609	505	20.2	7.5	69.9	42.0	18.2	4.0	1.62
45 to 54 years	324	275	25.5	13.8	78.9	38.2	14.2	5.5	1.76
55 to 64 years	135	107	12.1	7.5	73.8	26.2	15.9	5.6	1.41
65 years and over	43	39	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	4,933	4,129	21.9	8.5	74.4	38.3	19.9	4.2	1.67
Men	2,611	2,148	26.2	8.4	74.2	36.6	22.5	4.1	1.72
Women	2,322	1,981	17.2	8.5	74.5	40.1	17.1	4.3	1.62
Black, 16 years and over	1,519	1,421	21.6	7.3	76.8	30.6	20.8	5.1	1.62
Men	722	656	20.9	6.7	78.0	29.6	26.4	4.1	1.66
Women	797	764	22.3	7.9	75.8	31.5	16.0	5.9	1.59

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

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

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

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

Sex and reason	August 1988								
	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	6,659	5,727	22.1	8.2	74.8	36.1	19.9	4.5	1.66
Job losers ¹	2,887	2,150	28.1	9.3	74.4	39.7	22.5	5.4	1.79
Job leavers	1,062	1,046	24.1	9.3	79.3	35.6	19.0	2.7	1.70
Reentrants	1,888	1,728	17.7	7.9	71.7	38.0	18.3	4.3	1.58
New entrants	822	803	13.0	4.4	76.8	22.9	17.4	5.0	1.39
Men, 16 years and over	3,450	2,898	25.4	8.0	74.7	34.7	23.4	4.3	1.70
Job losers ¹	1,907	1,439	29.2	9.2	73.6	37.7	24.9	5.1	1.80
Job leavers	559	547	26.0	6.9	80.1	31.4	20.7	2.2	1.67
Reentrants	645	580	22.1	8.4	73.8	38.4	22.1	4.0	1.69
New entrants	338	332	13.9	3.6	72.3	20.2	23.5	5.1	1.39
Women, 16 years and over	3,209	2,829	18.8	8.3	74.9	37.5	16.3	4.7	1.61
Job losers ¹	979	711	26.0	9.4	75.9	43.7	17.4	5.9	1.78
Job leavers	503	499	22.0	11.8	78.4	40.1	17.4	3.2	1.73
Reentrants	1,244	1,149	15.7	7.6	70.6	37.7	16.4	4.4	1.52
New entrants	483	470	12.1	4.9	80.2	24.9	13.0	4.9	1.40

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

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

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

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

(In thousands)

Industry and age	Total		Men		Women	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
All industries	114,527	116,737	63,730	64,876	50,797	51,861
16 to 19 years	8,141	8,140	4,184	4,282	3,956	3,858
16 to 17 years	3,566	3,370	1,822	1,804	1,744	1,566
18 to 19 years	4,575	4,771	2,362	2,478	2,213	2,292
20 to 24 years	14,132	13,839	7,480	7,324	6,652	6,515
25 to 54 years	77,806	80,247	43,559	44,736	34,247	35,511
25 to 34 years	33,281	33,536	18,701	18,807	14,580	14,729
35 to 44 years	27,115	28,228	15,067	15,650	12,048	12,578
45 to 54 years	17,410	18,483	9,791	10,279	7,619	8,203
55 to 64 years	11,353	11,395	6,606	6,611	4,748	4,784
55 to 59 years	6,937	6,936	4,013	4,001	2,924	2,935
60 to 64 years	4,417	4,459	2,593	2,610	1,824	1,849
65 years and over	3,094	3,116	1,901	1,922	1,194	1,193
Agriculture	3,452	3,455	2,700	2,742	752	713
16 to 19 years	356	368	284	304	72	63
16 to 17 years	213	176	168	147	45	29
18 to 19 years	143	192	116	158	27	34
20 to 24 years	398	413	327	354	71	59
25 to 54 years	1,865	1,887	1,424	1,456	441	432
25 to 34 years	810	821	646	664	164	158
35 to 44 years	595	630	442	467	152	163
45 to 54 years	461	436	335	325	125	111
55 to 64 years	507	460	388	350	120	111
55 to 59 years	250	267	186	199	64	67
60 to 64 years	258	194	202	151	56	43
65 years and over	325	327	277	279	48	48
Nonagricultural industries	111,075	113,282	61,030	62,134	50,045	51,148
16 to 19 years	7,785	7,773	3,900	3,978	3,884	3,795
16 to 17 years	3,353	3,194	1,654	1,658	1,698	1,536
18 to 19 years	4,432	4,579	2,246	2,320	2,186	2,258
20 to 24 years	13,735	13,426	7,153	6,970	6,582	6,456
25 to 54 years	75,941	78,360	42,135	43,280	33,806	35,079
25 to 34 years	32,471	32,715	18,054	18,143	14,417	14,571
35 to 44 years	26,520	27,598	14,625	15,183	11,896	12,415
45 to 54 years	16,949	18,047	9,455	9,954	7,494	8,093
55 to 64 years	10,846	10,935	6,218	6,261	4,628	4,674
55 to 59 years	6,687	6,669	3,827	3,802	2,860	2,868
60 to 64 years	4,159	4,266	2,391	2,459	1,768	1,806
65 years and over	2,769	2,789	1,624	1,644	1,145	1,145

**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	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total	114,527	116,737	63,730	64,876	59,546	60,594	50,797	51,861	46,840	48,003
Managerial and professional specialty	27,750	28,980	15,524	16,069	15,415	15,963	12,225	12,911	12,088	12,800
Executive, administrative, and managerial	13,791	14,575	8,514	8,787	8,468	8,744	5,277	5,788	5,218	5,738
Officials and administrators, public administration	495	627	300	341	299	341	195	285	195	281
Other executive, administrative, and managerial	9,529	10,115	6,305	6,494	6,260	6,453	3,225	3,622	3,178	3,586
Management-related occupations	3,767	3,833	1,910	1,952	1,908	1,950	1,857	1,881	1,844	1,870
Professional specialty	13,958	14,405	7,010	7,282	6,947	7,219	6,948	7,123	6,871	7,062
Engineers	1,750	1,828	1,624	1,684	1,624	1,680	125	145	125	145
Mathematical and computer scientists	667	748	466	502	464	494	201	246	200	246
Natural scientists	422	420	311	317	310	315	111	103	110	103
Health diagnosing occupations	807	873	670	702	670	702	137	171	137	170
Health assessment and treating occupations	2,156	2,218	293	339	299	338	1,863	1,879	1,863	1,877
Teachers, college and university	503	504	294	303	294	300	209	201	207	200
Teachers, except college and university	3,074	3,126	764	802	749	795	2,311	2,325	2,281	2,313
Lawyers and judges	730	759	582	628	583	629	148	131	147	131
Other professional specialty occupations	3,849	3,928	2,007	2,005	1,965	1,968	1,843	1,923	1,800	1,877
Technical, sales, and administrative support	35,285	35,904	12,528	12,651	11,772	11,890	22,757	23,253	20,809	21,171
Technicians and related support	3,470	3,609	1,822	1,881	1,792	1,824	1,648	1,729	1,628	1,686
Health technologists and technicians	1,190	1,273	215	220	209	214	975	1,054	966	1,036
Engineering and science technicians	1,112	1,151	903	908	889	874	209	243	204	227
Technicians, except health, engineering, and science	1,167	1,185	704	753	694	737	464	433	459	423
Sales occupations	13,708	14,064	7,060	7,211	6,618	6,753	6,648	6,853	5,533	5,664
Supervisors and proprietors	3,598	3,703	2,442	2,457	2,417	2,427	1,156	1,247	1,130	1,216
Sales representatives, finance and business services	2,363	2,427	1,428	1,465	1,404	1,445	935	962	901	930
Sales representatives, commodities, except retail	1,619	1,616	1,318	1,316	1,305	1,306	300	300	292	291
Sales workers, retail and personal services	6,060	6,257	1,853	1,951	1,473	1,555	4,207	4,306	3,165	3,195
Sales-related occupations	68	60	19	22	19	20	50	38	44	32
Administrative support, including clerical	18,107	18,231	3,646	3,560	3,362	3,314	14,461	14,671	13,648	13,821
Supervisors	701	818	281	337	278	330	421	480	420	478
Computer equipment operators	976	898	328	283	299	277	648	615	609	575
Secretaries, stenographers, and typists	5,068	4,899	119	105	109	93	4,948	4,784	4,675	4,534
Financial records processing	2,402	2,476	219	238	219	223	2,183	2,238	2,131	2,186
Mail and message distributing	949	908	640	569	598	543	310	339	300	310
Other administrative support, including clerical	8,011	8,241	2,059	2,028	1,859	1,848	5,952	6,214	5,511	5,738
Service occupations	15,277	15,628	5,913	6,332	4,834	5,223	9,364	9,296	7,879	7,981
Private household	956	947	45	40	34	29	911	907	647	720
Protective service	1,932	2,167	1,627	1,787	1,550	1,704	304	380	237	314
Service, except private household and protective	12,389	12,514	4,240	4,504	3,250	3,490	8,149	8,010	6,995	6,947
Food service	5,247	5,216	1,979	2,027	1,274	1,314	3,268	3,189	2,481	2,444
Health service	1,871	1,887	172	182	157	163	1,698	1,705	1,619	1,624
Cleaning and building service	2,928	3,083	1,640	1,751	1,458	1,554	1,288	1,331	1,200	1,241
Personal service	2,344	2,329	449	544	361	459	1,894	1,784	1,695	1,637
Precision production, craft, and repair	14,073	13,910	12,919	12,709	12,522	12,265	1,154	1,201	1,125	1,165
Mechanics and repairers	4,627	4,415	4,495	4,266	4,373	4,144	133	149	131	145
Construction trades	5,323	5,421	5,225	5,302	4,995	5,034	99	120	95	115
Other precision production, craft, and repair	4,122	4,074	3,199	3,142	3,154	3,087	923	932	899	904
Operators, fabricators, and laborers	18,161	18,404	13,522	13,834	12,166	12,454	4,639	4,569	4,370	4,328
Machine operators, assemblers, and inspectors	8,346	8,176	4,924	4,891	4,693	4,678	3,422	3,285	3,293	3,191
Manufacturing industries	7,007	6,848	4,076	4,029	3,906	3,875	2,931	2,820	2,833	2,748
Durable goods	3,873	3,768	2,671	2,637	2,573	2,540	1,203	1,131	1,166	1,115
Nondurable goods	3,134	3,080	1,405	1,391	1,333	1,335	1,728	1,689	1,667	1,633
Nonmanufacturing industries	1,339	1,328	848	863	787	803	491	465	460	443
Transportation and material moving occupations	4,750	4,912	4,403	4,524	4,249	4,369	347	389	336	378
Motor vehicle operators	3,459	3,629	3,159	3,283	3,036	3,154	300	346	289	336
Other transportation and material moving occupations	1,291	1,284	1,244	1,241	1,213	1,216	46	43	47	42
Handlers, equipment cleaners, helpers, and laborers	5,065	5,315	4,195	4,419	3,224	3,407	870	896	742	759
Construction laborers	935	1,001	896	954	734	809	40	47	33	39
Other handlers, equipment cleaners, helpers, and laborers	4,130	4,314	3,299	3,465	2,490	2,598	830	849	709	720
Farming, forestry, and fishing	3,981	3,911	3,324	3,280	2,836	2,798	657	631	568	558
Farm operators and managers	1,319	1,293	1,123	1,095	1,117	1,078	196	198	191	197
Other farming, forestry, and fishing occupations	2,663	2,618	2,201	2,185	1,720	1,721	461	433	378	360

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
TOTAL						
Total, 16 years and over (thousands)	114,527	116,737	63,730	64,876	50,797	51,861
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.2	24.8	24.4	24.8	24.1	24.9
Executive, administrative, and managerial	12.0	12.5	13.4	13.5	10.4	11.2
Professional specialty	12.2	12.3	11.0	11.2	13.7	13.7
Technical, sales, and administrative support	30.8	30.8	19.7	19.5	44.8	44.8
Technicians and related support	3.0	3.1	2.9	2.9	3.2	3.3
Sales occupations	12.0	12.0	11.1	11.1	13.1	13.2
Administrative support, including clerical	15.8	15.6	5.7	5.5	28.5	28.3
Service occupations	13.3	13.4	9.3	9.8	18.4	17.9
Private household .....	.8	.8	.1	.1	1.8	1.7
Protective service	1.7	1.9	2.6	2.8	.6	.7
Service, except private household and protective	10.8	10.7	6.7	6.9	16.0	15.4
Precision production, craft, and repair	12.3	11.9	20.3	19.6	2.3	2.3
Operators, fabricators, and laborers	15.9	15.8	21.2	21.3	9.1	8.8
Machine operators, assemblers, and inspectors	7.3	7.0	7.7	7.5	6.7	6.3
Transportation and material moving occupations	4.1	4.2	6.9	7.0	.7	.8
Handlers, equipment cleaners, helpers, and laborers	4.4	4.6	6.6	6.8	1.7	1.7
Farming, forestry, and fishing	3.5	3.4	5.2	5.1	1.3	1.2
White						
Total, 16 years and over (thousands)	99,482	101,213	55,986	56,827	43,496	44,386
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	25.2	25.9	25.4	25.8	24.9	25.9
Executive, administrative, and managerial	12.7	13.2	14.1	14.3	10.8	11.7
Professional specialty	12.5	12.7	11.2	11.5	14.1	14.2
Technical, sales, and administrative support	31.3	31.1	20.0	19.7	45.8	45.6
Technicians and related support	3.0	3.0	2.9	2.8	3.2	3.2
Sales occupations	12.5	12.7	11.7	11.8	13.6	13.7
Administrative support, including clerical	15.8	15.4	5.5	5.0	29.1	28.7
Service occupations	12.1	12.2	8.3	8.8	17.1	16.6
Private household .....	.7	.7	.1	(¹)	1.6	1.6
Protective service	1.6	1.7	2.4	2.6	.5	.7
Service, except private household and protective	9.9	9.8	5.8	6.1	15.0	14.4
Precision production, craft, and repair	12.8	12.3	21.0	20.2	2.3	2.3
Operators, fabricators, and laborers	14.9	15.1	20.0	20.4	8.4	8.2
Machine operators, assemblers, and inspectors	6.8	6.6	7.4	7.2	6.1	5.9
Transportation and material moving occupations	4.0	4.0	6.5	6.6	.7	.7
Handlers, equipment cleaners, helpers, and laborers	4.1	4.4	6.1	6.5	1.6	1.7
Farming, forestry, and fishing	3.6	3.5	5.3	5.2	1.4	1.3
Black						
Total, 16 years and over (thousands)	11,721	11,962	5,937	6,072	5,784	5,890
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	15.3	15.1	13.2	12.4	17.4	17.8
Executive, administrative, and managerial	6.7	7.1	6.5	6.5	7.0	7.7
Professional specialty	8.5	8.0	6.7	5.9	10.4	10.2
Technical, sales, and administrative support	26.6	28.0	15.1	17.2	38.3	39.2
Technicians and related support	2.8	3.3	2.1	3.0	3.5	3.5
Sales occupations	7.3	7.1	5.1	4.9	9.6	9.5
Administrative support, including clerical	16.4	17.6	7.9	9.3	25.2	26.1
Service occupations	23.1	23.0	17.9	18.5	28.5	27.6
Private household	1.8	1.7	.1	.2	3.6	3.3
Protective service	3.0	3.1	4.7	4.8	1.2	1.4
Service, except private household and protective	18.3	18.1	13.1	13.6	23.7	22.8
Precision production, craft, and repair	8.5	9.1	15.1	15.7	1.8	2.4
Operators, fabricators, and laborers	23.8	22.4	33.9	32.0	13.4	12.5
Machine operators, assemblers, and inspectors	10.6	9.8	10.9	10.5	10.3	9.1
Transportation and material moving occupations	6.0	6.3	11.1	11.3	.8	1.3
Handlers, equipment cleaners, helpers, and laborers	7.2	6.3	11.9	10.1	2.3	2.2
Farming, forestry, and fishing	2.7	2.4	4.7	4.2	.6	.5

¹ Less than 0.05 percent.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	August 1988								
	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	104,334	1,202	16,462	86,670	8,695	252	1,758	1,490	207
16 to 19 years	7,669	288	460	6,921	77	26	285	40	43
16 to 17 years	3,142	192	193	2,757	35	17	126	24	26
18 to 19 years	4,527	96	268	4,164	42	9	159	16	17
20 to 24 years	13,113	143	1,011	11,958	299	14	333	61	19
25 to 34 years	30,613	189	4,109	26,315	2,047	54	511	278	32
35 to 44 years	24,913	162	4,959	19,793	2,620	65	288	317	25
45 to 54 years	16,153	159	3,547	12,448	1,839	54	155	260	21
55 to 64 years	9,609	174	1,979	7,456	1,296	30	115	299	46
55 to 59 years	5,900	92	1,297	4,511	752	17	58	177	31
60 to 64 years	3,709	82	682	2,944	544	13	57	122	15
65 years and over	2,263	87	397	1,780	517	8	71	235	21
Men, 16 years and over	56,389	187	8,100	48,103	5,695	50	1,400	1,266	77
16 to 19 years	3,907	97	248	3,562	47	24	234	38	33
16 to 17 years	1,626	75	103	1,448	18	14	104	23	20
18 to 19 years	2,281	22	146	2,114	29	10	130	14	14
20 to 24 years	6,774	27	495	6,251	186	11	281	56	17
25 to 34 years	16,841	16	2,022	14,803	1,297	6	413	244	7
35 to 44 years	13,472	17	2,353	11,103	1,711	1	210	255	2
45 to 54 years	8,756	8	1,790	6,958	1,198	1	109	216	1
55 to 64 years	5,378	14	986	4,378	880	3	94	246	10
55 to 59 years	3,288	8	643	2,637	511	2	48	144	7
60 to 64 years	2,090	6	343	1,741	369	-	46	102	3
65 years and over	1,262	9	205	1,047	377	5	61	212	6
Women, 16 years and over	47,945	1,015	8,363	38,568	3,001	203	358	225	130
16 to 19 years	3,762	191	212	3,359	30	2	51	3	10
16 to 17 years	1,516	117	90	1,309	17	3	22	1	7
18 to 19 years	2,246	74	122	2,050	13	-	29	2	3
20 to 24 years	6,339	116	517	5,707	113	3	52	6	1
25 to 34 years	13,773	174	2,087	11,512	750	49	99	34	25
35 to 44 years	11,441	145	2,606	8,690	909	65	78	62	23
45 to 54 years	7,398	151	1,757	5,490	642	53	46	45	20
55 to 64 years	4,230	160	993	3,077	416	27	21	53	36
55 to 59 years	2,612	84	654	1,874	241	15	10	33	24
60 to 64 years	1,619	77	339	1,203	175	12	11	19	12
65 years and over	1,001	77	192	732	140	3	10	23	15

A-25. Employed civilians by industry and occupation

(In thousands)

Industry	August 1988												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service ¹		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture	3,455	96	72	13	15	96	-	15	40	5	71	2	3,031
Mining	754	122	86	26	17	95	-	2	221	24	114	47	-
Construction	8,167	990	133	66	64	523	-	52	4,567	83	548	1,103	36
Manufacturing	21,685	2,513	1,857	719	782	2,425	-	354	4,040	6,848	793	1,252	101
Durable goods	12,899	1,504	1,266	499	371	1,386	-	208	2,795	3,768	409	603	89
Nondurable goods	8,787	1,009	591	219	411	1,039	-	147	1,245	3,080	384	649	12
Transportation and public utilities	8,075	989	423	224	287	2,116	-	250	1,266	100	1,863	538	18
Wholesale and retail trade	24,271	2,064	465	119	10,016	2,398	-	4,503	1,525	302	989	1,834	58
Wholesale trade	4,734	536	110	39	1,794	875	-	78	297	130	481	354	41
Retail trade	19,538	1,527	355	80	8,222	1,523	-	4,425	1,227	172	508	1,480	17
Finance, insurance, and real estate	8,052	2,004	210	166	1,941	3,190	-	252	164	18	11	27	70
Services	36,721	4,555	10,425	2,019	926	5,965	947	7,882	1,830	760	448	462	500
Private households	1,210	-	7	12	1	18	947	79	8	1	3	32	102
Other service industries	35,511	4,555	10,418	2,008	926	5,947	-	7,803	1,822	759	445	430	398
Professional services	22,634	2,432	9,080	1,641	127	4,194	-	4,072	409	192	248	128	110
Public administration	5,557	1,243	733	257	15	1,422	-	1,372	257	37	75	50	96

¹ Includes protective service, not shown separately.

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

(In thousands)

Reason not working and sex	All industries		Nonagricultural industries					
	Aug. 1987	Aug. 1988	Total		Wage and salary workers ¹			
			Aug. 1987	Aug. 1988	Paid absences		Unpaid absences	
					Aug. 1987	Aug. 1988	Aug. 1987	Aug. 1988
Total, 16 years and over	11,522	11,943	11,346	11,760	6,482	6,624	4,109	4,261
Vacation	9,113	9,435	9,025	9,311	5,758	5,833	2,782	2,919
Illness	1,267	1,293	1,228	1,277	479	500	667	693
Bad weather	35	46	19	36	(²)	(²)	(²)	(²)
Industrial dispute	32	41	32	41	(²)	(²)	(²)	(²)
All other reasons	1,074	1,128	1,042	1,095	245	291	659	648
Men, 16 years and over	4,985	5,181	4,859	5,041	3,186	3,150	1,291	1,446
Vacation	3,843	3,983	3,779	3,884	2,818	2,762	743	854
Illness	686	674	651	662	268	265	336	353
All other reasons ³	456	524	428	495	101	122	212	239
Women, 16 years and over	6,537	6,762	6,487	6,719	3,294	3,473	2,818	2,816
Vacation	5,270	5,452	5,245	5,427	2,941	3,069	2,039	2,065
Illness	581	619	577	616	210	235	331	341
All other reasons ³	686	691	664	677	144	169	448	410

¹ Excludes private household workers.

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

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Hours of work	August 1988					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	104,794	3,272	101,522	100.0	100.0	100.0
1 to 34 hours	23,012	859	22,154	22.0	26.3	21.8
1 to 4 hours	632	38	595	.6	1.2	.6
5 to 14 hours	3,463	197	3,266	3.3	6.0	3.2
15 to 29 hours	11,654	405	11,249	11.1	12.4	11.1
30 to 34 hours	7,263	219	7,044	6.9	6.7	6.9
35 hours and over	81,782	2,412	79,368	78.0	73.7	78.2
35 to 39 hours	7,071	149	6,921	6.7	4.6	6.8
40 hours	43,080	707	42,373	41.1	21.6	41.7
41 hours and over	31,631	1,556	30,074	30.2	47.6	29.6
41 to 48 hours	11,391	260	11,130	10.9	7.9	11.0
49 to 59 hours	11,397	433	10,964	10.9	13.2	10.8
60 hours and over	8,843	863	7,980	8.4	26.4	7.9
Average hours, total at work	39.9	45.4	39.7			
Average hours, workers on full-time schedules	43.7	52.3	43.5			

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	August 1988					
	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	23,012	7,260	15,752	22,154	7,000	15,153
Economic reasons	5,559	1,763	3,796	5,291	1,675	3,616
Slack work	2,274	1,316	958	2,117	1,243	874
Material shortages or repairs to plant and equipment	66	66	-	61	61	-
New job started during week	268	268	-	263	263	-
Job terminated during week	114	114	-	109	109	-
Could find only part-time work	2,837	-	2,837	2,742	-	2,742
Other reasons	17,452	5,495	11,957	16,862	5,325	11,537
Does not want, or unavailable for, full-time work	9,584	-	9,584	9,270	-	9,270
Vacation	2,487	2,487	-	2,451	2,451	-
Illness	1,221	1,055	166	1,204	1,046	158
Bad weather	259	259	-	186	186	-
Industrial dispute	12	12	-	11	11	-
Legal or religious holiday	70	70	-	68	68	-
Full time for this job	1,516	-	1,516	1,484	-	1,484
All other reasons	2,303	1,613	690	2,186	1,562	624
Average hours:						
Economic reasons	22.1	24.1	21.2	22.2	24.2	21.3
Other reasons	22.1	25.5	20.5	22.2	25.6	20.6
Worked 30 to 34 hours:						
Economic reasons	1,718	778	940	1,639	744	895
Other reasons	5,545	2,723	2,822	5,405	2,660	2,745

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

(Numbers in thousands)

Industry	August 1988								
	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	101,522	5,291	11,537	84,694	54,620	11,130	18,944	39.7	43.5
Wage and salary workers	93,372	4,727	10,170	78,475	51,860	10,549	16,066	39.6	43.1
Mining	666	10	9	647	370	100	177	44.2	44.8
Construction	6,285	409	247	5,629	3,633	778	1,218	41.0	43.2
Manufacturing	19,603	520	537	18,546	11,794	3,019	3,733	42.2	43.2
Durable goods	11,661	168	226	11,267	7,094	1,783	2,390	42.7	43.4
Nondurable goods	7,942	352	311	7,279	4,700	1,236	1,343	41.4	43.1
Transportation and public utilities	6,981	221	349	6,411	4,082	857	1,472	42.3	44.2
Wholesale and retail trade	20,694	1,767	3,975	14,952	9,283	2,155	3,514	37.6	43.6
Finance, insurance, and real estate	6,990	154	628	6,208	4,260	751	1,197	40.2	42.6
Service industries	27,046	1,581	4,225	21,240	14,862	2,375	4,003	37.8	42.6
Private households	1,132	257	444	431	275	39	117	26.6	45.5
All other industries	25,914	1,324	3,781	20,809	14,587	2,336	3,886	38.3	42.5
Public administration	5,107	66	201	4,840	3,572	513	755	41.1	42.2
Self-employed workers	7,898	558	1,279	6,061	2,682	574	2,805	41.2	48.1
Unpaid family workers	252	8	88	156	78	7	71	38.5	48.6

**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	August 1988							
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
TOTAL								
Total, 16 years and over	101,522	5,291	11,537	84,694	54,620	30,074	39.7	43.5
16 to 19 years	7,310	1,232	2,533	3,545	2,811	734	30.5	40.3
16 to 17 years	2,972	590	1,448	934	792	142	26.1	39.3
18 to 19 years	4,338	642	1,085	2,611	2,020	591	33.4	40.7
20 years and over	94,212	4,059	9,004	81,149	51,808	29,341	40.5	43.6
20 to 24 years	12,694	982	1,348	10,364	7,313	3,051	38.6	42.2
25 years and over	81,518	3,077	7,657	70,784	44,495	26,289	40.7	43.8
25 to 44 years	53,860	1,998	4,025	47,837	29,551	18,286	41.3	43.8
45 to 64 years	25,182	956	2,482	21,744	14,125	7,619	40.5	43.7
65 years and over	2,477	124	1,150	1,203	817	386	30.0	43.1
Men, 16 years and over	57,093	2,436	3,371	51,286	29,586	21,700	42.5	44.8
16 to 19 years	3,745	608	1,144	1,993	1,512	481	31.8	40.9
16 to 17 years	1,558	327	695	536	454	82	27.2	39.7
18 to 19 years	2,186	281	449	1,456	1,057	399	35.0	41.3
20 years and over	53,348	1,827	2,227	49,294	28,074	21,220	43.2	45.0
20 to 24 years	6,681	478	506	5,697	3,674	2,023	40.4	43.5
25 years and over	46,668	1,347	1,720	43,601	24,405	19,196	43.6	45.2
25 to 44 years	30,649	899	538	29,212	15,871	13,341	44.3	45.4
45 to 64 years	14,540	378	553	13,609	8,041	5,568	43.3	44.8
65 years and over	1,479	71	630	778	491	287	31.6	43.9
Women, 16 years and over	44,429	2,856	8,166	33,407	25,034	8,373	36.3	41.3
16 to 19 years	3,566	624	1,389	1,553	1,300	253	29.1	39.6
16 to 17 years	1,414	263	753	398	338	60	24.9	38.7
18 to 19 years	2,152	361	636	1,155	962	193	31.8	39.9
20 years and over	40,863	2,232	6,777	31,854	23,733	8,121	36.9	41.4
20 to 24 years	6,013	504	841	4,668	3,640	1,028	36.5	40.7
25 years and over	34,850	1,729	5,936	27,185	20,092	7,093	37.0	41.5
25 to 44 years	23,211	1,098	3,486	18,627	13,683	4,944	37.5	41.4
45 to 64 years	10,641	578	1,930	8,133	6,083	2,050	36.8	41.7
65 years and over	998	53	520	425	325	100	27.6	41.6
RACE								
White, 16 years and over	87,756	4,303	10,252	73,201	45,767	27,434	39.9	43.7
Men	49,871	1,973	2,908	44,990	25,047	19,943	42.8	45.1
Women	37,884	2,331	7,344	28,209	20,718	7,491	36.2	41.4
Black, 16 years and over	10,548	822	969	8,757	6,893	1,864	38.1	41.5
Men	5,440	400	338	4,702	3,478	1,224	39.5	42.3
Women	5,108	422	632	4,054	3,413	641	36.5	40.5
MARITAL STATUS								
Men, 16 years and over:								
Married, spouse present	35,488	892	1,229	33,367	18,236	15,131	44.0	45.4
Widowed, divorced, or separated	5,734	239	230	5,265	2,969	2,296	43.2	45.1
Single (never married)	15,871	1,305	1,912	12,654	8,382	4,272	38.9	43.2
Women, 16 years and over:								
Married, spouse present	23,283	1,142	4,901	17,240	13,014	4,226	35.8	41.1
Widowed, divorced, or separated	8,742	523	1,037	7,182	5,187	1,995	38.2	41.9
Single (never married)	12,404	1,190	2,228	8,986	6,835	2,151	35.8	41.2

HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

Occupation and sex	August 1988								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over ¹	101,099	5,208	11,449	84,443	54,359	11,100	18,984	39.8	43.5
Managerial and professional specialty	24,302	486	1,875	21,941	12,289	2,811	6,841	42.4	44.8
Executive, administrative, and managerial	13,345	190	638	12,517	6,525	1,652	4,341	44.3	45.8
Professional specialty	10,957	296	1,237	9,424	5,765	1,159	2,501	40.2	43.4
Technical, sales, and administrative support	32,845	1,495	4,796	26,554	18,293	3,211	5,050	38.5	42.6
Technicians and related support	3,350	45	307	2,999	2,114	388	497	40.2	42.4
Sales occupations	12,985	866	2,248	9,871	5,302	1,300	3,269	39.6	45.4
Administrative support, including clerical	16,510	584	2,242	13,684	10,877	1,522	1,284	37.3	40.7
Service occupations	14,221	1,517	3,296	9,408	6,795	1,021	1,592	35.1	42.6
Private household	885	197	341	347	224	31	92	27.2	45.1
Protective service	1,956	51	134	1,770	1,070	275	425	42.8	45.0
Service, except private household and protective	11,381	1,269	2,822	7,290	5,501	714	1,075	34.5	41.9
Precision production, craft, and repair	12,873	563	415	11,896	7,381	1,874	2,641	42.1	43.8
Operators, fabricators, and laborers	16,858	1,146	1,067	14,644	9,601	2,183	2,860	40.7	43.4
Machine operators, assemblers, and inspectors	7,535	390	268	6,877	4,828	1,116	933	40.6	42.2
Transportation and material moving occupations	4,376	229	169	3,978	2,032	569	1,377	44.5	46.8
Handlers, equipment cleaners, helpers, and laborers	4,946	527	630	3,789	2,741	498	550	37.3	42.0
Men, 16 years and over ¹	56,594	2,350	3,264	50,979	29,284	7,155	14,540	42.6	44.9
Managerial and professional specialty	14,274	189	553	13,532	6,684	1,644	5,204	44.8	46.2
Executive, administrative, and managerial	8,127	78	244	7,805	3,516	975	3,314	46.2	47.3
Professional specialty	6,147	111	309	5,727	3,168	669	1,890	43.1	44.8
Technical, sales, and administrative support	11,810	336	808	10,666	5,871	1,468	3,326	43.1	45.4
Technicians and related support	1,775	20	71	1,684	1,101	230	353	42.4	43.6
Sales occupations	6,724	207	489	6,027	2,667	843	2,518	44.8	47.4
Administrative support, including clerical	3,311	108	248	2,955	2,104	396	455	40.0	42.2
Service occupations	5,911	508	882	4,521	3,042	568	912	38.7	44.0
Private household	40	15	11	14	7	-	7	(²)	(²)
Protective service	1,639	33	99	1,506	866	250	391	43.8	45.7
Service, except private household and protective	4,232	460	772	3,001	2,169	318	513	36.8	43.1
Precision production, craft, and repair	11,823	518	316	10,988	6,711	1,739	2,538	42.4	44.0
Operators, fabricators, and laborers	12,776	799	705	11,272	6,976	1,737	2,560	41.6	44.1
Machine operators, assemblers, and inspectors	4,524	149	82	4,293	2,802	759	733	42.1	43.1
Transportation and material moving occupations	4,137	196	141	3,800	1,909	555	1,336	44.9	46.9
Handlers, equipment cleaners, helpers, and laborers	4,115	455	482	3,179	2,264	423	491	37.6	42.3
Women, 16 years and over ¹	44,506	2,857	8,185	33,463	25,075	3,945	4,444	36.3	41.3
Managerial and professional specialty	10,028	297	1,322	8,409	5,605	1,167	1,637	39.0	42.4
Executive, administrative, and managerial	5,218	112	394	4,712	3,008	677	1,027	41.3	43.3
Professional specialty	4,810	185	928	3,697	2,596	490	610	36.5	41.3
Technical, sales, and administrative support	21,035	1,159	3,988	15,888	12,422	1,743	1,724	36.0	40.8
Technicians and related support	1,575	24	236	1,315	1,013	159	143	37.8	40.9
Sales occupations	6,261	659	1,758	3,844	2,635	457	751	34.1	42.2
Administrative support, including clerical	13,199	476	1,994	10,729	8,773	1,127	829	36.6	40.3
Service occupations	8,310	1,010	2,414	4,886	3,753	453	680	32.6	41.3
Private household	845	183	329	333	217	31	84	27.2	45.0
Protective service	317	18	35	264	204	26	34	37.2	40.9
Service, except private household and protective	7,148	809	2,050	4,289	3,332	396	561	33.1	41.1
Precision production, craft, and repair	1,050	44	98	908	670	136	102	39.1	41.7
Operators, fabricators, and laborers	4,082	347	362	3,372	2,625	446	301	37.8	40.9
Machine operators, assemblers, and inspectors	3,012	242	186	2,584	2,026	357	200	38.4	40.7
Transportation and material moving occupations	239	33	28	178	123	14	41	37.3	43.7
Handlers, equipment cleaners, helpers, and laborers	831	72	148	610	476	74	59	35.6	40.7

¹ Excludes farming, forestry, and fishing occupations.

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status and sex	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Noninstitutional population ¹	184,738	184,904	185,052	185,225	185,370	185,571	185,705	185,847	185,964	186,088	186,247	186,402	186,522
Labor force ¹	122,042	121,706	122,128	122,349	122,472	122,924	123,084	122,639	123,055	122,692	123,157	123,357	123,723
Percent of population ²	66.1	65.8	66.0	66.1	66.1	66.2	66.3	66.0	66.2	65.9	66.1	66.2	66.3
Total employed ¹	114,786	114,615	114,951	115,259	115,494	115,878	116,145	115,839	116,445	115,909	116,703	116,732	116,872
Employment-population ratio ³	62.1	62.0	62.1	62.2	62.3	62.4	62.5	62.3	62.6	62.3	62.7	62.6	62.7
Resident Armed Forces	1,736	1,743	1,741	1,755	1,750	1,749	1,736	1,736	1,732	1,714	1,685	1,673	1,692
Civilian employed	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195	115,018	115,059	115,180
Agriculture	3,143	3,184	3,249	3,172	3,215	3,293	3,228	3,204	3,228	3,035	3,085	3,046	3,151
Nonagricultural industries	109,907	109,688	109,961	110,332	110,529	110,836	111,182	110,899	111,485	111,160	111,933	112,014	112,029
Unemployed	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783	6,455	6,625	6,851
Unemployment rate ⁴	5.9	5.8	5.9	5.8	5.7	5.7	5.6	5.5	5.4	5.5	5.2	5.4	5.5
Not in labor force	62,696	63,198	62,924	62,876	62,898	62,647	62,621	63,208	62,909	63,396	63,090	63,045	62,799
Men													
Noninstitutional population ¹	88,598	88,683	88,756	88,849	88,924	89,033	89,099	89,168	89,225	89,287	89,367	89,445	89,504
Labor force ¹	67,937	67,776	67,947	68,019	68,030	68,243	68,343	68,148	68,445	68,318	68,429	68,521	68,723
Percent of population ²	76.7	76.4	76.6	76.6	76.5	76.6	76.7	76.4	76.7	76.5	76.6	76.6	76.8
Total employed ¹	63,916	63,949	64,048	64,174	64,245	64,396	64,636	64,332	64,892	64,583	64,934	65,002	64,954
Employment-population ratio ³	72.1	72.1	72.2	72.2	72.2	72.3	72.5	72.1	72.7	72.3	72.7	72.7	72.6
Resident Armed Forces	1,575	1,581	1,580	1,593	1,589	1,588	1,577	1,573	1,569	1,553	1,523	1,512	1,529
Civilian employed	62,341	62,368	62,468	62,581	62,656	62,808	63,059	62,759	63,323	63,030	63,411	63,490	63,425
Unemployed	4,021	3,827	3,899	3,845	3,785	3,847	3,707	3,816	3,553	3,736	3,495	3,519	3,768
Unemployment rate ⁴	5.9	5.6	5.7	5.7	5.6	5.6	5.4	5.6	5.2	5.5	5.1	5.1	5.5
Not in labor force	20,661	20,907	20,809	20,830	20,894	20,790	20,756	21,020	20,780	20,969	20,938	20,924	20,781
Women													
Noninstitutional population ¹	96,140	96,221	96,295	96,376	96,446	96,538	96,606	96,679	96,739	96,801	96,880	96,957	97,018
Labor force ¹	54,105	53,930	54,181	54,330	54,442	54,681	54,740	54,491	54,610	54,374	54,728	54,836	55,000
Percent of population ²	56.3	56.0	56.3	56.4	56.4	56.6	56.7	56.4	56.5	56.2	56.5	56.6	56.7
Total employed ¹	50,870	50,666	50,903	51,085	51,249	51,482	51,509	51,507	51,553	51,327	51,769	51,730	51,918
Employment-population ratio ³	52.9	52.7	52.9	53.0	53.1	53.3	53.3	53.3	53.3	53.0	53.4	53.4	53.5
Resident Armed Forces	161	162	161	162	161	161	159	163	163	161	162	161	163
Civilian employed	50,709	50,504	50,742	50,923	51,088	51,321	51,350	51,344	51,390	51,166	51,607	51,569	51,755
Unemployed	3,235	3,264	3,278	3,245	3,193	3,200	3,231	2,985	3,057	3,047	2,960	3,106	3,083
Unemployment rate ⁴	6.0	6.1	6.1	6.0	5.9	5.9	5.9	5.5	5.6	5.6	5.4	5.7	5.6
Not in labor force	42,035	42,291	42,114	42,046	42,004	41,857	41,866	42,188	42,129	42,427	42,152	42,121	42,018

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

² Labor force as a percent of the noninstitutional population.

³ Total employment as a percent of the noninstitutional population.

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

Armed Forces).

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, sex, and age	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Civilian noninstitutional population ¹	183,002	183,161	183,311	183,470	183,620	183,822	183,969	184,111	184,232	184,374	184,562	184,729	184,830
Civilian labor force	120,306	119,963	120,387	120,594	120,722	121,175	121,348	120,903	121,323	120,978	121,472	121,684	122,031
Percent of population	65.7	65.5	65.7	65.7	65.7	65.9	66.0	65.7	65.9	65.6	65.8	65.9	66.0
Employed	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195	115,018	115,059	115,180
Employment-population ratio ²	61.8	61.6	61.8	61.9	61.9	62.1	62.2	62.0	62.3	61.9	62.3	62.3	62.3
Unemployed	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783	6,455	6,625	6,851
Unemployment rate	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6	5.3	5.4	5.6
Men, 20 years and over													
Civilian noninstitutional population ¹	79,668	79,740	79,807	79,885	80,002	80,120	80,203	80,260	80,326	80,402	80,526	80,608	80,669
Civilian labor force	62,083	62,085	62,211	62,299	62,248	62,440	62,696	62,497	62,791	62,662	62,667	62,769	62,925
Percent of population	77.9	77.9	78.0	78.0	77.8	77.9	78.2	77.9	78.2	77.9	77.8	77.9	78.0
Employed	58,825	58,967	59,037	59,164	59,185	59,287	59,625	59,407	59,883	59,590	59,797	59,954	59,834
Employment-population ratio ²	73.8	73.9	74.0	74.1	74.0	74.0	74.3	74.0	74.5	74.1	74.3	74.4	74.2
Agriculture	2,289	2,345	2,343	2,297	2,298	2,323	2,280	2,253	2,255	2,181	2,208	2,247	2,311
Nonagricultural industries	56,536	56,622	56,694	56,867	56,887	56,964	57,344	57,154	57,627	57,409	57,588	57,706	57,523
Unemployed	3,258	3,118	3,174	3,135	3,063	3,154	3,071	3,089	2,909	3,072	2,870	2,815	3,090
Unemployment rate	5.2	5.0	5.1	5.0	4.9	5.1	4.9	4.9	4.6	4.9	4.6	4.5	4.9
Not in labor force	17,585	17,655	17,596	17,586	17,754	17,680	17,507	17,763	17,535	17,740	17,859	17,839	17,744
Women, 20 years and over													
Civilian noninstitutional population ¹	88,685	88,785	88,843	88,923	89,010	89,110	89,178	89,261	89,307	89,382	89,502	89,588	89,670
Civilian labor force	49,969	49,922	50,095	50,254	50,361	50,558	50,640	50,542	50,612	50,441	50,642	50,775	50,934
Percent of population	56.3	56.2	56.4	56.5	56.6	56.7	56.8	56.6	56.7	56.4	56.6	56.7	56.8
Employed	47,308	47,251	47,480	47,634	47,750	47,977	48,005	48,132	48,170	47,960	48,169	48,199	48,466
Employment-population ratio ²	53.3	53.2	53.4	53.6	53.6	53.8	53.8	53.9	53.9	53.7	53.8	53.8	54.0
Agriculture	609	600	636	636	643	646	654	656	692	587	616	542	586
Nonagricultural industries	46,699	46,651	46,844	46,998	47,107	47,331	47,351	47,476	47,478	47,373	47,553	47,657	47,881
Unemployed	2,661	2,671	2,615	2,620	2,611	2,581	2,635	2,411	2,442	2,481	2,473	2,576	2,468
Unemployment rate	5.3	5.4	5.2	5.2	5.2	5.1	5.2	4.8	4.8	4.9	4.9	5.1	4.8
Not in labor force	38,716	38,863	38,748	38,669	38,649	38,552	38,538	38,719	38,695	38,941	38,860	38,813	38,736
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹	14,649	14,637	14,661	14,663	14,609	14,592	14,588	14,591	14,598	14,590	14,534	14,533	14,491
Civilian labor force	8,254	7,956	8,081	8,041	8,113	8,177	8,011	7,865	7,919	7,875	8,163	8,141	8,172
Percent of population	56.3	54.4	55.1	54.8	55.5	56.0	54.9	53.9	54.2	54.0	56.2	56.0	56.4
Employed	6,917	6,654	6,693	6,706	6,809	6,865	6,779	6,564	6,660	6,645	7,051	6,907	6,879
Employment-population ratio ²	47.2	45.5	45.7	45.7	46.6	47.0	46.5	45.0	45.6	45.5	48.5	47.5	47.5
Agriculture	245	239	270	239	274	323	293	295	280	267	260	257	254
Nonagricultural industries	6,672	6,415	6,423	6,467	6,535	6,542	6,486	6,269	6,380	6,378	6,791	6,650	6,625
Unemployed	1,337	1,302	1,388	1,335	1,304	1,312	1,232	1,301	1,259	1,230	1,112	1,234	1,293
Unemployment rate	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6	13.6	15.2	15.8
Not in labor force	6,395	6,681	6,580	6,622	6,496	6,415	6,577	6,726	6,679	6,715	6,371	6,392	6,319

¹ The population figures are not adjusted for seasonal variation.

population.

² Civilian employment as a percent of the civilian noninstitutional

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
WHITE													
Civilian noninstitutional population ¹	157,134	157,242	157,342	157,449	157,552	157,676	157,773	157,868	157,943	158,034	158,166	158,279	158,340
Civilian labor force	103,516	103,357	103,669	103,731	103,907	104,252	104,530	104,171	104,574	104,209	104,691	104,603	105,007
Percent of population	65.9	65.7	65.9	65.9	66.0	66.1	66.3	66.0	66.2	65.9	66.2	66.1	66.3
Employed	98,181	98,069	98,317	98,492	98,779	99,044	99,474	99,274	99,751	99,297	99,932	99,725	99,901
Employment-population ratio ²	62.5	62.4	62.5	62.6	62.7	62.8	63.0	62.9	63.2	62.8	63.2	63.0	63.1
Unemployed	5,335	5,288	5,352	5,239	5,128	5,208	5,056	4,897	4,824	4,913	4,759	4,878	5,106
Unemployment rate	5.2	5.1	5.2	5.1	4.9	5.0	4.8	4.7	4.6	4.7	4.5	4.7	4.9
Men, 20 years and over													
Civilian labor force	54,183	54,213	54,375	54,381	54,368	54,455	54,650	54,522	54,699	54,618	54,662	54,732	54,825
Percent of population	78.2	78.2	78.4	78.3	78.2	78.3	78.5	78.2	78.5	78.3	78.2	78.3	78.4
Employed	51,715	51,803	51,864	51,969	52,046	52,053	52,389	52,245	52,538	52,314	52,491	52,603	52,464
Employment-population ratio ²	74.7	74.7	74.8	74.9	74.8	75.2	75.0	75.0	75.4	75.0	75.1	75.2	75.0
Unemployed	2,468	2,410	2,511	2,412	2,322	2,402	2,260	2,277	2,161	2,304	2,171	2,129	2,361
Unemployment rate	4.6	4.4	4.6	4.4	4.3	4.4	4.1	4.2	4.0	4.2	4.0	3.9	4.3
Women, 20 years and over													
Civilian labor force	42,332	42,308	42,379	42,464	42,569	42,710	42,915	42,841	42,986	42,827	42,921	42,887	43,177
Percent of population	55.8	55.7	55.7	55.8	55.9	56.1	56.3	56.2	56.3	56.1	56.2	56.1	56.4
Employed	40,449	40,409	40,538	40,606	40,712	40,896	40,985	41,183	41,297	41,104	41,183	41,040	41,399
Employment-population ratio ²	53.3	53.2	53.3	53.4	53.5	53.7	53.8	54.0	54.1	53.8	53.9	53.7	54.1
Unemployed	1,883	1,899	1,841	1,858	1,857	1,813	1,930	1,658	1,689	1,723	1,738	1,847	1,778
Unemployment rate	4.4	4.5	4.3	4.4	4.4	4.2	4.5	3.9	3.9	4.0	4.0	4.3	4.1
Both sexes, 16 to 19 years													
Civilian labor force	7,001	6,836	6,915	6,886	6,970	7,087	6,965	6,807	6,889	6,764	7,108	6,983	7,005
Percent of population	58.5	57.2	57.9	57.7	58.6	59.6	58.6	57.2	58.0	57.0	59.9	58.9	59.2
Employed	6,017	5,857	5,915	5,917	6,021	6,095	6,100	5,845	5,916	5,879	6,258	6,081	6,038
Employment-population ratio ²	50.3	49.0	49.5	49.6	50.6	51.2	51.3	49.1	49.8	49.5	52.7	51.3	51.0
Unemployed	984	979	1,000	969	949	992	865	962	973	885	850	902	967
Unemployment rate	14.1	14.3	14.5	14.1	13.6	14.0	12.4	14.1	14.1	13.1	12.0	12.9	13.8
Men	15.2	15.1	15.1	14.8	14.9	14.4	12.2	15.7	14.5	13.8	12.8	14.6	13.8
Women	12.9	13.4	13.8	13.3	12.3	13.6	12.7	12.4	13.7	12.4	11.1	11.1	13.8
BLACK													
Civilian noninstitutional population ¹	20,396	20,426	20,453	20,482	20,508	20,539	20,569	20,596	20,622	20,650	20,683	20,715	20,736
Civilian labor force	13,150	13,028	13,152	13,193	13,215	13,222	13,168	13,098	13,078	13,069	12,989	13,293	13,262
Percent of population	64.5	63.8	64.3	64.4	64.4	64.4	64.0	63.6	63.4	63.3	62.8	64.2	64.0
Employed	11,513	11,421	11,556	11,589	11,605	11,608	11,504	11,420	11,482	11,452	11,489	11,774	11,764
Employment-population ratio ²	56.4	55.9	56.5	56.6	56.6	56.5	55.9	55.4	55.7	55.5	55.5	56.8	56.7
Unemployed	1,637	1,607	1,596	1,604	1,610	1,614	1,663	1,678	1,597	1,617	1,500	1,519	1,498
Unemployment rate	12.4	12.3	12.1	12.2	12.2	12.2	12.6	12.8	12.2	12.4	11.5	11.4	11.3
Men, 20 years and over													
Civilian labor force	6,054	6,032	6,023	6,045	6,043	6,115	6,166	6,127	6,163	6,107	6,064	6,070	6,154
Percent of population	74.9	74.5	74.3	74.5	74.3	75.0	75.6	75.0	75.3	74.5	73.8	73.8	74.7
Employed	5,407	5,421	5,431	5,430	5,430	5,497	5,472	5,429	5,511	5,449	5,458	5,492	5,566
Employment-population ratio ²	66.9	67.0	67.0	66.9	66.8	67.5	67.1	66.4	67.3	66.5	66.5	66.8	67.6
Unemployed	647	611	592	615	613	618	694	699	652	658	606	578	588
Unemployment rate	10.7	10.1	9.8	10.2	10.1	10.1	11.3	11.4	10.6	10.8	10.0	9.5	9.6
Women, 20 years and over													
Civilian labor force	6,122	6,067	6,177	6,207	6,224	6,244	6,131	6,136	6,093	6,059	6,074	6,307	6,182
Percent of population	60.3	59.7	60.7	60.9	61.0	61.1	59.9	59.9	59.4	59.0	59.0	61.2	59.9
Employed	5,430	5,357	5,495	5,537	5,544	5,550	5,495	5,465	5,407	5,414	5,421	5,650	5,572
Employment-population ratio ²	53.5	52.7	54.0	54.3	54.3	54.3	53.7	53.3	52.7	52.7	52.7	54.8	54.0
Unemployed	692	710	682	670	680	694	636	671	686	645	652	657	610
Unemployment rate	11.3	11.7	11.0	10.8	10.9	11.1	10.4	10.9	11.3	10.6	10.7	10.4	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	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	974	929	952	941	948	863	870	834	822	903	852	917	926
Percent of population	44.9	42.8	43.8	43.3	43.7	39.8	40.0	38.3	37.7	41.4	39.0	42.0	42.4
Employed	676	643	630	622	631	561	537	526	564	589	610	632	626
Employment-population ratio ²	31.2	29.6	29.0	28.6	29.1	25.8	24.7	24.2	25.9	27.0	28.0	28.9	28.7
Unemployed	298	286	322	319	317	302	333	308	258	314	242	285	300
Unemployment rate	30.6	30.8	33.8	33.9	33.4	35.0	38.3	36.9	31.4	34.8	28.4	31.1	32.4
Men	33.7	31.5	32.5	32.2	33.5	35.1	42.0	39.0	27.6	33.3	30.4	30.4	32.2
Women	27.1	30.0	35.2	35.8	33.4	34.9	34.7	35.0	35.5	36.6	25.9	31.8	32.7
HISPANIC ORIGIN													
Civilian noninstitutional population ¹	12,925	12,965	13,003	13,043	13,082	13,115	13,153	13,192	13,230	13,268	13,306	13,344	13,381
Civilian labor force	8,549	8,581	8,654	8,763	8,772	8,879	9,017	8,803	8,828	8,859	9,027	8,984	8,935
Percent of population	66.1	66.2	66.6	67.2	67.1	67.7	68.6	66.7	66.7	66.8	67.8	67.3	66.8
Employed	7,856	7,877	7,935	7,978	8,058	8,238	8,268	8,079	8,010	8,058	8,219	8,264	8,185
Employment-population ratio ²	60.8	60.8	61.0	61.2	61.6	62.8	62.9	61.2	60.5	60.7	61.8	61.9	61.2
Unemployed	693	704	719	785	714	642	749	724	818	801	809	720	750
Unemployment rate	8.1	8.2	8.3	9.0	8.1	7.2	8.3	8.2	9.3	9.0	9.0	8.0	8.4

¹ The population figures are not adjusted for seasonal variation.

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

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

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

(In thousands)

Category	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195	115,018	115,059	115,180
Married men, spouse present	40,308	40,404	40,556	40,645	40,711	40,404	40,475	40,481	40,459	40,267	40,485	40,535	40,505
Married women, spouse present	28,189	28,069	28,099	28,175	28,249	28,441	28,707	28,805	28,859	28,567	28,713	28,654	28,832
Women who maintain families	6,107	6,151	6,178	6,237	6,227	6,168	6,157	6,160	6,055	5,957	6,085	6,145	6,282
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,591	1,624	1,705	1,595	1,599	1,666	1,677	1,648	1,678	1,526	1,562	1,539	1,580
Self-employed workers	1,393	1,415	1,430	1,407	1,450	1,454	1,414	1,423	1,385	1,346	1,359	1,346	1,416
Unpaid family workers	155	139	140	155	156	138	114	142	155	159	167	148	163
Nonagricultural industries:													
Wage and salary workers	101,241	101,282	101,522	101,943	101,997	102,507	102,683	102,279	102,538	101,927	103,000	103,133	103,097
Government	16,794	16,928	17,033	17,118	17,064	17,197	16,948	16,908	17,015	16,887	17,064	16,959	17,112
Private industries	84,447	84,354	84,489	84,825	84,933	85,310	85,735	85,371	85,523	85,040	85,935	86,174	85,984
Private households	1,175	1,100	1,222	1,286	1,200	1,147	1,170	1,175	1,092	1,156	1,150	1,123	1,108
Other industries	83,272	83,254	83,267	83,539	83,733	84,163	84,565	84,196	84,431	83,884	84,786	85,051	84,877
Self-employed workers	8,214	8,204	8,274	8,222	8,280	8,150	8,312	8,366	8,637	8,917	8,577	8,528	8,491
Unpaid family workers	248	297	242	235	248	237	228	248	281	307	301	255	243
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	5,283	5,261	5,353	5,534	5,262	5,367	5,566	5,343	5,194	4,844	5,317	5,382	5,181
Slack work	2,468	2,213	2,377	2,408	2,284	2,396	2,478	2,520	2,236	2,227	2,364	2,490	2,318
Could only find part-time work	2,526	2,683	2,655	2,696	2,638	2,640	2,598	2,535	2,502	2,315	2,637	2,581	2,491
Voluntary part time	14,573	14,415	14,488	14,523	14,711	14,571	14,572	14,603	15,016	14,790	14,507	15,070	15,021
Nonagricultural industries:													
Part time for economic reasons	5,016	4,986	5,067	5,241	5,004	5,145	5,254	5,106	4,924	4,623	5,076	5,185	4,959
Slack work	2,265	2,034	2,196	2,209	2,111	2,260	2,327	2,325	2,121	2,120	2,199	2,351	2,178
Could only find part-time work	2,463	2,603	2,557	2,597	2,552	2,566	2,457	2,475	2,397	2,236	2,566	2,545	2,429
Voluntary part time	14,099	13,987	14,011	14,064	14,222	14,096	14,123	14,141	14,592	14,338	14,083	14,669	14,585

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Sex and age	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	113,050	112,872	113,210	113,504	113,744	114,129	114,409	114,103	114,713	114,195	115,018	115,059	115,180
16 to 24 years	20,475	20,116	20,096	20,065	20,112	20,312	20,271	19,916	19,990	19,773	20,404	20,159	20,153
16 to 19 years	6,917	6,654	6,693	6,706	6,809	6,865	6,779	6,564	6,660	6,645	7,051	6,907	6,879
16 to 17 years	2,849	2,754	2,768	2,734	2,826	2,776	2,752	2,657	2,682	2,649	2,820	2,691	2,645
18 to 19 years	3,996	3,911	3,936	3,985	3,994	4,061	4,045	3,906	3,967	3,995	4,227	4,210	4,170
20 to 24 years	13,558	13,462	13,403	13,359	13,303	13,447	13,491	13,353	13,330	13,128	13,353	13,253	13,273
25 years and over	92,606	92,735	93,071	93,424	93,625	93,778	94,118	94,239	94,686	94,359	94,592	95,016	95,119
25 to 54 years	78,202	78,307	78,477	78,731	78,916	79,170	79,351	79,588	79,946	79,920	80,088	80,481	80,657
55 years and over	14,498	14,491	14,641	14,663	14,716	14,581	14,673	14,566	14,712	14,438	14,542	14,469	14,553
Men, 16 years and over	62,341	62,368	62,468	62,581	62,656	62,808	63,059	62,759	63,323	63,030	63,411	63,490	63,425
16 to 24 years	10,586	10,448	10,403	10,370	10,369	10,456	10,444	10,349	10,427	10,351	10,591	10,446	10,508
16 to 19 years	3,516	3,401	3,431	3,417	3,471	3,521	3,434	3,352	3,440	3,439	3,614	3,537	3,591
16 to 17 years	1,410	1,391	1,409	1,390	1,451	1,444	1,406	1,376	1,397	1,369	1,418	1,388	1,392
18 to 19 years	2,046	2,021	2,034	2,040	2,035	2,053	2,046	1,982	2,042	2,068	2,184	2,150	2,149
20 to 24 years	7,070	7,047	6,972	6,953	6,898	6,935	7,010	6,998	6,987	6,912	6,977	6,910	6,917
25 years and over	51,781	51,900	52,047	52,210	52,299	52,338	52,623	52,469	52,862	52,654	52,793	53,064	52,972
25 to 54 years	43,289	43,408	43,488	43,592	43,690	43,848	43,992	43,975	44,336	44,175	44,278	44,541	44,463
55 years and over	8,503	8,514	8,580	8,605	8,629	8,470	8,567	8,467	8,530	8,466	8,542	8,534	8,529
Women, 16 years and over	50,709	50,504	50,742	50,923	51,088	51,321	51,350	51,344	51,390	51,166	51,607	51,569	51,755
16 to 24 years	9,889	9,668	9,693	9,695	9,743	9,857	9,826	9,567	9,563	9,422	9,814	9,713	9,645
16 to 19 years	3,401	3,253	3,262	3,289	3,338	3,344	3,345	3,212	3,220	3,206	3,438	3,370	3,288
16 to 17 years	1,439	1,363	1,359	1,344	1,375	1,332	1,346	1,281	1,285	1,280	1,402	1,303	1,253
18 to 19 years	1,950	1,890	1,902	1,945	1,959	2,008	1,999	1,924	1,925	1,927	2,043	2,060	2,021
20 to 24 years	6,488	6,415	6,431	6,406	6,405	6,513	6,481	6,355	6,343	6,216	6,376	6,343	6,357
25 years and over	40,825	40,835	41,024	41,214	41,326	41,440	41,495	41,770	41,824	41,705	41,798	41,953	42,147
25 to 54 years	34,913	34,899	34,989	35,139	35,226	35,322	35,359	35,613	35,610	35,745	35,809	35,939	36,194
55 years and over	5,995	5,977	6,061	6,058	6,087	6,111	6,106	6,099	6,182	5,972	5,999	5,935	6,024

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

(In thousands)

Sex and age	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	7,256	7,091	7,177	7,090	6,978	7,046	6,938	6,801	6,610	6,783	6,455	6,625	6,851
16 to 24 years	2,736	2,692	2,689	2,641	2,547	2,659	2,525	2,637	2,532	2,519	2,341	2,468	2,513
16 to 19 years	1,337	1,302	1,388	1,335	1,304	1,312	1,232	1,301	1,259	1,230	1,112	1,234	1,293
16 to 17 years	638	618	710	649	613	638	580	568	580	509	512	569	607
18 to 19 years	688	701	679	691	688	689	655	732	658	720	627	630	671
20 to 24 years	1,399	1,390	1,301	1,306	1,243	1,347	1,293	1,336	1,273	1,289	1,229	1,234	1,220
25 years and over	4,544	4,445	4,482	4,442	4,412	4,393	4,416	4,161	4,082	4,251	4,077	4,150	4,358
25 to 54 years	4,050	3,931	3,993	3,909	3,939	3,896	3,926	3,730	3,625	3,744	3,654	3,691	3,871
55 years and over	483	499	474	513	488	527	499	441	446	520	442	461	476
Men, 16 years and over	4,021	3,827	3,899	3,845	3,785	3,847	3,707	3,816	3,553	3,736	3,495	3,519	3,768
16 to 24 years	1,518	1,435	1,432	1,414	1,378	1,456	1,333	1,423	1,315	1,354	1,247	1,334	1,359
16 to 19 years	763	709	725	710	722	693	636	727	644	664	625	704	678
16 to 17 years	363	341	372	356	347	348	285	313	291	275	290	302	297
18 to 19 years	387	382	354	355	367	360	354	414	352	388	360	370	371
20 to 24 years	755	726	707	704	656	763	697	696	671	690	622	630	681
25 years and over	2,528	2,427	2,462	2,419	2,390	2,391	2,390	2,385	2,243	2,363	2,235	2,174	2,426
25 to 54 years	2,215	2,139	2,182	2,109	2,112	2,070	2,095	2,089	1,951	2,051	1,940	1,906	2,118
55 years and over	302	283	277	313	282	351	305	299	276	323	279	275	301
Women, 16 years and over	3,235	3,264	3,278	3,245	3,193	3,200	3,231	2,985	3,057	3,047	2,960	3,106	3,083
16 to 24 years	1,218	1,257	1,257	1,227	1,169	1,203	1,192	1,214	1,217	1,166	1,094	1,134	1,154
16 to 19 years	574	593	663	625	582	619	596	574	615	566	487	530	615
16 to 17 years	275	277	338	293	266	290	295	255	289	234	222	267	310
18 to 19 years	301	319	325	336	321	329	301	318	306	332	267	260	300
20 to 24 years	644	664	594	602	587	584	596	640	602	600	607	604	539
25 years and over	2,016	2,018	2,020	2,023	2,022	2,002	2,026	1,776	1,838	1,888	1,842	1,976	1,933
25 to 54 years	1,835	1,792	1,811	1,800	1,827	1,826	1,831	1,641	1,674	1,693	1,714	1,785	1,753
55 years and over	181	216	197	200	206	175	194	142	170	197	163	186	175

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

(Civilian workers)

Sex and age	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6	5.3	5.4	5.6
16 to 24 years	11.8	11.8	11.8	11.6	11.2	11.6	11.1	11.7	11.2	11.3	10.3	10.9	11.1
16 to 19 years	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6	13.6	15.2	15.8
16 to 17 years	18.3	18.3	20.4	19.2	17.8	18.7	17.4	17.6	17.8	16.1	15.4	17.5	18.7
18 to 19 years	14.7	15.2	14.7	14.8	14.7	14.5	13.9	15.8	14.2	15.3	12.9	13.0	13.9
20 to 24 years	9.4	9.4	8.8	8.9	8.5	9.1	8.7	9.1	8.7	8.9	8.4	8.5	8.4
25 years and over	4.7	4.6	4.6	4.5	4.5	4.5	4.5	4.2	4.1	4.3	4.1	4.2	4.4
25 to 54 years	4.9	4.8	4.8	4.7	4.8	4.7	4.7	4.5	4.3	4.5	4.4	4.4	4.6
55 years and over	3.2	3.3	3.1	3.4	3.2	3.5	3.3	2.9	2.9	3.5	2.9	3.1	3.2
Men, 16 years and over	6.1	5.8	5.9	5.8	5.7	5.8	5.6	5.7	5.3	5.6	5.2	5.3	5.6
16 to 24 years	12.5	12.1	12.1	12.0	11.7	12.2	11.3	12.1	11.2	11.6	10.5	11.3	11.5
16 to 19 years	17.8	17.3	17.4	17.2	17.2	16.4	15.6	17.8	15.8	16.2	14.7	16.6	15.9
16 to 17 years	20.5	19.7	20.9	20.4	19.3	19.4	16.9	18.5	17.2	16.7	17.0	17.9	17.6
18 to 19 years	15.9	15.9	14.8	14.8	15.3	14.9	14.7	17.3	14.7	15.8	14.2	14.7	14.7
20 to 24 years	9.6	9.3	9.2	9.2	8.7	9.9	9.0	9.1	8.8	9.1	8.2	8.4	9.0
25 years and over	4.7	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.1	4.3	4.1	3.9	4.4
25 to 54 years	4.9	4.7	4.8	4.6	4.6	4.5	4.5	4.5	4.2	4.4	4.2	4.1	4.5
55 years and over	3.4	3.2	3.1	3.5	3.2	4.0	3.4	3.4	3.1	3.7	3.2	3.1	3.4
Women, 16 years and over	6.0	6.1	6.1	6.0	5.9	5.9	5.9	5.5	5.6	5.6	5.4	5.7	5.6
16 to 24 years	11.0	11.5	11.5	11.2	10.7	10.9	10.8	11.3	11.3	11.0	10.0	10.5	10.7
16 to 19 years	14.4	15.4	16.9	16.0	14.8	15.6	15.1	15.2	16.0	15.0	12.4	13.6	15.8
16 to 17 years	16.0	16.9	19.9	17.9	16.2	17.9	18.0	16.6	18.4	15.5	13.7	17.0	19.8
18 to 19 years	13.4	14.4	14.6	14.7	14.1	14.1	13.1	14.2	13.7	14.7	11.6	11.2	12.9
20 to 24 years	9.0	9.4	8.5	8.6	8.4	8.2	8.4	9.1	8.7	8.8	8.7	8.7	7.8
25 years and over	4.7	4.7	4.7	4.7	4.7	4.6	4.7	4.1	4.2	4.3	4.2	4.5	4.4
25 to 54 years	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.4	4.5	4.5	4.6	4.7	4.6
55 years and over	2.9	3.5	3.1	3.2	3.3	2.8	3.1	2.3	2.7	3.2	2.6	3.0	2.8

A-39. Selected unemployment indicators, seasonally adjusted

(Unemployment rates)

Category	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total (all civilian workers)	6.0	5.9	6.0	5.9	5.8	5.8	5.7	5.6	5.4	5.6	5.3	5.4	5.6
Men, 20 years and over	5.2	5.0	5.1	5.0	4.9	5.1	4.9	4.9	4.6	4.9	4.6	4.5	4.9
Women, 20 years and over	5.3	5.4	5.2	5.2	5.2	5.1	5.2	4.8	4.8	4.9	4.9	5.1	4.8
Both sexes, 16 to 19 years	16.2	16.4	17.2	16.6	16.1	16.0	15.4	16.5	15.9	15.6	13.6	15.2	15.8
White	5.2	5.1	5.2	5.1	4.9	5.0	4.8	4.7	4.6	4.7	4.5	4.7	4.9
Black and other	11.3	10.9	10.8	11.0	10.9	10.9	11.3	11.5	10.7	11.3	10.3	10.0	10.0
Black	12.4	12.3	12.1	12.2	12.2	12.2	12.6	12.8	12.2	12.4	11.5	11.4	11.3
Hispanic origin	8.1	8.2	8.3	9.0	8.1	7.2	8.3	8.2	9.3	9.0	9.0	8.0	8.4
Married men, spouse present	3.7	3.7	3.7	3.5	3.4	3.6	3.4	3.4	3.0	3.3	3.1	3.0	3.4
Married women, spouse present	4.3	4.2	4.2	4.2	4.3	4.2	4.1	4.0	3.8	3.9	3.7	4.1	4.1
Women who maintain families	9.0	8.8	8.9	8.5	8.4	8.9	8.3	7.5	8.7	8.4	7.8	8.6	7.4
Full-time workers	5.6	5.5	5.6	5.5	5.4	5.4	5.3	5.3	5.1	5.2	4.9	5.0	5.3
Part-time workers	8.2	8.4	8.3	8.2	8.0	8.3	7.9	7.7	7.4	7.7	7.8	8.1	7.4
Unemployed 15 weeks and over	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.3	1.4
Labor force time lost ²	6.9	6.8	6.8	6.8	6.6	6.6	6.6	6.5	6.2	6.4	6.3	6.4	6.5
INDUSTRY													
Nonagricultural private wage and salary workers	6.0	5.9	5.9	5.8	5.7	5.8	5.7	5.6	5.3	5.7	5.4	5.4	5.6
Goods-producing industries	6.9	7.0	7.0	6.5	6.4	7.1	6.9	6.5	6.5	6.6	6.0	6.3	6.8
Mining	8.6	7.4	8.3	7.0	8.0	7.7	7.8	7.9	8.4	10.4	6.7	5.3	6.8
Construction	11.3	11.9	11.2	10.6	10.6	12.2	11.0	10.7	10.6	10.5	10.2	10.2	11.0
Manufacturing	5.6	5.6	5.7	5.3	5.1	5.6	5.6	5.2	5.3	5.4	4.8	5.2	5.6
Durable goods	5.5	5.4	5.2	4.8	4.8	5.5	5.9	5.2	4.8	4.9	4.4	5.0	5.0
Nondurable goods	5.8	5.9	6.5	5.9	5.6	5.8	5.3	5.3	6.0	6.0	5.4	5.6	6.4
Service-producing industries	5.6	5.3	5.4	5.5	5.3	5.3	5.1	5.2	4.7	5.2	5.1	5.0	5.1
Transportation and public utilities	4.4	4.1	4.4	4.5	4.6	3.6	3.6	4.2	3.8	4.4	4.1	3.5	3.8
Wholesale and retail trade	7.0	6.4	6.5	6.8	6.2	6.1	6.4	6.8	5.9	6.3	5.9	6.2	6.5
Finance and service industries	4.7	4.8	4.7	4.8	4.8	4.9	4.5	4.2	4.1	4.6	4.6	4.5	4.4
Government workers	3.7	3.4	3.3	3.4	3.2	3.0	2.8	2.8	3.0	2.9	2.8	3.1	3.1
Agricultural wage and salary workers	10.6	8.6	10.6	11.1	10.9	11.5	10.2	11.0	10.6	13.9	9.7	10.8	11.4

¹ Unemployment as a percent of the civilian labor force.

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Weeks of unemployment	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
DURATION													
Less than 5 weeks	3,203	3,220	3,223	3,218	3,229	3,089	3,084	3,009	3,125	3,075	3,066	2,965	3,197
5 to 14 weeks	2,142	1,949	2,093	2,029	1,968	2,263	2,145	2,101	1,956	2,110	1,890	2,078	1,957
15 weeks and over	1,896	1,904	1,801	1,834	1,791	1,733	1,740	1,722	1,540	1,609	1,512	1,629	1,676
15 to 26 weeks	834	917	844	899	892	839	841	887	725	784	727	838	859
27 weeks and over	1,062	987	957	935	899	894	899	835	816	825	785	791	817
Average (mean) duration, in weeks	14.3	14.2	14.1	14.0	14.2	14.4	14.4	13.7	13.4	13.8	12.9	13.6	13.7
Median duration, in weeks	6.4	5.8	6.2	6.1	6.0	6.4	6.4	6.6	5.6	5.9	6.0	6.3	5.9
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	44.2	45.5	45.3	45.4	46.2	43.6	44.3	44.0	47.2	45.3	47.4	44.4	46.8
5 to 14 weeks	29.6	27.6	29.4	28.7	28.2	31.9	30.8	30.8	29.5	31.1	29.2	31.1	28.7
15 weeks and over	26.2	26.9	25.3	25.9	25.6	24.5	25.0	25.2	23.3	23.7	23.4	24.4	24.5
15 to 26 weeks	11.5	13.0	11.9	12.7	12.8	11.8	12.1	13.0	10.9	11.5	11.2	12.6	12.6
27 weeks and over	14.7	14.0	13.4	13.2	12.9	12.6	12.9	12.2	12.3	12.1	12.1	11.9	12.0

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

(Numbers in thousands)

Reasons for unemployment	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
NUMBER OF UNEMPLOYED													
Job losers	3,389	3,313	3,388	3,307	3,200	3,209	3,207	3,139	2,916	3,236	3,059	3,087	3,138
On layoff	874	820	944	878	856	888	884	899	821	793	863	852	891
Other job losers	2,515	2,493	2,444	2,429	2,344	2,320	2,323	2,240	2,095	2,443	2,196	2,235	2,247
Job leavers	992	981	960	926	946	1,082	961	1,075	993	926	944	904	997
Reentrants	1,969	1,908	1,845	1,974	1,945	1,917	1,951	1,756	1,784	1,789	1,723	1,901	1,869
New entrants	855	882	914	855	909	885	864	887	915	807	777	776	793
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	47.0	46.8	47.7	46.8	45.7	45.2	45.9	45.8	44.1	47.9	47.0	46.3	46.2
On layoff	12.1	11.6	13.3	12.4	12.2	12.5	12.7	13.1	12.4	11.7	13.3	12.8	13.1
Other job losers	34.9	35.2	34.4	34.4	33.5	32.7	33.3	32.7	31.7	36.2	33.8	33.5	33.1
Job leavers	13.8	13.8	13.5	13.1	13.5	15.3	13.8	15.7	15.0	13.7	14.5	13.6	14.7
Reentrants	27.3	26.0	26.9	28.0	27.8	27.0	27.9	25.6	27.0	26.5	26.5	28.5	27.5
New entrants	11.9	12.5	12.9	12.1	13.0	12.5	12.4	12.9	13.8	11.9	11.9	11.6	11.7
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	2.8	2.8	2.8	2.7	2.7	2.6	2.6	2.6	2.4	2.7	2.5	2.5	2.6
Job leavers .....	.8	.8	.8	.8	.8	.9	.8	.9	.8	.8	.8	.7	.8
Reentrants	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.6	1.5
New entrants .....	.7	.7	.8	.7	.8	.7	.7	.7	.8	.7	.6	.6	.6

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

B-1. Employees on nonagricultural payrolls by major industry, 1936 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	Government		
													Federal	State	Local
Annual averages															
1936	29,068	25,400	11,933	946	1,160	9,827	17,135	2,973	(¹)	(¹)	1,373	3,312	(¹)	(¹)	(¹)
1937	31,011	27,255	12,936	1,015	1,127	10,794	18,075	3,134	(¹)	(¹)	1,417	3,503	(¹)	(¹)	(¹)
1938	29,194	25,311	11,401	891	1,070	9,440	17,793	2,863	(¹)	(¹)	1,410	3,458	(¹)	(¹)	(¹)
1939	30,603	26,608	12,297	854	1,165	10,278	18,306	2,936	1,762	4,664	1,447	3,502	905	(¹)	(¹)
1940	32,361	28,159	13,221	925	1,311	10,985	19,140	3,038	1,835	4,914	1,485	3,665	996	(¹)	(¹)
1941	36,539	31,877	15,963	957	1,814	13,192	20,574	3,274	1,960	5,251	1,525	3,905	1,340	(¹)	(¹)
1942	40,106	34,624	18,470	992	2,198	15,280	21,636	3,460	1,906	5,212	1,509	4,066	2,213	(¹)	(¹)
1943	42,434	36,356	20,114	925	1,587	17,602	22,320	3,647	1,822	5,160	1,481	4,130	2,905	(¹)	(¹)
1944	41,864	35,822	19,328	892	1,108	17,328	22,536	3,829	1,845	5,214	1,461	4,145	2,928	(¹)	(¹)
1945	40,374	34,431	17,507	836	1,147	15,524	22,867	3,906	1,949	5,365	1,481	4,222	2,808	(¹)	(¹)
1946	41,652	36,056	17,248	862	1,683	14,703	24,404	4,061	2,291	6,084	1,675	4,697	2,254	(¹)	(¹)
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,471	6,485	1,728	5,025	1,892	(¹)	(¹)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,605	6,667	1,800	5,181	1,863	(¹)	(¹)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,602	6,662	1,828	5,240	1,908	(¹)	(¹)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,635	6,751	1,888	5,357	1,928	(¹)	(¹)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,727	7,015	1,956	5,547	2,302	(¹)	(¹)
1952	48,793	42,185	20,198	898	2,688	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	46,990	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 ²	53,268	45,186	20,411	732	3,004	16,675	32,857	4,011	3,082	8,045	2,549	7,087	2,233	1,484	4,366
1960	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	3,143	8,248	2,629	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,133	8,204	2,688	7,620	2,279	1,607	4,708
1962	55,549	46,660	20,451	650	2,948	16,853	35,098	3,906	3,198	8,368	2,754	7,982	2,340	1,668	4,881
1963	56,653	47,429	20,640	635	3,010	16,995	36,013	3,903	3,248	8,530	2,830	8,277	2,358	1,747	5,121
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	3,337	8,823	2,911	8,660	2,348	1,856	5,392
1965	60,765	50,689	21,926	632	3,232	18,062	38,839	4,036	3,466	9,250	2,977	9,036	2,378	1,996	5,700
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	3,597	9,648	3,058	9,498	2,564	2,141	6,080
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	3,689	9,917	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,160	4,318	3,779	10,320	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	3,907	10,798	3,512	11,169	2,758	2,533	6,904
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	3,993	11,047	3,645	11,548	2,731	2,664	7,158
1971	71,214	58,331	22,935	609	3,704	18,623	48,278	4,476	4,001	11,351	3,772	11,797	2,696	2,747	7,437
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	4,113	11,836	3,908	12,276	2,684	2,859	7,790
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	4,277	12,329	4,046	12,857	2,663	2,923	8,146
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	4,433	12,554	4,148	13,441	2,724	3,039	8,407
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	4,415	12,645	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,582	4,546	13,209	4,271	14,551	2,733	3,273	8,865
1977	82,471	67,344	24,346	813	3,851	19,682	58,125	4,713	4,708	13,808	4,467	15,303	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,969	14,573	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	5,204	14,989	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,275	15,035	5,160	17,890	2,866	3,610	9,765
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	5,358	15,189	5,298	18,619	2,772	3,640	9,619
1982	89,566	73,729	23,813	1,128	3,905	18,781	65,753	5,082	5,278	15,179	5,341	19,036	2,739	3,640	9,458
1983	90,200	74,330	23,334	952	3,948	18,434	66,866	4,954	5,268	15,613	5,468	19,694	2,774	3,662	9,434
1984	94,496	78,472	24,727	966	4,383	19,378	69,769	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	102,310	85,295	24,784	721	4,998	19,065	77,525	5,385	5,872	18,509	6,549	24,196	2,943	3,963	10,109
Monthly data, seasonally adjusted															
1987:															
August	102,672	85,656	24,851	728	5,012	19,111	77,821	5,394	5,892	18,569	6,581	24,369	2,943	3,971	10,102
September	102,906	85,851	24,902	734	5,012	19,156	78,004	5,427	5,914	18,605	6,588	24,415	2,962	3,973	10,120
October	103,371	86,241	25,025	740	5,060	19,225	78,346	5,448	5,935	18,705	6,604	24,524	2,966	3,985	10,179
November	103,678	86,520	25,123	736	5,090	19,297	78,555	5,466	5,958	18,761	6,608	24,604	2,974	3,988	10,196
December	104,001	86,794	25,201	735	5,118	19,348	78,800	5,481	5,984	18,784	6,619	24,725	2,980	4,001	10,226
1988:															
January	104,262	87,044	25,180	728	5,083	19,369	79,082	5,499	6,010	18,927	6,633	24,795	2,973	4,006	10,239
February	104,729	87,475	25,271	731	5,150	19,390	79,458	5,513	6,035	19,045	6,636	24,975	2,972	4,014	10,268
March	105,020	87,700	25,330	733	5,192	19,405	79,690	5,530	6,061	19,050	6,651	25,078	2,970	4,031	10,319
April	105,281	87,973	25,435	737	5,238	19,460	79,846	5,543	6,089	19,093	6,650	25,163	2,963	4,041	10,304
May	105,489	88,139	25,466	739	5,237	19,490	80,023	5,556	6,115	19,130	6,656	25,216	2,957	4,050	10,343
June	106,057	88,678	25,592	740	5,308	19,544	80,465	5,582	6,148	19,205	6,679	25,472	2,951	4,049	10,379
July ^p	106,257	88,927	25,655	741	5,325	19,589	80,602	5,597	6,171	19,267	6,683	25,551	2,955	4,069	10,306
August ^p	106,476	89,080	25,647	735	5,328	19,584	80,829	5,609	6,190	19,290	6,696	25,648	2,972	4,073	10,351

¹ Not available.
² Data include Alaska and Hawaii beginning in 1959. This inclusion resulted in an increase of 212,000 (0.4 percent) in the nonagricultural total for the March 1959 benchmark month.
^p = preliminary.

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

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Total		102,212	102,471	106,920	106,055	106,287					
Total private		86,057	86,478	89,478	89,605	89,944	69,706	70,085	72,446	72,526	72,839
Mining		727	734	742	745	742	520	527	537	540	535
Metal mining	10	44.3	44.1	49.6	50.5		33.5	33.4	38.2	38.9	
Iron ores	101	6.5	6.7	7.3	7.4		4.9	5.2	5.9	6.0	
Copper ores	102	13.4	13.4	14.1	14.2		10.7	10.6	10.9	11.0	
Coal mining	11,12	161.2	163.3	154.2	152.9		131.4	133.5	125.3	124.7	
Bituminous coal and lignite mining	12	159.1	161.3	152.2	151.0		129.6	131.8	123.6	123.1	
Oil and gas extraction	13	406.7	412.4	421.3	424.0	419.9	265.7	271.2	283.9	286.1	-
Crude petroleum, natural gas, and natural gas liquids ...	131,2	205.6	205.1	200.3	202.6	-	101.6	101.5	101.2	103.0	
Oil and gas field services	138	201.1	207.3	221.0	221.4	-	164.1	169.7	182.7	183.1	-
Nonmetallic minerals, except fuels	14	114.8	114.5	116.5	117.1	-	88.9	88.8	89.7	90.2	-
Crushed and broken stone	142	41.9	41.8	43.0	43.2	-	33.6	33.4	34.1	34.3	-
Sand and gravel	144	36.4	36.4	36.7	36.9	-	-	-	-	-	-
Chemical and fertilizer minerals	147	16.8	16.7	17.1	17.2	-	-	-	-	-	-
Construction		5,288	5,352	5,510	5,634	5,690	4,168	4,233	4,340	4,456	4,504
General building contractors	15	1,392.9	1,403.2	1,453.2	1,475.9	1,479.2	1,029.2	1,038.7	1,074.5	1,095.5	
Residential building construction	152	738.5	738.5	791.6	799.0	-	532.2	532.0	575.1	582.7	
Operative builders	153	58.1	57.5	54.9	55.3		29.4	28.7	26.1	26.0	
Nonresidential building construction	154	596.3	607.2	606.7	621.6		467.6	478.0	473.3	486.8	
Heavy construction contractors	16	829.8	843.2	834.3	843.6		702.0	714.8	706.6	715.1	
Highway and street construction	161	320.6	325.5	322.2	325.6		273.4	277.7	272.4	275.5	
Heavy construction, except highway	162	509.2	517.7	512.1	518.0		428.6	437.1	434.2	439.6	
Special trade contractors	17	3,064.9	3,105.9	3,222.6	3,314.4		2,437.2	2,479.4	2,558.6	2,645.5	
Plumbing, heating, and air conditioning	171	655.0	659.6	674.9	691.8		487.4	492.3	499.6	515.9	
Painting, paper hanging, and decorating	172	191.0	189.9	191.3	197.3		163.2	162.2	162.3	168.8	-
Electrical work	173	542.6	554.2	577.1	594.6		421.0	433.7	448.3	465.2	
Masonry, stonework, and plastering	174	507.2	513.5	538.6	563.5	-	435.1	442.2	465.9	489.7	
Carpentering and flooring	175	198.4	197.3	195.3	198.1		155.6	154.1	153.1	155.3	
Roofing and sheet metal work	176	222.2	226.5	219.2	227.3		180.1	183.9	174.3	182.0	
Manufacturing		18,982	19,198	19,651	19,500	19,668	12,893	13,098	13,424	13,266	13,434
Durable goods		11,127	11,232	11,582	11,496	11,552	7,352	7,453	7,728	7,636	7,696
Lumber and wood products	24	759.5	763.3	775.4	776.4	779.9	637.4	640.4	648.8	649.0	652.4
Logging camps and logging contractors	241	90.9	91.3	91.5	94.9	-	76.5	76.9	76.4	79.6	-
Sawmills and planing mills	242	203.6	204.0	206.0	205.1		180.1	180.5	181.7	180.5	
Sawmills and planing mills, general	2421	166.9	166.6	168.4	168.4		147.6	147.5	148.5	148.3	
Hardwood dimension and flooring	2426	33.2	33.9	34.2	33.1		29.3	29.8	30.2	29.1	
Millwork, plywood, and structural members	243	268.3	269.0	272.2	273.3		222.2	222.7	224.8	225.6	
Millwork	2431	104.7	105.0	107.8	108.1		85.8	85.5	87.4	88.0	
Wood kitchen cabinets	2434	71.4	71.5	71.3	71.7		57.3	57.6	57.2	57.4	
Hardwood veneer and plywood	2435	23.9	24.5	24.7	24.4		20.8	21.4	21.7	21.3	
Softwood veneer and plywood	2436	38.5	38.3	38.1	38.1		35.1	34.9	34.5	34.4	
Wood containers	244	42.8	42.7	45.1	44.4		36.5	36.4	38.6	37.8	-
Wood buildings and mobile homes	245	72.3	73.3	75.1	75.2	-	55.0	55.9	57.1	57.5	
Mobile homes	2451	48.0	48.5	50.4	50.3		39.0	39.5	41.1	41.0	-
Miscellaneous wood products	249	81.6	83.0	85.5	83.5	-	67.1	68.0	70.2	68.0	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^P	Aug. 1988 ^P	July 1987	Aug. 1987	June 1988	July 1988 ^P	Aug. 1988 ^P
Durable goods—Continued											
Furniture and fixtures	25	510.0	521.8	534.9	526.5	535.3	406.9	417.4	426.9	418.2	426.8
Household furniture	251	300.2	306.5	315.9	306.1	-	253.3	258.8	267.2	257.8	-
Wood household furniture	2511	135.7	139.1	144.1	138.0	-	118.6	121.8	125.9	119.9	-
Upholstered household furniture	2512	97.5	99.8	102.9	100.7	-	81.5	83.6	86.2	84.5	-
Metal household furniture	2514	23.6	22.9	26.2	23.9	-	18.9	18.1	21.0	19.1	-
Mattresses and bedsprings	2515	28.1	29.0	30.0	30.3	-	21.3	22.1	23.3	23.5	-
Office furniture	252	66.4	68.8	68.0	68.5	-	50.0	52.0	51.2	51.5	-
Public building and related furniture	253	28.8	29.3	30.7	30.7	-	22.0	22.5	23.8	23.8	-
Partitions and fixtures	254	75.6	77.2	77.7	78.3	-	54.4	56.0	56.2	56.4	-
Miscellaneous furniture and fixtures	259	39.0	40.0	42.6	42.9	-	27.2	28.1	28.5	28.7	-
Stone, clay, and glass products	32	589.2	593.1	599.9	598.0	597.3	456.1	460.2	468.7	466.3	466.3
Flat glass	321	15.2	14.7	15.0	15.2	-	11.9	11.4	11.8	11.9	-
Glass and glassware, pressed or blown	322	86.2	87.0	87.0	84.9	-	73.9	74.8	75.3	73.3	-
Glass containers	3221	45.2	45.1	44.5	43.3	-	40.7	40.7	40.4	39.3	-
Pressed and blown glass, nec	3229	41.0	41.9	42.5	41.6	-	33.2	34.1	34.9	34.0	-
Products of purchased glass	323	50.5	51.0	52.4	52.2	-	35.6	36.2	39.2	39.3	-
Cement, hydraulic	324	21.4	21.4	20.7	20.9	-	16.7	16.6	15.9	16.0	-
Structural clay products	325	37.9	38.4	39.4	39.4	-	29.6	30.3	30.9	30.7	-
Pottery and related products	326	36.1	36.7	38.5	37.9	-	28.7	29.4	30.9	30.2	-
Concrete, gypsum, and plaster products	327	218.7	219.7	219.3	219.9	-	170.6	171.1	170.1	170.4	-
Concrete block and brick	3271	20.7	20.7	21.0	21.2	-	14.0	13.8	13.8	13.9	-
Concrete products, nec	3272	71.7	72.3	73.8	73.8	-	55.0	55.5	56.1	56.4	-
Ready-mixed concrete	3273	106.7	107.2	105.5	105.8	-	86.6	86.9	85.4	85.3	-
Misc. nonmetallic mineral products	329	110.8	111.3	114.1	114.3	-	79.6	80.2	84.0	84.1	-
Abrasive products	3291	21.5	21.5	22.1	22.1	-	14.6	14.6	15.3	15.3	-
Asbestos products	3292	8.7	8.7	8.9	8.9	-	6.7	6.7	6.7	6.7	-
Mineral wool	3296	25.0	25.0	24.3	24.4	-	-	-	-	-	-
Primary metal industries	33	741.5	752.8	786.1	777.4	783.3	555.5	568.4	602.1	593.6	599.7
Blast furnaces and basic steel products	331	272.3	273.7	282.8	281.9	282.2	205.8	208.0	219.4	218.8	219.7
Blast furnaces and steel mills	3312	206.7	207.5	212.8	212.0	-	157.6	159.2	166.4	166.0	-
Steel pipe and tubes	3317	23.4	23.8	25.5	25.1	-	16.9	17.4	19.4	18.9	-
Iron and steel foundries	332	128.2	130.0	140.5	138.4	-	100.2	102.2	112.8	110.8	-
Gray iron foundries	3321	78.7	80.7	85.8	83.8	-	63.4	65.3	70.4	68.4	-
Malleable iron foundries	3322	8.7	8.9	9.5	8.9	-	6.1	6.4	7.1	6.7	-
Steel foundries, nec	3325	27.0	26.6	30.9	31.4	-	20.2	19.9	24.1	24.5	-
Primary nonferrous metals	333	39.8	40.0	41.6	42.0	-	28.2	28.6	30.8	30.9	-
Primary aluminum	3334	21.1	21.3	22.3	22.6	-	14.9	15.2	16.8	17.0	-
Nonferrous rolling and drawing	335	178.5	181.6	186.1	182.6	-	126.6	130.1	133.7	129.8	-
Copper rolling and drawing	3351	23.1	23.5	24.6	23.8	-	17.9	18.4	18.8	18.0	-
Aluminum sheet, plate, and foil	3353	28.2	28.2	27.7	27.7	-	20.5	20.5	19.3	19.1	-
Nonferrous wire drawing and insulating	3357	75.7	77.7	81.2	78.3	-	52.5	54.8	58.7	55.8	-
Nonferrous foundries	336	81.1	85.5	90.2	88.2	-	64.2	68.7	72.4	70.7	-
Aluminum foundries	3361	50.0	52.9	55.6	54.6	-	40.2	43.2	45.5	44.8	-
Fabricated metal products	34	1,387.9	1,403.9	1,462.6	1,448.1	1,457.1	1,025.8	1,041.0	1,091.1	1,077.4	1,087.5
Metal cans and shipping containers	341	56.3	56.6	55.6	55.3	-	48.1	48.3	47.6	47.5	-
Metal cans	3411	45.5	45.8	44.5	44.3	-	39.5	39.7	38.6	38.5	-
Cutlery, hand tools, and hardware	342	130.2	131.3	134.6	132.1	-	95.1	96.3	100.1	97.8	-
Hand and edge tools, and hand saws and blades	3423,5	44.9	45.2	46.5	46.0	-	32.8	33.2	34.0	33.6	-
Hardware, nec	3429	74.7	75.1	77.0	75.2	-	55.3	55.8	58.5	56.8	-
Plumbing and heating, except electric	343	59.9	60.9	62.9	63.3	-	42.6	43.4	45.3	45.7	-
Plumbing fittings and brass goods	3432	24.7	24.7	25.9	25.8	-	17.9	18.0	18.9	18.7	-
Heating equipment, except electric	3433	24.3	25.5	24.9	25.5	-	16.4	17.4	17.0	17.7	-
Fabricated structural metal products	344	428.3	431.6	443.2	445.0	-	305.9	309.1	319.2	320.1	-
Fabricated structural metal	3441	77.1	77.6	79.1	79.4	-	55.0	55.5	57.1	57.5	-
Metal doors, sash, and trim	3442	94.2	95.4	95.9	96.7	-	70.7	71.5	70.9	71.4	-
Fabricated plate work (boiler shops)	3443	84.6	85.6	91.7	91.4	-	53.7	55.0	61.4	61.1	-
Sheet metal work	3444	109.6	110.0	113.0	113.8	-	82.5	83.1	85.1	85.5	-
Architectural metal work	3446	30.4	30.6	31.3	31.2	-	22.3	22.3	23.2	22.9	-

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 ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Fabricated metal products—Continued											
Screw machine products, bolts, etc	345	90.7	91.5	98.3	96.5		68.8	69.8	75.4	74.0	
Screw machine products	3451	45.5	45.6	50.9	49.8		37.0	37.2	41.7	41.0	
Bolts, nuts, rivets, and washers	3452	45.2	45.9	47.4	46.7		31.8	32.6	33.7	33.0	
Metal forgings and stampings	346	223.3	227.4	238.4	232.0		176.1	179.4	190.1	183.6	
Iron and steel forgings	3462	29.0	28.8	30.5	29.7		22.1	21.9	23.5	22.8	
Automotive stampings	3465	90.2	91.8	96.7	92.1		76.2	77.2	82.4	77.4	
Metal stampings, nec	3469	93.2	95.7	99.7	98.9		70.0	72.4	75.7	75.0	
Metal services, nec	347	110.3	112.5	119.6	116.3		87.9	90.3	96.0	92.8	
Plating and polishing	3471	71.1	73.3	77.5	75.6		57.0	59.2	62.7	60.7	
Metal coating and allied services	3479	39.2	39.2	42.1	40.7		30.9	31.1	33.3	32.1	
Ordnance and accessories, nec	348	76.3	76.5	78.7	77.7		47.5	47.9	49.1	49.1	
Ammunition, except for small arms, nec	3483	42.0	42.0	43.2	42.6		24.3	24.4	24.0	24.3	
Misc. fabricated metal products	349	212.6	215.6	231.3	229.9	-	153.8	156.5	168.3	166.8	
Valves and pipe fittings	3494	78.6	80.0	87.0	87.5	-	52.5	53.6	58.8	59.2	
Misc. fabricated wire products	3496	51.5	52.0	55.1	54.7	-	39.1	39.6	42.3	41.7	
Machinery, except electrical	35	2,011.9	2,019.7	2,144.5	2,141.8	2,148.8	1,185.5	1,194.3	1,280.8	1,273.9	1,277.8
Engines and turbines	351	87.3	86.1	87.5	87.1	-	55.2	54.4	58.3	57.6	-
Turbines and turbine generator sets	3511	24.6	24.2	22.3	22.4		12.7	12.6	13.0	13.0	
Internal combustion engines, nec	3519	62.7	61.9	65.2	64.7		42.5	41.8	45.3	44.6	
Farm and garden machinery	352	92.3	92.6	105.0	102.6		61.3	62.1	74.4	72.3	
Farm machinery and equipment	3523	69.4	69.1	76.3	76.3		44.4	44.7	52.0	52.1	
Construction and related machinery	353	212.5	215.5	235.1	233.9		126.2	128.4	143.3	142.9	
Construction machinery	3531	78.7	79.4	85.6	83.8		47.2	47.6	52.6	51.8	
Mining machinery	3532	17.0	17.2	18.4	18.3		10.3	10.4	11.2	11.3	
Oil field machinery	3533	36.4	37.8	44.3	44.5		21.4	22.4	26.9	26.9	
Conveyors and conveying equipment	3535	32.5	32.8	33.6	34.2		16.9	17.1	18.1	18.3	
Industrial trucks and tractors	3537	24.4	24.6	26.8	26.5		16.9	17.3	18.5	18.4	
Metalworking machinery	354	284.7	285.6	299.0	298.1		203.0	203.9	213.9	213.2	
Machine tools, metal cutting types	3541	44.8	44.6	46.0	46.1		27.9	27.9	29.1	29.1	
Machine tools, metal forming types	3542	16.6	16.4	17.5	17.5		10.3	10.2	11.2	11.2	
Special dies, tools, jigs, and fixtures	3544	135.0	135.5	140.8	140.7		103.2	103.5	107.7	107.7	
Machine tool accessories	3545	51.1	51.8	55.8	55.6		36.1	36.6	39.6	39.4	
Power driven hand tools	3546	20.2	20.2	20.6	20.1		14.8	14.9	15.0	14.6	
Special industry machinery	355	160.8	161.6	172.5	172.7		95.2	96.3	103.8	103.7	
Food products machinery	3551	37.7	38.0	40.3	40.6		22.7	23.0	24.4	24.5	
Textile machinery	3552	19.4	19.9	21.1	20.8		12.8	13.3	14.1	13.8	
Printing trades machinery	3555	26.8	26.6	28.7	28.8		15.7	15.6	17.4	17.5	
General industrial machinery	356	245.6	244.6	257.8	258.6		156.0	156.1	166.4	166.3	
Pumps and pumping equipment	3561	43.4	43.5	45.5	45.9		25.0	24.8	26.7	26.9	
Ball and roller bearings	3562	40.9	40.5	42.9	42.3		31.3	31.3	33.3	32.8	
Air and gas compressors	3563	20.5	20.1	21.1	21.1		11.5	11.6	12.4	12.3	
Blowers and fans	3564	29.7	29.7	30.4	30.4		19.1	19.1	19.5	19.5	
Speed changers, drives, and gears	3566	19.2	19.1	20.3	20.5		13.0	12.9	13.9	14.0	
Power transmission equipment, nec	3568	16.1	16.1	17.7	17.4		10.4	10.6	11.9	11.6	
Office and computing machines	357	484.9	489.6	513.9	516.0		162.2	165.7	168.3	166.3	
Electronic computing equipment	3573	431.9	436.7	459.1	461.5		137.1	140.9	142.2	141.1	
Refrigeration and service machinery	358	175.1	174.8	183.2	182.6		124.6	124.6	132.4	131.9	
Refrigeration and heating equipment	3585	125.0	124.4	131.4	131.2		91.3	90.9	97.4	97.0	
Misc. machinery, except electrical	359	268.7	269.3	290.5	290.2		201.8	202.8	220.0	219.7	
Carburetors, pistons, rings, and valves	3592	30.2	31.0	32.2	31.3		24.1	24.7	25.7	24.8	
Machinery, except electrical, nec	3599	238.5	238.3	258.3	258.9		177.7	178.1	194.3	194.9	
Electrical and electronic equipment	36	2,064.3	2,080.6	2,126.5	2,110.7	2,128.8	1,204.4	1,219.5	1,250.8	1,238.0	1,258.8
Electric distributing equipment	361	106.9	107.5	109.7	109.9	-	77.2	77.5	78.5	78.8	-
Transformers	3612	48.4	48.9	49.6	49.8		35.3	35.6	35.6	36.1	
Switchgear and switchboard apparatus	3613	58.5	58.6	60.1	60.1		41.9	41.9	42.9	42.7	
Electrical industrial apparatus	362	180.1	180.9	188.4	187.4		122.9	124.0	131.1	130.0	
Motors and generators	3621	86.0	85.8	90.6	89.6		65.7	65.6	70.9	70.3	
Industrial controls	3622	59.8	60.2	62.2	62.1		33.8	34.5	36.2	35.8	
Household appliances	363	134.5	135.4	135.6	134.3		106.8	107.5	108.6	107.7	
Household refrigerators and freezers	3632	28.8	29.0	29.4	29.6		23.4	23.5	24.1	24.0	
Household laundry equipment	3633	22.5	22.0	22.7	22.8		17.7	17.3	18.4	18.6	
Electric housewares and fans	3634	34.4	35.3	35.7	34.7	-	26.3	27.2	28.0	27.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Electrical and electronic equipment—Continued											
Electric lighting and wiring equipment	364	188.1	189.6	192.9	187.6	-	136.0	137.5	139.9	135.3	-
Electric lamps	3641	25.6	25.2	25.7	25.3	-	21.9	21.5	22.0	21.6	-
Current-carrying wiring devices	3643	75.1	74.9	75.5	72.6	-	49.6	49.8	49.6	47.2	-
Noncurrent-carrying wiring devices	3644	14.6	15.2	15.8	15.1	-	10.5	11.0	11.7	10.9	-
Residential lighting fixtures	3645	25.6	26.2	26.9	26.8	-	19.1	19.8	20.2	20.3	-
Radio and TV receiving equipment	365	79.0	84.4	81.8	81.9	-	52.8	58.0	55.9	56.3	-
Radio and TV receiving sets	3651	58.9	63.8	61.5	61.8	-	38.2	42.8	40.4	41.0	-
Communication equipment	366	605.1	606.2	600.1	597.2	-	253.3	253.2	252.3	251.6	-
Telephone and telegraph apparatus	3661	116.8	117.3	118.1	117.7	-	67.3	66.4	70.6	71.1	-
Radio and TV communication equipment	3662	488.3	488.9	482.0	479.5	-	186.0	186.8	181.7	180.5	-
Electronic components and accessories	367	624.3	628.5	665.7	661.9	-	353.7	358.5	377.2	372.5	-
Electronic tubes	3671-3	37.7	38.2	39.1	37.8	-	23.8	24.3	25.0	23.9	-
Semiconductors and related devices	3674	246.7	247.7	266.3	266.9	-	94.8	96.1	105.1	104.3	-
Electronic components, nec	3679	268.1	270.2	281.9	279.5	-	181.2	183.5	189.2	186.8	-
Misc. electrical equipment and supplies	369	146.3	148.1	152.3	150.5	-	101.7	103.3	107.3	105.8	-
Storage batteries	3691	26.3	27.9	29.2	29.1	-	20.4	21.8	22.1	21.9	-
Engine electrical equipment	3694	64.7	65.0	67.1	66.1	-	48.9	49.0	51.3	50.4	-
Transportation equipment	37	2,006.6	2,026.2	2,051.0	2,026.2	2,015.5	1,242.7	1,260.2	1,281.5	1,252.9	1,245.4
Motor vehicles and equipment	371	826.0	844.3	857.2	840.6	829.7	633.0	650.2	668.0	651.2	644.2
Motor vehicles and car bodies	3711	350.3	364.8	360.1	348.3	-	254.9	269.1	269.9	258.3	-
Truck and bus bodies	3713	43.9	43.6	44.0	43.6	-	34.7	34.3	34.4	34.0	-
Motor vehicle parts and accessories	3714	382.4	386.3	400.2	395.2	-	304.6	307.8	321.8	316.4	-
Truck trailers	3715	31.6	31.6	32.8	32.9	-	24.7	24.9	26.0	26.2	-
Aircraft and parts	372	702.4	700.3	698.5	697.8	-	346.7	344.8	340.2	338.0	-
Aircraft	3721	359.3	360.8	368.6	368.7	-	157.9	159.5	162.2	161.1	-
Aircraft engines and engine parts	3724	156.5	154.3	150.1	149.6	-	78.7	76.2	73.6	73.0	-
Aircraft equipment, nec	3728	186.6	185.2	179.8	179.5	-	110.1	109.1	104.4	103.9	-
Ship and boat building and repairing	373	184.3	185.8	196.4	188.8	-	137.1	138.9	148.6	139.0	-
Ship building and repairing	3731	122.1	124.4	128.3	122.2	-	86.8	89.5	92.7	84.3	-
Boat building and repairing	3732	62.2	61.4	68.1	66.6	-	50.3	49.4	55.9	54.7	-
Railroad equipment	374	26.7	27.6	31.1	31.8	-	18.2	19.1	22.7	23.2	-
Guided missiles, space vehicles, and parts	376	204.1	204.8	205.0	205.7	-	65.0	64.6	59.7	60.4	-
Guided missiles and space vehicles	3761	154.9	155.2	153.1	153.8	-	47.7	48.0	41.8	42.6	-
Miscellaneous transportation equipment	379	51.5	51.9	51.8	50.7	-	34.6	34.6	34.8	33.8	-
Travel trailers and campers	3792	19.9	20.5	20.6	20.3	-	15.4	15.6	16.2	16.0	-
Instruments and related products	38	694.4	696.3	715.5	714.1	718.5	375.4	377.2	396.0	393.8	398.1
Engineering and scientific instruments	381	82.8	83.1	86.0	86.7	-	37.3	37.4	40.0	40.1	-
Measuring and controlling devices	382	236.9	237.0	235.7	235.3	-	131.8	132.0	134.4	133.6	-
Environmental controls	3822	40.8	41.7	41.4	41.4	-	26.0	26.8	27.3	27.4	-
Process control instruments	3823	52.9	53.1	53.3	53.6	-	27.4	27.6	28.8	28.8	-
Instruments to measure electricity	3825	102.3	102.0	100.9	100.5	-	50.6	50.4	50.9	50.3	-
Optical instruments and lenses	383	33.7	33.5	34.8	35.0	-	16.7	16.1	17.7	17.9	-
Medical instruments and supplies	384	185.5	187.2	199.8	198.3	-	110.0	111.7	121.8	120.7	-
Surgical and medical instruments	3841	92.0	93.2	97.6	97.7	-	52.3	53.6	56.8	56.9	-
Surgical appliances and supplies	3842	79.6	80.0	87.2	85.6	-	49.8	50.2	56.4	55.3	-
Ophthalmic goods	385	36.6	36.8	38.8	38.1	-	25.0	25.3	26.6	25.8	-
Photographic equipment and supplies	386	107.7	107.3	109.7	110.1	-	46.6	46.4	47.6	47.9	-
Watches, clocks, and watchcases	387	11.2	11.4	10.7	10.6	-	8.0	8.3	7.9	7.8	-
Miscellaneous manufacturing	39	361.2	374.5	385.1	376.7	387.5	262.6	273.9	281.7	273.2	283.6
Jewelry, silverware, and plated ware	391	50.5	53.9	55.4	52.4	-	34.8	37.3	39.0	36.1	-
Jewelry, precious metal	3911	35.0	38.1	39.1	36.7	-	23.9	26.1	27.4	25.1	-
Musical instruments	393	11.8	12.7	12.5	12.0	-	9.7	10.7	10.5	10.0	-
Toys and sporting goods	394	95.4	99.1	105.6	105.4	-	71.5	74.8	79.1	78.6	-
Dolls, games, toys, and children's vehicles	3942,4	43.1	46.5	47.1	47.6	-	31.7	34.7	34.2	34.3	-
Sporting and athletic goods, nec	3949	52.3	52.6	58.5	57.8	-	39.8	40.1	44.9	44.3	-
Pens, pencils, office, and art supplies	395	32.4	32.9	34.1	33.8	-	22.6	22.8	24.3	24.0	-
Costume jewelry and notions	396	38.7	42.7	39.9	36.1	-	29.7	33.2	31.1	27.5	-
Costume jewelry	3961	19.6	22.4	20.8	17.7	-	14.9	17.4	16.1	13.2	-
Miscellaneous manufactures	399	132.4	133.2	137.6	137.0	-	94.3	95.1	97.7	97.0	-
Signs and advertising displays	3993	57.6	58.6	59.9	60.0	-	39.9	40.6	41.4	41.5	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods		7,855	7,966	8,069	8,004	8,116	5,541	5,645	5,696	5,630	5,738
Food and kindred products	20	1,667.4	1,712.9	1,648.4	1,670.6	1,714.5	1,186.8	1,231.7	1,166.8	1,187.5	1,229.2
Meat products	201	387.2	389.1	396.9	400.8	-	327.5	329.5	336.4	338.9	-
Meat packing plants	2011	134.2	135.8	141.5	142.1	-	112.2	113.8	118.4	118.8	-
Sausages and other prepared meats	2013	80.5	80.3	80.6	80.4	-	59.0	59.0	59.5	59.4	-
Poultry dressing plants	2016	151.3	151.9	154.3	157.6	-	137.0	137.5	140.2	142.2	-
Dairy products	202	167.2	166.3	168.9	168.8	-	103.0	101.8	103.0	102.8	-
Cheese, natural and processed	2022	42.7	42.6	43.9	43.8	-	32.8	32.8	33.6	33.5	-
Fluid milk	2026	81.8	81.5	81.9	81.6	-	41.3	41.0	40.6	40.6	-
Preserved fruits and vegetables	203	273.7	307.4	240.5	257.7	-	229.2	262.7	196.4	213.7	-
Canned specialties	2032	23.7	26.7	23.3	24.1	-	16.5	19.4	16.4	17.1	-
Canned fruits and vegetables	2033	102.1	129.6	75.7	91.3	-	87.2	114.6	61.7	77.5	-
Frozen fruits and vegetables	2037	54.4	54.6	49.0	47.1	-	48.5	49.0	43.3	41.4	-
Grain mill products	204	124.7	127.5	132.1	132.2	-	85.4	87.6	91.8	92.0	-
Flour and other grain mill products	2041	22.7	22.7	24.0	24.2	-	15.2	15.3	16.6	16.8	-
Prepared feeds, nec	2048	42.0	42.4	44.3	44.3	-	26.5	26.6	28.0	28.0	-
Bakery products	205	210.1	210.2	207.9	207.5	-	128.1	128.5	126.7	126.1	-
Bread, cake, and related products	2051	164.3	163.7	162.2	161.6	-	91.2	91.2	91.5	90.8	-
Cookies and crackers	2052	45.8	46.5	45.7	45.9	-	36.9	37.3	35.2	35.3	-
Sugar and confectionery products	206	85.3	92.8	90.8	90.7	-	65.6	72.9	70.5	70.7	-
Cane and beet sugar	2061-3	17.1	19.0	18.9	17.3	-	12.8	14.7	14.3	13.0	-
Confectionery products	2065	48.3	53.5	52.4	53.4	-	39.4	44.3	43.1	44.2	-
Fats and oils	207	33.5	33.9	34.1	34.0	-	23.6	23.9	25.0	25.2	-
Beverages	208	208.9	208.2	202.8	202.7	-	90.6	90.1	86.2	85.7	-
Malt beverages	2082	41.3	40.8	39.9	40.3	-	26.1	25.8	24.3	24.1	-
Bottled and canned soft drinks	2086	123.4	122.2	120.7	121.5	-	41.1	40.4	40.8	41.5	-
Misc. food and kindred products	209	176.8	177.5	174.4	176.2	-	133.8	134.7	130.8	132.4	-
Tobacco manufactures	21	51.4	54.3	49.7	48.9	51.1	38.2	40.9	36.6	35.7	37.4
Cigarettes	211	40.4	40.3	38.5	38.4	-	30.3	30.2	29.0	28.7	-
Textile mill products	22	717.1	731.8	731.1	716.4	724.2	622.6	635.2	634.1	620.6	627.2
Weaving mills, cotton	221	100.2	100.8	99.4	98.4	-	90.6	91.2	90.0	89.0	-
Weaving mills, synthetics	222	86.8	88.4	92.6	91.5	-	77.4	78.6	81.9	81.0	-
Weaving and finishing mills, wool	223	16.4	18.7	19.6	18.8	-	13.3	15.3	16.1	15.2	-
Narrow fabric mills	224	22.3	23.4	24.7	23.5	-	19.2	20.3	21.1	19.9	-
Knitting mills	225	213.2	215.2	210.3	206.8	-	187.1	189.0	185.6	182.7	-
Women's hosiery, except socks	2251	35.7	35.7	33.6	32.6	-	31.9	31.9	30.9	29.9	-
Hosiery, nec	2252	35.6	35.8	35.4	35.1	-	32.0	32.2	31.8	31.6	-
Knit outerwear mills	2253	71.7	72.5	70.5	69.7	-	63.9	64.7	62.8	62.2	-
Knit underwear mills	2254	25.6	25.9	25.7	25.2	-	21.6	21.9	21.6	21.3	-
Circular knit fabric mills	2257	25.8	26.1	25.7	25.3	-	22.5	22.6	22.4	22.0	-
Textile finishing, except wool	226	58.7	60.7	58.7	56.1	-	49.2	50.8	48.9	46.5	-
Finishing plants, cotton	2261	23.0	24.1	24.0	22.5	-	19.4	20.4	19.9	18.5	-
Finishing plants, synthetics	2262	21.8	22.5	21.1	20.5	-	17.7	18.2	17.1	16.6	-
Floor covering mills	227	57.7	58.7	58.8	58.5	-	46.8	47.6	47.5	47.1	-
Yarn and thread mills	228	109.3	112.0	111.9	109.1	-	98.1	100.4	100.1	97.6	-
Yarn mills, except wool	2281	81.1	82.5	83.0	81.5	-	73.5	74.8	75.1	73.8	-
Throwing and winding mills	2282	15.4	15.5	15.1	14.8	-	13.7	13.7	13.3	13.0	-
Miscellaneous textile goods	229	52.5	53.9	55.1	53.7	-	40.9	42.0	42.9	41.6	-
Apparel and other textile products	23	1,081.0	1,099.4	1,107.9	1,057.7	1,092.2	906.2	922.7	932.6	885.9	919.4
Men's and boys' suits and coats	231	57.6	57.3	59.1	57.1	-	49.4	49.2	51.1	49.1	-
Men's and boys' furnishings	232	305.6	308.9	314.6	304.5	-	263.6	266.3	271.5	262.4	-
Men's and boys' shirts and nightwear	2321	85.7	86.5	85.6	82.6	-	73.6	74.2	73.5	70.9	-
Men's and boys' separate trousers	2327	48.0	48.9	50.1	47.9	-	42.0	42.8	43.7	41.7	-
Men's and boys' work clothing	2328	94.8	95.6	97.4	94.7	-	82.8	83.4	85.0	82.9	-
Women's and misses' outerwear	233	341.7	352.6	350.8	321.8	-	284.0	293.7	292.9	265.6	-
Women's and misses' blouses and waists	2331	46.4	46.7	45.3	41.7	-	38.5	38.7	37.4	33.9	-
Women's and misses' dresses	2335	77.6	82.6	83.0	73.5	-	64.5	69.0	69.0	59.9	-
Women's and misses' suits and coats	2337	42.0	43.3	42.4	40.8	-	34.7	36.0	34.7	33.5	-
Women's and misses' outerwear, nec	2339	175.7	180.0	180.1	165.8	-	146.3	150.0	151.8	138.3	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	71.8	72.4	71.4	69.3		58.6	59.3	59.0	57.2	
Women's and children's underwear	2341	58.7	59.4	58.3	57.3		49.6	50.4	49.9	49.1	
Brassieres and allied garments	2342	13.1	13.0	13.1	12.0		9.0	8.9	9.1	8.1	
Children's outerwear	236	59.3	58.6	57.0	55.7		49.5	48.9	48.2	46.9	
Children's dresses and blouses	2361	25.1	24.7	23.6	23.3		22.0	21.7	20.6	20.3	
Misc. apparel and accessories	238	40.7	41.9	42.8	41.1		34.0	35.2	35.4	34.1	
Misc. fabricated textile products	239	186.3	190.0	194.2	190.4		152.8	156.1	160.3	156.6	
Curtains and draperies	2391	25.1	25.6	25.2	24.5		20.4	20.8	20.7	20.1	
House furnishings, nec	2392	51.8	53.0	53.2	53.1		43.8	45.1	45.2	44.7	
Automotive and apparel trimmings	2396	37.8	38.5	39.7	38.0		31.5	32.1	32.9	31.2	
Paper and allied products	26	679.1	682.8	697.2	692.1	695.6	515.6	518.2	528.6	524.1	527.4
Paper and pulp mills	261,2,6	190.5	191.4	195.8	194.7	-	144.9	145.3	149.8	148.6	-
Paper mills, except building paper	262	167.1	168.2	171.9	171.1		126.5	127.1	130.8	129.9	
Paperboard mills	263	54.5	54.0	54.3	54.4		40.9	40.7	41.2	41.5	
Misc. converted paper products	264	232.4	233.9	237.2	236.0		172.8	173.5	174.2	173.2	
Paper coating and glazing	2641	58.9	59.2	59.0	59.5		38.2	38.0	36.3	36.4	
Envelopes	2642	26.5	26.6	27.5	26.6		20.3	20.5	21.0	20.3	
Bags, except textile bags	2643	51.7	52.1	53.5	53.0		40.8	41.0	41.9	41.5	
Paperboard containers and boxes	265	201.7	203.5	209.9	207.0		157.0	158.7	163.4	160.8	
Folding paperboard boxes	2651	44.0	44.7	46.0	45.1		34.7	35.2	36.6	35.8	
Corrugated and solid fiber boxes	2653	109.5	110.1	113.3	112.2		83.3	83.9	85.4	84.4	
Sanitary food containers	2654	23.0	22.9	24.0	24.2		19.8	19.8	20.6	20.7	
Printing and publishing	27	1,506.3	1,509.7	1,566.1	1,564.2	1,566.8	837.7	841.7	876.0	871.5	873.4
Newspapers	271	469.8	470.2	479.3	477.7	-	170.3	170.9	172.0	171.5	-
Periodicals	272	122.0	123.0	126.9	128.0		45.3	45.8	45.6	45.4	
Books	273	110.4	110.6	114.3	113.4		58.6	58.8	61.7	60.6	
Book publishing	2731	82.1	82.4	85.1	84.3		36.4	36.8	38.2	37.2	
Book printing	2732	28.3	28.2	29.2	29.1		22.2	22.0	23.5	23.4	
Miscellaneous publishing	274	78.5	78.2	82.6	82.6		42.0	41.5	42.6	41.8	
Commercial printing	275	526.0	527.5	552.9	551.3		380.4	382.1	403.3	400.8	
Commercial printing, letterpress	2751	163.1	164.0	171.1	171.0		117.1	117.9	122.8	122.1	
Commercial printing, lithographic	2752	335.5	335.9	352.2	351.1		241.4	242.1	256.8	256.6	
Manifold business forms	276	49.2	49.4	51.4	51.3		33.9	34.0	35.2	35.0	
Blankbooks and bookbinding	278	73.2	73.4	78.9	79.4		58.8	58.8	62.5	62.6	
Printing trade services	279	53.1	53.4	55.9	56.2		39.7	40.0	41.2	41.5	
Chemicals and allied products	28	1,031.6	1,035.3	1,071.6	1,075.0	1,079.5	578.7	582.5	604.1	604.7	609.1
Industrial inorganic chemicals	281	129.7	130.4	133.9	134.2	-	67.0	67.6	67.6	67.5	-
Industrial inorganic chemicals, nec	2819	86.0	86.8	89.9	89.7		47.8	48.6	48.7	48.5	
Plastics materials and synthetics	282	168.0	168.0	171.0	171.5		110.3	110.2	112.2	112.8	
Plastics materials and resins	2821	76.7	76.8	79.4	79.8		45.2	45.2	46.7	47.2	
Organic fibers, noncellulosic	2824	64.0	64.2	64.3	64.3		45.0	45.2	45.6	45.7	
Drugs	283	216.7	216.9	230.4	231.8		99.5	99.1	103.7	103.8	
Pharmaceutical preparations	2834	171.3	171.3	182.8	183.3		77.0	76.6	80.3	80.1	
Soap, cleaners, and toilet goods	284	153.9	157.4	164.7	165.4		98.1	101.4	107.4	107.4	
Soap and other detergents	2841	44.6	44.8	45.4	45.7		28.1	28.2	28.3	28.6	
Polishing, sanitation, and finishing preparations	2842,3	41.1	41.4	43.1	43.3		22.9	23.2	25.0	24.8	
Toilet preparations	2844	68.2	71.2	76.2	76.4		47.1	50.0	54.1	54.0	
Paints and allied products	285	63.5	63.3	62.8	63.4		31.6	31.3	31.4	31.8	
Industrial organic chemicals	286	151.7	151.5	156.3	157.6		85.4	86.2	90.2	91.4	
Cyclic crudes and intermediates	2865	28.9	29.1	29.9	30.2		18.7	18.8	18.4	18.6	
Gum, wood, and industrial organic chemicals, nec	2861,9	122.8	122.4	126.4	127.4		66.7	67.4	71.8	72.8	
Agricultural chemicals	287	50.9	50.5	53.2	52.0		31.7	31.4	34.2	33.0	
Miscellaneous chemical products	289	97.2	97.3	99.3	99.1		55.1	55.3	57.4	57.0	
Petroleum and coal products	29	168.1	168.4	169.6	170.7	170.9	110.4	110.7	110.5	112.2	113.5
Petroleum refining	291	127.8	127.8	128.7	129.6	-	81.7	81.8	82.1	83.6	-
Paving and roofing materials	295	27.9	28.2	27.8	27.9		21.6	21.8	21.3	21.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods—Continued											
Rubber and misc. plastics products	30	812.6	824.0	879.5	868.7	872.2	627.5	636.9	684.5	673.1	677.7
Tires and inner tubes	301	85.8	85.9	87.3	87.6	-	61.2	61.1	63.0	63.3	-
Rubber and plastics footwear	302	10.9	11.6	12.7	11.9	-	8.9	9.6	10.5	9.5	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	22.1	22.3	24.5	24.7	-	15.8	16.0	18.3	18.2	-
Fabricated rubber products, nec	306	101.8	103.2	109.4	107.8	-	77.4	78.7	84.3	82.6	-
Miscellaneous plastics products	307	592.0	601.0	645.6	636.7	-	464.2	471.5	508.4	499.5	-
Leather and leather products	31	139.9	147.5	148.1	140.0	149.4	117.4	124.0	122.3	114.7	123.6
Leather tanning and finishing	311	13.7	14.4	14.5	13.5	-	11.3	12.0	12.0	11.3	-
Footwear, except rubber	314	83.7	87.9	88.2	82.3	-	72.4	76.2	75.1	69.2	-
Men's footwear, except athletic	3143	36.8	38.0	39.2	36.6	-	30.2	31.2	31.5	29.1	-
Women's footwear, except athletic	3144	30.4	32.3	30.4	29.0	-	26.8	28.6	26.8	25.4	-
Luggage	316	10.3	10.8	11.7	11.2	-	7.2	7.6	8.2	7.9	-
Handbags and personal leather goods	317	15.4	16.3	15.6	15.5	-	12.7	13.4	12.1	12.1	-
Transportation and public utilities		5,377	5,398	5,616	5,597	5,614	4,456	4,475	4,664	4,641	4,660
Transportation		3,134	3,158	3,352	3,325	3,338					
Railroad transportation	40	314.5	314.7	306.3	305.4	-					
Class I railroads ²	4011	276.2	276.4	264.4	263.3	-					
Local and interurban passenger transit	41	243.9	243.1	307.9	259.9	-	221.4	220.9	283.5	235.3	-
Local and suburban transportation	411	108.2	108.1	115.6	115.2	-	98.7	98.7	105.5	104.6	-
Taxicabs	412	33.2	32.9	32.6	32.6	-	-	-	-	-	-
Intercity highway transportation	413	31.5	32.2	31.8	32.2	-	28.6	29.3	28.6	29.0	-
School buses	415	49.3	48.0	103.0	56.2	-	-	-	-	-	-
Trucking and warehousing	42	1,468.5	1,486.8	1,550.0	1,559.4	-	1,278.8	1,295.2	1,351.1	1,360.2	-
Trucking and trucking terminals	421,3	1,364.7	1,379.4	1,439.4	1,448.5	-	1,192.1	1,205.2	1,258.6	1,267.7	-
Public warehousing	422	103.8	107.4	110.6	110.9	-	86.7	90.0	92.5	92.5	-
Water transportation	44	180.6	178.6	188.2	192.5	-	-	-	-	-	-
Local water transportation	445	28.6	28.8	28.4	29.3	-	-	-	-	-	-
Water transportation services	446	98.4	95.0	106.8	109.8	-	-	-	-	-	-
Transportation by air	45	607.6	613.0	650.3	655.2	-	-	-	-	-	-
Air transportation	451,2	534.1	538.9	571.0	575.7	-	-	-	-	-	-
Air transportation services	458	73.5	74.1	79.3	79.5	-	-	-	-	-	-
Pipe lines, except natural gas	46	18.7	18.7	16.7	17.2	-	13.7	13.6	11.6	12.1	-
Transportation services	47	300.5	303.4	332.6	335.1	-	-	-	-	-	-
Freight forwarding	471	63.1	64.2	68.0	69.3	-	-	-	-	-	-
Communication and public utilities		2,243	2,240	2,264	2,272	2,276					
Communication	48	1,303.7	1,301.7	1,317.8	1,322.9	-	990.1	987.9	995.2	997.7	-
Telephone communication	481	916.5	914.6	913.2	916.8	-	678.6	676.9	669.9	670.7	-
Radio and television broadcasting	483	234.0	233.5	245.1	245.8	-	192.3	191.7	201.8	202.4	-
Radio broadcasting	4832	116.0	115.8	117.3	118.6	-	-	-	-	-	-
Television broadcasting	4833	118.0	117.7	127.8	127.2	-	-	-	-	-	-
Electric, gas, and sanitary services	49	938.8	938.1	946.4	948.9	-	745.5	745.6	750.4	753.3	-
Electric services	491	450.6	450.2	450.0	450.7	-	344.6	344.8	343.9	345.1	-
Gas production and distribution	492	168.9	168.5	189.7	170.8	-	134.2	134.1	134.6	135.7	-
Combination utility services	493	207.6	206.8	204.5	204.5	-	171.5	170.7	168.0	167.9	-
Sanitary services	495	84.1	85.2	94.0	94.6	-	72.9	73.8	81.6	82.1	-
Wholesale trade		5,908	5,926	6,181	6,206	6,225	4,739	4,752	4,986	5,008	5,028
Durable goods	50	3,467	3,480	3,678	3,697	3,713	2,751	2,760	2,941	2,958	-
Motor vehicles and automotive equipment	501	438.6	438.9	455.7	457.3	-	352.1	352.3	365.7	367.2	-
Automobiles and other motor vehicles	5012	113.0	113.0	119.7	119.8	-	-	-	-	-	-
Automotive parts and supplies	5013	295.0	294.9	305.2	306.4	-	-	-	-	-	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Wholesale trade—Continued											
Durable goods—Continued											
Furniture and home furnishings	502	143.0	144.4	144.7	144.8		115.6	117.1	116.8	116.9	
Furniture	5021	63.0	63.6	65.3	65.4		-	-	-	-	
Home furnishings	5023	80.0	80.8	79.4	79.4		-	-	-	-	
Lumber and construction materials	503	240.9	243.5	274.5	279.5		199.1	201.1	225.1	229.2	
Lumber, plywood, and millwork	5031	109.9	111.1	124.9	127.5		-	-	-	-	
Construction materials, nec	5039	131.0	132.4	149.6	152.0		-	-	-	-	
Sporting goods, toys, and hobby goods	504	84.3	84.0	88.6	88.9		69.9	69.4	73.0	72.8	
Metals and minerals, except petroleum	505	135.0	135.4	145.9	146.9		105.4	106.2	115.7	116.5	
Electrical goods	506	496.5	497.9	523.0	527.7		377.4	379.0	401.7	407.0	
Electrical apparatus and equipment	5063	273.1	274.1	289.8	294.1		-	-	-	-	
Electrical appliances, TV and radios	5064	68.3	68.4	68.9	68.6		-	-	-	-	
Electronic parts and equipment	5065	155.1	155.4	164.3	165.0		-	-	-	-	
Hardware, plumbing, and heating equipment	507	267.1	267.7	273.7	273.9		215.5	216.9	221.4	221.6	
Hardware	5072	91.8	91.9	94.1	94.2		-	-	-	-	
Plumbing and hydronic heating supplies	5074	109.5	109.6	112.5	112.6		-	-	-	-	
Machinery, equipment, and supplies	508	1,463.2	1,467.4	1,557.9	1,564.4		1,157.1	1,157.2	1,248.5	1,253.9	
Commercial machines and equipment	5081	544.8	546.4	578.3	578.8		-	-	-	-	
Construction and mining machinery	5082	79.4	78.7	82.1	83.3		-	-	-	-	
Farm machinery and equipment	5083	117.2	117.8	125.1	124.8		-	-	-	-	
Industrial machinery and equipment	5084	303.7	304.8	325.7	327.7		-	-	-	-	
Industrial supplies	5085	130.1	130.1	137.2	138.4		-	-	-	-	
Professional equipment and supplies	5086	175.8	177.6	189.8	191.2		-	-	-	-	
Miscellaneous durable goods	509	198.2	200.5	213.9	214.0		158.8	160.9	172.8	173.1	
Scrap and waste materials	5093	89.6	90.4	99.6	99.8		-	-	-	-	
Nondurable goods	51	2,441	2,446	2,503	2,509	2,512	1,988	1,992	2,045	2,050	
Paper and paper products	511	203.8	204.9	212.8	213.2	-	166.2	166.8	172.4	173.0	
Drugs, proprietaries, and sundries	512	167.5	168.4	174.9	175.8		139.7	140.1	146.7	147.7	
Apparel, piece goods, and notions	513	199.6	200.9	202.2	202.6		150.5	152.2	155.4	156.0	
Groceries and related products	514	796.1	797.2	807.3	811.0		674.1	675.4	685.9	687.6	
Groceries, general line	5141	251.2	251.5	256.2	259.3		-	-	-	-	
Meats and meat products	5147	66.0	66.2	64.7	65.1		-	-	-	-	
Fresh fruits and vegetables	5148	102.0	102.0	105.3	104.5		-	-	-	-	
Chemicals and allied products	516	130.8	131.0	133.9	134.3		96.2	96.6	99.6	99.4	
Petroleum and petroleum products	517	199.6	200.1	204.4	206.7		155.8	155.8	159.9	162.2	
Petroleum bulk stations and terminals	5171	84.1	84.4	87.7	89.0		-	-	-	-	
Petroleum products, nec	5172	115.5	115.7	116.7	117.7		-	-	-	-	
Beer, wine, and distilled beverages	518	154.3	154.2	157.4	159.3		127.1	127.0	129.7	131.5	
Beer and ale	5181	98.0	97.6	100.0	100.9		-	-	-	-	
Wines and distilled beverages	5182	56.3	56.6	57.4	58.4		-	-	-	-	
Miscellaneous nondurable goods	519	465.9	463.0	486.3	484.5		377.6	375.2	395.1	394.4	
Farm supplies	5191	153.1	149.7	162.8	162.4		-	-	-	-	
Retail trade		18,636	18,694	19,359	19,363	19,425	16,570	16,618	17,164	17,160	17,207
Building materials and garden supplies	52	768.4	762.3	798.4	790.0		641.3	634.6	665.0	656.3	
Lumber and other building materials	521	426.7	424.8	432.8	432.8		363.3	360.8	365.4	365.6	
Hardware stores	525	158.9	158.7	168.1	168.0		132.1	131.9	140.0	139.8	
General merchandise stores	53	2,379.7	2,397.9	2,484.8	2,485.2	2,492.1	2,228.8	2,241.6	2,297.5	2,295.8	
Department stores	531	1,986.6	2,000.5	2,067.2	2,066.0	-	1,876.6	1,885.7	1,923.8	1,920.6	
Variety stores	533	235.7	237.9	242.8	243.1		215.3	217.4	221.5	222.1	
Misc. general merchandise stores	539	157.4	159.5	174.8	176.1		136.9	138.5	152.2	153.1	
Food stores	54	2,973.8	2,968.2	3,089.0	3,110.2	3,124.2	2,740.0	2,732.9	2,840.6	2,859.4	
Grocery stores	541	2,621.1	2,617.1	2,725.6	2,748.0	-	2,425.9	2,420.4	2,520.4	2,539.8	
Meat markets and freezer provisioners	542	57.7	57.6	58.9	59.5		-	-	-	-	
Dairy products stores	545	30.1	29.2	25.8	26.5		-	-	-	-	
Retail bakeries	546	171.1	171.3	178.8	177.4		155.2	155.7	161.5	160.7	
Automotive dealers and service stations	55	2,031.8	2,034.7	2,099.0	2,114.2	2,118.6	1,708.7	1,710.6	1,756.1	1,770.1	
New and used car dealers	551,2	984.0	986.2	1,014.5	1,020.4	-	819.0	820.9	841.0	845.8	
Auto and home supply stores	553	324.6	327.0	333.4	336.6		263.6	265.2	270.5	273.5	
Gasoline service stations	554	618.2	618.0	636.8	642.0		540.5	540.5	552.2	558.0	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Retail trade—Continued											
Apparel and accessory stores	56	1,094.2	1,099.2	1,094.1	1,092.4		925.1	930.6	925.4	923.1	
Men's and boys' clothing and furnishings	561	105.9	104.1	103.8	103.2		87.1	85.5	84.6	83.9	
Women's ready-to-wear stores	562	381.7	380.9	382.8	379.7		323.2	323.2	323.3	319.6	
Family clothing stores	565	256.4	258.8	257.7	260.5		222.7	225.5	224.4	227.2	
Shoe stores	566	220.1	224.0	217.6	217.0		180.6	184.2	181.2	181.2	
Furniture and home furnishings stores	57	795.0	797.8	819.0	820.5		658.2	661.6	671.0	671.9	
Furniture and home furnishings stores	571	445.8	447.2	458.0	459.8		367.2	368.3	373.0	374.7	
Furniture stores	5712	275.4	276.3	284.4	285.0		-	-	-	-	
Household appliance stores	572	87.0	87.0	90.8	90.5		73.8	74.1	77.1	76.5	
Radio, television, and music stores	573	262.2	263.6	270.2	270.2		217.2	219.2	220.9	220.7	
Radio and television stores	5732	191.3	191.9	193.2	193.5		-	-	-	-	
Music stores	5733	70.9	71.7	77.0	76.7		-	-	-	-	
Eating and drinking places	58	6,296.7	6,333.3	6,561.5	6,540.5	6,574.4	5,734.6	5,770.5	5,985.9	5,965.0	
Miscellaneous retail	59	2,296.8	2,300.6	2,413.2	2,410.3		1,933.3	1,935.5	2,022.4	2,018.5	
Drug stores and proprietary stores	591	577.1	576.6	591.4	587.8		492.4	490.4	503.6	500.0	
Liquor stores	592	124.0	123.3	125.6	124.8		-	-	-	-	
Miscellaneous shopping goods stores	594	759.1	765.7	797.5	802.2		634.3	639.9	664.7	669.8	
Sporting goods and bicycle shops	5941	130.7	135.0	140.2	142.1		-	-	-	-	
Book stores	5942	71.5	73.0	76.1	75.0		-	-	-	-	
Stationery stores	5943	74.8	75.0	76.9	76.9		-	-	-	-	
Jewelry stores	5944	146.1	147.0	151.7	153.0		-	-	-	-	
Gift, novelty, and souvenir shops	5947	160.6	159.1	171.5	173.4		-	-	-	-	
Sewing, needlework, and piece goods	5949	60.0	60.1	60.4	59.1		-	-	-	-	
Nonstore retailers	596	270.2	273.5	274.1	272.6		242.7	246.5	244.8	242.6	
Mail order houses	5961	126.8	129.8	126.4	125.9		-	-	-	-	
Merchandising machine operators	5962	86.4	86.6	90.6	89.0		-	-	-	-	
Fuel and ice dealers	598	104.4	105.4	110.7	110.9		86.3	87.1	91.8	91.8	
Retail stores, nec	599	375.8	370.1	423.6	420.2		306.0	300.2	341.3	338.1	
Finance, insurance, and real estate³		6,660	6,661	6,743	6,779	6,778	4,904	4,898	4,900	4,937	4,941
Finance		3,321	3,315	3,324	3,335	3,333					
Banking	60	1,751.7	1,748.4	1,746.4	1,752.3		1,266.7	1,264.5	1,251.5	1,256.3	
Commercial and stock savings banks	602	1,580.4	1,577.3	1,570.2	1,575.2		1,138.9	1,137.0	1,121.6	1,125.7	
State banks, Federal Reserve	6022	346.6	346.6	346.8	348.3		-	-	-	-	
State banks, not Federal Reserve	6023,4	375.9	376.0	378.0	379.0		-	-	-	-	
Mutual savings banks	603	85.7	85.5	86.6	86.9		-	-	-	-	
Credit agencies other than banks	61	902.9	902.3	897.5	899.3		676.6	675.2	667.4	671.3	
Savings and loan associations	612	399.8	400.9	394.8	395.2		305.8	306.4	299.6	299.9	
Federal savings and loan associations	6122	221.9	222.6	222.6	223.2		-	-	-	-	
State associations, insured	6123	172.9	173.3	167.4	167.4		-	-	-	-	
Personal credit institutions	614	238.3	238.5	248.8	249.4		183.8	183.8	192.7	192.8	
Business credit institutions	615	56.1	56.7	64.8	66.5		-	-	-	-	
Mortgage bankers and brokers	616	183.7	181.3	166.2	165.4		-	-	-	-	
Security, commodity brokers, and services	62	457.1	456.6	462.8	463.4						
Security brokers and dealers	621	358.0	357.2	357.1	356.9						
Holding and other investment offices	67	209.1	208.1	216.8	220.4						
Insurance		2,034	2,036	2,080	2,086	2,085					
Insurance carriers	63	1,428.0	1,428.6	1,455.2	1,458.3		967.8	964.2	971.1	975.9	
Life insurance	631	584.7	585.4	595.2	596.5		362.2	360.2	357.8	358.4	
Medical service and health insurance	632	199.1	198.9	203.8	203.9		160.4	160.1	164.8	165.3	
Fire, marine, and casualty insurance	633	534.0	535.2	552.2	553.7		360.4	360.3	369.5	373.2	
Title insurance	636	62.9	61.7	56.8	57.3		-	-	-	-	
Insurance agents, brokers, and service	64	606.0	607.5	624.9	628.1						

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Finance, insurance, and real estate—Continued											
Real estate, and combined real estate, insurance, etc ...		1,305	1,310	1,339	1,358	1,360					
Real estate	65	1,294.7	1,299.4	1,329.3	1,348.3						
Real estate operators and lessors	651	549.7	551.5	559.7	564.2						
Real estate agents and managers	653	543.6	545.8	567.6	578.7						
Subdividers and developers	655	166.8	167.5	168.8	172.0						
Combined real estate, insurance, etc	66	10.3	10.3	10.0	9.9						
Services		24,479	24,515	25,676	25,781	25,802	21,456	21,484	22,431	22,518	22,530
Hotels and other lodging places	70	1,602.3	1,612.5	1,681.6	1,725.7		-	-	-	-	
Hotels, motels, and tourist courts	701	1,527.4	1,536.1	1,615.1	1,640.9		1,369.6	1,378.3	1,447.1	1,470.8	
Personal services	72	1,127.5	1,126.6	1,196.1	1,182.9		-	-	-	-	
Laundry, cleaning, and garment services	721	405.8	406.2	418.9	416.3		361.8	361.9	372.9	370.6	
Photographic studios, portrait	722	52.2	52.5	55.5	52.4		-	-	-	-	
Beauty shops	723	353.1	351.6	359.6	355.9		317.5	316.3	320.6	317.5	
Funeral service and crematories	726	77.6	77.6	78.9	78.4		-	-	-	-	
Business services	73	5,214.8	5,269.7	5,507.1	5,539.7	5,578.0	4,464.7	4,519.2	4,709.9	4,739.3	
Advertising	731	212.0	212.2	214.3	216.2	-	158.4	158.1	159.8	160.2	
Advertising agencies	7311	156.3	156.0	157.9	159.4		-	-	-	-	
Credit reporting and collection	732	100.2	99.8	96.3	96.4		-	-	-	-	
Mailing, reproduction, and stenographic	733	210.4	211.3	233.9	234.0		-	-	-	-	
Services to buildings	734	719.3	720.7	725.4	724.7		650.7	651.6	656.9	654.9	
Personnel supply services	736	1,213.5	1,253.3	1,312.5	1,318.1		-	-	-	-	
Employment agencies	7361	180.5	182.5	189.5	193.3		-	-	-	-	
Temporary help supply services	7362	955.3	991.6	1,039.0	1,039.7		-	-	-	-	
Computer and data processing services	737	652.6	657.7	725.3	736.0		512.1	516.1	567.7	578.8	
Computer programming and software	7372	244.2	247.7	279.9	283.1		-	-	-	-	
Data processing services	7374	301.2	302.2	326.3	331.9		-	-	-	-	
Miscellaneous business services	739	2,097.7	2,105.6	2,189.6	2,204.5		-	-	-	-	
Research development laboratories, nec	7391	197.1	196.0	201.5	203.3		-	-	-	-	
Management and public relations	7392	589.2	589.6	619.3	622.2		-	-	-	-	
Detective and protective services	7393	453.9	453.7	468.7	471.0		-	-	-	-	
Equipment rental and leasing	7394	247.7	250.8	262.5	262.9		-	-	-	-	
Photofinishing laboratories	7395	81.7	82.9	79.3	80.1		-	-	-	-	
Auto repair, services, and garages	75	804.2	804.1	838.3	838.9		670.7	669.7	693.5	694.9	
Automotive rentals, without drivers	751	163.7	164.2	170.2	169.9		-	-	-	-	
Automotive repair shops	753	481.6	481.6	504.6	508.0		397.8	397.5	416.4	420.1	
Miscellaneous repair services	76	322.4	322.1	340.6	344.2		268.5	267.1	279.0	281.8	
Electrical repair shops	762	103.9	104.4	112.1	115.0		-	-	-	-	
Motion pictures	78	235.4	242.1	245.2	241.3		197.4	203.3	205.1	200.9	
Motion picture production and services	781	107.7	115.0	112.6	110.5		84.8	91.4	87.3	84.8	
Motion picture theaters	783	114.3	113.4	116.3	115.5		-	-	-	-	
Amusement and recreation services	79	1,053.1	1,052.4	1,059.1	1,097.0		942.5	940.9	904.7	939.7	
Health services	80	6,870.9	6,900.7	7,232.1	7,274.9	7,290.2	6,114.4	6,138.8	6,428.8	6,467.4	
Offices of physicians	801	1,055.4	1,064.5	1,138.1	1,143.6	-	870.2	875.5	935.3	939.3	
Offices of dentists	802	471.3	475.7	492.2	495.7		415.3	419.9	432.0	435.7	
Nursing and personal care facilities	805	1,297.9	1,300.8	1,329.2	1,335.9		1,173.7	1,176.8	1,200.2	1,206.9	
Skilled nursing care facilities	8051	869.9	871.6	889.1	894.2		-	-	-	-	
Nursing and personal care, nec	8059	428.0	429.2	440.1	441.7		-	-	-	-	
Hospitals	806	3,176.0	3,184.6	3,341.1	3,361.4		2,898.1	2,906.2	3,053.6	3,072.6	
General medical and surgical hospitals	8062	2,960.2	2,969.4	3,113.1	3,131.9		-	-	-	-	
Psychiatric hospitals	8063	76.0	75.7	82.5	82.8		-	-	-	-	
Specialty hospitals, excluding psychiatric	8069	139.8	139.5	145.5	146.7		-	-	-	-	
Medical and dental laboratories	807	135.5	137.2	148.0	149.1		-	-	-	-	
Outpatient care facilities	808	266.7	266.3	287.8	289.2		-	-	-	-	

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 ¹				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Services—Continued											
Legal services	81	815.9	810.3	843.7	845.1		686.3	680.5	708.4	709.0	
Educational services	82	1,224.1	1,216.9	1,360.9	1,285.9			-			
Elementary and secondary schools	821	323.7	318.3	367.6	330.7						
Colleges and universities	822	735.2	733.1	818.8	775.8						
Correspondence and vocational schools	824	74.1	74.8	79.8	77.0						
Social services	83	1,494.3	1,470.4	1,580.2	1,573.7						
Individual and family services	832	307.7	304.4	307.3	312.3						
Job training and related services	833	249.9	233.2	241.7	246.3						
Residential care	836	352.9	354.0	376.7	378.1						
Museums, botanical and zoological gardens	84	50.9	50.7	52.2	52.4						
Membership organizations	86	1,630.6	1,611.3	1,626.3	1,659.9						
Business associations	861	93.5	93.5	95.4	95.2						
Labor organizations	863	129.0	127.8	134.5	131.1						
Civic and social associations	864	413.3	395.1	398.2	433.9						
Miscellaneous services	89	1,333.0	1,335.0	1,395.3	1,407.1		1,083.5	1,085.4	1,127.6	1,135.8	
Engineering and architectural services	891	730.8	732.4	766.4	773.6		616.2	618.2	640.9	647.0	
Noncommercial research organizations	892	125.1	123.9	128.6	130.6		-	-	-	-	
Accounting, auditing, and bookkeeping	893	451.0	452.4	471.8	473.4		347.9	349.0	362.9	362.2	
Government		16,156	15,993	17,442	16,450	16,343					
Federal Government ⁴		2,983	2,966	2,986	2,996	2,996					
Executive, by agency ⁴		2,923.3	2,906.9	2,925.6							
Department of Defense		1,001.2	996.7	967.1							
Postal Service ⁵		810.0	801.6	829.8							
Other executive agencies		1,112.1	1,108.6	1,128.7							
Legislative		39.5	38.9	39.4							
Judicial		19.7	19.7	20.9							
Federal government, by industry:											
Manufacturing activities		125.9	125.9	121.8	121.5						
Shipbuilding and repairing	3731	76.4	76.6	74.0	73.9						
Transportation and public utilities, except Postal Service		42.9	43.3	42.8	42.1						
Services		435.2	434.8	426.1	424.7						
Hospitals	806	254.2	253.3	248.8	249.2						
State government		3,752	3,749	3,932	3,849	3,845					
Hospitals	806	442.0	441.0	445.5	448.1	-					
Education	82	1,326.5	1,317.0	1,468.3	1,365.7						
General administration, including executive, legislative, and judicial functions		1,428.5	1,434.5	1,457.5	1,473.6						
Local government		9,421	9,278	10,524	9,605	9,502					
Transportation and public utilities		497.2	497.6	498.0	501.4	-					
Hospitals	806	614.0	615.4	637.5	639.3						
Education	82	4,625.5	4,530.2	5,773.6	4,714.4						
General administration, including executive, legislative, and judicial functions		3,303.0	3,264.5	3,249.4	3,365.0						

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

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

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

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

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

⁵ Includes rural mail carriers.

- Data not available.

^p = preliminary.

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

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	May 1987	June 1987	Apr. 1988	May 1988	June 1988
Total	47,304	47,400	48,985	49,245	49,453
Total private	38,429	38,730	39,822	40,068	40,502
Goods-producing	6,823	6,891	7,021	7,057	7,140
Mining	95	95	97	97	99
Construction	523	534	553	564	576
Manufacturing	6,205	6,262	6,371	6,396	6,465
Durable goods	2,981	3,000	3,073	3,084	3,111
Lumber and wood products	117	120	121	123	126
Furniture and fixtures	161	161	167	167	165
Stone, clay, and glass products	114	116	116	117	119
Primary metal industries	101	101	106	106	108
Fabricated metal products	318	320	327	330	333
Machinery, except electrical	448	450	473	475	480
Electrical and electronic equipment	861	865	882	883	891
Transportation equipment	396	397	395	396	398
Instruments and related products	300	301	308	309	313
Miscellaneous manufacturing	167	170	177	177	179
Nondurable goods	3,224	3,262	3,298	3,312	3,354
Food and kindred products	492	510	499	504	522
Tobacco manufactures	17	16	16	16	16
Textile mill products	350	353	350	351	353
Apparel and other textile products	877	883	879	880	882
Paper and allied products	163	166	166	167	170
Printing and publishing	643	645	674	673	678
Chemicals and allied products	291	294	306	307	314
Petroleum and coal products	24	24	24	25	26
Rubber and misc. plastics products	282	285	300	303	306
Leather and leather products	85	86	85	86	87
Service-producing	40,481	40,509	41,964	42,188	42,313
Transportation and public utilities	1,537	1,545	1,604	1,615	1,630
Wholesale trade	1,717	1,734	1,806	1,819	1,840
Retail trade	9,708	9,833	9,968	10,120	10,233
Finance, insurance, and real estate	4,077	4,117	4,137	4,147	4,193
Services	14,567	14,610	15,286	15,310	15,466
Government	8,875	8,672	9,163	9,177	8,951
Federal	1,050	1,061	1,057	1,059	1,066
State	1,936	1,848	2,029	2,001	1,911
Local	5,889	5,763	6,077	6,117	5,974

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

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

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total	102,672	102,906	103,371	103,678	104,001	104,262	104,729	105,020	105,281	105,489	106,057	106,257	106,476
Total private	85,656	85,851	86,241	86,520	86,794	87,044	87,475	87,700	87,973	88,139	88,678	88,927	89,080
Goods-producing	24,851	24,902	25,025	25,123	25,201	25,180	25,271	25,330	25,435	25,466	25,592	25,655	25,647
Mining	728	734	740	736	735	728	731	733	737	739	740	741	735
Oil and gas extraction	412	417	421	418	417	414	415	419	421	425	425	424	419
Construction	5,012	5,012	5,060	5,090	5,118	5,083	5,150	5,192	5,238	5,237	5,308	5,325	5,328
General building contractors	1,326	1,328	1,340	1,348	1,352	1,365	1,377	1,383	1,400	1,394	1,412	1,400	1,398
Manufacturing	19,111	19,156	19,225	19,297	19,348	19,369	19,390	19,405	19,460	19,490	19,544	19,589	19,584
Durable goods	11,246	11,269	11,315	11,355	11,390	11,393	11,404	11,411	11,459	11,477	11,515	11,563	11,565
Lumber and wood products	739	744	744	750	754	754	756	755	758	757	757	757	755
Furniture and fixtures	524	526	529	531	533	536	535	534	535	537	537	541	537
Stone, clay, and glass products	580	580	583	585	588	583	584	585	587	585	587	588	584
Primary metal industries	755	761	766	768	769	768	770	772	773	776	781	788	786
Blast furnaces and basic steel products	274	276	278	279	279	279	280	281	281	281	281	281	282
Fabricated metal products	1,405	1,412	1,421	1,429	1,433	1,435	1,438	1,439	1,444	1,448	1,457	1,464	1,459
Machinery, except electrical	2,031	2,039	2,049	2,062	2,074	2,085	2,091	2,099	2,111	2,121	2,134	2,150	2,160
Electrical and electronic equipment	2,081	2,085	2,094	2,100	2,110	2,112	2,112	2,115	2,117	2,115	2,120	2,121	2,129
Transportation equipment	2,063	2,052	2,052	2,047	2,046	2,036	2,031	2,025	2,045	2,048	2,047	2,053	2,052
Motor vehicles and equipment	874	860	859	854	851	839	837	835	848	851	850	858	859
Instruments and related products	696	696	700	704	704	704	705	705	706	709	713	715	718
Miscellaneous manufacturing	372	374	377	379	379	380	382	382	383	381	382	386	385
Nondurable goods	7,865	7,887	7,910	7,942	7,958	7,976	7,986	7,994	8,001	8,013	8,029	8,026	8,019
Food and kindred products	1,625	1,627	1,630	1,636	1,638	1,647	1,649	1,647	1,648	1,643	1,645	1,631	1,627
Tobacco manufactures	54	53	52	54	54	55	54	54	54	52	53	52	51
Textile mill products	728	730	731	733	733	732	732	729	727	728	727	729	721
Apparel and other textile products	1,098	1,104	1,106	1,110	1,106	1,105	1,104	1,106	1,100	1,100	1,097	1,092	1,091
Paper and allied products	680	682	682	683	684	685	686	687	687	689	691	691	693
Printing and publishing	1,514	1,518	1,522	1,528	1,532	1,538	1,544	1,548	1,554	1,559	1,565	1,567	1,572
Chemicals and allied products	1,029	1,032	1,036	1,041	1,047	1,047	1,049	1,052	1,056	1,060	1,065	1,069	1,073
Petroleum and coal products	165	166	167	167	167	166	165	164	165	166	167	167	168
Rubber and misc. plastics products	827	830	839	845	851	854	856	860	864	870	873	881	876
Leather and leather products	145	145	145	145	146	147	147	147	146	146	146	147	147
Service-producing	77,821	78,004	78,346	78,555	78,800	79,082	79,458	79,690	79,846	80,023	80,465	80,602	80,829
Transportation and public utilities	5,394	5,427	5,448	5,466	5,481	5,499	5,513	5,530	5,543	5,556	5,582	5,597	5,609
Transportation	3,171	3,201	3,214	3,231	3,244	3,261	3,272	3,285	3,298	3,308	3,332	3,345	3,351
Communication and public utilities	2,223	2,226	2,234	2,235	2,237	2,238	2,241	2,245	2,245	2,248	2,250	2,252	2,258
Wholesale trade	5,892	5,914	5,935	5,958	5,984	6,010	6,035	6,061	6,089	6,115	6,148	6,171	6,190
Durable goods	3,463	3,478	3,498	3,514	3,536	3,555	3,573	3,591	3,610	3,635	3,660	3,679	3,695
Nondurable goods	2,429	2,436	2,437	2,444	2,448	2,455	2,462	2,470	2,479	2,480	2,488	2,492	2,495
Retail trade	18,569	18,605	18,705	18,761	18,784	18,927	19,045	19,050	19,093	19,130	19,205	19,267	19,290
General merchandise stores	2,449	2,457	2,489	2,495	2,494	2,526	2,561	2,543	2,546	2,541	2,549	2,546	2,546
Food stores	2,961	2,958	2,971	2,979	2,988	3,014	3,029	3,044	3,049	3,053	3,080	3,098	3,115
Automotive dealers and service stations	2,010	2,015	2,026	2,026	2,033	2,038	2,047	2,055	2,064	2,070	2,076	2,089	2,093
Eating and drinking places	6,143	6,152	6,191	6,216	6,232	6,260	6,291	6,319	6,326	6,336	6,352	6,369	6,377
Finance, insurance, and real estate	6,581	6,588	6,604	6,608	6,619	6,633	6,636	6,651	6,650	6,656	6,679	6,686	6,696
Finance	3,289	3,292	3,295	3,299	3,301	3,308	3,305	3,306	3,302	3,299	3,304	3,302	3,307
Insurance	2,029	2,032	2,043	2,042	2,049	2,052	2,053	2,060	2,065	2,067	2,074	2,076	2,079
Real estate	1,263	1,264	1,266	1,267	1,269	1,273	1,278	1,285	1,283	1,290	1,301	1,308	1,310
Services	24,369	24,415	24,524	24,604	24,725	24,795	24,975	25,078	25,163	25,216	25,472	25,551	25,648
Business services	5,212	5,233	5,282	5,287	5,306	5,321	5,385	5,405	5,420	5,443	5,480	5,501	5,517
Health services	6,875	6,894	6,928	6,962	6,995	7,019	7,056	7,088	7,126	7,153	7,203	7,239	7,261
Government	17,016	17,055	17,130	17,158	17,207	17,218	17,254	17,320	17,308	17,350	17,379	17,330	17,396
Federal	2,943	2,962	2,966	2,974	2,980	2,973	2,972	2,970	2,963	2,957	2,951	2,955	2,972
State	3,971	3,973	3,985	3,988	4,001	4,006	4,014	4,031	4,041	4,050	4,049	4,069	4,073
Local	10,102	10,120	10,179	10,196	10,226	10,239	10,268	10,319	10,304	10,343	10,379	10,306	10,351

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987

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

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987							1988					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total	47,254	47,458	47,582	47,700	47,941	48,072	48,240	48,396	48,615	48,772	48,865	48,999	49,306
Total private	38,581	38,776	38,893	38,985	39,170	39,295	39,425	39,573	39,767	39,881	39,969	40,075	40,357
Goods-producing	6,859	6,909	6,905	6,931	6,963	6,990	7,007	7,022	7,028	7,040	7,058	7,082	7,103
Mining	95	96	96	96	96	96	96	96	96	96	97	97	99
Construction	528	531	533	536	538	542	543	546	549	552	558	566	569
Manufacturing	6,236	6,282	6,276	6,299	6,329	6,352	6,368	6,380	6,383	6,392	6,403	6,419	6,435
Durable goods	2,987	2,997	3,011	3,024	3,038	3,045	3,056	3,059	3,062	3,067	3,077	3,085	3,096
Lumber and wood products	117	119	118	119	120	120	121	122	122	122	123	123	123
Furniture and fixtures	162	165	164	165	166	166	166	167	166	166	166	167	166
Stone, clay, and glass products	114	114	114	114	115	115	116	116	116	116	117	118	117
Primary metal industries	101	101	103	103	104	104	105	104	105	104	105	106	108
Fabricated metal products	318	319	320	321	322	323	324	325	325	326	327	329	331
Machinery, except electrical	447	450	454	456	458	460	463	466	467	469	471	473	476
Electrical and electronic equipment	863	867	870	873	877	878	881	882	882	885	886	885	890
Transportation equipment	396	391	396	398	398	398	399	396	393	393	396	397	397
Instruments and related products	300	301	301	303	304	306	306	306	308	308	308	309	311
Miscellaneous manufacturing	169	170	171	172	174	175	175	175	178	178	178	178	177
Nondurable goods	3,249	3,285	3,265	3,275	3,291	3,307	3,312	3,321	3,321	3,325	3,326	3,334	3,339
Food and kindred products	514	520	514	515	518	521	521	528	528	526	528	526	526
Tobacco manufactures	18	17	16	17	17	17	18	18	18	17	17	17	17
Textile mill products	351	354	353	353	353	354	354	353	353	352	350	351	351
Apparel and other textile products	876	892	876	880	883	886	883	881	879	880	875	877	874
Paper and allied products	163	163	164	165	165	166	167	167	167	167	167	167	168
Printing and publishing	645	647	650	651	654	658	660	664	666	669	672	673	677
Chemicals and allied products	291	295	296	297	299	301	303	303	304	305	307	309	311
Petroleum and coal products	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rubber and misc. plastics products	282	285	286	287	291	293	296	296	296	298	300	303	304
Leather and leather products	85	88	86	86	87	87	86	87	86	87	86	86	86
Service-producing	40,395	40,549	40,677	40,769	40,978	41,082	41,233	41,374	41,587	41,732	41,807	41,917	42,203
Transportation and public utilities	1,540	1,542	1,551	1,559	1,568	1,572	1,576	1,580	1,588	1,599	1,602	1,610	1,625
Wholesale trade	1,731	1,739	1,749	1,756	1,762	1,774	1,785	1,795	1,802	1,813	1,813	1,826	1,838
Retail trade	9,789	9,827	9,856	9,876	9,925	9,955	9,972	10,056	10,127	10,123	10,130	10,161	10,192
Finance, insurance, and real estate	4,088	4,101	4,105	4,108	4,120	4,126	4,131	4,139	4,139	4,147	4,141	4,147	4,164
Services	14,574	14,658	14,727	14,755	14,832	14,878	14,954	14,981	15,083	15,159	15,225	15,249	15,435
Government	8,673	8,682	8,689	8,715	8,771	8,777	8,815	8,823	8,848	8,891	8,896	8,924	8,949
Federal	1,045	1,045	1,049	1,056	1,057	1,060	1,062	1,060	1,061	1,061	1,057	1,054	1,050
State	1,913	1,925	1,929	1,927	1,935	1,937	1,945	1,947	1,952	1,960	1,968	1,971	1,978
Local	5,715	5,712	5,711	5,732	5,779	5,780	5,808	5,816	5,835	5,870	5,871	5,899	5,921

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

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

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	69,343	69,463	69,766	69,988	70,234	70,405	70,787	70,961	71,170	71,260	71,736	71,941	72,070
Goods-producing	17,468	17,506	17,601	17,678	17,743	17,698	17,798	17,839	17,909	17,925	18,025	18,080	18,066
Mining	522	528	534	531	530	524	527	529	533	535	535	536	530
Construction	3,908	3,903	3,949	3,972	3,998	3,949	4,022	4,059	4,096	4,088	4,149	4,164	4,159
Manufacturing	13,038	13,075	13,118	13,175	13,215	13,225	13,249	13,251	13,280	13,302	13,341	13,380	13,377
Durable goods	7,483	7,499	7,532	7,564	7,590	7,582	7,599	7,598	7,632	7,649	7,676	7,720	7,728
Lumber and wood products	617	621	621	627	630	629	631	631	633	632	634	630	629
Furniture and fixtures	419	420	424	425	427	428	427	426	427	429	429	432	429
Stone, clay, and glass products	448	449	451	453	457	453	454	455	457	455	457	458	454
Primary metal industries	571	577	580	584	584	583	586	588	591	594	599	604	602
Blast furnaces and basic steel products	207	210	212	213	213	214	216	217	219	218	219	219	219
Fabricated metal products	1,043	1,050	1,055	1,063	1,068	1,068	1,071	1,071	1,073	1,079	1,085	1,093	1,090
Machinery, except electrical	1,207	1,213	1,221	1,230	1,238	1,244	1,250	1,256	1,262	1,269	1,273	1,285	1,291
Electrical and electronic equipment	1,224	1,225	1,233	1,235	1,241	1,240	1,241	1,242	1,244	1,244	1,250	1,256	1,264
Transportation equipment	1,305	1,292	1,290	1,285	1,283	1,273	1,271	1,261	1,276	1,278	1,276	1,285	1,291
Motor vehicles and equipment	684	670	669	665	661	651	649	648	658	660	660	671	678
Instruments and related products	378	380	383	385	385	387	388	388	389	391	394	396	398
Miscellaneous manufacturing	271	272	274	277	277	277	280	280	280	278	279	281	280
Nondurable goods	5,555	5,576	5,586	5,611	5,625	5,643	5,650	5,653	5,648	5,653	5,665	5,660	5,649
Food and kindred products	1,149	1,151	1,153	1,159	1,161	1,169	1,172	1,168	1,169	1,164	1,168	1,153	1,148
Tobacco manufactures	41	39	39	40	41	42	41	41	40	39	40	39	37
Textile mill products	632	634	634	636	636	636	636	634	632	632	630	633	623
Apparel and other textile products	922	927	929	932	930	929	928	930	926	925	923	918	918
Paper and allied products	516	520	518	518	519	520	521	521	520	521	523	524	526
Printing and publishing	846	849	851	856	858	863	867	870	871	872	875	876	878
Chemicals and allied products	579	582	582	585	589	589	589	592	593	596	599	602	605
Petroleum and coal products	108	109	109	109	109	109	108	107	107	108	108	109	111
Rubber and misc. plastics products	641	644	650	655	661	664	666	669	670	676	679	685	682
Leather and leather products	121	121	121	121	121	122	122	121	120	120	120	121	121
Service-producing	51,875	51,957	52,165	52,310	52,491	52,707	52,989	53,122	53,261	53,335	53,711	53,861	54,004
Transportation and public utilities	4,477	4,502	4,517	4,533	4,545	4,560	4,574	4,587	4,600	4,611	4,632	4,646	4,665
Wholesale trade	4,720	4,736	4,752	4,777	4,802	4,825	4,848	4,881	4,902	4,924	4,956	4,973	4,993
Retail trade	16,508	16,520	16,610	16,651	16,671	16,795	16,902	16,897	16,949	16,949	17,028	17,075	17,087
Finance, insurance, and real estate	4,822	4,821	4,822	4,818	4,824	4,831	4,827	4,825	4,823	4,828	4,842	4,850	4,863
Services	21,348	21,378	21,464	21,531	21,649	21,696	21,838	21,932	21,987	22,023	22,253	22,317	22,396

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

^p = preliminary.

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

**ESTABLISHMENT DATA
INDEXES OF DIFFUSION
SEASONALLY ADJUSTED**

B-7. Indexes of diffusion: Percent of industries in which employment¹ increased, seasonally adjusted

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1986.....	57.0	47.3	49.5	50.8	51.9	46.8	51.9	54.1	51.4	53.0	58.9	58.9
	1987.....	50.8	59.2	61.1	62.4	62.4	61.6	70.8	62.2	68.1	67.3	67.8	68.4
	1988.....	61.6	61.6	62.2	63.8	58.1	68.9	^p 60.8	^p 56.5				
Over 3-month span	1986.....	50.0	47.6	45.7	46.2	46.2	46.2	48.1	51.9	50.5	55.9	59.7	59.2
	1987.....	57.6	57.0	65.1	69.2	68.1	71.9	73.8	76.8	74.1	76.5	78.1	73.0
	1988.....	71.6	66.8	67.0	66.8	71.4	^p 68.4	^p 70.8					
Over 6-month span	1986.....	48.1	47.3	43.8	42.7	43.2	47.0	46.5	50.0	55.9	53.2	55.9	58.4
	1987.....	64.6	64.3	63.0	70.3	72.4	77.3	78.4	79.7	82.7	77.8	77.0	76.5
	1988.....	73.5	70.3	70.3	^p 72.4	^p 71.1							
Over 12-month span	1986.....	42.2	41.6	43.8	44.9	45.7	48.6	46.8	48.6	51.6	53.8	56.5	57.8
	1987.....	63.8	67.3	69.5	73.5	76.8	76.8	78.9	78.9	79.7	78.4	77.8	81.9
	1988.....	^p 78.4	^p 78.9										

¹ Based on the number of employees, seasonally adjusted for 1, 3, and 6 month spans, on the payrolls of 185 private nonagricultural industries. Data for the 12-month span are unadjusted.

^p = preliminary.

NOTE: Figures are the percent of industries with employment

rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans. Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Alabama	1,509.9	1,541.3	1,534.5	10.5	11.3	11.5	76.4	76.7	77.1
Birmingham	393.7	408.4	408.0	5.3	5.8	5.8	24.7	27.0	27.6
Huntsville	123.7	128.2	128.3	.1	.1	.1	5.7	5.7	6.0
Mobile	162.5	163.8	166.1	.5	.5	.6	9.6	9.1	9.4
Montgomery	126.3	127.3	127.9	.2	.2	.2	8.0	8.7	8.8
Tuscaloosa	56.4	58.3	58.6	2.1	2.5	2.5	3.2	3.2	3.4
Alaska	225.6	216.6	223.7	8.9	9.1	9.3	12.5	10.6	11.5
Arizona	1,357.6	1,390.1	1,376.2	11.5	12.1	12.2	104.6	95.9	96.2
Phoenix	900.5	919.3	914.2	.6	.6	.6	70.1	64.3	64.4
Tucson	237.8	243.7	238.8	1.6	1.7	1.8	20.0	18.7	18.8
Arkansas	831.6	863.5	858.1	4.1	4.3	4.4	36.7	35.6	36.1
Fayetteville-Springdale	46.8	49.5	49.1	(¹)	(¹)	(¹)	2.1	2.0	2.0
Fort Smith	76.0	78.8	78.5	.9	1.0	1.0	3.0	2.8	2.8
Little Rock-North Little Rock	228.1	236.5	234.9	.4	.4	.4	11.6	11.8	12.2
Pine Bluff	31.7	32.9	32.3	(¹)	(¹)	(¹)	1.7	1.6	1.5
California	11,605.3	12,119.1	12,013.8	40.7	41.5	41.6	595.4	640.3	647.7
Anaheim-Santa Ana	1,086.8	1,120.1	1,114.0	1.9	1.3	1.4	63.6	65.3	64.8
Bakersfield	154.8	160.9	159.1	12.6	13.7	13.7	9.5	9.1	8.9
Fresno	204.1	208.5	208.6	.6	.7	.6	13.1	12.9	13.4
Los Angeles-Long Beach	3,985.9	4,102.0	4,078.1	9.4	9.5	9.5	148.0	157.0	156.2
Modesto	105.7	109.6	112.0	(¹)	(¹)	(¹)	7.2	6.8	6.9
Oakland	807.6	836.9	832.5	3.2	3.3	3.3	48.6	51.9	52.2
Oxnard-Ventura	203.3	214.2	214.2	2.6	2.8	2.8	12.8	13.5	13.8
Riverside-San Bernardino	598.6	638.6	629.4	1.2	1.3	1.2	52.9	55.6	56.7
Sacramento	544.5	578.5	574.0	.8	.7	.7	34.4	36.8	37.5
San Diego	857.3	905.9	898.3	.8	.8	.8	57.6	60.4	61.2
San Francisco	927.9	949.0	946.4	.9	.9	.9	35.1	35.5	36.2
San Jose	783.3	803.3	799.9	.2	.2	.2	33.1	32.1	32.7
Santa Barbara-Santa Maria-Lompoc	144.6	148.9	146.4	1.2	1.3	1.3	6.4	6.5	6.7
Santa Rosa-Petaluma	123.5	130.7	128.5	.7	.8	.8	8.8	9.3	9.5
Stockton	142.3	145.2	144.2	.1	.1	.1	8.7	8.4	8.6
Vallejo-Fairfield-Napa	125.0	131.9	131.1	.3	.3	.3	9.3	10.2	10.4
Colorado	1,389.9	1,400.8	1,387.8	21.7	20.9	21.1	71.6	62.8	62.6
Boulder-Longmont	102.8	104.6	104.2	.3	.3	.3	3.7	3.2	3.3
Denver	786.3	796.7	787.8	14.3	13.6	13.7	39.1	35.9	35.6
Connecticut	1,637.6	1,686.3	1,661.8	1.7	1.7	1.7	81.6	82.2	84.1
Bridgeport-Milford	195.0	202.0	196.4	(¹)	(¹)	(¹)	9.3	9.8	9.9
Hartford	474.8	491.3	485.9	.3	.4	.4	21.1	21.9	22.0
New Haven-Meriden	249.4	258.6	256.1	.3	.4	.4	13.5	13.9	14.5
Stamford	126.7	130.9	129.3	.6	.5	.5	5.9	5.8	6.1
Waterbury	84.9	89.5	87.9	(¹)	(¹)	(¹)	4.6	4.9	5.1
Delaware	322.3	337.6	338.3	.1	.1	.1	20.8	22.1	23.1
Wilmington	271.3	283.9	284.2	.2	.1	.1	17.0	17.7	18.5
District of Columbia	675.5	673.9	685.8	.1	.1	.1	15.6	15.9	15.5
Washington MSA	2,109.3	2,159.0	2,169.0	1.3	1.2	1.2	137.2	137.7	140.2
Florida	4,802.4	5,082.9	5,027.2	8.7	8.9	8.8	344.7	350.6	353.2
Daytona Beach	111.5	117.6	116.2	(¹)	(¹)	(¹)	8.5	8.4	8.5
Fort Lauderdale-Hollywood-Pompano Beach	459.3	485.6	480.5	.4	.4	.4	35.5	35.5	35.9
Fort Myers-Cape Coral	104.9	115.0	113.4	(¹)	(¹)	(¹)	12.1	12.9	13.1
Jacksonville	392.5	416.5	414.1	.5	.4	.4	28.2	27.5	27.9
Melbourne-Titusville-Palm Bay	143.3	149.2	150.0	(¹)	(¹)	(¹)	8.8	8.3	8.3
Miami-Hialeah	823.4	836.3	824.7	1.0	.9	.9	42.8	40.8	40.7
Orlando	475.2	503.3	498.2	(¹)	(¹)	(¹)	33.8	35.8	36.1
Pensacola	124.1	127.3	125.6	.3	.3	.3	9.4	9.2	9.0
Sarasota	103.0	108.9	107.2	(¹)	(¹)	(¹)	10.6	10.6	10.6
Tallahassee	107.3	111.0	110.4	(¹)	(¹)	(¹)	5.9	6.0	6.1
Tampa-St. Petersburg-Clearwater	789.1	818.2	812.3	.7	.6	.6	59.4	59.4	59.6
West Palm Beach-Boca Raton-Delray Beach	317.4	340.0	334.0	(¹)	(¹)	(¹)	28.0	28.0	28.4

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Alabama	369.9	377.8	376.1	73.1	73.3	74.1	333.4	339.4	338.6
Birmingham	53.4	57.0	56.9	28.0	28.2	28.4	98.7	100.8	101.1
Huntsville	31.0	32.0	32.2	2.8	2.9	3.0	23.5	24.0	24.1
Mobile	26.7	26.5	26.9	9.2	9.4	9.4	43.8	44.2	44.3
Montgomery	19.0	19.4	19.3	5.0	5.1	5.0	28.5	29.0	29.2
Tuscaloosa	9.5	9.9	9.8	1.9	1.9	1.9	12.0	12.3	12.2
Alaska	22.4	16.7	22.6	19.4	18.7	19.0	43.9	43.0	43.5
Arizona	186.8	189.7	189.6	72.6	73.2	73.0	335.8	344.3	342.6
Phoenix	135.4	138.7	138.8	49.9	50.3	50.1	228.5	232.2	231.0
Tucson	31.0	30.2	30.1	9.5	9.6	9.5	54.3	57.0	57.0
Arkansas	221.2	228.6	229.7	50.9	51.3	51.8	191.0	196.5	196.7
Fayetteville-Springdale	11.8	12.3	12.3	4.4	5.2	5.2	10.9	11.5	11.5
Fort Smith	26.6	27.8	27.9	3.9	4.1	4.1	15.9	16.1	15.8
Little Rock-North Little Rock	32.3	33.6	33.8	16.5	16.9	17.0	55.3	56.7	56.6
Pine Bluff	6.3	6.6	6.6	2.5	2.4	2.4	6.9	7.0	7.0
California	2,115.5	2,144.0	2,145.9	587.3	584.0	589.8	2,758.3	2,885.0	2,897.8
Anaheim-Santa Ana	249.0	256.3	257.1	34.7	34.5	34.6	272.1	280.1	284.0
Bakersfield	11.1	11.1	11.2	8.1	8.2	8.3	38.0	38.4	39.0
Fresno	22.7	23.5	23.7	11.0	11.4	11.6	53.4	53.2	53.5
Los Angeles-Long Beach	904.9	910.9	904.2	208.6	209.4	212.0	914.3	929.0	930.9
Modesto	25.1	24.6	26.1	4.4	4.3	4.4	26.9	28.6	29.0
Oakland	104.4	106.0	107.3	56.5	56.9	57.4	200.6	204.5	205.8
Oxnard-Ventura	29.3	30.7	30.8	10.3	10.1	10.1	50.6	53.3	53.2
Riverside-San Bernardino	80.6	85.5	84.9	30.9	32.1	32.0	151.3	161.1	161.3
Sacramento	41.1	43.1	44.2	25.4	26.1	26.5	133.8	139.2	140.6
San Diego	121.9	123.4	124.1	33.9	34.3	34.5	206.5	218.9	220.7
San Francisco	79.0	79.9	79.0	77.3	76.4	76.7	210.2	213.6	214.5
San Jose	264.1	265.3	267.8	21.5	21.6	21.8	150.2	154.6	154.3
Santa Barbara-Santa Maria-Lompoc	22.6	22.6	22.3	5.1	5.0	5.1	35.4	36.1	36.3
Santa Rosa-Petaluma	18.5	18.7	19.0	6.4	6.2	6.2	32.4	34.4	34.4
Stockton	24.0	23.3	24.1	9.3	8.5	9.1	33.3	34.0	34.1
Vallejo-Fairfield-Napa	12.7	12.4	12.8	4.6	4.6	4.7	30.0	31.9	32.2
Colorado	185.3	187.0	187.9	83.6	82.7	82.8	349.0	353.2	353.8
Boulder-Longmont	28.2	28.5	28.6	2.3	2.3	2.3	22.6	23.0	23.2
Denver	95.5	95.9	96.3	60.4	59.9	59.9	197.3	200.6	200.2
Connecticut	377.6	378.8	363.1	71.0	74.3	72.2	367.4	384.6	383.2
Bridgeport-Milford	56.4	55.3	52.9	8.5	9.6	9.1	45.2	47.1	46.8
Hartford	90.8	93.2	92.3	17.4	18.3	17.8	100.1	103.9	102.8
New Haven-Meriden	45.9	46.3	45.3	18.0	18.6	18.4	57.3	59.7	59.4
Stamford	23.4	24.2	23.3	5.2	5.5	5.5	30.6	31.4	31.1
Waterbury	22.5	23.9	22.2	2.9	3.3	3.0	17.1	17.5	17.5
Delaware	66.8	69.3	69.2	13.3	14.4	14.1	72.6	73.6	73.9
Wilmington	55.8	58.1	57.6	14.4	15.1	15.3	58.2	59.2	59.3
District of Columbia	16.2	16.4	16.6	25.0	25.3	25.3	62.8	64.9	64.4
Washington MSA	86.7	87.9	88.3	102.6	106.4	107.4	414.4	428.9	429.6
Florida	526.6	539.7	535.9	256.3	262.2	260.9	1,304.1	1,384.5	1,376.5
Daytona Beach	11.6	11.7	11.6	3.4	3.5	3.5	32.8	35.0	34.8
Fort Lauderdale-Hollywood-Pompano Beach	45.1	46.6	46.0	22.7	23.2	23.2	138.0	145.0	144.2
Fort Myers-Cape Coral	5.4	5.6	5.5	4.8	4.9	5.0	30.7	33.8	33.4
Jacksonville	38.1	39.9	39.8	27.9	28.7	28.2	106.6	111.9	112.5
Melbourne-Titusville-Palm Bay	28.1	29.8	30.0	5.8	6.1	6.1	33.0	34.7	34.3
Miami-Hialeah	95.1	95.9	95.1	69.0	68.1	68.0	220.8	221.7	221.0
Orlando	54.2	55.1	55.0	24.8	26.2	25.9	124.8	131.5	131.0
Pensacola	11.7	11.5	11.3	6.1	6.3	6.3	32.8	33.8	33.9
Sarasota	8.8	9.2	9.3	3.5	3.6	3.6	30.4	31.9	31.4
Tallahassee	4.6	4.6	4.6	3.1	3.2	3.2	22.9	23.3	23.3
Tampa-St. Petersburg-Clearwater	91.6	94.8	94.3	38.4	39.1	39.5	219.1	228.3	227.5
West Palm Beach-Boca Raton-DeLray Beach	34.8	35.8	35.3	12.0	12.3	12.2	84.3	92.1	90.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Alabama	71.6	70.9	71.4	277.5	283.3	283.3	297.5	308.6	302.4
Birmingham	29.4	29.6	29.7	93.9	96.4	96.2	60.3	63.6	62.3
Huntsville	3.6	3.8	3.8	28.2	29.8	30.0	28.8	29.9	29.1
Mobile	8.2	7.8	7.9	36.8	37.4	37.4	27.7	28.9	30.2
Montgomery	7.6	7.7	7.8	26.0	25.4	25.7	32.0	31.8	31.9
Tuscaloosa	2.1	2.1	2.2	7.9	8.1	8.1	17.7	18.3	18.5
Alaska	11.3	10.9	10.9	44.3	43.4	43.9	62.9	64.2	63.0
Arizona	95.5	93.1	92.7	343.7	357.9	355.9	207.1	223.9	214.0
Phoenix	75.6	73.9	73.7	230.9	241.8	240.7	109.5	117.5	114.9
Tucson	12.9	12.4	12.3	64.2	66.3	66.1	44.3	47.8	43.2
Arkansas	38.2	38.3	38.2	155.4	162.0	162.7	134.1	146.9	138.5
Fayetteville-Springdale	1.5	1.5	1.4	7.0	7.4	7.3	9.1	9.6	9.4
Fort Smith	2.7	2.7	2.7	16.6	16.8	17.3	6.4	7.5	6.9
Little Rock-North Little Rock	15.9	16.2	16.3	52.9	55.3	55.0	43.2	45.6	43.6
Pine Bluff	1.4	1.5	1.5	6.2	6.4	6.4	6.7	7.4	6.9
California	809.5	821.6	826.3	2,899.1	3,011.2	3,009.3	1,799.5	1,991.5	1,855.4
Anaheim-Santa Ana	91.6	90.2	90.0	267.6	272.2	273.3	106.3	120.2	108.8
Bakersfield	6.3	6.3	6.3	32.6	33.0	33.3	36.6	41.1	38.4
Fresno	13.6	12.6	12.8	49.0	48.4	49.8	40.7	45.8	43.2
Los Angeles-Long Beach	285.7	293.2	294.8	1,038.8	1,072.9	1,070.6	476.2	520.1	499.9
Modesto	4.5	4.5	4.6	21.3	22.3	22.4	16.3	18.5	18.6
Oakland	54.8	56.4	56.6	186.0	193.3	193.6	153.5	164.6	156.3
Oxnard-Ventura	10.4	11.0	10.9	47.9	51.1	51.3	39.4	41.7	41.3
Riverside-San Bernardino	26.6	27.6	28.0	140.1	148.3	146.5	115.0	127.1	118.8
Sacramento	33.8	34.7	35.1	117.2	125.7	125.7	158.0	172.2	163.7
San Diego	61.3	62.6	63.0	229.1	239.9	241.1	146.2	165.6	152.9
San Francisco	113.1	113.9	113.8	282.8	293.0	294.4	129.5	135.8	130.9
San Jose	34.8	34.9	34.9	197.2	205.3	204.8	82.2	89.3	83.4
Santa Barbara-Santa Maria-Lompoc	8.8	8.7	8.7	39.6	40.6	40.5	25.5	28.1	25.5
Santa Rosa-Petaluma	8.5	8.7	8.8	28.4	29.4	29.2	19.8	23.2	20.6
Stockton	8.7	8.6	8.4	29.6	30.3	30.4	28.6	32.0	29.4
Vallejo-Fairfield-Napa	4.6	4.4	4.4	27.7	30.2	30.0	35.8	37.9	36.3
Colorado	99.1	97.2	97.2	336.0	334.3	335.9	243.6	262.7	246.5
Boulder-Longmont	4.1	4.1	4.1	21.6	21.9	22.0	20.0	21.3	20.4
Denver	67.4	66.7	66.5	198.5	198.8	198.6	115.8	125.3	117.0
Connecticut	152.0	153.5	154.8	391.4	402.9	403.4	194.9	208.3	199.3
Bridgeport-Milford	11.8	12.6	12.7	46.0	46.6	46.7	17.8	21.0	18.3
Hartford	78.3	80.4	80.6	107.8	111.4	110.9	59.0	61.8	59.1
New Haven-Meriden	15.3	15.9	15.9	68.4	71.6	71.4	30.7	32.2	30.8
Stamford	13.1	13.6	13.6	37.7	39.1	39.2	10.2	10.8	10.0
Waterbury	4.5	4.5	4.8	21.1	22.3	22.2	12.2	13.1	13.1
Delaware	27.2	28.7	28.8	74.9	80.9	81.0	46.6	48.5	48.1
Wilmington	24.1	25.5	25.6	65.5	70.0	69.9	36.1	38.2	37.9
District of Columbia	37.7	38.0	37.9	229.9	243.4	242.0	288.3	269.9	284.0
Washington MSA	127.0	130.5	131.9	670.3	700.5	701.3	570.0	565.9	569.1
Florida	364.5	370.8	371.7	1,305.3	1,395.1	1,390.8	692.2	771.1	729.4
Daytona Beach	6.5	6.6	6.6	31.8	32.4	32.8	16.9	20.0	18.4
Fort Lauderdale-Hollywood-Pompano Beach	39.9	41.7	41.8	123.7	131.0	131.5	54.0	62.2	57.5
Fort Myers-Cape Coral	8.1	8.3	8.3	29.5	32.7	32.7	14.2	16.7	15.3
Jacksonville	37.8	39.7	39.9	99.8	109.0	109.2	53.6	59.4	56.2
Melbourne-Titusville-Palm Bay	5.5	5.9	5.9	41.6	43.5	44.1	20.4	20.8	21.2
Miami-Hialeah	68.5	67.9	68.1	222.2	227.7	226.5	104.0	113.3	104.4
Orlando	33.7	36.0	36.2	155.0	161.8	161.8	48.8	56.8	52.1
Pensacola	5.7	5.8	5.8	30.9	31.4	31.4	27.2	29.0	27.6
Sarasota	8.5	8.8	8.7	30.0	32.2	32.0	11.2	12.5	11.6
Tallahassee	5.1	5.1	5.0	21.9	22.7	22.5	43.6	45.8	45.4
Tampa-St. Petersburg-Clearwater	66.3	67.0	67.0	218.8	225.9	226.0	94.8	103.1	97.8
West Palm Beach-Boca Raton-Delray Beach	28.8	28.2	28.2	93.3	101.7	100.6	36.1	41.8	38.4

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		
	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a
Georgia	2,770.2	2,801.7	2,794.8	8.3	8.5	8.5	154.0	150.5	152.1
Athens	61.9	62.4	62.1	.2	.2	.2	2.6	2.3	2.4
Atlanta	1,374.2	1,392.1	1,390.5	1.4	1.4	1.4	74.7	71.9	73.1
Augusta	156.8	157.9	158.1	.5	.5	.5	9.6	9.7	10.0
Columbus	92.2	92.8	92.6	.1	.1	.1	5.4	5.4	5.3
Macon-Warner Robins	118.3	118.5	118.2	.1	.1	.1	5.1	4.8	5.0
Savannah	102.7	102.3	102.2	(^b)	(^b)	(^b)	6.7	6.7	6.8
Hawaii	459.7	489.0	469.1	(^b)	(^b)	(^b)	21.8	20.8	21.0
Honolulu	367.1	374.4	374.0	(^b)	(^b)	(^b)	17.0	16.6	16.9
Idaho	336.2	346.2	343.8	2.7	3.2	3.2	15.1	14.9	16.1
Boise City	86.9	90.3	90.1	(^c)	(^c)	(^c)	4.7	4.5	4.7
Illinois	4,908.2	5,029.8	5,031.3	24.5	24.3	24.1	203.3	215.4	222.0
Aurora-Elgin	133.8	142.5	140.6	(^b)	(^b)	(^b)	6.7	7.2	7.4
Bloomington-Normal	53.8	55.7	55.1	(^b)	(^b)	(^b)	1.8	1.8	1.8
Champaign-Urbana-Rantoul	81.9	83.0	81.6	(^b)	(^b)	(^b)	2.5	2.5	2.5
Chicago	3,035.8	3,111.1	3,115.3	2.5	2.5	2.5	125.7	129.4	134.7
Davenport-Rock Island-Moline	155.7	155.4	155.3	(^b)	(^b)	(^b)	4.9	4.7	4.8
Decatur	50.0	50.8	50.4	(^b)	(^b)	(^b)	2.0	1.9	1.9
Joliet	95.6	97.1	96.2	(^b)	(^b)	(^b)	5.5	5.2	5.4
Lake County	187.7	197.9	196.6	(^b)	(^b)	(^b)	9.3	9.9	10.2
Peoria	133.4	138.5	138.1	(^b)	(^b)	(^b)	5.4	5.4	5.4
Rockford	124.2	128.2	125.2	(^b)	(^b)	(^b)	4.8	4.7	4.7
Springfield	98.3	99.3	99.1	(^b)	(^b)	(^b)	3.3	3.2	3.2
Indiana	2,308.5	2,410.9	2,397.7	9.0	8.4	8.5	108.4	117.1	119.8
Anderson	47.9	48.6	47.6	(^c)	(^c)	(^c)	1.5	1.5	1.5
Bloomington	48.6	51.7	52.3	(^c)	(^c)	(^c)	2.4	2.5	2.7
Elkhart-Goshen	98.4	104.6	103.6	(^c)	(^c)	(^c)	2.9	3.0	3.1
Evansville	126.4	129.8	130.0	2.3	2.1	2.1	7.8	7.3	7.6
Fort Wayne	184.8	196.1	195.7	(^c)	(^c)	(^c)	9.9	11.3	11.9
Gary-Hammond	224.0	229.5	230.8	(^c)	(^c)	(^c)	12.6	13.6	13.8
Indianapolis	607.0	631.0	631.2	.8	.8	.9	32.2	34.0	34.9
Lafayette	61.0	63.0	63.4	(^c)	(^c)	(^c)	2.8	3.5	3.7
Muncie	48.7	50.7	50.0	(^c)	(^c)	(^c)	2.2	2.2	2.3
South Bend-Mishawaka	109.4	113.8	112.5	(^c)	(^c)	(^c)	5.4	6.0	6.3
Terre Haute	51.7	53.3	52.8	.3	.3	.3	2.1	2.4	2.4
Iowa	1,103.7	1,148.4	1,126.9	2.5	2.4	2.4	40.2	37.8	39.4
Cedar Rapids	85.9	90.6	90.1	.2	.1	.1	3.5	3.0	3.2
Des Moines	206.0	217.7	216.4	(^b)	(^b)	(^b)	8.4	8.0	8.4
Dubuque	41.6	42.5	42.4	(^b)	(^b)	(^b)	1.5	1.4	1.4
Sioux City	50.6	53.3	53.5	(^b)	(^b)	(^b)	2.2	1.9	1.9
Waterloo-Cedar Falls	59.7	62.2	61.5	(^b)	(^b)	(^b)	2.1	2.3	2.4
Kansas	989.4	1,024.4	1,009.1	11.6	11.4	11.6	47.9	45.2	46.3
Topeka	85.8	89.9	88.1	(^b)	(^b)	(^b)	3.9	3.6	3.6
Wichita	226.9	233.5	231.7	2.3	2.4	2.5	10.4	10.2	10.4
Kentucky	1,305.8	1,359.5	1,351.3	39.2	36.3	36.3	61.9	65.6	67.3
Lexington-Fayette	170.8	180.6	177.4	.7	.6	.5	11.0	9.6	9.7
Louisville	439.9	458.6	459.5	.5	.4	.4	23.7	25.3	26.0
Owensboro	32.9	33.9	33.5	.9	.8	.8	2.2	2.4	2.4
Louisiana	1,477.5	1,498.1	1,496.7	55.2	55.0	55.1	79.7	82.2	83.5
Alexandria	45.6	45.7	45.4	.2	.2	.2	2.6	2.4	2.5
Baton Rouge	209.3	210.2	209.7	.8	.8	.8	18.9	21.1	20.5
Houma-Thibodaux	52.2	53.5	53.2	5.8	6.2	6.2	1.5	1.6	1.6
Lafayette	81.0	82.8	83.8	10.3	10.7	10.6	3.1	2.9	3.0
Monroe	55.5	53.6	53.7	.4	.4	.4	2.9	2.7	2.7
New Orleans	510.6	517.8	517.8	14.7	15.1	15.1	21.8	22.5	22.8
Shreveport	132.2	132.0	130.8	3.4	3.0	3.0	7.1	7.6	7.8
Maine	506.3	534.7	530.1	.1	.1	.1	34.2	36.6	37.9
Lewiston-Auburn	39.0	41.3	40.0	(^b)	(^b)	(^b)	2.4	2.4	2.6
Portland	124.7	128.7	129.0	(^b)	(^b)	(^b)	10.0	10.0	10.2

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Georgia	568.7	570.5	567.2	176.3	177.6	177.9	697.1	694.6	697.9
Athens	15.3	15.3	15.1	1.8	1.8	1.8	12.9	12.9	13.0
Atlanta	186.5	187.6	185.9	116.4	119.7	120.2	379.9	377.5	379.6
Augusta	35.5	36.4	36.4	5.3	5.2	5.2	34.4	33.5	33.6
Columbus	20.0	20.1	20.0	3.7	3.6	3.6	20.5	20.0	20.2
Macon-Warner Robins	18.7	18.1	18.3	4.9	4.9	4.9	26.9	26.9	27.0
Savannah	17.3	16.6	16.6	9.5	8.8	9.0	25.4	25.0	25.2
Hawaii	22.8	22.2	22.7	36.9	36.8	36.6	124.4	125.7	126.9
Honolulu	16.8	16.6	16.6	30.3	30.4	30.5	97.5	98.6	99.4
Idaho	56.4	57.6	57.6	18.0	18.1	18.3	86.5	86.0	86.4
Boise City	11.0	12.6	12.9	5.2	5.2	5.2	23.0	23.0	23.3
Illinois	931.8	949.7	947.0	294.7	303.2	300.2	1,228.7	1,261.2	1,269.6
Aurora-Elgin	36.0	37.9	38.1	3.0	3.2	3.1	37.8	39.8	39.3
Bloomington-Normal	5.1	6.1	6.1	2.6	2.6	2.6	12.7	12.8	12.8
Champaign-Urbana-Rantoul	7.9	8.0	8.0	2.3	2.3	2.3	19.2	19.1	19.0
Chicago	548.2	555.6	550.3	193.2	194.0	194.1	757.4	787.4	785.2
Davenport-Rock Island-Moline	33.5	32.6	32.6	8.2	8.3	8.3	42.3	42.3	42.5
Decatur	13.4	13.4	13.4	4.9	4.8	4.8	11.1	11.4	11.5
Joliet	19.5	19.9	19.8	8.4	8.2	8.2	22.7	22.8	22.9
Lake County	42.1	44.4	44.7	6.7	7.3	7.2	50.3	53.3	53.2
Peoria	31.0	35.6	35.4	6.7	6.7	6.7	33.5	33.1	33.6
Rockford	41.7	44.7	41.7	4.3	4.3	4.3	29.0	28.9	29.0
Springfield	4.0	3.9	3.9	4.8	4.9	4.9	22.0	22.0	22.1
Indiana	616.1	636.9	634.1	121.9	130.1	130.7	554.2	575.4	576.5
Anderson	16.9	16.6	16.0	1.5	1.6	1.5	11.4	11.6	11.5
Bloomington	8.7	9.5	9.6	1.7	1.8	1.8	11.3	11.9	11.9
Elkhart-Goshen	53.6	57.3	57.0	2.8	2.9	2.9	18.5	19.2	19.1
Evansville	30.6	30.9	31.1	6.6	6.7	6.7	33.1	34.4	34.5
Fort Wayne	51.3	52.2	52.2	12.2	12.7	12.8	46.4	49.5	49.3
Gary-Hammond	55.6	56.8	56.6	15.1	15.0	15.2	53.4	55.0	55.4
Indianapolis	106.9	105.8	105.7	37.4	39.0	39.2	157.7	165.6	165.4
Lafayette	12.0	12.3	12.3	2.0	2.0	2.0	12.9	12.9	12.9
Muncie	10.8	10.7	10.7	2.3	2.5	2.5	12.6	13.1	12.9
South Bend-Mishawaka	23.2	23.9	22.7	5.0	5.1	5.2	29.5	30.9	30.8
Terre Haute	10.4	10.1	10.0	2.8	3.0	2.9	14.7	15.1	15.3
Iowa	215.6	226.9	225.7	53.6	55.0	54.9	285.0	292.2	292.7
Cedar Rapids	22.3	23.8	23.9	5.5	6.4	6.5	21.1	22.1	21.8
Des Moines	23.7	26.4	26.1	12.1	12.6	12.7	54.4	57.4	57.4
Dubuque	12.6	12.9	13.1	1.7	1.8	1.9	9.7	9.9	10.0
Sioux City	9.2	10.6	10.7	3.1	3.2	3.2	13.4	13.9	14.2
Waterloo-Cedar Falls	14.0	15.0	15.0	1.7	1.8	1.8	14.7	15.2	15.2
Kansas	177.1	181.5	181.5	61.4	61.5	61.1	251.8	258.9	257.0
Topeka	9.0	9.2	9.0	6.7	6.5	6.5	19.5	20.9	20.6
Wichita	60.6	60.3	60.5	10.7	10.8	10.7	52.8	54.3	54.2
Kentucky	260.2	272.7	272.7	67.7	68.8	68.5	315.0	330.5	331.0
Lexington-Fayette	27.5	30.3	30.2	7.6	8.0	8.0	41.7	44.1	44.0
Louisville	85.8	88.1	87.9	27.5	30.0	29.8	107.8	116.1	115.0
Owensboro	5.6	6.0	5.9	2.2	2.2	2.2	8.5	8.5	8.5
Louisiana	163.2	168.7	168.9	104.8	104.5	104.9	364.9	363.5	364.2
Alexandria	3.5	3.5	3.5	2.2	2.2	2.2	11.2	11.2	11.2
Baton Rouge	18.5	18.7	18.8	10.3	10.4	10.3	50.8	51.3	51.5
Houma-Thibodaux	4.3	4.3	4.3	5.5	6.1	6.2	13.9	13.7	13.8
Lafayette	5.8	6.2	6.1	5.7	6.0	6.0	21.9	22.8	23.3
Monroe	6.9	7.1	6.8	2.9	2.6	2.7	14.6	14.1	14.1
New Orleans	41.5	43.8	43.8	43.2	44.0	44.3	134.6	134.7	133.9
Shreveport	17.6	17.4	17.4	8.4	8.1	8.0	32.6	32.2	32.2
Maine	99.2	108.6	103.1	20.7	21.5	21.7	130.8	135.2	137.0
Lewiston-Auburn	10.3	10.5	9.9	1.4	1.5	1.5	9.7	10.1	10.1
Portland	15.4	16.4	16.7	6.1	6.0	5.9	37.1	37.4	38.0

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Georgia	158.0	157.4	158.1	541.3	555.6	557.5	466.3	487.0	475.5
Athens	1.9	1.9	1.9	9.8	9.7	9.9	17.6	18.4	17.9
Atlanta	99.8	100.0	100.5	324.1	331.8	333.1	191.5	202.3	196.7
Augusta	6.4	6.2	6.2	32.3	32.7	32.9	32.8	33.6	33.3
Columbus	6.3	6.1	6.1	15.9	16.8	16.6	20.3	20.7	20.8
Macon-Warner Robins	7.5	7.7	7.8	22.2	22.5	22.6	32.8	33.4	32.7
Savannah	4.6	4.3	4.3	24.0	24.4	24.2	15.2	16.5	16.2
Hawaii	34.2	34.6	34.9	126.1	130.4	130.4	93.7	98.5	96.6
Honolulu	28.7	29.0	29.2	98.3	100.5	100.6	78.5	82.7	80.8
Idaho	19.4	19.2	19.4	68.9	71.5	71.6	69.2	75.7	71.2
Boise City	7.6	7.5	7.6	18.9	19.8	19.9	16.4	17.7	16.5
Illinois	363.2	366.2	367.7	1,167.4	1,195.1	1,209.3	694.6	714.7	691.4
Aurora-Elgin	6.5	6.7	6.7	30.1	32.1	32.4	13.6	15.5	13.5
Bloomington-Normal	9.4	9.6	9.6	12.0	12.0	12.1	10.2	10.8	10.1
Champaign-Urbana-Rantoul	3.3	3.4	3.4	16.4	16.6	16.7	30.3	31.1	29.7
Chicago	261.6	265.7	267.4	791.6	811.8	822.4	355.6	364.7	358.7
Davenport-Rock Island-Moline	8.0	8.2	8.2	31.4	31.6	31.6	27.4	27.7	27.3
Decatur	2.7	2.7	2.7	10.7	10.9	10.8	5.2	5.7	5.3
Joliet	3.8	3.8	3.8	20.3	20.3	20.3	15.1	16.6	15.5
Lake County	7.0	6.9	6.9	43.2	44.7	45.2	28.5	30.8	28.6
Peoria	7.0	7.0	7.0	34.6	34.8	34.8	15.2	15.9	15.2
Rockford	5.3	5.3	5.4	27.1	27.6	27.6	12.0	12.7	12.5
Springfield	8.0	8.1	8.1	24.4	24.1	24.2	31.7	33.0	32.6
Indiana	118.3	121.7	122.2	453.5	478.2	480.0	327.2	343.1	325.8
Anderson	1.6	1.7	1.7	9.4	9.7	9.6	5.7	6.1	5.7
Bloomington	1.8	2.0	2.0	7.9	8.5	8.4	14.8	15.6	15.9
Elkhart-Goshen	2.5	2.7	2.7	12.8	13.7	13.7	5.2	5.7	5.0
Evansville	5.2	5.4	5.4	29.5	30.4	31.0	11.3	12.5	11.7
Fort Wayne	12.3	12.3	12.3	37.8	40.9	40.5	14.9	17.2	16.7
Gary-Hammond	8.5	8.5	8.6	48.0	49.6	49.7	30.8	30.9	31.6
Indianapolis	47.0	49.3	49.7	137.2	146.1	146.2	87.9	90.2	89.3
Lafayette	3.1	3.2	3.2	11.3	11.6	11.6	16.9	17.5	17.6
Muncie	1.7	1.7	1.7	10.5	11.1	11.0	8.8	9.4	8.9
South Bend-Mishawaka	6.4	6.5	6.6	29.5	30.9	30.8	10.5	10.4	10.2
Terre Haute	2.0	2.1	2.1	10.7	10.9	10.9	8.6	9.5	8.9
Iowa	65.6	67.2	67.5	243.9	250.5	248.3	197.3	216.4	196.0
Cedar Rapids	5.0	4.9	5.0	19.0	20.1	19.8	9.3	10.2	9.8
Des Moines	27.4	29.4	29.8	51.7	54.0	53.9	28.1	29.7	27.9
Dubuque	1.4	1.5	1.5	11.4	11.4	11.4	3.2	3.5	3.0
Sioux City	2.7	2.6	2.6	13.6	14.5	14.4	6.4	6.6	6.5
Waterloo-Cedar Falls	3.0	2.8	2.8	13.5	13.7	13.7	10.6	11.3	10.5
Kansas	57.4	57.8	57.6	201.0	209.3	208.5	181.2	198.8	185.5
Topeka	6.3	6.7	6.7	20.7	21.3	21.3	19.6	21.6	20.3
Wichita	11.6	11.4	11.4	52.9	55.9	55.9	25.6	28.2	26.1
Kentucky	62.1	62.6	62.8	274.6	286.7	284.4	225.1	236.3	228.3
Lexington-Fayette	9.2	9.3	9.3	40.1	41.5	40.9	33.0	37.2	34.8
Louisville	29.4	30.0	30.2	103.9	108.7	108.6	61.3	60.0	61.6
Owensboro	1.4	1.5	1.5	7.6	7.9	7.9	4.5	4.6	4.3
Louisiana	85.4	84.7	84.4	318.5	328.9	328.9	305.8	310.6	306.8
Alexandria	2.6	2.6	2.6	11.2	11.3	11.3	12.1	12.3	11.9
Baton Rouge	13.7	13.6	13.4	43.4	44.2	44.0	52.9	50.1	50.4
Houma-Thibodaux	2.4	2.2	2.1	8.5	9.0	9.1	10.3	10.4	9.9
Lafayette	3.8	3.6	3.6	18.1	18.8	18.6	12.3	11.8	12.6
Monroe	4.7	4.6	4.5	11.8	11.6	11.7	11.3	10.5	10.8
New Orleans	34.4	33.9	33.5	130.9	135.7	135.7	89.5	88.1	88.7
Shreveport	7.4	7.2	7.3	32.7	33.1	33.2	23.0	23.4	21.9
Maine	25.5	25.6	25.7	116.3	116.9	123.7	79.5	90.2	80.9
Lewiston-Auburn	2.2	2.5	2.5	9.6	10.4	10.0	3.4	3.9	3.4
Portland	12.6	12.8	12.9	29.6	31.2	31.3	13.9	14.9	14.0

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		
	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a
Maryland	2,035.7	2,049.5	2,037.3	1.9	1.9	1.9	157.5	153.0	155.3
Baltimore MSA	1,092.0	1,095.7	1,090.5	.3	.3	.3	76.0	75.2	76.3
Baltimore City	461.6	460.2	462.2	(¹)	(¹)	(¹)	20.1	20.0	20.1
Suburban Maryland-D.C.	715.8	727.0	720.4	.7	.6	.6	65.9	62.7	64.0
Massachusetts	3,050.9	3,156.2	3,118.0	1.9	2.0	2.0	147.0	158.6	162.3
Boston	1,696.0	1,754.3	1,728.2	.9	1.1	1.1	72.5	77.2	78.0
Brockton	71.7	75.1	74.1	(¹)	(¹)	(¹)	4.0	4.4	4.6
Fall River	54.0	56.3	54.4	(¹)	(¹)	(¹)	2.5	2.8	2.8
Fitchburg-Leominster	38.4	41.1	38.8	(¹)	(¹)	(¹)	2.7	2.9	3.0
Lawrence-Haverhill	160.0	167.5	162.6	(¹)	(¹)	(¹)	8.6	8.8	8.8
Lowell	103.8	108.2	106.1	.2	.1	.1	5.9	6.7	6.7
New Bedford	65.4	69.7	67.6	(¹)	(¹)	(¹)	3.3	3.6	3.8
Springfield	235.5	244.4	238.5	.1	.1	.1	10.6	10.6	11.0
Worcester	195.9	208.0	203.8	.1	.2	.2	10.1	11.0	11.0
Michigan	3,658.4	3,775.8	3,739.6	10.4	10.5	10.5	130.3	137.8	143.5
Ann Arbor	157.6	168.0	164.3	(¹)	(¹)	(¹)	6.2	6.6	7.0
Battle Creek	57.3	58.3	57.9	(¹)	(¹)	(¹)	2.1	2.2	2.3
Benton Harbor	63.3	65.0	64.8	(¹)	(¹)	(¹)	1.6	1.6	1.6
Detroit	1,833.2	1,882.1	1,867.6	.8	.9	.9	63.1	64.7	67.7
Flint	169.9	167.5	165.6	(¹)	(¹)	(¹)	4.7	4.5	4.6
Grand Rapids	308.9	323.9	322.3	(¹)	(¹)	(¹)	15.3	15.5	16.2
Kalamazoo	100.0	105.3	103.5	(¹)	(¹)	(¹)	3.4	3.2	3.4
Lansing-East Lansing	191.7	205.3	200.2	(¹)	(¹)	(¹)	5.6	5.9	6.2
Muskegon	56.7	57.0	57.1	(¹)	(¹)	(¹)	2.3	2.2	2.4
Saginaw-Bay City-Midland	152.9	158.0	157.4	(¹)	(¹)	(¹)	6.3	7.2	7.7
Minnesota	1,965.4	2,044.5	2,025.6	6.7	7.4	7.5	92.9	85.8	89.0
Duluth	88.6	90.6	89.5	4.0	4.7	4.8	5.1	3.4	3.7
Minneapolis-St. Paul	1,282.5	1,329.6	1,318.2	(¹)	(¹)	(¹)	59.3	56.8	59.0
Rochester	57.1	59.1	58.6	(²)	(²)	(²)	2.1	2.1	2.1
St. Cloud	67.1	71.7	71.1	(²)	(²)	(²)	4.4	4.0	4.3
Mississippi	856.1	884.3	876.8	6.1	6.3	6.4	35.6	34.7	34.9
Jackson	174.8	182.0	179.6	.9	1.1	1.2	9.0	8.8	8.9
Missouri	2,180.7	2,228.3	2,203.6	5.8	5.7	5.6	103.7	103.6	105.6
Kansas City	727.6	742.1	735.7	.5	.5	.5	38.1	37.3	38.6
St. Louis	1,124.7	1,145.5	1,139.2	3.6	3.5	3.5	58.4	59.1	60.5
Springfield	104.8	110.6	111.1	.1	.1	.1	5.3	5.8	6.0
Montana	274.3	278.8	272.3	6.1	6.1	6.1	9.9	9.8	9.7
Nebraska	656.1	673.5	664.4	1.8	1.9	1.9	25.9	25.4	25.7
Lincoln	109.4	111.4	110.6	(¹)	(¹)	(¹)	4.5	4.5	4.6
Omaha	299.4	308.9	306.0	.2	.2	.2	12.9	12.5	12.8
Nevada	504.4	532.0	535.4	8.2	10.6	10.9	31.4	34.4	35.2
Las Vegas	284.0	301.7	301.9	.3	.3	.3	19.3	20.8	21.0
Reno	133.8	138.7	140.5	.9	1.1	1.1	7.3	8.2	8.7
New Hampshire	519.9	541.0	538.7	.7	.8	.7	40.4	41.3	42.9
Nashua	92.8	97.4	95.3	.1	.1	.1	5.5	6.0	6.1
Portsmouth-Dover-Rochester,NH-ME	111.3	116.3	115.1	.1	.1	.1	6.5	6.6	7.0
New Jersey	3,628.7	3,721.1	3,706.3	2.4	2.5	2.5	176.9	188.7	192.8
Atlantic City	180.3	177.3	184.0	(¹)	(¹)	(¹)	10.5	11.3	11.2
Bergen-Passaic	668.0	689.5	684.1	.1	.1	.1	32.5	33.9	33.8
Camden	422.1	442.1	439.3	.1	.1	.1	25.7	28.9	29.1
Jersey City	239.7	248.0	246.7	(¹)	(¹)	(¹)	7.0	8.3	8.2
Middlesex-Somerset-Hunterdon	518.6	537.0	535.9	.6	.7	.7	23.9	25.1	25.4
Monmouth-Ocean	337.1	345.6	347.7	(¹)	(¹)	(¹)	22.4	25.4	26.0
Newark	962.2	978.9	975.9	.8	.7	.7	39.8	44.0	44.8
Trenton	192.8	202.2	198.7	(¹)	(¹)	(¹)	5.6	5.7	6.0

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Maryland	207.1	207.2	207.9	93.7	92.6	92.3	524.8	525.3	526.7
Baltimore MSA	131.3	131.4	130.9	53.7	53.4	52.9	270.0	270.5	270.7
Baltimore City	44.2	44.9	44.6	28.5	27.9	27.8	98.4	98.4	98.4
Suburban Maryland-D.C.	35.0	35.8	35.9	27.3	27.2	27.1	190.9	194.4	194.6
Massachusetts	587.3	586.2	571.8	128.5	133.0	128.0	723.7	744.6	738.3
Boston	276.5	277.1	272.9	74.5	76.4	74.7	382.3	388.4	384.9
Brockton	11.1	11.5	11.1	4.9	5.2	4.9	21.9	23.4	23.4
Fall River	16.1	15.7	14.2	1.7	1.9	1.9	14.6	15.4	15.6
Fitchburg-Leominster	11.2	11.5	10.8	1.5	1.7	1.6	9.8	10.2	9.8
Lawrence-Haverhill	50.2	49.9	49.0	6.5	6.7	6.2	36.4	38.4	38.1
Lowell	35.8	36.2	35.8	3.5	3.4	3.2	21.7	22.7	22.3
New Bedford	18.4	19.0	17.9	2.7	3.2	3.1	16.3	17.2	17.0
Springfield	50.8	51.4	50.2	9.1	10.1	9.5	55.4	58.0	56.9
Worcester	45.5	46.5	45.5	8.5	8.6	8.5	47.0	48.9	48.0
Michigan	925.3	945.2	927.1	151.6	154.6	155.7	859.0	887.4	886.9
Ann Arbor	38.4	39.1	38.5	4.0	4.5	4.5	28.1	30.5	30.1
Battle Creek	15.6	15.5	15.4	1.9	1.8	1.9	11.5	12.0	11.9
Benton Harbor	21.6	21.1	21.2	2.3	2.5	2.5	13.4	14.0	14.1
Detroit	441.3	447.7	438.9	84.6	87.9	88.3	439.1	452.8	452.9
Flint	54.6	48.8	47.4	4.7	4.5	4.7	44.7	47.3	47.2
Grand Rapids	94.3	99.2	98.9	11.3	11.3	11.3	80.4	84.0	84.0
Kalamazoo	28.0	30.4	30.0	3.2	3.4	3.4	23.1	24.0	23.6
Lansing-East Lansing	31.3	33.7	32.9	5.8	5.6	5.6	40.9	43.7	43.5
Muskegon	17.4	17.3	16.9	2.4	2.4	2.4	12.7	12.9	13.1
Saginaw-Bay City-Midland	42.7	43.6	42.9	6.9	7.1	7.1	36.6	37.6	37.7
Minnesota	379.2	391.7	394.6	99.9	101.2	100.6	493.2	509.8	509.4
Duluth	7.6	7.9	7.9	5.8	6.0	6.0	22.3	22.2	22.2
Minneapolis-St. Paul	255.4	262.6	264.0	69.6	70.7	69.8	316.5	325.0	324.8
Rochester	10.9	11.4	11.7	1.7	1.7	1.7	11.7	11.5	11.6
St. Cloud	11.8	12.6	12.7	3.3	3.6	3.6	20.8	22.5	22.4
Mississippi	226.4	235.1	233.4	42.4	43.3	43.5	187.4	191.2	191.3
Jackson	20.5	21.3	21.0	12.6	13.1	13.1	42.4	43.3	43.4
Missouri	419.3	421.9	419.0	142.4	144.1	143.3	545.1	555.4	557.0
Kansas City	108.5	109.5	109.4	55.5	55.7	55.0	192.8	192.6	193.1
St. Louis	218.7	221.3	219.6	72.3	74.9	74.3	276.6	280.0	280.4
Springfield	20.0	21.5	21.5	6.9	7.2	7.3	30.1	31.6	31.5
Montana	21.6	20.4	20.5	19.7	19.3	19.2	74.7	74.2	74.3
Nebraska	89.3	93.1	92.9	42.7	43.9	44.2	170.2	171.4	170.7
Lincoln	13.5	13.9	14.1	5.8	5.9	5.9	25.6	25.2	25.0
Omaha	34.3	35.9	36.0	22.7	23.9	24.0	76.8	78.0	77.4
Nevada	23.6	24.5	24.5	28.0	28.6	28.5	103.2	108.4	109.2
Las Vegas	8.8	8.9	8.9	15.8	16.2	16.2	60.4	64.2	64.5
Reno	8.4	8.3	8.2	9.1	9.3	9.2	30.0	31.1	31.3
New Hampshire	116.2	121.9	116.7	17.0	17.8	17.2	133.3	137.1	138.1
Nashua	36.8	37.4	36.9	2.1	2.2	2.2	21.0	21.7	21.3
Portsmouth-Dover-Rochester,NH-ME	20.1	21.2	19.9	2.9	3.2	3.2	32.1	31.8	32.9
New Jersey	672.4	673.8	665.9	237.0	245.3	244.3	871.3	889.1	887.6
Atlantic City	8.1	8.5	8.5	6.2	6.2	6.3	44.6	42.9	47.7
Bergen-Passaic	158.6	161.9	158.9	28.4	28.6	28.4	192.5	195.3	195.4
Camden	71.4	72.0	72.1	18.1	19.1	19.0	113.8	119.3	118.5
Jersey City	48.4	49.2	47.1	30.5	30.9	30.8	58.5	61.2	61.0
Middlesex-Somerset-Hunterdon	113.0	116.7	116.0	43.0	44.8	44.3	124.2	129.0	128.7
Monmouth-Ocean	30.3	30.0	29.8	16.2	16.7	16.7	94.7	93.7	95.2
Newark	181.1	179.3	176.5	80.6	80.5	79.3	196.0	199.5	199.1
Trenton	30.8	31.5	31.4	6.3	6.8	6.6	31.2	32.4	32.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Maryland	126.4	128.0	128.2	549.2	551.5	553.7	375.1	390.0	371.3
Baltimore MSA	76.1	75.3	75.6	288.5	288.6	289.8	196.0	201.0	194.0
Baltimore City	44.3	44.7	44.9	138.9	139.5	139.8	87.2	84.7	86.5
Suburban Maryland-D.C.	42.0	42.9	43.3	213.5	213.3	214.5	140.4	150.1	140.4
Massachusetts	223.2	231.5	233.9	847.8	888.6	886.3	391.5	411.7	395.4
Boston	152.4	157.2	157.4	541.2	565.7	559.4	195.7	211.2	199.8
Brockton	3.2	3.2	3.3	14.9	15.7	15.6	11.7	11.7	11.2
Fall River	3.0	3.2	3.2	10.3	10.8	10.9	5.8	6.5	5.8
Fitchburg-Leominster	1.9	1.9	1.9	7.7	8.6	8.4	3.6	4.3	3.3
Lawrence-Haverhill	6.5	6.7	6.7	33.4	35.9	35.2	18.4	21.1	18.6
Lowell	4.3	4.3	4.3	20.1	20.8	20.9	12.3	14.0	12.8
New Bedford	2.5	2.7	2.7	13.1	13.5	13.7	9.1	10.5	9.4
Springfield	16.5	16.9	17.0	55.9	58.7	57.3	37.1	38.6	36.5
Worcester	14.2	15.2	15.5	47.5	52.3	51.0	23.0	25.3	24.1
Michigan	183.7	186.6	187.5	824.0	843.0	843.8	574.1	610.8	578.6
Ann Arbor	4.8	4.7	4.7	32.6	34.9	35.0	43.4	47.4	44.3
Battle Creek	3.4	3.3	3.3	11.7	11.9	11.9	11.1	11.5	11.2
Benton Harbor	2.6	2.7	2.7	13.7	14.4	14.2	7.9	8.6	8.3
Detroit	107.4	109.3	109.8	466.0	474.9	477.9	231.0	243.8	231.3
Flint	5.9	5.9	5.9	30.6	31.8	31.6	24.7	24.6	24.3
Grand Rapids	13.8	14.1	14.1	64.0	68.2	67.6	29.5	31.3	29.9
Kalamazoo	4.7	5.0	5.0	23.6	23.7	23.7	14.1	15.7	14.4
Lansing-East Lansing	11.6	12.2	12.3	36.8	39.7	39.3	59.3	64.3	60.1
Muskegon	1.4	1.4	1.4	11.8	12.0	12.1	8.7	8.9	8.8
Saginaw-Bay City-Midland	6.1	6.3	6.3	33.1	34.9	34.8	21.0	21.2	20.6
Minnesota	121.3	124.5	124.9	479.1	498.4	500.4	293.1	325.6	299.1
Duluth	3.2	3.3	3.2	20.8	21.4	21.6	19.9	21.7	20.1
Minneapolis-St. Paul	94.2	96.6	97.0	326.6	337.5	337.5	160.3	179.8	165.3
Rochester	1.6	1.7	1.7	24.2	24.5	24.7	5.1	6.1	5.2
St. Cloud	2.3	2.4	2.4	13.8	14.3	14.2	10.6	12.3	11.4
Mississippi	38.9	39.4	39.4	140.7	144.8	144.3	178.6	189.4	183.7
Jackson	14.4	14.5	14.5	38.3	39.9	40.0	36.6	39.9	37.6
Missouri	137.0	137.2	137.6	510.4	517.8	518.2	317.0	342.6	317.3
Kansas City	58.6	58.7	58.7	169.8	173.5	173.9	103.8	114.3	106.5
St. Louis	75.1	74.6	74.6	288.0	292.7	295.6	132.0	139.4	130.7
Springfield	4.8	4.8	4.7	26.2	27.4	27.5	11.4	12.2	12.5
Montana	13.5	12.6	12.7	65.9	65.8	66.1	62.9	70.6	63.7
Nebraska	48.3	48.3	48.1	147.9	151.4	150.7	130.0	138.1	130.2
Lincoln	8.1	8.8	8.9	22.7	23.4	23.0	29.2	29.7	29.1
Omaha	29.2	28.7	28.6	80.0	84.3	83.8	43.3	45.4	43.2
Nevada	23.7	25.1	25.3	225.9	235.4	238.3	60.4	65.0	63.5
Las Vegas	14.3	15.4	15.6	134.9	143.4	143.8	30.2	32.5	31.6
Reno	7.0	7.1	7.1	56.1	57.1	58.8	15.0	16.5	16.1
New Hampshire	32.4	34.2	34.5	119.2	121.0	125.5	60.7	66.9	63.1
Nashua	4.0	4.2	4.2	17.6	18.9	18.5	5.7	6.9	6.0
Portsmouth-Dover-Rochester,NH-ME	6.7	6.8	7.0	21.4	22.9	23.6	21.5	23.7	21.4
New Jersey	232.1	238.3	241.2	900.2	924.9	929.1	536.4	558.5	542.9
Atlantic City	7.7	7.5	7.6	78.6	75.8	78.6	24.5	25.0	24.0
Bergen-Passaic	38.7	40.5	41.1	151.9	160.2	160.2	65.3	69.0	66.2
Camden	24.9	26.3	26.6	100.1	103.7	103.9	68.0	72.7	70.0
Jersey City	12.7	13.5	13.9	41.6	43.2	43.0	41.0	41.7	42.7
Middlesex-Somerset-Hunterdon	36.1	36.7	36.8	108.1	112.6	114.6	69.7	71.4	69.4
Monmouth-Ocean	18.4	18.7	18.8	95.8	97.2	100.0	59.1	63.7	61.0
Newark	78.5	80.6	81.0	250.5	258.6	260.2	134.9	135.7	134.3
Trenton	9.6	9.6	9.8	54.5	59.1	56.8	54.8	57.1	55.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
New Mexico	530.1	541.6	539.2	15.0	15.5	15.2	33.2	31.1	31.1
Albuquerque	230.9	236.8	235.9	.2	.2	.2	16.2	15.8	15.9
Las Cruces	38.7	39.7	39.8	.1	.1	.1	2.3	2.3	2.3
Santa Fe	55.7	57.1	57.3	.1	.1	.1	2.8	2.6	2.7
New York	8,064.1	8,275.6	8,223.1	6.3	6.3	6.3	350.5	359.9	369.5
Albany-Schenectady-Troy	405.2	416.3	413.1	.4	.4	.4	21.7	21.5	21.8
Binghamton	119.4	124.0	122.2	(¹)	(¹)	(¹)	5.6	5.4	5.7
Buffalo	434.2	450.1	445.7	.4	.4	.4	19.1	18.8	19.8
Elmira	38.5	40.7	40.3	(¹)	(¹)	(¹)	1.6	1.7	1.8
Nassau-Suffolk	1,133.4	1,167.6	1,155.3	.2	.2	.2	63.3	64.7	65.9
New York PMSA	4,082.3	4,174.2	4,154.6	1.3	1.3	1.3	155.6	162.5	163.7
New York City	3,547.3	3,633.6	3,613.8	.7	.7	.7	119.9	126.8	127.2
Niagara Falls	80.3	83.1	82.2	(¹)	(¹)	(¹)	3.6	3.5	3.7
Orange County	101.8	107.0	105.4	(¹)	(¹)	(¹)	6.1	6.7	6.8
Poughkeepsie	115.9	122.3	122.0	(²)	(²)	(²)	7.0	7.1	7.3
Rochester	459.8	476.2	469.7	.8	.6	.6	20.4	20.3	21.0
Rockland County	98.1	100.7	99.0	(²)	(²)	(²)	5.7	5.7	5.7
Syracuse	297.9	307.1	303.6	.3	.3	.3	16.4	18.1	18.4
Utica-Rome	121.5	126.0	125.0	.2	.2	.2	4.6	4.5	4.7
Westchester County	417.4	420.6	422.3	.3	.3	.3	28.4	28.0	28.7
North Carolina	2,825.6	2,960.4	2,910.9	5.0	5.0	5.1	163.9	171.4	172.7
Asheville	78.2	80.7	80.5	.1	.1	.1	4.3	4.5	4.5
Charlotte-Gastonia-Rock Hill	572.4	602.8	598.4	.4	.4	.4	35.0	39.0	39.4
Greensboro-Winston-Salem-High Point	458.6	471.8	465.2	.3	.3	.3	25.1	25.7	26.0
Raleigh-Durham	379.1	390.6	388.5	.3	.4	.4	22.3	22.6	22.8
North Dakota	253.9	259.6	257.0	4.4	4.4	4.4	13.1	11.7	12.2
Bismarck	36.8	37.5	37.2	.2	.2	.2	1.9	1.7	1.8
Fargo-Moorhead	69.2	72.7	71.5	(¹)	(¹)	(¹)	4.1	4.1	4.2
Grand Forks	29.6	29.5	29.6	(¹)	(¹)	(¹)	2.2	1.5	1.7
Ohio	4,572.3	4,728.6	4,696.2	21.1	20.3	20.6	192.7	200.1	209.6
Akron	262.1	269.6	269.2	.5	.6	.6	9.7	10.0	10.6
Cincinnati	679.4	702.7	700.1	.4	.6	.6	31.2	33.4	34.5
Cleveland	900.7	918.5	921.1	1.0	.9	.9	30.9	30.9	32.0
Columbus	652.9	685.0	678.1	1.0	1.0	1.0	29.3	30.4	31.7
Dayton-Springfield	423.8	439.0	433.3	.4	.4	.4	17.7	18.9	19.8
Toledo	277.2	290.7	288.9	.3	.3	.3	11.3	12.7	13.3
Youngstown-Warren	183.4	197.5	193.6	.7	.6	.6	8.3	8.9	9.2
Oklahoma	1,100.0	1,107.9	1,100.7	45.8	43.4	44.0	35.0	33.2	33.5
Enid	21.8	21.9	21.6	1.0	.9	.9	.7	.7	.6
Lawton	33.1	33.5	33.2	.2	.2	.2	1.2	1.1	1.1
Oklahoma City	397.6	399.4	396.4	11.2	11.0	10.9	13.0	12.9	12.9
Tulsa	288.6	290.6	291.0	15.5	15.0	14.9	10.6	9.9	10.1
Oregon	1,096.5	1,147.9	1,134.6	1.5	1.4	1.5	37.8	38.9	39.9
Eugene-Springfield	103.2	109.8	105.2	.2	.2	.2	3.6	3.4	3.6
Portland	555.7	578.2	573.5	.5	.5	.5	21.0	20.8	21.3
Salem	99.3	99.3	97.7	.1	.1	.1	3.5	3.5	3.7
Pennsylvania	4,930.0	5,074.1	5,050.4	30.8	30.0	29.9	242.9	246.2	256.8
Allentown-Bethlehem	271.4	279.1	276.2	.6	.6	.6	14.1	14.9	15.4
Altoona	52.1	52.7	52.9	(²)	(²)	(²)	2.9	2.7	2.8
Beaver County	50.3	52.6	52.1	(²)	(²)	(²)	3.9	4.5	4.7
Erie	110.0	112.5	112.5	.3	.3	.3	3.7	3.7	3.9
Harrisburg-Lebanon-Carlisle	296.4	303.4	302.1	.3	.3	.3	12.8	13.6	13.5
Johnstown	78.6	80.7	79.8	3.7	3.7	3.7	3.3	3.1	3.4
Lancaster	180.6	186.6	185.6	.4	.4	.4	11.3	11.8	12.1
Philadelphia PMSA	2,149.2	2,195.4	2,188.9	1.1	1.1	1.1	108.6	114.8	118.9
Philadelphia City	773.5	775.3	777.8	(²)	(²)	(²)	18.3	17.8	17.8
Pittsburgh	856.7	879.5	867.9	5.5	5.6	5.6	45.2	44.3	44.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p
New Mexico	38.8	40.4	40.8	28.1	28.1	27.8	129.6	132.8	133.3
Albuquerque	20.0	20.4	20.5	12.1	12.3	12.1	60.2	62.0	62.2
Las Cruces	4.1	3.9	4.0	1.2	1.1	1.1	8.0	8.7	8.7
Santa Fe	1.7	1.8	1.8	1.2	1.3	1.3	10.8	11.5	11.5
New York	1,209.9	1,229.5	1,211.4	399.4	411.4	403.0	1,708.4	1,726.2	1,716.4
Albany-Schenectady-Troy	48.9	48.1	47.5	16.4	16.7	16.6	85.1	88.5	88.3
Binghamton	37.7	38.7	38.8	4.5	4.6	4.7	26.3	27.2	27.0
Buffalo	76.5	77.1	77.0	21.3	22.0	21.5	108.2	112.8	111.5
Elmira	8.0	8.5	8.8	1.4	1.5	1.5	10.6	10.9	10.8
Nassau-Suffolk	174.3	174.0	170.0	46.8	50.2	47.1	308.7	314.6	312.7
New York PMSA	453.9	461.2	452.5	237.1	242.0	239.1	758.7	764.7	757.6
New York City	369.9	377.2	368.3	211.5	215.9	213.3	633.6	638.8	631.8
Niagara Falls	23.4	23.9	23.1	3.7	4.0	3.9	18.9	19.9	19.9
Orange County	14.6	15.3	15.2	5.7	6.0	5.8	27.4	28.8	28.6
Poughkeepsie	30.2	30.4	30.6	3.3	3.3	3.3	21.9	24.9	24.8
Rochester	132.3	136.4	137.0	14.5	14.8	14.4	99.9	102.3	101.4
Rockland County	14.9	14.8	14.6	3.9	4.1	4.1	23.3	23.8	23.7
Syracuse	52.8	53.1	52.6	18.0	18.2	18.2	70.9	73.4	73.3
Utica-Rome	23.9	24.7	24.3	4.3	4.7	4.6	27.1	28.1	27.7
Westchester County	67.2	67.3	67.6	21.1	21.3	21.0	97.5	97.6	97.6
North Carolina	852.9	864.3	860.0	142.5	148.7	148.9	644.7	665.9	669.4
Asheville	18.9	19.3	19.3	3.7	3.8	3.8	18.7	18.7	18.9
Charlotte-Gastonia-Rock Hill	152.9	155.3	154.4	48.5	50.0	49.9	138.6	144.8	145.6
Greensboro-Winston-Salem-High Point	153.0	151.8	151.1	27.4	27.8	27.8	104.5	105.5	105.7
Raleigh-Durham	57.8	58.3	58.5	17.3	16.6	16.6	81.2	83.2	83.3
North Dakota	16.0	16.5	16.6	16.3	16.6	16.6	68.4	69.4	69.2
Bismarck	2.0	2.1	2.1	2.6	2.7	2.7	9.8	9.8	9.8
Fargo-Moorhead	5.0	4.9	4.8	4.5	4.9	5.0	21.0	21.6	21.5
Grand Forks	1.7	1.8	1.8	1.5	1.5	1.5	8.3	8.3	8.4
Ohio	1,084.3	1,106.7	1,101.8	208.6	210.9	210.9	1,103.4	1,135.0	1,137.2
Akron	66.0	67.5	67.1	13.1	13.0	13.0	65.5	67.0	67.0
Cincinnati	144.9	143.7	143.9	35.5	36.7	36.8	170.9	175.9	177.1
Cleveland	199.7	203.9	202.6	41.5	41.2	41.2	216.2	222.1	222.7
Columbus	102.5	103.2	102.8	27.9	28.5	28.7	166.4	174.1	174.5
Dayton-Springfield	103.6	103.5	103.6	15.6	15.8	15.8	96.9	100.8	101.1
Toledo	61.6	63.6	63.4	13.9	13.8	14.0	69.3	72.8	72.7
Youngstown-Warren	43.8	50.6	48.5	7.5	7.7	7.6	48.6	51.3	51.3
Oklahoma	154.2	157.6	158.3	63.2	61.4	61.6	270.0	267.2	265.0
Enid	1.7	1.6	1.7	2.2	2.2	2.2	6.4	6.5	6.4
Lawton	3.4	3.5	3.5	1.4	1.2	1.3	8.4	8.6	8.5
Oklahoma City	47.1	47.4	48.1	19.7	19.1	19.3	100.6	99.3	98.6
Tulsa	46.9	48.0	48.2	23.2	24.0	24.0	70.4	70.2	69.8
Oregon	215.0	211.2	216.4	58.6	59.7	59.4	279.0	293.1	296.5
Eugene-Springfield	20.2	20.0	19.9	4.1	4.4	4.4	26.7	27.2	27.1
Portland	96.4	98.8	99.7	34.7	35.5	35.5	146.0	151.0	152.6
Salem	19.0	14.5	15.5	2.9	3.0	3.0	21.9	22.3	22.2
Pennsylvania	1,041.7	1,058.8	1,051.8	240.8	247.0	243.1	1,127.6	1,150.1	1,148.3
Allentown-Bethlehem	76.6	76.7	75.9	14.0	14.0	13.8	59.4	61.3	61.1
Alltoona	11.5	11.4	11.4	4.6	4.6	4.6	13.0	13.3	13.4
Beaver County	9.8	9.7	9.4	5.1	5.2	5.1	11.2	11.2	11.3
Erie	34.5	34.7	34.6	4.0	3.7	3.7	23.5	24.0	23.9
Harrisburg-Lebanon-Carlisle	52.5	52.6	53.2	17.7	18.4	17.9	67.5	68.1	68.0
Johnstown	13.1	13.3	13.2	4.7	4.9	4.7	16.6	17.0	17.0
Lancaster	60.8	60.1	60.2	7.0	7.2	7.1	43.8	45.7	45.8
Philadelphia PMSA	373.8	373.7	372.1	98.1	97.7	96.3	495.2	508.5	507.9
Philadelphia City	95.1	94.7	94.0	45.6	45.4	46.0	147.3	152.2	151.3
Pittsburgh	123.0	127.0	127.4	44.9	44.2	42.4	215.6	219.8	218.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
New Mexico	27.4	27.8	27.9	125.1	127.9	128.7	132.9	138.0	134.4
Albuquerque	15.0	15.1	15.2	64.4	65.0	65.3	42.8	46.0	44.5
Las Cruces	1.7	1.7	1.8	6.3	6.7	6.7	15.0	15.2	15.1
Santa Fe	2.1	2.0	2.0	15.3	15.5	15.7	21.7	22.3	22.2
New York	802.7	802.4	807.9	2,218.0	2,296.4	2,302.2	1,368.8	1,443.7	1,406.6
Albany-Schenectady-Troy	23.3	23.5	23.7	102.4	105.4	106.0	107.0	112.1	109.0
Binghamton	4.1	4.1	4.1	22.5	22.9	23.0	18.8	21.0	18.9
Buffalo	26.7	27.8	27.8	110.6	116.1	114.9	71.5	75.2	72.9
Elmira	1.4	1.4	1.4	9.7	10.2	10.2	5.7	6.6	5.8
Nassau-Suffolk	76.6	78.6	79.1	294.7	299.8	303.9	168.8	185.4	176.3
New York PMSA	589.5	579.5	582.4	1,251.1	1,289.6	1,284.9	635.0	673.5	673.2
New York City	555.8	544.5	547.1	1,102.9	1,140.9	1,133.9	553.0	588.8	591.6
Niagara Falls	1.9	1.9	2.0	15.9	16.8	16.7	12.7	13.0	12.8
Orange County	4.1	4.1	4.2	22.7	22.9	23.2	21.1	23.0	21.5
Poughkeepsie	4.6	4.9	5.0	25.7	26.0	26.4	23.2	25.7	24.4
Rochester	22.4	22.7	22.8	110.6	113.6	112.6	58.9	65.6	59.9
Rockland County	5.1	5.5	5.5	25.2	24.8	25.8	20.0	21.9	19.4
Syracuse	19.5	19.6	19.7	71.2	72.1	72.0	48.9	52.4	49.2
Utica-Rome	6.8	7.1	7.1	26.3	27.0	27.0	28.3	29.9	29.4
Westchester County	27.7	28.7	28.9	117.5	118.4	119.6	57.8	58.9	58.5
North Carolina	129.4	133.7	134.2	491.6	514.9	518.0	395.7	456.5	402.6
Asheville	2.8	2.5	2.6	19.1	19.7	20.3	10.5	12.1	11.0
Charlotte-Gastonia-Rock Hill	37.0	37.2	37.3	104.5	112.6	112.1	55.4	63.5	59.3
Greensboro-Winston-Salem-High Point	23.0	23.7	23.9	81.8	84.1	85.2	43.6	52.9	45.2
Raleigh-Durham	23.1	23.8	23.7	94.5	98.8	99.3	82.7	86.9	83.9
North Dakota	12.7	12.6	12.6	61.3	63.8	64.1	61.7	64.6	61.3
Bismarck	1.7	1.6	1.6	10.3	10.7	10.7	8.3	8.7	8.3
Fargo-Moorhead	4.5	4.6	4.6	18.3	19.0	19.1	11.8	13.6	12.3
Grand Forks	1.2	1.2	1.2	6.6	6.9	6.8	8.1	8.3	8.2
Ohio	246.8	252.5	254.1	1,068.2	1,109.4	1,108.6	647.1	693.7	653.6
Akron	10.7	10.9	11.0	59.3	62.4	62.5	37.3	38.3	37.4
Cincinnati	40.8	42.4	42.7	173.7	182.1	182.3	81.8	88.1	82.2
Cleveland	55.2	56.8	57.5	236.0	244.8	245.5	120.2	118.0	118.8
Columbus	57.8	59.3	60.1	155.9	164.4	164.9	112.2	124.1	114.4
Dayton-Springfield	18.2	18.4	18.5	103.9	108.6	107.9	67.4	72.5	66.1
Toledo	11.5	11.3	11.3	72.0	76.2	76.3	37.4	40.0	37.6
Youngstown-Warren	8.3	8.5	8.6	44.7	45.8	46.0	21.4	24.1	21.8
Oklahoma	59.5	57.1	57.2	234.7	239.8	241.4	237.6	248.2	239.7
Enid	1.0	1.0	1.0	5.6	5.5	5.5	3.2	3.5	3.3
Lawton	1.7	1.5	1.5	5.8	5.8	5.9	11.0	11.6	11.2
Oklahoma City	24.9	24.1	23.9	88.6	90.8	91.3	92.5	94.8	91.4
Tulsa	17.6	17.3	17.3	70.4	70.8	71.6	34.0	35.4	35.1
Oregon	73.1	74.6	75.0	243.6	253.0	254.5	187.9	216.0	191.4
Eugene-Springfield	4.9	4.9	4.9	23.8	25.5	25.3	19.7	24.2	19.8
Portland	48.1	48.6	49.2	136.8	141.9	142.3	72.2	80.9	72.4
Salem	5.5	5.8	5.8	18.6	19.9	19.7	27.8	30.2	27.7
Pennsylvania	297.1	300.1	301.8	1,284.4	1,345.4	1,351.9	664.7	696.5	666.8
Allentown-Bethlehem	11.7	11.8	11.9	67.0	69.7	70.3	28.0	30.1	27.2
Altoona	1.7	1.8	1.9	11.1	11.3	11.5	7.3	7.6	7.3
Beaver County	1.8	1.8	1.9	11.1	11.9	11.9	7.4	8.3	7.8
Erie	5.4	5.4	5.4	26.4	27.8	27.9	12.2	12.9	12.8
Harrisburg-Lebanon-Carlisle	17.5	18.0	18.1	63.6	66.0	66.2	64.5	66.4	64.9
Johnstown	4.8	4.8	4.8	19.4	20.4	20.1	13.0	13.5	12.9
Lancaster	6.9	7.2	7.2	36.5	38.4	38.7	13.9	15.8	14.1
Philadelphia PMSA	166.1	165.6	166.2	611.3	630.2	630.1	295.0	303.8	296.3
Philadelphia City	74.0	73.8	74.1	246.0	248.7	247.6	147.2	142.7	147.0
Pittsburgh	54.5	54.3	54.7	264.2	276.6	275.6	103.8	107.7	99.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a	July 1987	June 1988	July 1988 ^a
Pennsylvania—Continued									
Reading	144.9	154.0	151.4	(²)	(²)	(²)	7.1	7.5	7.7
Scranton—Wilkes-Barre	290.3	298.2	296.5	0.7	0.6	0.7	13.5	13.5	14.4
Williamsport	50.3	53.4	53.2	(²)	(²)	(²)	2.1	2.0	2.0
York	168.3	176.2	174.5	.4	.5	.5	10.2	11.4	11.3
Rhode Island	449.8	460.3	454.6	.1	.1	.1	20.7	20.9	21.1
Pawtucket—Woonsocket—Attleboro	132.1	135.0	133.1	.1	.1	.1	5.2	5.2	5.3
Providence	315.6	325.4	321.1	.1	.1	.1	15.4	15.5	15.6
South Carolina	1,388.4	1,453.0	1,432.6	1.7	1.6	1.6	88.1	91.9	93.0
Charleston	187.8	194.6	194.9	(¹)	(¹)	(¹)	13.6	14.2	14.5
Columbia	225.7	231.7	232.7	(¹)	(¹)	(¹)	13.8	14.5	15.2
Greenville—Spartanburg	306.0	317.2	311.0	(¹)	(¹)	(¹)	21.9	23.0	22.7
South Dakota	257.1	266.3	261.3	2.6	2.6	2.7	11.8	11.6	12.0
Rapid City	35.6	37.2	36.9	.3	.3	.3	2.4	2.4	2.4
Sioux Falls	65.0	67.7	66.6	(¹)	(¹)	(¹)	3.2	3.5	3.5
Tennessee	2,006.0	2,068.4	2,052.8	6.8	6.6	6.6	101.8	101.7	102.9
Chattanooga	184.6	193.7	191.8	.8	.8	.9	8.5	9.6	9.5
Johnson City—Kingsport—Bristol	157.3	164.6	163.9	.3	.3	.3	6.7	6.8	6.8
Knoxville	247.7	251.0	251.1	1.9	1.9	1.8	12.2	10.8	11.1
Memphis	422.2	435.5	433.6	.1	.2	.2	20.3	20.2	20.4
Nashville	468.3	461.7	459.5	.7	.6	.6	29.9	27.2	27.1
Texas	6,468.8	6,595.6	6,556.9	182.2	182.2	182.5	350.7	326.6	328.0
Abilene	47.4	49.3	49.0	2.0	2.1	2.1	2.1	2.2	2.3
Amarillo	76.8	78.8	78.0	1.3	1.2	1.2	3.6	4.0	4.0
Austin	343.4	343.4	340.7	.8	.7	.7	17.0	15.4	15.6
Beaumont—Port Arthur	127.9	129.5	128.9	1.5	1.5	1.5	7.4	8.0	8.0
Brazoria	56.0	58.6	57.6	1.8	1.7	1.7	5.6	6.6	6.6
Brownsville—Harlingen	65.5	67.6	66.9	.1	.1	.1	2.2	2.2	2.2
Bryan—College Station	46.3	45.7	46.1	.7	.6	.6	2.0	2.3	2.3
Corpus Christi	122.6	124.5	123.5	4.3	3.9	3.9	6.4	6.2	6.4
Dallas	1,329.0	1,333.7	1,331.5	18.7	18.3	18.4	63.5	51.8	51.0
El Paso	184.1	189.2	185.5	.1	.1	.1	10.0	9.4	9.5
Ft. Worth—Arlington	515.6	516.8	509.1	3.6	3.6	3.6	25.4	19.6	19.6
Galveston—Texas City	70.9	71.8	72.0	.6	.6	.5	3.7	2.9	2.9
Houston	1,384.0	1,415.0	1,411.4	62.5	64.1	64.1	84.8	85.4	86.7
Killeen—Temple	69.4	71.3	71.0	.1	.1	.1	3.6	3.6	3.6
Laredo	35.1	36.9	36.8	2.0	1.9	1.9	1.4	1.3	1.3
Longview—Marshall	63.9	66.0	65.8	3.5	3.7	3.7	2.9	3.3	3.4
Lubbock	89.5	91.9	92.2	.4	.4	.4	3.5	3.6	3.6
McAllen—Edinburg—Mission	84.5	89.5	87.2	.9	.9	.9	3.9	4.2	4.0
Midland	42.5	45.0	44.7	9.4	9.8	9.9	1.3	1.2	1.2
Odessa	41.3	43.8	43.0	5.8	6.1	6.1	2.1	2.1	2.0
San Angelo	35.6	36.4	35.9	.4	.4	.4	1.7	1.6	1.6
San Antonio	498.2	509.4	505.3	2.6	2.6	2.4	30.3	26.9	26.8
Sherman—Denison	37.2	38.3	37.9	.1	.1	.1	1.7	1.7	1.7
Texarkana	45.3	45.4	44.5	.1	.1	.1	2.1	1.8	1.7
Tyler	61.5	61.7	61.3	1.9	2.0	2.0	2.2	2.3	2.4
Victoria	27.1	27.6	27.5	1.6	1.6	1.7	1.8	1.8	1.8
Waco	76.3	77.3	77.3	.1	.1	.1	3.7	3.7	3.9
Wichita Falls	49.9	51.0	50.9	1.9	1.9	1.9	1.8	2.1	2.2
Utah	634.0	657.2	648.4	7.9	8.5	8.5	28.5	25.8	25.8
Provo—Orem	71.9	78.7	77.9	(¹)	(¹)	(¹)	2.8	2.9	3.0
Salt Lake City—Ogden	443.1	455.7	451.8	2.6	2.7	2.7	19.8	17.6	18.0
Vermont	245.1	249.5	249.8	.5	.8	.7	18.5	18.5	18.9
Barre—Montpelier	33.5	35.6	35.5	.2	.2	.2	2.4	2.6	2.8
Burlington	73.6	78.4	77.9	(¹)	(¹)	(¹)	4.9	5.3	5.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Pennsylvania—Continued									
Reading	46.7	49.1	48.3	6.2	7.2	6.8	32.6	33.8	33.7
Scranton-Wilkes-Barre	71.0	71.4	69.8	15.1	16.0	15.6	66.1	67.8	67.7
Williamsport	16.5	16.8	16.9	1.8	1.9	1.9	11.7	12.6	12.7
York	57.9	60.6	60.4	7.2	8.0	7.9	41.4	42.0	42.1
Rhode Island									
Pawtucket-Woonsocket-Attleboro	113.2	115.9	112.1	15.5	16.4	15.8	104.5	106.6	106.5
Providence	52.8	53.5	51.7	3.4	3.6	3.4	32.2	33.6	33.5
Providence	71.7	72.3	69.4	11.8	12.7	12.3	70.0	72.5	72.7
South Carolina									
Charleston	374.4	379.7	377.6	59.0	61.1	61.3	318.3	333.8	335.6
Columbia	19.5	20.4	20.3	9.9	10.2	10.3	47.2	47.1	47.4
Greenville-Spartanburg	29.2	30.1	30.3	10.3	10.6	10.6	49.7	51.1	51.7
Greenville-Spartanburg	100.5	101.8	100.6	11.2	11.8	11.9	71.3	73.1	73.5
South Dakota									
Rapid City	29.1	30.3	30.3	12.2	12.5	12.5	68.6	69.5	69.7
Rapid City	3.2	3.1	3.2	1.7	1.9	1.9	10.7	11.0	11.2
Sioux Falls	8.7	8.7	8.7	4.6	4.7	4.6	17.5	17.8	17.9
Tennessee									
Chattanooga	492.4	501.5	496.7	104.5	107.4	107.7	480.2	486.5	488.9
Johnson City-Kingsport-Bristol	44.1	46.6	45.6	8.6	8.5	8.5	43.6	45.0	45.1
Knoxville	53.2	55.0	54.5	6.0	6.2	6.2	36.2	36.1	36.1
Memphis	47.9	50.3	50.7	9.9	10.2	10.2	64.9	64.7	65.2
Memphis	52.9	53.9	53.9	39.0	40.3	40.9	117.5	120.7	120.8
Nashville	89.8	86.9	87.2	22.9	24.4	24.3	116.4	111.0	110.8
Texas									
Abilene	926.8	949.9	942.8	385.8	390.1	392.6	1,642.2	1,670.1	1,668.0
Amarillo	4.6	4.7	4.8	2.4	2.4	2.4	13.4	13.8	13.8
Austin	9.9	10.0	9.5	5.8	5.9	5.9	22.2	23.4	23.6
Beaumont-Port Arthur	39.4	39.3	39.5	10.7	10.7	10.7	79.2	77.2	76.9
Brazoria	24.8	25.6	25.5	9.9	9.8	9.8	32.2	31.5	31.6
Brownsville-Harlingen	15.4	15.6	15.6	2.3	2.3	2.3	11.0	11.1	10.9
Bryan-College Station	10.2	10.5	10.5	3.2	3.1	3.1	17.9	17.6	17.7
Corpus Christi	3.1	3.2	3.2	1.6	1.6	1.6	9.6	9.6	9.5
Dallas	11.5	11.1	11.2	7.1	6.9	7.0	32.0	32.7	32.6
El Paso	222.1	222.7	222.2	89.9	92.2	92.9	345.7	350.9	352.7
Ft. Worth-Arlington	36.6	37.8	36.3	10.2	10.8	11.0	46.4	47.3	47.2
Galveston-Texas City	113.2	118.6	112.7	30.2	31.0	31.2	138.2	133.8	132.4
Houston	8.7	8.6	8.4	5.1	4.5	4.6	14.7	15.3	15.4
Killeen-Temple	145.5	151.0	151.2	98.5	99.1	99.5	350.3	359.4	359.5
Laredo	8.1	8.5	8.5	2.7	2.8	2.8	16.0	16.6	16.5
Longview-Marshall	1.8	1.8	1.7	4.5	5.0	5.0	10.1	10.6	10.7
Lubbock	15.5	16.1	16.0	3.1	3.2	3.2	16.7	16.9	16.9
McAllen-Edinburg-Mission	7.1	7.5	7.5	4.7	5.0	5.0	26.6	27.8	27.8
Midland	11.9	12.3	11.8	2.8	2.7	2.7	25.1	26.7	26.3
Odessa	2.8	2.9	2.9	2.0	2.2	2.2	10.2	10.5	10.5
San Angelo	3.7	3.8	3.8	2.1	2.2	2.1	12.4	12.9	12.9
San Antonio	5.7	5.5	5.4	3.0	3.1	3.0	9.3	9.4	9.3
Sherman-Denison	46.5	46.9	46.5	18.4	18.3	18.4	131.4	133.5	134.4
Texas	11.2	11.4	11.4	2.0	2.0	2.1	8.4	8.5	8.3
Tyler	7.4	7.3	7.2	1.8	1.8	1.9	10.7	10.9	10.7
Victoria	10.9	10.4	10.4	2.9	2.7	2.7	16.6	16.8	16.8
Waco	2.7	3.1	3.1	1.5	1.5	1.5	7.9	7.7	7.6
Wichita Falls	14.8	15.0	14.9	3.3	3.3	3.3	19.0	19.1	19.2
Wichita Falls	8.5	8.1	8.3	2.6	2.6	2.6	12.1	12.2	12.2
Utah									
Provo-Orem	92.9	97.0	97.0	37.7	39.1	39.1	152.1	153.5	153.9
Salt Lake City-Ogden	10.4	13.2	13.4	2.9	3.1	3.1	15.9	16.5	16.4
Salt Lake City-Ogden	61.9	63.2	63.6	28.6	29.4	29.3	110.9	112.4	112.1
Vermont									
Barre-Montpelier	48.6	50.3	49.4	10.2	10.8	10.7	57.6	58.4	58.7
Burlington	4.3	4.9	4.3	.9	.9	.9	7.1	7.6	7.5
Burlington	16.4	17.3	17.2	3.0	3.0	3.0	17.3	18.3	18.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Pennsylvania—Continued									
Reading	7.6	8.2	8.2	29.5	31.5	31.6	15.2	16.7	15.1
Scranton-Wilkes-Barre	13.0	13.0	13.2	71.4	74.5	75.5	39.5	41.4	39.6
Williamsport	2.3	2.4	2.4	9.8	10.6	10.9	6.1	7.1	6.4
York	5.1	5.3	5.3	29.5	30.9	30.7	16.6	17.5	16.3
Rhode Island									
Pawtucket-Woonsocket-Attleboro	25.9	26.2	26.4	113.4	115.4	115.8	56.5	58.8	56.8
Providence	3.7	3.7	3.8	24.4	25.0	25.0	10.3	10.3	10.3
	21.5	21.8	22.0	82.7	85.7	86.0	42.4	44.8	43.0
South Carolina									
Charleston	66.1	67.6	67.7	247.1	260.9	258.9	233.7	256.4	236.9
Columbia	8.7	9.0	8.9	40.0	40.9	41.1	48.8	52.7	52.3
Greenville-Spartanburg	18.4	19.2	19.3	43.6	44.8	44.9	60.3	61.0	60.3
	11.9	12.1	12.1	52.9	55.9	55.9	36.0	39.2	34.0
South Dakota									
Rapid City	14.6	14.8	14.8	62.7	63.9	64.0	55.6	61.2	55.3
Sioux Falls	1.8	1.7	1.7	9.6	9.6	9.9	5.9	7.1	6.2
	6.2	6.5	6.6	18.1	18.7	18.7	6.7	7.8	6.4
Tennessee									
Chattanooga	104.3	103.6	103.9	411.4	428.0	428.0	304.7	333.1	318.1
Johnson City-Kingsport-Bristol	12.0	11.6	11.6	36.7	37.9	37.5	30.2	33.7	33.1
Knoxville	5.4	5.5	5.6	27.8	30.9	31.1	21.8	23.8	23.3
Memphis	9.7	9.7	9.5	52.3	51.9	52.2	48.9	51.5	50.4
Nashville	24.5	25.0	25.0	99.3	101.3	101.5	68.6	73.9	70.9
	33.6	33.5	33.5	113.1	111.7	112.0	61.8	66.4	64.0
Texas									
Abilene	445.4	441.3	442.7	1,440.4	1,495.1	1,500.3	1,095.3	1,140.3	1,100.0
Amarillo	2.6	2.6	2.6	12.5	12.6	12.6	7.8	8.9	8.4
Austin	4.5	4.4	4.4	16.7	16.8	17.0	12.8	13.1	12.4
Beaumont-Port Arthur	25.2	24.8	24.7	84.4	83.6	83.4	86.7	91.7	89.2
Brazoria	5.3	5.3	5.3	28.0	28.2	28.2	18.8	19.6	19.0
Brownsville-Harlingen	2.1	2.0	2.0	7.7	8.1	8.1	10.1	11.2	10.4
Bryan-College Station	3.5	3.5	3.5	14.3	15.0	15.2	14.2	15.6	14.6
Corpus Christi	1.8	1.6	1.6	8.7	8.5	8.4	18.8	18.3	18.9
Dallas	7.0	7.0	6.9	27.6	29.1	28.9	26.7	27.6	26.6
El Paso	133.7	128.5	129.3	313.5	322.7	321.7	141.9	146.6	143.3
Ft. Worth-Arlington	9.6	9.6	9.6	35.2	36.2	35.8	36.1	38.0	36.0
Galveston-Texas City	28.4	26.8	26.7	113.7	116.8	117.5	62.9	66.6	65.4
Houston	4.4	4.2	4.2	14.4	15.2	15.3	19.3	20.5	20.7
Killeen-Temple	102.8	97.0	97.1	361.6	372.4	374.9	178.0	186.6	178.4
Laredo	3.0	2.9	2.9	15.1	15.7	15.6	20.8	21.1	21.0
Longview-Marshall	1.6	1.7	1.7	5.8	6.1	6.0	7.9	8.5	8.5
Lubbock	2.7	2.7	2.7	11.5	11.6	11.5	8.0	8.5	8.4
McAllen-Edinburg-Mission	5.5	5.5	5.5	21.4	22.2	22.4	20.3	19.9	20.0
Midland	3.9	3.8	3.8	14.4	14.4	14.4	21.6	24.5	23.3
Odessa	2.5	2.5	2.5	8.5	8.9	8.9	5.8	7.0	6.6
San Angelo	1.6	1.7	1.7	6.9	7.4	7.4	6.7	7.6	7.0
San Antonio	1.8	1.8	1.8	7.6	7.9	8.0	6.1	6.7	6.4
Sherman-Denison	40.1	40.5	40.9	120.5	126.2	126.6	108.4	114.5	109.3
Texarkana	1.7	1.8	1.8	8.0	8.5	8.4	4.1	4.3	4.1
Tyler	1.9	1.9	1.9	9.4	9.8	9.7	11.9	12.0	11.3
Victoria	3.7	3.6	3.6	14.7	14.8	14.7	8.6	9.1	8.7
Waco	1.5	1.6	1.6	5.7	5.9	5.7	4.4	4.4	4.5
Wichita Falls	4.8	4.7	4.7	19.1	19.7	19.8	11.5	11.7	11.4
	2.4	2.4	2.3	11.4	11.5	11.8	9.2	10.2	9.8
Utah									
Provo-Orem	34.7	33.9	34.2	148.2	156.1	156.5	132.0	143.3	133.4
Salt Lake City-Ogden	2.4	2.3	2.3	25.2	26.7	27.0	12.4	14.0	12.7
	28.5	28.2	28.1	102.5	108.2	109.6	88.2	94.0	88.4
Vermont									
Barre-Montpelier	12.2	12.5	12.7	61.7	60.3	62.7	35.8	37.9	36.0
Burlington	3.1	2.9	3.0	7.7	8.0	8.6	7.8	8.5	8.2
	3.7	3.7	3.8	18.7	19.8	20.5	9.6	11.0	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	Total			Mining			Construction		
	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p
Virginia	2,695.9	2,816.4	2,805.5	15.7	15.2	15.1	193.0	200.6	206.0
Bristol	30.8	33.5	33.0	.1	.1	.1	1.0	1.0	1.0
Charlottesville	64.0	65.8	66.2	.1	.1	.1	3.9	3.7	3.9
Danville	39.6	41.4	40.9	.1	.1	.1	1.8	2.1	2.2
Lynchburg	70.5	73.7	71.2	.1	.1	.1	3.5	3.5	3.6
Norfolk-Virginia Beach-Newport News	557.6	578.9	575.3	.1	.1	.1	41.5	40.3	41.4
Northern Virginia	718.0	758.3	763.0	.5	.5	.5	55.7	59.0	60.8
Richmond-Petersburg	438.1	454.4	454.7	.5	.6	.6	30.3	31.7	32.2
Roanoke	121.8	120.6	118.1	.2	.2	.2	8.0	7.9	8.1
Washington	1,842.8	1,943.8	1,923.5	3.0	3.4	3.4	92.0	101.7	105.0
Seattle	934.2	986.6	985.5	.6	.7	.7	48.1	52.9	53.8
West Virginia	601.3	607.4	611.1	35.9	33.9	33.7	25.9	26.8	27.1
Charleston	107.5	107.2	108.0	2.2	2.0	2.0	4.6	4.5	4.5
Huntington-Ashland	102.7	104.1	104.1	1.4	1.3	1.3	4.6	4.7	4.7
Parkersburg-Marietta	60.0	60.6	60.9	.6	.6	.6	3.1	3.1	3.2
Wheeling	59.2	59.3	59.3	2.4	2.2	2.2	2.2	2.3	2.4
Wisconsin	2,087.8	2,179.1	2,159.3	2.4	2.5	2.6	72.0	75.6	77.2
Appleton-Oshkosh-Neenah	144.9	151.9	151.2	(¹)	(¹)	(¹)	6.9	6.7	7.1
Eau Claire	53.8	58.0	57.3	(¹)	(¹)	(¹)	1.6	1.7	1.8
Green Bay	94.2	99.4	98.5	(¹)	(¹)	(¹)	3.3	3.6	3.6
Janesville-Beloit	54.2	57.1	56.0	(¹)	(¹)	(¹)	1.4	1.2	1.2
Kenosha	40.7	41.7	41.6	(¹)	(¹)	(¹)	1.3	.7	.8
La Crosse	50.0	53.9	54.1	(¹)	(¹)	(¹)	1.4	2.0	2.1
Madison	196.5	204.4	202.6	(¹)	(¹)	(¹)	7.5	7.9	7.9
Milwaukee	693.7	723.0	715.3	(¹)	(¹)	(¹)	21.9	22.5	22.7
Racine	69.4	72.2	72.0	(¹)	(¹)	(¹)	2.0	1.8	2.1
Wausau	45.7	48.2	47.4	(¹)	(¹)	(¹)	1.4	1.6	1.6
Wyoming	183.2	183.9	181.0	17.5	17.8	17.8	12.0	9.4	9.7
Puerto Rico	773.1	820.6	822.1	.8	.8	.8	34.9	38.2	38.5
Caguas	49.6	52.4	52.7	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Mayaguez	55.9	56.1	57.7	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Ponce	50.6	51.9	51.4	.1	.2	.2	2.9	3.5	3.6
San Juan	476.2	495.6	495.5	.4	.4	.4	26.0	28.4	28.5
Virgin Islands	39.7	40.1	40.1	(¹)	(¹)	(¹)	1.5	1.8	1.7

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Virginia	429.8	429.0	426.0	143.9	147.5	148.1	615.8	647.0	649.7
Bristol	10.1	11.4	11.5	1.1	1.1	1.1	7.9	8.4	8.5
Charlottesville	8.7	8.7	8.6	2.3	2.3	2.3	13.2	14.2	14.4
Danville	16.9	16.7	17.0	1.0	1.0	1.1	8.5	9.3	9.2
Lynchburg	23.8	23.4	23.0	2.9	2.9	2.8	14.3	15.6	15.5
Norfolk-Virginia Beach-Newport News	67.7	70.6	70.3	26.6	26.5	26.4	137.8	141.6	142.7
Northern Virginia	35.5	35.7	35.5	50.3	54.1	55.1	160.7	169.7	170.8
Richmond-Petersburg	62.1	62.1	62.2	22.9	23.6	23.5	105.0	110.9	111.2
Roanoke	19.8	19.4	19.2	8.9	8.7	8.7	34.3	32.1	32.3
Washington	318.8	333.3	331.3	100.3	104.1	105.2	460.5	478.5	480.2
Seattle	184.3	194.6	195.7	59.8	61.0	61.1	230.0	238.6	242.1
West Virginia	85.5	86.7	86.8	36.6	37.0	37.1	140.2	144.1	145.1
Charleston	11.0	10.8	10.8	8.4	8.5	8.6	28.0	28.5	28.6
Huntington-Ashland	19.3	19.4	19.5	7.9	7.7	7.7	26.5	27.0	26.8
Parkersburg-Marietta	14.1	14.5	14.5	2.2	2.2	2.2	14.6	14.6	14.7
Wheeling	7.0	7.2	7.2	3.2	3.3	3.3	16.2	16.2	16.1
Wisconsin	537.4	555.8	557.5	92.3	97.9	95.7	502.3	523.3	524.3
Appleton-Oshkosh-Neenah	51.7	54.1	54.4	5.1	5.3	5.3	30.8	32.2	32.4
Eau Claire	10.3	11.0	11.0	3.3	3.7	3.5	15.7	16.8	16.6
Green Bay	25.6	25.8	26.3	6.4	6.3	6.3	25.0	26.0	26.0
Janesville-Beloit	17.8	17.8	17.7	2.1	2.5	2.1	13.5	14.0	14.1
Kenosha	13.4	14.3	14.5	1.3	1.3	1.2	9.1	9.4	9.4
La Crosse	10.9	11.4	11.3	2.5	2.6	2.6	14.0	14.4	14.6
Madison	22.9	23.5	23.8	6.9	7.4	7.3	43.9	45.8	45.7
Milwaukee	168.3	175.6	175.1	34.0	35.7	34.6	162.7	168.2	168.7
Racine	23.7	24.8	24.8	2.2	2.3	2.2	16.6	17.5	17.4
Wausau	13.4	14.3	14.3	2.6	2.9	2.7	11.3	11.6	11.6
Wyoming	8.1	8.1	8.3	12.8	12.7	12.8	41.7	40.9	40.8
Puerto Rico	149.9	151.0	152.8	16.3	15.2	15.3	133.7	139.5	139.3
Caguas	15.6	14.7	15.1	(¹)	(¹)	(¹)	9.1	9.7	9.8
Mayaguez	19.5	18.1	19.7	(¹)	(¹)	(¹)	7.6	7.9	7.7
Ponce	9.3	8.7	8.7	(¹)	(¹)	(¹)	7.8	8.2	8.2
San Juan	64.5	66.1	65.8	12.8	12.7	12.9	92.8	98.4	98.1
Virgin Islands	2.2	2.3	2.4	2.6	2.6	2.6	9.0	9.3	9.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p
Virginia	148.1	150.9	152.2	639.9	686.7	688.6	509.7	539.5	519.8
Bristol	1.2	1.4	1.4	4.6	5.0	5.0	4.8	5.1	4.4
Charlottesville	3.6	3.6	3.6	12.0	12.3	12.3	20.2	20.9	21.0
Danville	1.2	1.3	1.3	5.7	5.6	5.6	4.4	5.3	4.4
Lynchburg	3.8	4.1	4.1	13.3	14.2	13.1	8.9	9.9	9.0
Norfolk-Virginia Beach-Newport News	27.7	28.5	28.7	134.5	143.1	143.6	121.8	128.2	122.1
Northern Virginia	47.3	49.5	50.7	227.0	243.9	244.9	141.2	145.9	144.7
Richmond-Petersburg	36.5	36.7	37.0	94.0	97.8	98.0	86.8	91.0	90.0
Roanoke	8.2	8.6	8.5	27.6	28.2	27.7	14.8	15.5	13.4
Washington	108.5	109.1	109.6	420.8	446.5	445.8	338.9	367.2	343.0
Seattle	68.5	68.9	69.3	218.4	237.1	236.8	124.5	132.8	126.0
West Virginia	24.5	24.5	24.6	125.4	125.4	125.0	127.3	129.0	131.7
Charleston	6.1	6.1	6.1	25.8	25.5	25.6	21.4	21.3	21.8
Huntington-Ashland	3.9	3.9	3.9	20.5	21.8	21.7	18.6	18.3	18.5
Parkersburg-Marietta	2.3	2.3	2.3	13.5	13.4	13.3	9.6	9.9	10.1
Wheeling	2.7	2.7	2.7	15.9	15.6	15.6	9.6	9.8	9.8
Wisconsin	114.3	115.3	115.8	462.1	475.7	476.4	305.0	333.0	309.8
Appleton-Oshkosh-Neenah	7.2	7.6	7.6	27.8	28.6	28.4	15.1	17.0	15.7
Eau Claire	2.0	2.0	2.0	12.1	12.5	12.6	8.7	10.3	9.8
Green Bay	3.5	3.6	3.7	20.4	22.5	22.3	10.0	11.5	10.2
Janesville-Beloit	1.7	1.7	1.7	11.7	12.7	12.6	5.9	7.1	6.5
Kenosha	1.3	1.4	1.4	8.2	8.1	8.1	6.1	6.5	6.2
La Crosse	1.5	1.5	1.5	13.8	14.4	14.6	5.9	7.6	7.4
Madison	17.9	18.4	18.7	42.3	44.5	44.0	54.9	56.7	55.0
Milwaukee	49.6	49.3	49.3	181.5	187.4	187.3	75.5	84.0	77.3
Racine	2.3	2.3	2.3	14.3	14.9	15.1	8.2	8.5	8.0
Wausau	3.4	3.5	3.4	8.1	8.3	8.4	5.4	6.0	5.4
Wyoming	7.5	7.2	7.2	35.4	35.9	36.1	48.2	51.9	48.3
Puerto Rico	35.1	36.2	36.3	104.5	112.5	111.8	297.8	327.2	327.4
Caguas	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	16.5	18.4	18.2
Mayaguez	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	19.7	20.8	20.9
Ponce	(¹)	(¹)	(¹)	9.2	9.1	9.0	18.3	18.9	18.6
San Juan	28.7	29.3	29.4	74.7	81.3	80.7	176.2	179.0	179.6
Virgin Islands	1.7	1.7	1.7	8.8	9.2	8.7	13.9	13.2	13.8

¹ Not available.

² Combined with construction.

^p = preliminary.

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 1987 benchmarks except Colorado. Data for Colorado have been adjusted to December 1986 benchmarks.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.52	530.85	37.8	12.69	479.68
Monthly data, not seasonally adjusted									
1987:									
August	35.2	\$8.94	\$314.69	42.7	\$12.40	\$529.48	38.6	\$12.68	\$489.45
September	34.7	9.05	314.04	42.3	12.50	528.75	36.5	12.79	466.84
October	34.9	9.08	316.89	42.9	12.42	532.82	38.8	12.82	497.42
November	34.8	9.13	317.72	42.6	12.54	534.20	37.1	12.83	475.99
December	34.8	9.13	317.72	43.1	12.60	543.06	37.6	12.81	481.66
1988:									
January	34.4	9.18	315.79	42.1	12.77	537.62	35.9	12.99	466.34
February	34.5	9.17	316.37	41.8	12.71	531.28	36.1	12.82	462.80
March	34.4	9.18	315.79	41.9	12.59	527.52	37.4	12.87	481.34
April	34.7	9.23	320.28	42.8	12.60	539.28	37.9	12.88	488.15
May	34.6	9.26	320.40	42.2	12.54	529.19	38.2	12.87	491.63
June	34.9	9.23	322.13	42.5	12.55	533.38	38.7	12.85	497.30
July ^p	35.1	9.24	324.32	42.5	12.67	538.48	38.6	12.90	497.94
August ^p	35.0	9.24	323.40	42.5	12.63	536.78	38.6	12.93	499.10

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Manufacturing				Transportation and public utilities			Wholesale trade		
	Weekly hours	Hourly earnings	Hourly earnings, excluding overtime	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages										
1964	40.7	\$2.53	\$2.43	\$102.97	41.1	\$2.89	\$118.78	40.7	\$2.52	\$102.56
1965	41.2	2.61	2.50	107.53	41.3	3.03	125.14	40.8	2.61	106.49
1966	41.4	2.71	2.59	112.19	41.2	3.11	128.13	40.7	2.73	111.11
1967	40.6	2.82	2.71	114.49	40.5	3.23	130.82	40.3	2.88	116.06
1968	40.7	3.01	2.88	122.51	40.6	3.42	138.85	40.1	3.05	122.31
1969	40.6	3.19	3.05	129.51	40.7	3.63	147.74	40.2	3.23	129.85
1970	39.8	3.35	3.23	133.33	40.5	3.85	155.93	39.9	3.44	137.26
1971	39.9	3.57	3.45	142.44	40.1	4.21	168.82	39.5	3.65	144.18
1972	40.5	3.82	3.66	154.71	40.4	4.65	187.86	39.4	3.85	151.69
1973	40.7	4.09	3.91	166.46	40.5	5.02	203.31	39.3	4.08	160.34
1974	40.0	4.42	4.25	176.80	40.2	5.41	217.48	38.8	4.39	170.33
1975	39.5	4.83	4.67	190.79	39.7	5.88	233.44	38.7	4.73	183.05
1976	40.1	5.22	5.02	209.32	39.8	6.45	256.71	38.7	5.03	194.66
1977	40.3	5.68	5.44	228.90	39.9	6.99	278.90	38.8	5.39	209.13
1978	40.4	6.17	5.91	249.27	40.0	7.57	302.80	38.8	5.88	228.14
1979	40.2	6.70	6.43	269.34	39.9	8.16	325.58	38.8	6.39	247.93
1980	39.7	7.27	7.02	288.62	39.6	8.87	351.25	38.5	6.96	267.96
1981	39.8	7.99	7.72	318.00	39.4	9.70	382.18	38.5	7.56	291.06
1982	38.9	8.49	8.25	330.26	39.0	10.32	402.48	38.3	8.09	309.85
1983	40.1	8.83	8.52	354.08	39.0	10.79	420.81	38.5	8.55	329.18
1984	40.7	9.19	8.82	374.03	39.4	11.12	438.13	38.5	8.89	342.27
1985	40.5	9.54	9.16	386.37	39.5	11.40	450.30	38.4	9.16	351.74
1986	40.7	9.73	9.34	396.01	39.2	11.70	458.64	38.3	9.35	358.11
1987	41.0	9.91	9.48	406.31	39.2	12.03	471.58	38.1	9.59	365.38
Monthly data, not seasonally adjusted										
1987:										
August	40.9	\$9.86	\$9.42	\$403.27	39.7	\$12.06	\$478.78	38.3	\$9.60	\$367.68
September	40.8	9.99	9.53	407.59	39.2	12.11	474.71	38.0	9.64	366.32
October	41.3	9.95	9.48	410.94	39.4	12.12	477.53	38.3	9.65	369.60
November	41.4	10.01	9.54	414.41	39.3	12.21	479.85	38.2	9.72	371.30
December	41.8	10.07	9.59	420.93	39.2	12.24	479.81	38.2	9.73	371.69
1988:										
January	41.0	10.07	9.62	412.87	39.0	12.16	474.24	37.9	9.78	370.66
February	40.7	10.05	9.63	409.04	38.9	12.23	475.75	37.9	9.78	370.66
March	40.9	10.07	9.64	411.86	38.6	12.19	470.53	37.9	9.78	370.66
April	41.0	10.12	9.68	414.92	39.2	12.27	480.98	38.2	9.88	377.42
May	40.9	10.14	9.70	414.73	39.2	12.28	481.38	38.0	9.87	375.06
June	41.2	10.16	9.70	418.59	39.5	12.27	484.67	38.1	9.85	375.29
July ^a	40.7	10.16	9.72	413.51	39.7	12.30	488.31	38.3	9.93	380.32
August ^b	40.8	10.11	9.65	412.49	39.6	12.36	489.46	38.0	9.89	375.82

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Retail trade			Finance, insurance, and real estate			Services		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	37.0	\$1.75	\$64.75	37.3	\$2.30	\$85.79	36.1	\$1.94	\$70.03
1965	36.6	1.82	66.61	37.2	2.39	88.91	35.9	2.05	73.60
1966	35.9	1.91	68.57	37.3	2.47	92.13	35.5	2.17	77.04
1967	35.3	2.01	70.95	37.1	2.58	95.72	35.1	2.29	80.38
1968	34.7	2.16	74.95	37.0	2.75	101.75	34.7	2.42	83.97
1969	34.2	2.30	78.66	37.1	2.93	108.70	34.7	2.61	90.57
1970	33.8	2.44	82.47	36.7	3.07	112.67	34.4	2.81	96.66
1971	33.7	2.60	87.62	36.6	3.22	117.85	33.9	3.04	103.06
1972	33.4	2.75	91.85	36.6	3.36	122.98	33.9	3.27	110.85
1973	33.1	2.91	96.32	36.6	3.53	129.20	33.8	3.47	117.29
1974	32.7	3.14	102.68	36.5	3.77	137.61	33.6	3.75	126.00
1975	32.4	3.36	108.86	36.5	4.06	148.19	33.5	4.02	134.67
1976	32.1	3.57	114.60	36.4	4.27	155.43	33.3	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	6.11	178.41	36.3	8.73	316.90	32.5	8.48	275.60
Monthly data, not seasonally adjusted									
1987:									
August	30.2	\$6.07	\$183.31	36.4	\$8.74	\$318.14	32.9	\$8.40	\$276.36
September	29.5	6.20	182.90	36.0	8.73	314.28	32.4	8.54	276.70
October	29.1	6.16	179.26	36.2	8.76	317.11	32.5	8.61	279.83
November	29.0	6.18	179.22	36.3	8.89	322.71	32.5	8.71	283.08
December	29.3	6.19	181.37	36.0	8.81	317.16	32.4	8.73	282.85
1988:									
January	28.3	6.24	176.59	36.2	8.96	324.35	32.4	8.81	285.44
February	28.5	6.23	177.56	36.4	9.02	328.33	32.6	8.81	287.21
March	28.6	6.24	178.46	35.8	8.97	321.13	32.3	8.80	284.24
April	28.9	6.26	180.91	36.2	9.03	326.89	32.6	8.82	287.53
May	28.9	6.28	181.49	35.8	9.09	325.42	32.4	8.84	286.42
June	29.4	6.26	184.04	35.8	8.98	321.48	32.7	8.78	287.11
July ^p	30.0	6.28	188.40	36.2	9.02	326.52	33.0	8.79	290.07
August ^p	29.8	6.25	186.25	35.5	9.04	320.92	32.8	8.78	287.98

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

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

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Total private		35.0	35.2	34.9	35.1	35.0					
Mining		42.0	42.7	42.5	42.5	42.5					
Metal mining	10	42.0	42.3	42.3	43.0						
Iron ores	101	40.0	41.3	41.4	41.7						
Copper ores	102	43.6	43.6	43.1	45.4						
Coal mining	11,12		42.2	42.1							
Bituminous coal and lignite mining	12		42.2	42.1							
Oil and gas extraction	13	42.1	41.8	41.4	41.9						
Crude petroleum, natural gas, and natural gas liquids	131,2	42.5	40.6	41.5	44.0						
Oil and gas field services	138	41.8	42.4	41.3	40.8						
Nonmetallic minerals, except fuels	14	46.3	46.7	46.8	46.6						
Crushed and broken stone	142	48.6	49.0	48.4	48.3						
Construction		38.6	38.6	38.7	38.6	38.6					
General building contractors	15	37.8	37.8	37.9	37.9						
Residential building construction	152	37.1	37.0	37.0	36.9						
Operative builders	153	38.0	38.4	38.5	39.0						
Nonresidential building construction	154	38.5	38.6	39.0	39.0						
Heavy construction contractors	16	42.8	43.1	43.4	42.9						
Highway and street construction	161	44.9	44.6	45.2	44.4						
Heavy construction, except highway	162	41.5	42.1	42.2	41.9						
Special trade contractors	17	37.8	37.7	37.7	37.7						
Plumbing, heating, and air conditioning	171	38.7	38.6	39.0	39.2						
Painting, paper hanging, and decorating	172	36.4	36.3	36.7	36.5						
Electrical work	173	39.2	39.0	38.7	39.1						
Masonry, stonework, and plastering	174	35.8	35.8	35.6	35.5				-		
Carpentering and flooring	175	36.1	36.0	35.6	35.6				-		
Roofing and sheet metal work	176	35.2	35.5	35.6	34.4				-		
Manufacturing		40.6	40.9	41.2	40.7	40.8	3.6	3.8	3.9	3.7	3.9
Durable goods		41.0	41.3	42.0	41.2	41.3	3.6	3.8	4.1	3.8	3.9
Lumber and wood products	24	40.4	40.8	40.9	40.3	40.5	3.9	4.1	3.9	3.8	
Logging camps and logging contractors	241	39.6	39.7	41.0	40.2	-	4.0	4.8	4.2	4.5	
Sawmills and planing mills	242	41.2	42.0	41.6	40.9	-	4.5	4.9	4.4	4.2	-
Sawmills and planing mills, general	2421	41.4	42.2	42.0	41.2	-	4.7	5.2	4.6	4.5	-
Hardwood dimension and flooring	2426	41.0	41.5	40.1	39.4	-	3.7	4.0	3.5	3.1	-
Millwork, plywood, and structural members	243	40.5	41.0	40.6	40.3	-	3.8	3.9	3.8	3.7	
Millwork	2431	41.2	41.5	40.9	40.4	-	3.6	3.5	3.3	3.3	
Wood kitchen cabinets	2434	40.0	39.9	39.8	39.5	-	3.3	3.3	3.4	2.8	-
Hardwood veneer and plywood	2435	39.8	41.2	41.0	40.1	-	4.0	3.9	3.8	3.5	
Softwood veneer and plywood	2436	40.0	41.8	41.6	41.5	-	4.3	5.2	5.1	5.5	
Wood containers	244	38.9	38.8	39.4	39.0	-	3.1	3.0	3.6	3.4	
Wood buildings and mobile homes	245	40.3	39.8	40.6	40.1	-	3.5	3.3	3.2	3.1	
Mobile homes	2451	40.1	39.6	40.1	39.6	-	3.0	2.8	2.9	2.9	-
Miscellaneous wood products	249	39.9	40.5	40.5	39.8	-	3.0	3.2	3.3	3.1	-
Furniture and fixtures	25	39.3	40.3	39.4	38.8	39.3	2.5	3.2	2.6	2.4	-
Household furniture	251	38.9	39.9	39.0	38.2	-	2.3	2.8	2.3	1.9	-
Wood household furniture	2511	39.3	40.0	39.3	38.8	-	2.3	2.7	2.4	2.1	-
Upholstered household furniture	2512	37.9	39.1	37.9	36.7	-	1.7	2.3	1.8	1.2	-
Metal household furniture	2514	40.3	40.3	40.3	38.7	-	3.0	3.2	2.7	2.4	-
Mattresses and bedsprings	2515	39.2	40.7	40.6	38.7	-	3.4	4.1	3.5	3.1	-
Office furniture	252	39.3	41.5	39.9	40.0	-	2.5	3.7	2.4	2.7	-
Public building and related furniture	253	41.2	40.3	41.4	41.1	-	3.8	3.6	4.7	4.1	
Partitions and fixtures	254	40.0	41.1	39.7	39.3	-	3.3	4.2	3.0	3.2	
Miscellaneous furniture and fixtures	259	39.5	40.8	39.5	40.0	-	2.6	3.5	2.8	3.0	-
Stone, clay, and glass products	32	42.6	42.6	42.8	42.5	43.0	5.3	5.4	5.3	5.2	-
Flat glass	321	44.3	45.3	45.4	46.6	-	5.0	6.2	7.5	7.1	-
Glass and glassware, pressed or blown	322	40.9	41.4	41.0	41.4	-	5.0	4.9	4.4	5.0	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a	July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a
Total private		\$8.90	\$8.94	\$9.23	\$9.24	\$9.24	\$311.50	\$314.69	\$322.13	\$324.32	\$323.40
Mining		12.41	12.40	12.55	12.67	12.63	521.22	529.48	533.38	538.48	536.78
Metal mining	10	12.92	12.94	13.17	13.18		542.64	547.36	557.09	566.74	
Iron ores	101	14.84	14.68	14.55	14.76		593.60	606.28	602.37	615.49	
Copper ores	102	11.25	11.33	11.68	11.46		490.50	493.99	503.41	520.28	
Coal mining	11,12		15.64	15.83			614.26	660.01	666.44	642.65	
Bituminous coal and lignite mining	12		15.69	15.88			618.19	662.12	668.55	644.69	
Oil and gas extraction	13	11.50	11.35	11.58	11.85		484.15	474.43	479.41	496.52	
Crude petroleum, natural gas, and natural gas liquids	131,2	14.03	13.91	14.32	14.46		596.28	564.75	594.28	636.24	
Oil and gas field services	138	9.91	9.89	10.05	10.26		414.24	419.34	415.07	418.61	
Nonmetallic minerals, except fuels	14	10.60	10.69	10.94	11.03		490.78	499.22	511.99	514.00	
Crushed and broken stone	142	10.04	10.18	10.40	10.46		487.94	498.82	503.36	505.22	
Construction		12.60	12.68	12.85	12.90	12.93	486.36	489.45	497.30	497.94	499.10
General building contractors	15	11.59	11.73	11.98	11.96		438.10	443.39	454.04	453.28	
Residential building construction	152	10.77	10.96	11.30	11.28		399.57	405.52	418.10	416.23	
Operative builders	153	10.22	10.43	11.04	10.87		388.36	400.51	425.04	423.93	
Nonresidential building construction	154	12.57	12.64	12.83	12.80		483.95	487.90	500.37	499.20	
Heavy construction contractors	16	12.11	12.13	12.38	12.53		518.31	522.80	537.29	537.54	
Highway and street construction	161	12.09	12.17	12.46	12.58		542.84	542.78	563.19	558.55	
Heavy construction, except highway	162	12.12	12.10	12.32	12.50		502.98	509.41	519.90	523.75	
Special trade contractors	17	13.18	13.25	13.37	13.41		498.20	499.53	504.05	505.56	
Plumbing, heating, and air conditioning	171	13.39	13.44	13.67	13.75		518.19	518.78	533.13	539.00	
Painting, paper hanging, and decorating	172	12.56	12.57	12.52	12.68		457.18	456.29	459.48	462.82	
Electrical work	173	14.70	14.68	14.71	14.67		576.24	572.52	569.28	573.60	
Masonry, stonework, and plastering	174	13.44	13.49	13.63	13.54		481.15	482.94	485.23	480.67	
Carpentering and flooring	175	12.41	12.57	12.77	12.72		448.00	452.52	454.61	452.83	
Roofing and sheet metal work	176	11.58	11.74	11.84	12.05		407.62	416.77	421.50	414.52	
Manufacturing		9.87	9.86	10.16	10.16	10.11	400.72	403.27	418.59	413.51	412.49
Durable goods		10.38	10.39	10.69	10.67	10.62	425.58	429.11	448.98	439.60	438.61
Lumber and wood products	24	8.45	8.48	8.60	8.64	8.60	341.38	345.98	351.74	348.19	348.30
Logging camps and logging contractors	241	10.79	10.92	10.83	11.07	-	427.28	433.52	444.03	445.01	-
Sawmills and planing mills	242	8.60	8.60	8.71	8.72		354.32	361.20	362.34	356.65	
Sawmills and planing mills, general	2421	8.95	8.94	9.04	9.03		370.53	377.27	379.68	372.04	
Hardwood dimension and flooring	2426	6.78	6.83	7.03	7.07		277.98	283.45	281.90	278.56	
Millwork, plywood, and structural members	243	8.35	8.39	8.62	8.59		338.18	343.99	349.97	346.18	
Millwork	2431	8.65	8.68	8.79	8.76		356.38	360.22	359.51	353.90	
Wood kitchen cabinets	2434	7.61	7.71	8.04	7.89		304.40	307.63	319.99	311.66	
Hardwood veneer and plywood	2435	6.89	6.87	6.99	7.02		274.22	283.04	286.59	281.50	
Softwood veneer and plywood	2436	9.77	9.80	10.20	10.29		390.80	409.64	424.32	427.04	
Wood containers	244	6.21	6.26	6.34	6.40		241.57	242.89	249.80	249.60	
Wood buildings and mobile homes	245	7.97	7.92	8.09	8.03		321.19	315.22	328.45	322.00	
Mobile homes	2451	8.04	8.00	8.22	8.09		322.40	316.80	329.62	320.36	
Miscellaneous wood products	249	7.32	7.30	7.42	7.48		292.07	295.65	300.51	297.70	
Furniture and fixtures	25	7.66	7.74	7.91	7.97	8.01	301.04	311.92	311.65	309.24	314.79
Household furniture	251	7.05	7.10	7.29	7.34	-	274.25	283.29	284.31	280.39	-
Wood household furniture	2511	6.53	6.55	6.81	6.90		256.63	262.00	267.63	267.72	
Upholstered household furniture	2512	7.69	7.76	7.91	7.91		291.45	303.42	299.79	290.30	
Metal household furniture	2514	7.21	7.34	7.37	7.64		290.56	295.80	297.01	295.67	
Mattresses and bedsprings	2515	7.63	7.66	7.76	7.69		299.10	311.76	315.06	297.60	
Office furniture	252	8.66	8.93	9.01	9.22		340.34	370.60	359.50	368.80	
Public building and related furniture	253	8.06	8.08	8.48	8.37		332.07	325.62	351.07	344.01	
Partitions and fixtures	254	9.18	9.09	9.32	9.34		367.20	373.60	370.00	367.06	
Miscellaneous furniture and fixtures	259	8.09	8.25	8.33	8.17		319.56	336.60	329.04	326.80	
Stone, clay, and glass products	32	10.30	10.28	10.48	10.60	10.54	438.78	437.93	448.54	450.50	453.22
Flat glass	321	14.05	14.27	15.02	14.84	-	622.42	646.43	681.91	691.54	-
Glass and glassware, pressed or blown	322	11.62	11.48	11.69	11.90		475.26	475.27	479.29	492.66	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	40.6	41.7	40.8	41.5		5.9	5.9	5.3	5.8	
Pressed and blown glass, nec	3229	41.2	41.0	41.2	41.3		3.8	3.8	3.3	4.0	
Products of purchased glass	323	41.3	41.1	41.9	41.9		3.5	3.9	3.5	3.4	
Cement, hydraulic	324	42.0	41.9	42.5	42.4		3.3	3.6	3.3	3.5	
Structural clay products	325	42.0	42.3	42.1	42.0		4.3	4.7	4.4	4.4	
Pottery and related products	326	39.3	39.9	40.1	39.6		2.9	2.8	2.9	3.0	
Concrete, gypsum, and plaster products	327	44.7	44.3	44.7	44.0		7.3	7.3	7.3	6.9	
Concrete block and brick	3271	45.3	45.4	46.7	45.6		8.5	8.3	8.0	7.0	
Concrete products, nec	3272	43.7	43.6	43.4	43.1		6.2	6.5	6.3	6.3	
Ready-mixed concrete	3273	45.0	44.0	44.7	43.6		7.7	7.4	8.0	7.1	
Misc. nonmetallic mineral products	329	41.6	41.7	42.6	42.0		4.3	4.5	4.7	4.6	
Abrasive products	3291	42.7	42.6	43.8	42.7		3.5	3.6	3.8	3.5	
Asbestos products	3292	40.3	41.3	42.5	39.9		4.1	3.8	3.9	2.4	
Primary metal industries											
Blast furnaces and basic steel products	331	43.7	43.3	44.5	44.1	42.7	5.2	5.3	5.9	5.9	
Blast furnaces and steel mills	3312	44.2	43.4	44.7	44.6	-	5.4	5.3	6.0	6.1	
Steel pipe and tubes	3317	41.7	42.1	44.0	41.4		4.7	5.3	5.9	4.9	
Iron and steel foundries	332	42.2	42.5	43.5	42.5		4.6	5.1	5.7	5.1	
Gray iron foundries	3321	42.3	42.7	43.9	42.3		4.8	5.7	6.2	5.2	
Malleable iron foundries	3322	41.4	42.1	42.0	41.7		3.4	3.9	4.2	4.4	
Steel foundries, nec	3325	41.9	42.4	43.1	42.7		4.4	4.0	5.7	5.0	
Primary nonferrous metals	333	43.3	43.3	43.4	43.7		4.4	4.4	4.6	5.0	
Primary aluminum	3334	44.0	44.3	43.8	43.8		4.7	4.8	4.8	5.1	
Nonferrous rolling and drawing	335	42.9	43.2	43.7	43.0		5.6	5.8	6.2	6.0	
Copper rolling and drawing	3351	41.6	43.6	43.7	42.5		5.9	6.2	6.7	6.0	
Aluminum sheet, plate, and foil	3353	44.3	44.2	45.3	45.3		7.4	7.5	7.7	8.3	
Nonferrous wire drawing and insulating	3357	42.7	42.9	43.3	42.4		4.9	5.5	5.8	5.1	
Nonferrous foundries	336	40.5	41.6	42.0	40.7		3.1	3.7	4.1	3.2	
Aluminum foundries	3361	41.3	42.3	42.8	41.0		3.4	3.8	4.5	3.4	
Fabricated metal products											
Metal cans and shipping containers	34	40.8	41.3	42.1	41.1	41.5	3.5	3.9	4.2	3.7	
Metal cans	341	44.4	44.9	44.8	44.7		6.3	6.6	5.8	5.9	
Metal cans	3411	44.7	45.1	45.1	45.3		6.4	6.7	6.0	6.1	
Cutlery, hand tools, and hardware	342	40.3	40.7	41.9	40.6		3.0	3.2	3.6	3.1	
Hand and edge tools, and hand saws and blades	3423,5	40.1	41.1	41.4	40.6		2.7	3.3	3.1	2.7	
Hardware, nec	3429	40.2	40.2	41.8	40.3		3.1	3.2	3.8	3.2	
Plumbing and heating, except electric	343	40.4	41.0	40.9	40.7		3.0	3.4	3.5	3.3	
Plumbing fittings and brass goods	3432	40.4	41.4	40.7	40.4		2.3	3.0	3.1	2.7	
Heating equipment, except electric	3433	39.9	40.1	40.5	40.8		2.9	2.9	3.3	3.7	
Fabricated structural metal products	344	40.6	41.0	41.2	40.9		3.4	3.7	3.8	3.8	
Fabricated structural metal	3441	41.2	42.2	42.3	42.4		3.7	4.3	5.0	5.2	
Metal doors, sash, and trim	3442	40.4	40.4	40.6	40.3		3.3	3.4	3.3	3.3	
Fabricated plate work (boiler shops)	3443	41.3	42.1	42.9	42.0		3.4	4.0	4.4	4.2	
Sheet metal work	3444	39.5	39.8	39.8	39.7		3.1	3.2	3.0	3.0	
Architectural metal work	3446	40.5	40.5	40.3	40.4		3.5	3.7	3.5	3.7	
Screw machine products, bolts, etc	345	41.6	42.1	43.3	42.7		4.2	4.6	5.3	4.9	
Screw machine products	3451	40.7	41.0	42.2	41.4		3.3	3.6	4.4	4.0	
Bolts, nuts, rivets, and washers	3452	42.7	43.5	44.7	44.3		5.3	5.8	6.5	5.9	
Metal forgings and stampings	346	40.5	41.6	43.6	40.8		3.6	4.2	5.5	3.5	
Iron and steel forgings	3462	40.9	41.6	43.4	43.2		3.5	4.2	5.1	5.2	
Automotive stampings	3465	41.0	42.3	46.2	40.1		3.5	4.4	7.2	2.9	
Metal stampings, nec	3469	39.7	40.6	40.8	40.4		3.6	3.9	3.8	3.5	
Metal services, nec	347	40.8	40.7	41.3	40.3		3.4	3.4	3.7	3.2	
Plating and polishing	3471	40.4	40.5	41.3	40.2		3.5	3.5	3.6	3.1	
Metal coating and allied services	3479	41.5	41.0	41.2	40.4		3.2	3.3	3.8	3.5	
Ordnance and accessories, nec	348	40.6	40.7	41.7	41.1		2.6	3.2	3.3	2.8	
Ammunition, except for small arms, nec	3483	39.4	39.5	40.4	40.6		2.1	2.7	2.5	2.4	
Misc. fabricated metal products	349	40.5	40.8	42.2	40.7		3.3	3.5	3.7	3.3	
Valves and pipe fittings	3494	40.7	41.5	42.9	41.6		3.5	3.6	4.1	3.8	
Misc. fabricated wire products	3496	40.8	40.2	41.5	40.3		3.3	3.3	3.6	3.0	
Machinery, except electrical											
Engines and turbines	35	41.8	41.9	42.6	42.3	42.0	3.8	4.0	4.4	4.1	
Engines and turbines	351	42.9	42.3	44.2	45.3	-	3.5	5.4	4.7	3.8	
Turbines and turbine generator sets	3511	38.7	38.7	44.0	43.3		3.3	4.1	5.2	5.1	
Internal combustion engines, nec	3519	44.2	43.4	44.2	45.9		3.5	5.8	4.6	3.4	
Farm and garden machinery	352	41.7	41.2	42.3	41.9		3.5	3.1	3.8	3.7	
Farm machinery and equipment	3523	43.0	42.3	43.4	43.7		4.4	3.9	4.7	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 workers¹ on private nonagricultural payrolls by detailed industry—Continued

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	\$12.14	\$11.92	\$12.18	\$12.41		\$492.88	\$497.06	\$496.94	\$515.02	
Pressed and blown glass, nec	3229	10.99	10.94	11.12	11.30		452.79	448.54	458.14	466.69	
Products of purchased glass	323	8.83	8.76	9.13	9.16		364.68	360.04	382.55	383.80	
Cement, hydraulic	324	13.24	13.43	13.03	13.17		556.08	562.72	553.78	558.41	
Structural clay products	325	8.52	8.56	8.87	8.92		357.84	362.09	373.43	374.64	
Pottery and related products	326	8.88	8.88	9.36	9.47		348.98	354.31	375.34	375.01	
Concrete, gypsum, and plaster products	327	10.10	10.10	10.25	10.43		451.47	447.43	458.18	458.92	
Concrete block and brick	3271	9.04	9.02	9.34	9.38		409.51	409.51	436.18	427.73	
Concrete products, nec	3272	8.96	9.00	9.19	9.75		391.55	392.40	398.85	420.23	
Ready-mixed concrete	3273	10.95	10.92	11.05	11.06		492.75	480.48	493.94	482.22	
Misc. nonmetallic mineral products	329	10.40	10.40	10.59	10.64		432.64	433.68	451.13	446.88	
Abrasive products	3291	9.73	9.67	9.97	10.02		415.47	411.94	436.69	427.85	
Asbestos products	3292	10.59	10.19	10.48	10.51		426.78	420.85	445.40	419.35	
Primary metal industries	33	11.93	11.93	12.15	12.21	\$12.12	510.60	511.80	530.96	526.25	\$517.52
Blast furnaces and basic steel products	331	13.63	13.74	13.96	14.07	14.01	595.63	594.94	621.22	620.49	602.43
Blast furnaces and steel mills	3312	14.25	14.44	14.70	14.84	-	629.85	626.70	657.09	661.86	-
Steel pipe and tubes	3317	10.93	10.92	11.03	10.81		455.78	459.73	485.32	447.53	
Iron and steel foundries	332	10.70	10.71	11.00	10.93		451.54	455.18	478.50	464.53	
Gray iron foundries	3321	11.15	11.19	11.55	11.47		471.65	477.81	507.05	485.18	
Malleable iron foundries	3322	11.65	11.53	11.75	12.14		482.31	485.41	493.50	506.24	
Steel foundries, nec	3325	10.04	9.89	10.22	10.16		420.68	419.34	440.48	433.83	
Primary nonferrous metals	333	13.02	13.01	13.12	13.26		563.77	563.33	569.41	579.46	
Primary aluminum	3334	13.42	13.44	13.57	13.60		590.48	595.39	594.37	595.68	
Nonferrous rolling and drawing	335	11.43	11.43	11.70	11.65		490.35	493.78	511.29	500.95	
Copper rolling and drawing	3351	10.62	10.70	10.96	10.90		441.79	466.52	478.95	463.25	
Aluminum sheet, plate, and foil	3353	13.70	13.99	14.02	14.02		606.91	618.36	635.11	635.11	
Nonferrous wire drawing and insulating	3357	11.44	11.43	11.97	11.80		488.49	490.35	518.30	500.32	
Nonferrous foundries	336	9.48	9.43	9.60	9.55		383.94	392.29	403.20	388.69	
Aluminum foundries	3361	9.70	9.67	9.81	9.68		400.61	409.04	419.87	396.88	
Fabricated metal products	34	9.93	9.94	10.26	10.18	10.16	405.14	410.52	431.95	418.40	421.64
Metal cans and shipping containers	341	13.30	13.34	13.50	13.45	-	590.52	598.97	604.80	601.22	-
Metal cans	3411	14.04	14.14	14.32	14.24		627.59	637.71	645.83	645.07	
Cutlery, hand tools, and hardware	342	9.70	9.79	10.23	10.03		390.91	398.45	428.64	407.22	
Hand and edge tools, and hand saws and blades	3423.5	9.03	9.09	9.28	9.19		362.10	373.60	384.19	373.11	
Hardware, nec	3429	9.97	10.14	10.69	10.44		400.79	407.63	446.84	420.73	
Plumbing and heating, except electric	343	9.17	9.18	9.33	9.33		370.47	376.38	381.60	379.73	
Plumbing fittings and brass goods	3432	8.58	8.68	8.93	9.00		346.63	359.35	363.45	363.60	
Heating equipment, except electric	3433	9.20	9.24	9.12	9.09		367.08	370.52	369.36	370.87	
Fabricated structural metal products	344	9.26	9.28	9.54	9.56		375.96	380.48	393.05	391.00	
Fabricated structural metal	3441	9.92	9.89	10.27	10.24		408.70	417.36	434.42	434.18	
Metal doors, sash, and trim	3442	7.59	7.57	8.04	8.09		306.64	305.83	326.42	326.03	
Fabricated plate work (boiler shops)	3443	10.11	10.30	10.29	10.32		417.54	433.63	441.44	433.44	
Sheet metal work	3444	9.81	9.73	9.90	9.92		387.50	387.25	394.02	393.82	
Architectural metal work	3446	8.90	8.81	8.93	8.90		360.45	356.81	359.88	359.56	
Screw machine products, bolts, etc	345	9.71	9.82	9.97	9.93		403.94	413.42	431.70	424.01	
Screw machine products	3451	9.05	9.13	9.25	9.33		368.34	374.33	390.35	386.26	
Bolts, nuts, rivets, and washers	3452	10.45	10.56	10.80	10.62		446.22	459.36	482.76	470.47	
Metal forgings and stampings	346	11.67	11.60	12.35	11.95		472.64	482.56	538.46	487.56	
Iron and steel forgings	3462	12.49	12.37	12.94	12.92		510.84	514.59	561.60	558.14	
Automotive stampings	3465	13.53	13.46	14.50	14.04		554.73	569.36	669.90	563.00	
Metal stampings, nec	3469	9.33	9.27	9.46	9.43		370.40	376.36	385.97	380.97	
Metal services, nec	347	8.06	7.98	8.20	8.27		328.85	324.79	338.66	333.28	
Plating and polishing	3471	8.08	7.97	8.16	8.23		326.43	322.79	337.01	330.85	
Metal coating and allied services	3479	8.02	8.01	8.28	8.35		332.83	328.41	341.14	337.34	
Ordnance and accessories, nec	348	10.98	10.90	11.29	11.35		445.79	443.63	470.79	466.49	
Ammunition, except for small arms, nec	3483	10.43	10.44	10.96	10.95		410.94	412.38	442.78	444.57	
Misc. fabricated metal products	349	9.29	9.32	9.46	9.54		376.25	380.26	399.21	388.28	
Valves and pipe fittings	3494	9.93	10.02	10.28	10.39		404.15	415.83	441.01	432.22	
Misc. fabricated wire products	3496	8.33	8.36	8.38	8.41		339.86	336.07	347.77	338.92	
Machinery, except electrical	35	10.67	10.70	10.93	10.93	10.92	446.01	448.33	465.62	462.34	458.64
Engines and turbines	351	13.32	13.40	13.69	13.73	-	571.43	566.82	605.10	621.97	-
Turbines and turbine generator sets	3511	12.77	13.36	13.75	13.89		494.20	517.03	605.00	601.44	
Internal combustion engines, nec	3519	13.46	13.41	13.67	13.68		594.93	581.99	604.21	627.91	
Farm and garden machinery	352	9.91	9.84	9.97	10.21		413.25	405.41	421.73	427.80	
Farm machinery and equipment	3523	10.54	10.40	10.59	10.81		453.22	439.92	459.61	472.40	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	42.1	42.7	43.4	43.0		3.4	3.9	4.4	4.2	
Construction machinery	3531	42.6	43.6	44.7	44.0		3.1	3.4	4.2	4.1	
Mining machinery	3532	42.2	42.7	41.1	40.7		4.0	4.5	3.7	3.8	
Oil field machinery	3533	43.7	43.3	44.3	43.0		4.9	5.5	6.3	5.5	
Conveyors and conveying equipment	3535	42.0	42.8	43.0	43.9		3.7	4.6	4.5	5.1	
Industrial trucks and tractors	3537	39.6	40.1	41.2	41.4		2.6	3.4	3.5	3.4	
Metalworking machinery	354	41.9	42.1	43.2	42.8		4.3	4.5	5.0	4.9	
Machine tools, metal cutting types	3541	41.1	41.6	42.8	42.2		3.6	3.8	4.3	4.3	
Machine tools, metal forming types	3542	41.3	42.6	44.1	44.9		4.3	4.9	5.3	5.9	
Special dies, tools, jigs, and fixtures	3544	42.4	42.7	43.8	43.5		5.0	5.2	5.7	5.7	
Machine tool accessories	3545	41.1	41.1	42.2	41.4		3.7	4.0	4.3	4.0	
Power driven hand tools	3546	41.9	41.6	42.4	41.5		3.2	3.4	3.3	3.2	
Special industry machinery	355	41.3	41.6	42.3	41.6		3.9	4.1	4.8	4.4	
Food products machinery	3551	41.5	41.7	42.0	41.8		3.3	3.7	4.1	4.0	
Textile machinery	3552	41.9	42.6	42.6	41.7		4.0	4.1	3.8	3.3	
Printing trades machinery	3555	39.7	39.7	40.2	39.4		4.2	4.3	5.1	4.7	
General industrial machinery	356	41.6	41.8	42.9	42.5		3.8	3.9	4.8	4.5	
Pumps and pumping equipment	3561	41.4	42.9	43.6	43.6		3.4	4.4	4.6	4.4	
Ball and roller bearings	3562	43.3	42.2	44.1	42.9		4.8	4.4	6.2	5.3	
Air and gas compressors	3563	41.1	41.3	41.9	42.4		3.0	3.6	4.8	4.8	
Blowers and fans	3564	41.1	41.8	42.0	40.9		3.6	4.0	3.2	3.1	
Speed changers, drives, and gears	3566	41.1	41.3	43.4	42.1		3.8	4.3	5.7	5.1	
Power transmission equipment, nec	3568	41.7	41.4	41.8	42.0		4.3	4.2	5.1	4.8	
Office and computing machines	357	41.9	42.9	41.5	41.3		3.2	3.4	3.2	2.7	
Electronic computing equipment	3573	41.5	42.6	41.6	41.3		3.2	3.3	3.2	2.8	
Refrigeration and service machinery	358	41.9	41.4	42.4	41.8		3.9	3.7	4.1	3.3	
Refrigeration and heating equipment	3585	42.6	41.7	43.0	42.4		4.4	3.8	4.3	3.6	
Misc. machinery, except electrical	359	41.4	41.3	42.0	41.8		3.8	3.9	4.4	4.3	
Carburetors, pistons, rings, and valves	3592	40.5	41.3	43.2	42.7		3.4	3.8	5.1	4.9	
Machinery, except electrical, nec	3599	41.5	41.3	41.9	41.7		3.8	3.9	4.3	4.2	
Electrical and electronic equipment	36	40.3	40.7	41.1	40.4	40.5	2.7	3.0	3.3	2.9	
Electric distributing equipment	361	40.5	40.8	42.3	41.9	-	3.0	3.3	3.5	3.6	
Transformers	3612	40.8	41.7	42.5	41.9		2.8	3.5	3.4	3.2	
Switchgear and switchboard apparatus	3613	40.2	40.1	42.1	41.9		3.2	3.2	3.6	4.0	
Electrical industrial apparatus	362	40.8	41.1	42.6	41.9		3.0	3.4	4.4	3.7	
Motors and generators	3621	40.9	40.8	42.5	41.9		3.4	3.5	5.1	3.9	
Industrial controls	3622	39.9	40.7	42.1	41.0		1.7	2.6	2.8	2.6	
Household appliances	363	39.3	39.8	39.7	39.0		2.5	2.2	2.9	2.4	
Household refrigerators and freezers	3632	39.2	40.2	39.8	38.8		3.2	1.9	4.5	3.6	
Household laundry equipment	3633	41.3	40.8	39.9	40.1		3.7	2.5	2.0	2.1	
Electric housewares and fans	3634	38.6	40.1	39.3	39.5		1.9	2.6	2.8	2.4	
Electric lighting and wiring equipment	364	39.3	40.0	40.4	39.3		2.2	2.7	3.2	2.5	
Electric lamps	3641	39.4	39.8	41.0	40.3		2.4	2.0	3.6	2.8	
Current-carrying wiring devices	3643	39.5	40.2	39.8	38.8		2.5	3.0	2.9	2.6	
Noncurrent-carrying wiring devices	3644	39.5	40.5	41.0	39.6		1.5	2.5	2.7	2.5	
Residential lighting fixtures	3645	37.4	38.9	38.7	38.1		1.1	1.6	1.7	1.3	
Radio and TV receiving equipment	365	40.2	40.6	41.3	41.0		2.1	2.7	3.3	2.7	
Radio and TV receiving sets	3651	39.8	40.1	40.9	40.8		1.5	2.2	2.8	1.9	
Communication equipment	366	40.9	40.9	41.0	40.6		2.5	2.6	2.5	2.3	
Telephone and telegraph apparatus	3661	41.7	42.0	42.7	42.2		2.4	2.7	3.0	2.7	
Radio and TV communication equipment	3662	40.6	40.5	40.3	39.9		2.5	2.5	2.4	2.1	
Electronic components and accessories	367	40.5	40.6	40.5	40.0		3.2	3.3	3.3	3.1	
Electronic tubes	3671-3	40.0	40.4	41.6	41.4		2.1	2.1	3.3	3.5	
Semiconductors and related devices	3674	40.8	40.3	40.1	40.4		4.0	3.6	3.4	3.4	
Electronic components, nec	3679	40.7	41.0	40.8	40.1		3.2	3.5	3.3	3.0	
Misc. electrical equipment and supplies	369	40.6	41.5	42.6	41.2		2.6	3.4	4.2	3.2	
Storage batteries	3691	40.3	41.1	41.8	41.0		2.8	3.8	3.3	2.8	
Engine electrical equipment	3694	41.2	42.4	43.7	41.2		2.9	3.9	5.3	3.6	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	\$10.96	\$10.99	\$11.09	\$11.04	-	\$461.42	\$469.27	\$481.31	\$474.72	
Construction machinery	3531	12.16	12.17	12.36	12.32	-	518.02	530.61	552.49	542.08	
Mining machinery	3532	11.61	11.27	11.40	11.53	-	489.94	481.23	468.54	469.27	
Oil field machinery	3533	10.78	10.91	10.76	10.66	-	471.09	472.40	476.67	458.38	
Conveyors and conveying equipment	3535	9.65	9.78	9.96	9.93	-	405.30	418.58	428.28	435.93	
Industrial trucks and tractors	3537	9.63	9.63	9.87	9.81	-	381.35	386.16	406.64	406.13	
Metalworking machinery	354	11.04	11.06	11.30	11.40	-	462.58	465.63	488.16	487.92	
Machine tools, metal cutting types	3541	11.11	11.04	11.30	11.37	-	456.62	459.26	483.64	479.81	
Machine tools, metal forming types	3542	11.47	11.51	11.74	11.77	-	473.71	490.33	517.73	528.47	
Special dies, tools, jigs, and fixtures	3544	11.78	11.81	12.06	12.21	-	499.47	504.29	528.23	531.14	
Machine tool accessories	3545	9.91	9.94	10.10	10.07	-	407.30	408.53	426.22	416.90	
Power driven hand tools	3546	8.40	8.59	8.92	9.12	-	351.96	357.34	378.21	378.48	
Special industry machinery	355	10.64	10.63	11.09	11.13	-	439.43	442.21	469.11	463.01	
Food products machinery	3551	10.57	10.66	11.05	10.96	-	438.66	444.52	464.10	458.13	
Textile machinery	3552	8.80	8.76	9.09	9.13	-	368.72	373.18	387.23	380.72	
Printing trades machinery	3555	11.53	11.58	12.15	12.16	-	457.74	459.73	488.43	479.10	
General industrial machinery	356	10.33	10.37	10.60	10.55	-	429.73	433.47	454.74	448.38	
Pumps and pumping equipment	3561	11.02	10.94	11.25	11.20	-	456.23	469.33	490.50	488.32	
Ball and roller bearings	3562	10.83	10.89	11.17	10.88	-	468.94	459.56	492.60	466.75	
Air and gas compressors	3563	10.25	10.34	10.51	10.41	-	421.28	427.04	440.37	441.38	
Blowers and fans	3564	9.14	9.26	9.38	9.34	-	375.65	387.07	393.96	382.01	
Speed changers, drives, and gears	3566	10.24	10.22	10.60	10.47	-	420.86	422.09	460.04	440.79	
Power transmission equipment, nec	3568	10.52	10.46	10.54	10.68	-	438.68	433.04	440.57	448.56	
Office and computing machines	357	10.29	10.34	10.71	10.68	-	431.15	443.59	444.47	441.08	
Electronic computing equipment	3573	10.28	10.32	10.68	10.66	-	426.62	439.63	444.29	440.26	
Refrigeration and service machinery	358	10.35	10.44	10.64	10.44	-	433.67	432.22	451.14	436.39	
Refrigeration and heating equipment	3585	10.60	10.61	10.84	10.60	-	451.56	442.44	466.12	449.44	
Misc. machinery, except electrical	359	10.35	10.40	10.55	10.53	-	428.49	429.52	443.10	440.15	
Carburetors, pistons, rings, and valves	3592	12.69	12.66	12.83	12.61	-	513.95	522.86	554.26	538.45	
Machinery, except electrical, nec	3599	10.04	10.09	10.24	10.26	-	416.66	416.72	429.06	427.84	
Electrical and electronic equipment	36	9.86	9.88	10.15	10.12	\$10.12	397.36	402.12	417.17	408.85	\$409.86
Electric distributing equipment	361	9.19	9.33	9.42	9.46	-	372.20	380.66	398.47	396.37	-
Transformers	3612	9.02	9.20	9.19	9.24	-	368.02	383.64	390.58	387.16	-
Switchgear and switchboard apparatus	3613	9.33	9.44	9.61	9.64	-	375.07	378.54	404.58	403.92	-
Electrical industrial apparatus	362	9.84	9.81	10.08	10.05	-	401.47	403.19	429.41	421.10	-
Motors and generators	3621	9.70	9.68	10.08	9.90	-	396.73	394.94	428.40	414.81	-
Industrial controls	3622	9.83	9.77	9.93	10.07	-	392.22	397.64	418.05	412.87	-
Household appliances	363	9.90	9.87	10.09	10.12	-	389.07	392.83	400.57	394.68	-
Household refrigerators and freezers	3632	11.33	11.34	11.75	11.77	-	444.14	455.87	467.65	456.68	-
Household laundry equipment	3633	11.81	11.83	11.71	11.74	-	487.75	482.66	467.23	470.77	-
Electric housewares and fans	3634	7.27	7.31	7.37	7.34	-	280.62	293.13	289.64	289.93	-
Electric lighting and wiring equipment	364	9.09	9.07	9.57	9.50	-	357.24	362.80	386.63	373.35	-
Electric lamps	3641	10.46	10.44	10.63	10.71	-	412.12	415.51	435.83	431.61	-
Current-carrying wiring devices	3643	8.65	8.64	9.29	9.47	-	341.68	347.33	369.74	367.44	-
Noncurrent-carrying wiring devices	3644	9.21	9.25	9.25	9.24	-	363.80	374.63	379.25	365.90	-
Residential lighting fixtures	3645	6.85	6.73	7.08	7.10	-	256.19	261.80	274.00	270.51	-
Radio and TV receiving equipment	365	9.11	8.97	9.48	9.40	-	366.22	364.18	391.52	385.40	-
Radio and TV receiving sets	3651	9.43	9.23	9.94	9.68	-	375.31	370.12	406.55	394.94	-
Communication equipment	366	11.77	11.81	12.09	12.09	-	481.39	483.03	495.69	490.85	-
Telephone and telegraph apparatus	3661	11.31	11.38	11.71	11.73	-	471.63	477.96	500.02	495.01	-
Radio and TV communication equipment	3662	11.95	11.97	12.25	12.23	-	485.17	484.79	493.68	487.98	-
Electronic components and accessories	367	8.91	8.93	9.15	9.15	-	360.86	362.56	370.58	366.00	-
Electronic tubes	3671-3	11.23	11.26	11.37	11.40	-	449.20	454.90	472.99	471.96	-
Semiconductors and related devices	3674	10.68	10.71	11.19	11.15	-	435.74	431.61	448.72	450.46	-
Electronic components, nec	3679	8.08	8.11	8.20	8.16	-	328.86	332.51	334.56	327.22	-
Misc. electrical equipment and supplies	369	10.29	10.48	10.82	10.61	-	417.77	434.92	460.93	437.13	-
Storage batteries	3691	11.05	11.16	11.05	10.83	-	445.32	458.68	461.89	444.03	-
Engine electrical equipment	3694	10.69	11.05	11.64	11.34	-	440.43	468.52	508.67	467.21	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a	July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a
Durable goods—Continued											
Transportation equipment	37	41.0	41.0	43.0	41.7	41.5	3.7	3.9	4.9	4.2	
Motor vehicles and equipment	371	40.9	40.7	44.2	41.6	41.4	3.5	3.8	5.8	4.4	
Motor vehicles and car bodies	3711	40.3	38.6	44.0	41.0	-	3.1	3.0	5.9	4.6	
Truck and bus bodies	3713	42.7	42.3	43.0	41.5	-	4.6	4.2	4.1	3.7	
Motor vehicle parts and accessories	3714	41.3	42.2	44.8	41.9	-	3.8	4.5	6.2	4.4	
Truck trailers	3715	40.5	41.2	41.5	39.8	-	3.5	3.6	3.8	2.5	
Aircraft and parts	372	41.6	42.0	42.2	42.3	-	4.7	4.8	4.4	4.5	
Aircraft	3721	41.5	41.9	41.8	41.8	-	4.4	4.3	3.8	3.9	
Aircraft engines and engine parts	3724	41.5	42.5	42.0	42.7	-	4.4	5.3	4.5	4.8	
Aircraft equipment, nec	3728	41.9	41.9	43.1	42.8	-	5.4	5.3	5.2	5.2	
Ship and boat building and repairing	373	39.9	39.9	40.6	40.4	-	2.5	2.5	3.0	2.8	
Ship building and repairing	3731	40.1	40.0	40.9	40.6	-	2.6	2.4	3.1	3.0	
Boat building and repairing	3732	39.7	39.8	40.1	40.1	-	2.5	2.6	2.7	2.7	
Railroad equipment	374	40.1	41.2	42.7	41.4	-	2.4	2.3	4.0	3.5	
Guided missiles, space vehicles, and parts	376	41.4	42.3	42.6	42.9	-	3.6	4.1	4.2	4.5	
Guided missiles and space vehicles	3761	41.2	42.2	42.4	43.0	-	3.6	4.1	4.2	4.7	
Miscellaneous transportation equipment	379	39.4	39.7	39.9	40.3	-	3.8	3.6	2.6	2.9	
Travel trailers and campers	3792	38.4	38.3	38.8	38.9	-	2.4	2.2	2.0	2.9	
Instruments and related products	38	40.8	41.3	41.4	41.1	41.3	2.5	2.9	3.0	2.8	
Engineering and scientific instruments	381	41.3	41.9	41.4	41.9	-	3.0	3.2	2.7	2.9	
Measuring and controlling devices	382	40.6	41.0	41.6	40.9	-	2.2	2.6	2.8	2.6	
Environmental controls	3822	39.5	39.9	39.8	38.4	-	2.3	2.9	2.0	2.0	
Process control instruments	3823	41.1	42.0	44.2	43.6	-	2.8	3.4	3.9	3.8	
Instruments to measure electricity	3825	39.8	40.8	40.6	40.2	-	1.9	2.1	2.6	1.9	
Optical instruments and lenses	383	41.2	41.9	43.6	43.9	-	2.5	3.0	3.7	3.3	
Medical instruments and supplies	384	40.2	40.6	40.9	40.2	-	2.6	2.9	2.9	2.6	
Surgical and medical instruments	3841	40.4	40.6	41.1	39.5	-	2.5	2.8	2.9	2.3	
Surgical appliances and supplies	3842	40.1	40.5	40.4	40.7	-	2.5	3.1	2.7	2.9	
Ophthalmic goods	385	40.1	40.6	39.7	39.0	-	2.6	2.5	2.7	2.2	
Photographic equipment and supplies	386	42.8	43.3	42.6	43.9	-	3.1	3.7	4.0	3.7	
Watches, clocks, and watchcases	387	41.5	41.0	40.3	39.6	-	2.3	2.2	2.2	1.5	
Miscellaneous manufacturing	39	38.8	39.5	39.3	38.6	39.0	2.2	2.7	2.5	2.1	
Jewelry, silverware, and plated ware	391	37.2	38.2	37.2	38.0	-	1.4	2.0	1.8	1.1	
Jewelry, precious metal	3911	36.3	37.6	35.9	36.8	-	1.0	1.7	1.4	.5	
Musical instruments	393	41.2	41.7	39.9	38.2	-	2.4	3.0	2.3	1.7	
Toys and sporting goods	394	38.6	39.7	39.4	38.6	-	2.0	2.7	2.2	2.1	
Dolls, games, toys, and children's vehicles	3942,4	37.8	39.0	37.7	37.0	-	1.5	2.7	1.2	1.2	
Sporting and athletic goods, nec	3949	39.2	40.3	40.7	39.8	-	2.5	2.6	3.0	2.8	
Pens, pencils, office, and art supplies	395	40.6	40.5	40.5	40.2	-	2.2	2.2	3.2	2.6	
Costume jewelry and notions	396	36.0	37.2	38.7	36.3	-	2.4	3.3	2.4	1.3	
Costume jewelry	3961	34.1	34.5	37.3	34.3	-	2.0	2.7	2.1	.7	
Miscellaneous manufactures	399	39.8	40.1	39.9	39.0	-	2.7	3.0	2.8	2.5	
Signs and advertising displays	3993	39.4	39.7	39.9	39.2	-	2.3	2.9	2.8	2.8	
Nondurable goods		40.0	40.4	40.2	39.9	40.2	3.6	3.9	3.6	3.6	3.8
Food and kindred products	20	40.0	40.6	40.3	40.4	40.8	4.2	4.6	4.2	4.6	-
Meat products	201	39.6	39.8	40.5	40.0	-	3.6	4.0	4.4	4.4	
Meat packing plants	2011	40.9	41.5	41.4	41.4	-	4.1	4.8	5.2	5.6	
Sausages and other prepared meats	2013	40.9	41.1	41.7	41.2	-	4.0	4.1	5.0	5.0	
Poultry dressing plants	2016	38.4	38.1	39.4	38.4	-	3.1	3.4	3.5	3.3	
Dairy products	202	41.6	41.5	41.4	41.7	-	4.8	4.5	4.5	4.7	
Cheese, natural and processed	2022	39.5	39.7	39.9	39.7	-	4.0	3.8	3.7	3.6	
Fluid milk	2026	42.3	42.4	42.0	42.6	-	5.2	5.0	4.7	5.2	
Preserved fruits and vegetables	203	38.2	40.7	38.6	38.5	-	4.6	5.8	3.7	4.3	
Canned specialties	2032	39.9	40.5	40.1	40.4	-	5.0	5.6	4.3	3.8	
Canned fruits and vegetables	2033	36.8	41.1	38.7	38.6	-	4.9	6.8	4.2	5.4	
Frozen fruits and vegetables	2037	37.7	40.1	37.4	36.3	-	4.5	5.6	3.5	3.3	
Grain mill products	204	44.5	44.0	44.2	45.0	-	6.3	6.1	5.8	6.8	
Flour and other grain mill products	2041	47.0	46.9	46.3	48.1	-	6.7	6.7	6.6	8.5	
Prepared feeds, nec	2048	44.2	43.8	43.2	43.3	-	6.6	6.3	5.8	6.3	
Bakery products	205	39.5	39.8	40.2	40.4	-	3.9	3.9	4.1	4.2	
Bread, cake, and related products	2051	39.1	39.0	39.2	39.5	-	4.2	3.9	4.3	4.3	
Cookies and crackers	2052	40.5	41.8	42.8	42.8	-	3.3	3.9	3.8	3.8	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a	July 1987	Aug. 1987	June 1988	July 1988 ^a	Aug. 1988 ^a
Durable goods—Continued											
Transportation equipment	37	\$12.82	\$12.88	\$13.35	\$13.23	\$13.15	\$525.62	\$528.08	\$574.05	\$551.69	\$545.73
Motor vehicles and equipment	371	13.35	13.40	14.16	13.86	13.69	546.02	545.38	625.87	576.58	566.77
Motor vehicles and car bodies	3711	15.26	15.33	16.23	16.02	-	614.98	591.74	714.12	656.82	-
Truck and bus bodies	3713	11.53	11.29	11.77	11.73	-	492.33	477.57	506.11	486.80	-
Motor vehicle parts and accessories	3714	12.56	12.63	13.32	13.04	-	518.73	532.99	596.74	546.38	-
Truck trailers	3715	9.35	9.34	9.24	9.22	-	378.68	384.81	383.46	366.96	-
Aircraft and parts	372	13.15	13.22	13.46	13.61	-	547.04	555.24	568.01	575.70	-
Aircraft	3721	(^b)	(^b)	(^b)	(^b)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	\$13.26	\$13.48	\$13.74	\$14.03	-	\$550.29	\$572.90	\$577.08	\$599.08	-
Aircraft equipment, nec	3728	12.33	12.26	12.54	12.58	-	516.63	513.69	540.47	538.42	-
Ship and boat building and repairing	373	10.32	10.30	10.34	10.23	-	411.77	410.97	419.80	413.29	-
Ship building and repairing	3731	11.61	11.56	11.56	11.47	-	465.56	462.40	472.80	465.68	-
Boat building and repairing	3732	8.07	8.01	8.29	8.29	-	320.38	318.80	332.43	332.43	-
Railroad equipment	374	11.80	11.85	11.94	11.99	-	473.18	488.22	509.84	496.39	-
Guided missiles, space vehicles, and parts	376	12.64	12.80	13.09	13.24	-	523.30	541.44	557.63	568.00	-
Guided missiles and space vehicles	3761	(^b)	(^b)	(^b)	(^b)	-	-	-	-	-	-
Miscellaneous transportation equipment	379	\$10.57	\$10.54	\$10.19	\$10.35	-	\$416.46	\$418.44	\$406.58	\$417.11	-
Travel trailers and campers	3792	8.65	8.67	8.65	8.61	-	332.16	332.06	335.62	334.93	-
Instruments and related products	38	9.71	9.74	9.88	9.95	9.91	396.17	402.26	409.03	408.95	409.28
Engineering and scientific instruments	381	10.68	10.72	10.93	11.01	-	441.08	449.17	452.50	461.32	-
Measuring and controlling devices	382	9.56	9.60	9.68	9.72	-	388.14	393.60	402.69	397.55	-
Environmental controls	3822	8.83	9.05	9.18	9.22	-	348.79	361.10	365.36	354.05	-
Process control instruments	3823	9.45	9.44	9.35	9.33	-	388.40	396.48	413.27	406.79	-
Instruments to measure electricity	3825	9.80	9.88	9.83	9.93	-	390.04	403.10	399.10	399.19	-
Optical instruments and lenses	383	10.61	10.48	10.75	10.93	-	437.13	439.11	468.70	479.83	-
Medical instruments and supplies	384	8.64	8.63	8.82	8.93	-	347.33	350.38	360.74	358.99	-
Surgical and medical instruments	3841	8.81	8.73	9.10	9.17	-	355.92	354.44	374.01	362.22	-
Surgical appliances and supplies	3842	8.45	8.51	8.50	8.66	-	338.85	344.66	343.40	352.46	-
Ophthalmic goods	385	7.45	7.43	7.47	7.47	-	298.75	301.66	296.56	291.33	-
Photographic equipment and supplies	386	12.95	13.19	13.48	13.25	-	554.26	571.13	574.25	581.68	-
Watches, clocks, and watchcases	387	7.23	7.15	7.27	7.41	-	300.05	293.15	292.98	293.44	-
Miscellaneous manufacturing	39	7.72	7.72	7.93	7.94	7.96	299.54	304.94	311.65	306.48	310.44
Jewelry, silverware, and plated ware	391	8.24	8.26	8.60	8.54	-	306.53	315.53	319.92	324.52	-
Jewelry, precious metal	3911	8.31	8.36	8.75	8.67	-	301.65	314.34	314.13	319.06	-
Musical instruments	393	7.55	7.50	7.94	7.86	-	311.06	312.75	316.81	300.25	-
Toys and sporting goods	394	7.11	7.16	7.14	7.18	-	274.45	284.25	281.32	277.15	-
Dolls, games, toys, and children's vehicles	3942,4	6.86	6.95	6.93	6.92	-	259.31	271.05	261.26	256.04	-
Sporting and athletic goods, nec	3949	7.31	7.33	7.30	7.36	-	286.55	295.40	297.11	292.93	-
Pens, pencils, office, and art supplies	395	7.62	7.62	7.81	7.87	-	309.37	308.61	316.31	316.37	-
Costume jewelry and notions	396	6.38	6.37	6.71	6.76	-	229.68	236.96	259.68	245.39	-
Costume jewelry	3961	5.80	5.80	6.22	6.26	-	197.78	200.10	232.01	214.72	-
Miscellaneous manufactures	399	8.42	8.43	8.70	8.68	-	335.12	338.04	347.13	338.52	-
Signs and advertising displays	3993	8.78	8.85	9.03	9.00	-	345.93	351.35	360.30	352.80	-
Nondurable goods		9.18	9.14	9.39	9.45	9.40	367.20	369.26	377.48	377.06	377.88
Food and kindred products	20	8.88	8.82	9.12	9.13	9.01	355.20	358.09	367.54	368.85	367.61
Meat products	201	7.41	7.45	7.64	7.64	-	293.44	296.51	309.42	305.60	-
Meat packing plants	2011	8.35	8.44	8.53	8.49	-	341.52	350.26	353.14	351.49	-
Sausages and other prepared meats	2013	8.90	8.81	9.11	9.04	-	364.01	362.09	379.89	372.45	-
Poultry dressing plants	2016	6.08	6.11	6.34	6.40	-	233.47	232.79	249.80	245.76	-
Dairy products	202	9.58	9.56	9.79	9.86	-	398.53	396.74	405.31	411.16	-
Cheese, natural and processed	2022	9.01	8.85	9.20	9.08	-	355.90	351.35	367.08	360.48	-
Fluid milk	2026	10.11	10.09	10.22	10.38	-	427.65	427.82	429.24	442.19	-
Preserved fruits and vegetables	203	8.11	7.96	8.43	8.42	-	309.80	323.97	325.40	324.17	-
Canned specialties	2032	10.27	9.96	10.59	10.51	-	409.77	403.38	424.66	424.60	-
Canned fruits and vegetables	2033	8.06	7.98	8.44	8.47	-	296.61	327.98	326.63	326.94	-
Frozen fruits and vegetables	2037	7.36	7.08	7.54	7.67	-	277.47	283.91	282.00	278.42	-
Grain mill products	204	10.92	10.83	11.13	11.23	-	485.94	476.52	491.95	505.35	-
Flour and other grain mill products	2041	10.59	10.41	10.83	10.99	-	497.73	488.23	501.43	528.62	-
Prepared feeds, nec	2048	8.38	8.39	8.54	8.69	-	370.40	367.48	368.93	376.28	-
Bakery products	205	9.97	9.96	10.27	10.26	-	393.82	396.41	412.85	414.50	-
Bread, cake, and related products	2051	9.94	9.93	10.26	10.21	-	388.65	387.27	402.19	403.30	-
Cookies and crackers	2052	10.03	10.02	10.32	10.38	-	406.22	418.84	441.70	444.26	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^P	Aug. 1988 ^P	July 1987	Aug. 1987	June 1988	July 1988 ^P	Aug. 1988 ^P
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	39.1	40.4	39.9	40.2	-	2.4	3.2	2.9	3.7	-
Cane and beet sugar	2061-3	40.9	41.2	40.4	42.8	-	4.4	4.5	4.5	6.1	-
Confectionery products	2065	37.5	39.6	39.0	38.7	-	1.8	2.8	2.3	3.0	-
Fats and oils	207	41.7	41.4	43.0	43.0	-	5.1	5.1	5.0	5.2	-
Beverages	208	41.4	41.2	41.4	42.0	-	4.3	4.2	4.6	5.0	-
Malt beverages	2082	43.3	42.7	43.0	44.2	-	5.3	5.0	6.5	7.1	-
Bottled and canned soft drinks	2086	41.5	41.4	41.3	41.7	-	4.5	4.4	4.5	4.8	-
Misc. food and kindred products	209	39.1	39.7	38.1	39.0	-	4.3	4.6	3.8	4.3	-
Tobacco manufactures	21	37.3	37.8	39.8	39.2	39.2	2.7	3.1	2.8	2.9	-
Cigarettes	211	36.9	38.4	40.0	39.5	-	2.8	3.3	3.1	3.0	-
Textile mill products	22	41.6	42.2	41.0	40.4	41.1	4.4	4.6	3.8	3.5	-
Weaving mills, cotton	221	42.8	43.7	40.2	39.7	-	6.1	6.5	4.0	3.6	-
Weaving mills, synthetics	222	42.3	42.5	41.9	41.3	-	4.7	4.7	4.5	3.9	-
Weaving and finishing mills, wool	223	41.2	41.5	41.2	40.4	-	1.9	1.4	3.4	2.9	-
Narrow fabric mills	224	40.3	40.8	41.5	40.6	-	3.5	3.8	3.4	2.9	-
Knitting mills	225	39.9	40.5	40.1	39.7	-	3.3	3.5	3.0	2.9	-
Women's hosiery, except socks	2251	38.8	39.1	37.7	37.5	-	3.4	3.3	2.0	1.9	-
Hosiery, nec	2252	39.1	40.2	39.3	39.2	-	3.0	2.9	2.4	2.6	-
Knit outerwear mills	2253	40.0	40.1	40.3	40.2	-	2.9	3.3	2.9	3.1	-
Knit underwear mills	2254	38.4	39.6	40.0	38.7	-	2.4	2.1	2.4	1.8	-
Circular knit fabric mills	2257	42.0	42.8	40.7	40.1	-	4.9	4.7	4.1	3.8	-
Textile finishing, except wool	226	41.7	42.9	41.6	40.8	-	4.4	5.3	4.3	3.8	-
Finishing plants, cotton	2261	42.8	43.4	41.8	42.2	-	4.5	5.4	4.1	4.0	-
Finishing plants, synthetics	2262	40.6	42.6	42.0	39.6	-	3.8	4.8	4.9	3.3	-
Floor covering mills	227	43.3	44.1	42.9	42.4	-	3.9	4.9	4.5	4.6	-
Yarn and thread mills	228	42.5	42.8	40.3	39.9	-	5.2	5.3	3.9	3.8	-
Yarn mills, except wool	2281	43.3	43.7	40.6	40.1	-	5.7	5.8	4.1	4.0	-
Throwing and winding mills	2282	37.4	39.0	38.6	38.7	-	3.0	3.3	2.9	2.5	-
Miscellaneous textile goods	229	42.4	42.4	43.1	41.6	-	4.1	4.6	4.7	3.7	-
Apparel and other textile products	23	36.9	37.3	37.2	36.6	36.9	1.7	1.9	1.8	1.5	-
Men's and boys' suits and coats	231	36.1	35.8	37.3	37.6	-	1.0	1.2	1.4	1.2	-
Men's and boys' furnishings	232	37.4	37.9	37.4	36.5	-	1.5	1.9	1.6	1.2	-
Men's and boys' shirts and nightwear	2321	37.7	38.1	37.8	37.1	-	1.5	1.9	1.5	1.0	-
Men's and boys' separate trousers	2327	36.8	37.5	37.0	36.7	-	.8	1.5	1.8	1.2	-
Men's and boys' work clothing	2328	37.1	37.6	36.6	36.3	-	1.7	2.0	1.6	1.5	-
Women's and misses' outerwear	233	35.6	35.8	35.6	35.6	-	1.5	1.6	1.6	1.5	-
Women's and misses' blouses and waists	2331	35.3	36.0	36.7	36.6	-	1.0	1.4	1.5	1.1	-
Women's and misses' dresses	2335	35.7	35.4	35.0	34.8	-	1.5	1.4	1.3	1.1	-
Women's and misses' suits and coats	2337	36.3	36.6	36.9	35.9	-	2.0	2.1	1.9	2.2	-
Women's and misses' outerwear, nec	2339	35.5	35.8	35.3	35.6	-	1.6	1.6	1.6	1.6	-
Women's and children's undergarments	234	37.2	38.1	37.9	36.2	-	1.2	1.6	1.5	1.5	-
Women's and children's underwear	2341	37.9	38.4	38.3	36.5	-	1.2	1.5	1.5	1.4	-
Brassieres and allied garments	2342	33.4	36.5	35.8	34.4	-	1.1	2.1	1.7	1.8	-
Children's outerwear	236	37.8	36.2	37.8	37.1	-	2.0	1.8	1.9	1.7	-
Children's dresses and blouses	2361	36.1	35.0	36.3	35.5	-	1.5	1.2	1.3	1.2	-
Misc. apparel and accessories	238	38.1	38.6	38.4	37.7	-	1.8	1.9	1.9	1.9	-
Misc. fabricated textile products	239	38.1	39.2	39.1	38.0	-	2.4	2.9	2.8	1.9	-
Curtains and draperies	2391	37.6	38.4	36.3	36.2	-	1.4	1.9	1.5	.7	-
House furnishings, nec	2392	38.5	39.6	38.2	38.6	-	3.1	3.3	2.1	2.3	-
Automotive and apparel trimmings	2396	38.8	40.3	42.6	38.7	-	3.2	4.4	6.2	3.1	-
Paper and allied products	26	43.2	43.2	43.1	43.0	43.1	5.2	5.2	4.9	5.0	-
Paper and pulp mills	261,2,6	45.6	45.0	45.0	45.1	-	6.7	6.3	6.2	6.3	-
Paper mills, except building paper	262	45.8	45.1	45.2	45.1	-	6.9	6.5	6.4	6.4	-
Paperboard mills	263	43.6	43.6	44.5	43.9	-	7.3	7.3	7.6	7.3	-
Misc. converted paper products	264	42.2	42.0	41.6	41.5	-	4.0	3.9	3.7	3.8	-
Paper coating and glazing	2641	44.2	43.9	43.0	42.8	-	4.5	4.4	4.0	4.0	-
Envelopes	2642	41.7	41.4	40.6	41.2	-	3.1	3.1	2.5	2.8	-
Bags, except textile bags	2643	42.0	41.7	41.2	41.6	-	4.4	4.2	4.0	4.2	-
Paperboard containers and boxes	265	42.0	42.9	42.6	42.4	-	4.5	4.9	4.4	4.4	-
Folding paperboard boxes	2651	41.6	42.2	42.0	41.8	-	4.2	4.4	4.2	4.1	-
Corrugated and solid fiber boxes	2653	42.5	43.5	43.1	42.9	-	4.8	5.5	4.6	4.8	-
Sanitary food containers	2654	42.0	42.0	43.8	43.7	-	4.7	4.2	4.8	5.0	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	\$9.40	\$9.28	\$9.47	\$9.60		\$367.54	\$374.91	\$377.85	\$385.92	
Cane and beet sugar	2061-3	11.04	11.06	11.28	11.60		451.54	455.67	455.71	496.48	
Confectionery products	2065	8.26	8.13	8.31	8.39		309.75	321.95	324.09	324.69	
Fats and oils	207	9.53	9.52	9.34	9.45		397.40	394.13	401.62	406.35	
Beverages	208	11.87	11.90	12.08	12.15		491.42	490.28	500.11	510.30	
Malt beverages	2082	16.56	16.51	17.06	17.07		717.05	704.98	733.58	754.49	
Bottled and canned soft drinks	2086	9.47	9.44	9.65	9.70		393.01	390.82	398.55	404.49	
Misc. food and kindred products	209	8.21	8.27	8.52	8.37		321.01	328.32	324.61	326.43	
Tobacco manufactures	21	15.17	14.55	15.78	15.66	\$14.82	565.84	549.99	628.04	613.87	\$580.94
Cigarettes	211	17.26	17.01	17.97	17.59	-	636.89	653.18	718.80	694.81	-
Textile mill products	22	7.13	7.16	7.33	7.31	7.38	296.61	302.15	300.53	295.32	303.32
Weaving mills, cotton	221	7.52	7.56	7.64	7.62	-	321.86	330.37	307.13	302.51	-
Weaving mills, synthetics	222	7.70	7.70	7.98	7.87		325.71	327.25	334.36	325.03	
Weaving and finishing mills, wool	223	7.57	7.55	8.04	7.95		311.88	313.33	331.25	321.18	
Narrow fabric mills	224	6.73	6.75	6.79	6.82		271.22	275.40	281.79	276.89	
Knitting mills	225	6.52	6.54	6.61	6.63		260.15	264.87	265.06	263.21	
Women's hosiery, except socks	2251	6.48	6.49	6.46	6.53		251.42	253.76	243.54	244.88	
Hosiery, nec	2252	6.19	6.20	6.35	6.40		242.03	249.24	249.56	250.88	
Knit outerwear mills	2253	6.45	6.49	6.33	6.37		258.00	260.25	255.10	256.07	
Knit underwear mills	2254	6.13	6.11	6.39	6.41		235.39	241.96	255.60	248.07	
Circular knit fabric mills	2257	7.13	7.11	7.43	7.37		299.46	304.31	302.40	295.54	
Textile finishing, except wool	226	7.40	7.44	7.77	7.72		308.58	319.18	323.23	314.98	
Finishing plants, cotton	2261	7.43	7.50	7.78	7.70		318.00	325.50	325.20	324.94	
Finishing plants, synthetics	2262	7.60	7.64	8.07	7.97		308.56	325.46	338.94	315.61	
Floor covering mills	227	7.42	7.45	7.65	7.64		321.29	328.55	328.19	323.94	
Yarn and thread mills	228	6.78	6.84	6.99	7.02		288.15	292.75	281.70	280.10	
Yarn mills, except wool	2281	6.76	6.83	6.98	6.99		292.71	298.47	283.39	280.30	
Throwing and winding mills	2282	6.92	6.99	7.13	7.18		258.81	272.61	275.22	277.87	
Miscellaneous textile goods	229	8.05	8.04	8.33	8.24		341.32	340.90	359.02	342.78	
Apparel and other textile products	23	5.87	5.88	6.08	6.00	6.08	216.60	219.32	226.18	219.60	224.35
Men's and boys' suits and coats	231	6.62	6.56	6.80	6.85	-	238.98	234.85	253.64	257.56	-
Men's and boys' furnishings	232	5.43	5.44	5.55	5.55		203.08	206.18	207.57	202.58	
Men's and boys' shirts and nightwear	2321	5.21	5.24	5.39	5.38		196.42	199.64	203.74	199.60	
Men's and boys' separate trousers	2327	5.28	5.27	5.42	5.45		194.30	197.63	200.54	200.02	
Men's and boys' work clothing	2328	5.56	5.52	5.59	5.62		206.28	207.55	204.59	204.01	
Women's and misses' outerwear	233	5.71	5.68	5.87	5.80		203.28	203.34	208.97	206.48	
Women's and misses' blouses and waists	2331	5.05	5.01	5.11	4.96		178.27	180.36	187.54	181.54	
Women's and misses' dresses	2335	6.10	6.05	6.22	6.14		217.77	214.17	217.70	213.67	
Women's and misses' suits and coats	2337	6.57	6.41	6.55	6.56		238.49	234.61	241.70	235.50	
Women's and misses' outerwear, nec	2339	5.50	5.50	5.74	5.69		195.25	196.90	202.62	202.56	
Women's and children's undergarments	234	5.49	5.53	5.67	5.57		204.23	210.69	214.89	201.63	
Women's and children's underwear	2341	5.33	5.37	5.53	5.43		202.01	206.21	211.80	198.20	
Brassieres and allied garments	2342	6.47	6.45	6.48	6.49		216.10	235.43	231.98	223.26	
Children's outerwear	236	5.27	5.29	5.42	5.45		199.21	191.50	204.88	202.20	
Children's dresses and blouses	2361	5.12	5.13	5.41	5.44		184.83	179.55	196.38	193.12	
Misc. apparel and accessories	238	5.64	5.70	5.91	5.91		214.88	220.02	226.94	222.81	
Misc. fabricated textile products	239	6.98	7.05	7.40	7.08		265.94	276.36	289.34	269.04	
Curtains and draperies	2391	5.73	5.71	5.98	5.94		215.45	219.26	217.07	215.03	
House furnishings, nec	2392	6.08	6.09	6.23	6.24		234.08	241.16	237.99	240.86	
Automotive and apparel trimmings	2396	10.47	10.69	11.50	10.53		406.24	430.81	489.90	407.51	
Paper and allied products	26	11.49	11.41	11.65	11.73	11.64	496.37	492.91	502.12	504.39	501.68
Paper and pulp mills	261,2,6	14.08	13.95	14.34	14.42	-	642.05	627.75	645.30	650.34	-
Paper mills, except building paper	262	14.16	14.03	14.41	14.44		648.53	632.75	651.33	651.24	
Paperboard mills	263	14.36	14.29	14.37	14.50		626.10	623.04	639.47	636.55	
Misc. converted paper products	264	9.97	9.91	10.07	10.13		420.73	416.22	418.91	420.40	
Paper coating and glazing	2641	11.00	11.07	11.23	11.24		486.20	485.97	482.89	481.07	
Envelopes	2642	9.25	9.27	9.53	9.60		385.73	383.78	386.92	395.52	
Bags, except textile bags	2643	9.29	9.28	9.38	9.43		390.18	386.98	386.46	392.29	
Paperboard containers and boxes	265	9.80	9.81	9.97	10.02		411.60	420.85	424.72	424.85	
Folding paperboard boxes	2651	10.19	10.18	10.34	10.33		423.90	429.60	434.28	431.79	
Corrugated and solid fiber boxes	2653	10.01	10.02	10.14	10.21		425.43	435.87	437.03	438.01	
Sanitary food containers	2654	9.32	9.32	9.70	9.72		391.44	391.44	424.86	424.76	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods—Continued											
Printing and publishing	27	37.9	38.2	37.6	37.9	38.3	2.9	3.3	2.7	2.9	
Newspapers	271	33.4	33.7	33.6	33.2	-	1.4	1.5	1.4	1.3	
Periodicals	272	38.1	39.1	37.7	38.0	-	2.8	4.0	2.9	2.9	
Books	273	38.8	38.8	38.6	39.1	-	3.5	3.6	2.9	3.3	
Book publishing	2731	38.4	37.4	38.1	37.6	-	3.1	2.9	2.3	2.1	
Book printing	2732	39.4	41.2	39.3	41.6	-	4.2	4.8	3.8	5.2	
Miscellaneous publishing	274	36.5	36.7	35.6	36.2	-	2.2	2.6	1.7	1.9	
Commercial printing	275	39.4	39.8	38.7	39.2	-	3.4	3.9	2.9	3.3	
Commercial printing, letterpress	2751	39.2	39.5	38.7	39.0	-	2.8	3.1	2.7	2.9	
Commercial printing, lithographic	2752	39.3	39.7	38.5	39.1	-	3.5	4.1	2.9	3.4	
Manifold business forms	276	41.8	41.4	42.1	41.9	-	4.2	4.0	4.5	4.5	
Blankbooks and bookbinding	278	38.4	38.4	38.7	39.0	-	2.4	2.7	2.7	3.2	
Printing trade services	279	38.6	38.8	38.9	39.6	-	4.0	4.4	4.3	4.9	
Chemicals and allied products	28	41.9	42.1	42.4	42.0	41.8	3.9	4.0	4.2	4.1	
Industrial inorganic chemicals	281	42.1	42.2	43.1	42.8	-	4.1	4.3	4.3	4.4	
Industrial inorganic chemicals, nec	2819	42.7	42.9	43.3	42.8	-	4.1	4.2	4.3	4.2	
Plastics materials and synthetics	282	42.5	43.0	43.5	43.5	-	4.3	4.4	4.9	5.1	
Plastics materials and resins	2821	43.0	42.9	43.9	43.5	-	4.4	4.4	5.1	5.0	
Organic fibers, noncellulosic	2824	42.5	43.5	43.0	43.6	-	4.0	4.1	4.6	5.1	
Drugs	283	41.1	41.2	41.3	40.6	-	2.7	2.8	2.9	2.8	
Pharmaceutical preparations	2834	40.9	40.9	41.1	40.1	-	2.7	2.8	3.0	2.8	
Soap, cleaners, and toilet goods	284	41.0	41.2	40.4	39.6	-	3.5	3.6	3.6	3.3	
Soap and other detergents	2841	44.5	43.7	44.2	43.7	-	5.9	5.5	5.0	5.5	
Polishing, sanitation, and finishing preparations	2842,3	41.7	41.5	41.5	40.6	-	3.4	3.4	3.6	2.9	
Toilet preparations	2844	38.6	39.6	37.8	37.0	-	2.1	2.6	2.9	2.3	
Paints and allied products	285	42.2	41.9	42.3	42.1	-	4.3	4.0	4.2	4.0	
Industrial organic chemicals	286	43.7	43.4	43.7	43.8	-	5.3	5.4	5.1	5.2	
Cyclic crudes and intermediates	2865	42.8	43.1	42.4	41.0	-	5.7	5.8	5.3	4.7	
Gum, wood, and industrial organic chemicals, nec	2861,9	43.9	43.5	44.1	44.5	-	5.2	5.3	5.1	5.3	
Agricultural chemicals	287	42.0	41.9	43.8	42.5	-	3.8	3.7	5.6	4.8	
Miscellaneous chemical products	289	41.0	41.4	42.0	41.6	-	3.4	3.7	3.7	3.5	
Petroleum and coal products	29	44.9	43.6	45.1	45.5	45.4	5.2	5.0	5.9	6.0	
Petroleum refining	291	44.7	43.1	45.0	45.5	-	4.4	4.0	5.3	5.4	
Paving and roofing materials	295	47.2	46.7	46.9	46.8	-	9.1	9.4	9.1	9.1	
Rubber and misc. plastics products	30	41.0	41.4	41.7	41.0	41.4	3.9	4.2	4.2	4.0	
Tires and inner tubes	301	44.2	43.9	44.7	44.7	-	6.2	6.2	6.3	6.6	
Rubber and plastics footwear	302	41.8	41.4	39.3	39.7	-	3.1	2.9	1.4	1.2	
Reclaimed rubber, and rubber and plastics hose and belting	303,4	41.7	43.1	44.3	45.3	-	4.1	4.9	4.2	5.2	
Fabricated rubber products, nec	306	40.5	41.4	42.0	40.9	-	3.3	3.8	4.0	3.4	
Miscellaneous plastics products	307	40.6	41.0	41.3	40.4	-	3.7	4.0	4.1	3.8	
Leather and leather products	31	38.7	39.0	37.9	37.4	37.8	2.3	2.6	2.1	1.6	
Leather tanning and finishing	311	40.8	42.4	41.3	39.6	-	3.1	4.5	4.1	2.9	
Footwear, except rubber	314	39.2	38.7	37.8	37.7	-	2.4	2.4	1.9	1.4	
Men's footwear, except athletic	3143	38.9	38.5	37.4	37.9	-	2.0	2.1	1.1	.9	
Women's footwear, except athletic	3144	39.9	39.1	38.2	38.3	-	3.3	2.9	2.8	2.2	
Luggage	316	38.2	41.1	39.8	37.5	-	2.6	3.6	3.5	3.3	
Handbags and personal leather goods	317	36.1	37.8	36.0	35.5	-	2.1	3.1	1.5	1.2	
Transportation and public utilities		39.6	39.7	39.5	39.7	39.6					
Railroad transportation:											
Class I railroads ³	4011	44.1	45.5	45.1	45.1	-					
Local and interurban passenger transit	41	36.3	36.5	34.6	36.5	-					
Local and suburban transportation	411	38.6	38.8	38.8	39.0	-					
Intercity highway transportation	413	39.9	39.5	40.9	40.8	-					
Trucking and warehousing	42	38.8	38.9	38.6	38.5	-					
Trucking and trucking terminals	421,3	38.7	38.9	38.6	38.5	-					
Public warehousing	422	39.1	39.1	38.7	39.0	-					
Pipe lines, except natural gas	46	43.4	42.3	41.9	43.5	-					

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Nondurable goods—Continued											
Printing and publishing	27	\$10.24	\$10.32	\$10.43	\$10.48	\$10.55	\$388.10	\$394.22	\$392.17	\$397.19	\$404.07
Newspapers	271	10.26	10.19	10.47	10.44	-	342.68	343.40	351.79	346.61	-
Periodicals	272	10.59	10.89	10.88	10.85	-	403.48	425.80	410.18	412.30	-
Books	273	9.39	9.38	9.31	9.38	-	364.33	363.94	359.37	366.76	-
Book publishing	2731	8.93	9.00	8.96	9.01	-	342.91	336.60	341.38	338.78	-
Book printing	2732	10.12	9.96	9.87	9.90	-	398.73	410.35	387.89	411.84	-
Miscellaneous publishing	274	9.37	9.51	9.84	9.91	-	342.01	349.02	350.30	358.74	-
Commercial printing	275	10.49	10.61	10.68	10.77	-	413.31	422.28	413.32	422.18	-
Commercial printing, letterpress	2751	10.06	10.09	10.32	10.31	-	394.35	398.56	399.38	402.09	-
Commercial printing, lithographic	2752	10.62	10.76	10.76	10.91	-	417.37	427.17	414.26	426.58	-
Manifold business forms	276	10.81	10.72	11.14	11.03	-	451.86	443.81	468.99	462.16	-
Blankbooks and bookbinding	278	8.08	8.19	8.30	8.35	-	310.27	314.50	321.21	325.65	-
Printing trade services	279	12.52	12.63	12.82	12.87	-	483.27	490.04	498.70	509.65	-
Chemicals and allied products	28	12.37	12.33	12.60	12.70	12.64	518.30	519.09	534.24	533.40	528.35
Industrial inorganic chemicals	281	13.60	13.67	13.82	14.01	-	572.56	576.87	595.64	599.63	-
Industrial inorganic chemicals, nec	2819	13.73	13.76	13.86	14.08	-	586.27	590.30	600.14	602.62	-
Plastics materials and synthetics	282	12.58	12.55	13.01	13.06	-	534.65	539.65	565.94	568.11	-
Plastics materials and resins	2821	13.51	13.54	13.78	13.89	-	580.93	580.87	604.94	604.22	-
Organic fibers, noncellulosic	2824	12.02	11.97	12.48	12.47	-	510.85	520.70	536.64	543.69	-
Drugs	283	11.59	11.57	11.93	11.94	-	476.35	476.68	492.71	484.76	-
Pharmaceutical preparations	2834	11.31	11.32	11.70	11.72	-	462.58	462.99	480.87	469.97	-
Soap, cleaners, and toilet goods	284	10.88	10.72	10.98	11.03	-	446.08	441.66	443.59	436.79	-
Soap and other detergents	2841	13.96	13.93	14.37	14.43	-	621.22	608.74	635.15	630.59	-
Polishing, sanitation, and finishing preparations	2842,3	10.07	10.03	10.32	10.29	-	419.92	416.25	428.28	417.77	-
Toilet preparations	2844	9.19	9.07	9.23	9.27	-	354.73	359.17	348.89	342.99	-
Paints and allied products	285	10.81	10.77	11.18	11.17	-	456.18	451.26	472.91	470.26	-
Industrial organic chemicals	286	14.93	14.90	15.03	15.18	-	652.44	646.66	656.81	664.88	-
Cyclic crudes and intermediates	2865	14.69	14.58	14.93	14.81	-	628.73	628.40	633.03	607.21	-
Gum, wood, and industrial organic chemicals, nec	2861,9	14.99	14.99	15.05	15.27	-	658.06	652.07	663.71	679.52	-
Agricultural chemicals	287	11.93	12.00	12.21	12.42	-	501.06	502.80	534.80	527.85	-
Miscellaneous chemical products	289	11.38	11.37	11.49	11.52	-	466.58	470.72	482.58	479.23	-
Petroleum and coal products	29	14.51	14.54	15.04	15.03	14.74	651.50	633.94	678.30	683.87	669.20
Petroleum refining	291	15.69	15.74	16.26	16.23	-	701.34	678.39	731.70	738.47	-
Paving and roofing materials	295	11.38	11.51	11.60	11.57	-	537.14	537.52	544.04	541.48	-
Rubber and misc. plastics products	30	8.96	8.93	9.07	9.11	9.15	367.36	369.70	378.22	373.51	378.81
Tires and inner tubes	301	14.39	14.29	14.24	14.39	-	636.04	627.33	636.53	643.23	-
Rubber and plastics footwear	302	6.04	6.07	6.38	6.33	-	252.47	251.30	250.73	251.30	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	8.96	8.95	9.17	9.28	-	373.63	385.75	406.23	420.38	-
Fabricated rubber products, nec	306	8.69	8.69	8.79	8.80	-	351.95	359.77	369.18	359.92	-
Miscellaneous plastics products	307	8.29	8.28	8.47	8.47	-	336.57	339.48	349.81	342.19	-
Leather and leather products	31	5.99	6.04	6.27	6.21	6.24	231.81	235.56	237.63	232.25	235.87
Leather tanning and finishing	311	8.05	8.20	8.44	8.39	-	328.44	347.68	348.57	332.24	-
Footwear, except rubber	314	5.70	5.69	5.96	5.91	-	223.44	220.20	225.29	222.81	-
Men's footwear, except athletic	3143	6.17	6.11	6.28	6.21	-	240.01	235.24	234.87	235.36	-
Women's footwear, except athletic	3144	5.34	5.34	5.69	5.69	-	213.07	208.79	217.36	217.93	-
Luggage	316	6.21	6.51	6.34	6.24	-	237.22	267.56	252.33	234.00	-
Handbags and personal leather goods	317	5.82	5.81	5.99	5.79	-	210.10	219.62	215.64	205.55	-
Transportation and public utilities		12.00	12.06	12.27	12.30	12.36	475.20	478.78	484.67	488.31	489.46
Railroad transportation:											
Class I railroads ³	4011	14.11	14.27	15.06	15.06	-	622.25	649.29	679.21	679.21	-
Local and interurban passenger transit	41	8.52	8.51	8.45	8.59	-	309.28	310.62	292.37	313.54	-
Local and suburban transportation	411	9.10	8.94	8.98	9.06	-	351.26	346.87	348.42	353.34	-
Intercity highway transportation	413	11.52	11.66	11.19	11.35	-	459.65	460.57	457.67	463.08	-
Trucking and warehousing	42	10.72	10.73	10.92	10.85	-	415.94	417.40	421.51	417.73	-
Trucking and trucking terminals	421,3	10.89	10.90	11.08	10.99	-	421.44	424.01	427.69	423.12	-
Public warehousing	422	8.44	8.42	8.81	8.84	-	330.00	329.22	340.95	344.76	-
Pipe lines, except natural gas	46	14.97	15.17	15.58	15.39	-	649.70	641.69	652.80	669.47	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Transportation and public utilities—Continued											
Communication	48	40.4	40.4	39.9	40.4						
Telephone communication	481	42.0	41.9	41.4	42.0						
Radio and television broadcasting	483	35.9	36.2	35.8	36.3						
Electric, gas, and sanitary services	49	41.5	41.4	41.5	41.7						
Electric services	491	41.3	41.1	41.4	42.0						
Gas production and distribution	492	40.5	40.6	41.1	41.3						
Combination utility services	493	42.5	42.2	42.0	41.4						
Sanitary services	495	43.1	42.9	42.2	42.4						
Wholesale trade		38.2	38.3	38.1	38.3	38.0					
Durable goods	50	38.6	38.8	38.6	38.7						
Motor vehicles and automotive equipment	501	38.5	38.5	38.1	38.4						
Furniture and home furnishings	502	36.8	37.2	37.3	37.2						
Lumber and construction materials	503	39.5	39.7	40.0	39.8						
Sporting goods, toys, and hobby goods	504	36.4	36.5	35.7	36.2						
Metals and minerals, except petroleum	505	40.4	40.8	40.4	39.9						
Electrical goods	506	38.3	38.3	38.0	38.2						
Hardware, plumbing, and heating equipment	507	38.6	38.6	38.7	38.9						
Machinery, equipment, and supplies	508	38.9	39.1	38.9	39.0						
Miscellaneous durable goods	509	37.7	37.8	37.9	38.0						
Nondurable goods	51	37.6	37.6	37.5	37.6						
Paper and paper products	511	36.9	37.2	37.0	37.1						
Drugs, proprietaries, and sundries	512	37.6	37.6	36.8	37.0						
Apparel, piece goods, and notions	513	36.5	37.1	36.7	36.7						
Groceries and related products	514	38.2	37.9	37.9	38.4						
Chemicals and allied products	516	39.2	39.6	40.0	39.8						
Petroleum and petroleum products	517	39.1	38.9	38.4	39.0						
Beer, wine, and distilled beverages	518	36.3	36.2	36.3	36.4						
Miscellaneous nondurable goods	519	37.0	37.1	36.9	36.7						
Retail trade		30.0	30.2	29.4	30.0	29.8					
Building materials and garden supplies	52	37.4	37.4	37.0	37.3						
Lumber and other building materials	521	39.3	39.2	39.0	39.2						
Hardware stores	525	33.8	34.1	33.3	33.8						
General merchandise stores	53	29.1	29.2	28.0	28.4						
Department stores	531	28.8	28.9	27.6	28.1						
Variety stores	533	30.1	29.9	29.3	29.8						
Misc. general merchandise stores	539	31.7	31.4	30.1	30.9						
Food stores	54	31.0	30.8	30.7	31.5						
Grocery stores	541	31.2	31.1	30.9	31.6						
Retail bakeries	546	28.1	28.1	28.9	29.4						
Automotive dealers and service stations	55	36.9	37.1	36.8	36.8						
New and used car dealers	551,2	37.4	37.5	37.5	37.3						
Auto and home supply stores	553	39.6	40.0	38.8	39.3						
Gasoline service stations	554	34.7	35.0	34.7	34.9						
Apparel and accessory stores	56	27.8	28.0	27.2	27.8						
Men's and boys' clothing and furnishings	561	30.6	30.5	29.3	29.6						
Women's ready-to-wear stores	562	26.4	26.6	25.3	26.0						
Family clothing stores	565	27.7	28.3	27.3	27.7						
Shoe stores	566	29.1	29.1	28.7	29.5						
Furniture and home furnishings stores	57	33.3	33.6	32.8	33.5						
Furniture and home furnishings stores	571	33.4	33.7	33.4	33.9						
Household appliance stores	572	34.4	34.6	33.8	34.1						
Radio, television, and music stores	573	32.9	33.0	31.6	32.5						
Eating and drinking places ⁴	58	26.7	27.2	26.0	26.8						

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ²	Aug. 1988 ²	July 1987	Aug. 1987	June 1988	July 1988 ²	Aug. 1988 ²
Transportation and public utilities—Continued											
Communication	48	\$12.42	\$12.56	\$12.65	\$12.70	-	\$501.77	\$507.42	\$504.74	\$513.08	-
Telephone communication	481	13.16	13.35	13.31	13.43	-	552.72	559.37	551.03	564.06	-
Radio and television broadcasting	483	10.72	10.80	11.59	11.38	-	384.85	390.96	414.92	413.09	-
Electric, gas, and sanitary services	49	13.67	13.76	14.10	14.12	-	567.31	569.66	585.15	588.80	-
Electric services	491	13.81	13.84	14.22	14.28	-	570.35	568.82	588.71	599.76	-
Gas production and distribution	492	12.90	12.97	13.17	13.12	-	522.45	526.58	541.29	541.86	-
Combination utility services	493	15.93	16.15	16.56	16.60	-	677.03	681.53	695.52	687.24	-
Sanitary services	495	10.10	10.15	10.90	10.95	-	435.31	435.44	459.98	464.28	-
Wholesale trade		9.56	9.60	9.85	9.93	\$9.89	365.19	367.68	375.29	380.32	\$375.82
Durable goods	50	9.70	9.76	10.07	10.15	-	374.42	378.69	388.70	392.81	-
Motor vehicles and automotive equipment	501	8.65	8.75	9.09	9.17	-	333.03	336.88	346.33	352.13	-
Furniture and home furnishings	502	8.93	8.89	9.46	9.52	-	328.62	330.71	352.86	354.14	-
Lumber and construction materials	503	9.23	9.38	9.61	9.64	-	364.59	372.39	384.40	383.67	-
Sporting goods, toys, and hobby goods	504	9.73	9.75	9.81	9.78	-	354.17	355.88	350.22	354.04	-
Metals and minerals, except petroleum	505	10.36	10.47	10.56	10.58	-	418.54	427.18	426.62	422.14	-
Electrical goods	506	9.98	10.12	10.43	10.54	-	382.23	387.60	396.34	402.63	-
Hardware, plumbing, and heating equipment	507	9.22	9.30	9.48	9.53	-	355.89	358.98	366.88	370.72	-
Machinery, equipment, and supplies	508	10.35	10.38	10.74	10.83	-	402.62	405.86	417.79	422.37	-
Miscellaneous durable goods	509	7.80	7.83	7.97	8.03	-	294.06	295.97	302.06	305.14	-
Nondurable goods	51	9.36	9.38	9.53	9.60	-	351.94	352.69	357.38	360.96	-
Paper and paper products	511	9.98	10.11	10.22	10.49	-	368.26	376.09	378.14	389.18	-
Drugs, proprietaries, and sundries	512	10.79	10.94	11.04	11.08	-	405.70	411.34	406.27	409.96	-
Apparel, piece goods, and notions	513	9.14	9.09	9.44	9.40	-	333.61	337.24	346.45	344.98	-
Groceries and related products	514	9.50	9.48	9.67	9.76	-	362.90	359.29	366.49	374.78	-
Chemicals and allied products	516	12.10	12.05	12.16	12.19	-	474.32	477.18	486.40	485.16	-
Petroleum and petroleum products	517	9.49	9.48	9.66	9.58	-	371.06	368.77	370.94	373.62	-
Beer, wine, and distilled beverages	518	11.02	11.14	11.10	11.19	-	400.03	403.27	402.93	407.32	-
Miscellaneous nondurable goods	519	7.66	7.69	7.77	7.82	-	283.42	285.30	286.71	286.99	-
Retail trade		6.07	6.07	6.26	6.28	6.25	182.10	183.31	184.04	188.40	186.25
Building materials and garden supplies	52	6.97	7.03	7.31	7.33	-	260.68	262.92	270.47	273.41	-
Lumber and other building materials	521	7.30	7.36	7.69	7.71	-	286.89	288.51	299.91	302.23	-
Hardware stores	525	5.94	5.95	6.18	6.17	-	200.77	202.90	205.79	208.55	-
General merchandise stores	53	6.42	6.42	6.53	6.56	-	186.82	187.46	182.84	186.30	-
Department stores	531	6.73	6.74	6.83	6.87	-	193.62	194.79	188.51	193.05	-
Variety stores	533	4.82	4.79	4.93	4.93	-	145.08	143.22	144.45	146.91	-
Misc. general merchandise stores	539	4.91	4.96	5.25	5.30	-	155.65	155.74	158.03	163.77	-
Food stores	54	6.89	6.82	6.94	6.90	-	213.59	210.06	213.06	217.35	-
Grocery stores	541	7.03	6.96	7.05	7.00	-	219.34	216.46	217.85	221.20	-
Retail bakeries	546	5.57	5.60	5.98	5.97	-	156.52	157.36	172.82	175.52	-
Automotive dealers and service stations	55	7.87	7.95	8.26	8.33	-	290.40	294.95	303.97	306.54	-
New and used car dealers	551,2	9.67	9.83	10.19	10.34	-	361.66	368.63	382.13	385.68	-
Auto and home supply stores	553	6.68	6.70	7.01	7.04	-	264.53	268.00	271.99	276.67	-
Gasoline service stations	554	5.54	5.54	5.72	5.74	-	192.24	193.90	198.48	200.33	-
Apparel and accessory stores	56	5.53	5.51	5.78	5.75	-	153.73	154.28	157.22	159.85	-
Men's and boys' clothing and furnishings	561	6.54	6.49	7.05	6.98	-	200.12	197.95	206.57	206.61	-
Women's ready-to-wear stores	562	5.13	5.15	5.45	5.40	-	135.43	136.99	137.89	140.40	-
Family clothing stores	565	5.53	5.49	5.65	5.66	-	153.18	155.37	154.25	156.78	-
Shoe stores	566	5.58	5.57	5.92	5.88	-	162.38	162.09	169.90	173.46	-
Furniture and home furnishings stores	57	7.50	7.52	7.81	7.90	-	249.75	252.67	256.17	264.65	-
Furniture and home furnishings stores	571	7.64	7.63	7.92	8.02	-	255.18	257.13	264.53	271.88	-
Household appliance stores	572	7.51	7.43	7.83	7.89	-	258.34	257.08	264.65	269.05	-
Radio, television, and music stores	573	7.27	7.37	7.59	7.68	-	239.18	243.21	239.84	249.60	-
Eating and drinking places ⁴	58	4.39	4.39	4.53	4.55	-	117.21	119.41	117.78	121.94	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Retail trade—Continued											
Miscellaneous retail	59	30.7	31.0	30.1	30.6						
Drug stores and proprietary stores	591	28.9	29.1	27.7	28.3						
Miscellaneous shopping goods stores	594	29.5	29.7	29.0	30.0						
Nonstore retailers	596	33.0	33.7	32.1	31.7						
Fuel and ice dealers	598	37.8	38.2	38.1	38.5						
Retail stores, nec	599	31.8	32.2	31.9	31.9						
Finance, insurance, and real estate⁵		36.2	36.4	35.8	36.2	35.5					
Banking	60	36.2	36.6	35.6	36.2						
Commercial and stock savings banks	602	36.2	36.6	35.5	36.2						
Credit agencies other than banks	61	36.4	36.9	36.3	36.7						
Savings and loan associations	612	35.9	36.4	35.9	36.1						
Personal credit institutions	614	36.6	36.7	36.4	36.9						
Insurance carriers	63	37.1	37.3	37.1	37.2						
Life insurance	631	36.8	36.9	36.6	36.9						
Medical service and health insurance	632	37.6	37.3	37.6	38.2						
Fire, marine, and casualty insurance	633	36.9	37.3	37.1	36.9						
Services		32.8	32.9	32.7	33.0	32.8					
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	31.1	32.1	31.6	32.4						
Personal services:											
Laundry, cleaning, and garment services	721	34.2	34.4	34.4	34.2						
Beauty shops ⁴	723	29.5	29.8	30.1	30.0						
Business services	73	33.6	33.8	34.1	34.0						
Advertising	731	36.8	36.8	36.9	37.1						
Services to buildings	734	28.7	28.9	29.4	29.6						
Computer and data processing services	737	37.6	37.7	37.6	37.7						
Auto repair, services, and garages	75	37.1	37.2	36.7	37.1						
Automotive repair shops	753	38.6	38.5	38.1	38.1						
Miscellaneous repair services	76	38.1	38.3	38.4	38.5						
Motion pictures	78	30.5	31.2	28.5	29.4						
Motion picture production and services	781	39.0	39.2	36.8	37.4						
Amusement and recreation services	79	30.5	30.5	28.7	30.2						
Health services	80	32.6	32.6	32.4	32.6						
Offices of physicians	801	30.8	31.2	31.1	31.2						
Offices of dentists	802	28.3	28.4	28.4	28.3						
Nursing and personal care facilities	805	32.0	32.0	31.6	32.2						
Hospitals	806	34.4	34.3	34.1	34.3						
Legal services	81	34.7	34.9	34.7	35.0						
Miscellaneous services	89	38.3	38.2	38.0	38.2						
Engineering and architectural services	891	39.5	39.5	39.3	39.2						
Accounting, auditing, and bookkeeping	893	36.8	36.5	36.4	37.0						

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Retail trade—Continued											
Miscellaneous retail	59	\$6.31	\$6.32	\$6.54	\$6.56		\$193.72	\$195.92	\$196.85	\$200.74	
Drug stores and proprietary stores	591	5.90	5.87	6.23	6.24		170.51	170.82	172.57	176.59	
Miscellaneous shopping goods stores	594	5.84	5.89	6.12	6.11		172.28	174.93	177.48	183.30	
Nonstore retailers	596	7.28	7.20	7.46	7.50		240.24	242.64	239.47	237.75	
Fuel and ice dealers	598	8.88	8.84	9.00	9.03		335.66	337.69	342.90	347.66	
Retail stores, nec	599	6.53	6.55	6.67	6.77		207.65	210.91	212.77	215.96	
Finance, insurance, and real estate⁵		8.63	8.74	8.98	9.02	\$9.04	312.41	318.14	321.48	326.52	\$320.92
Banking	60	7.42	7.52	7.78	7.79		268.60	275.23	276.97	282.00	
Commercial and stock savings banks	602	7.19	7.29	7.52	7.52		260.28	266.81	266.96	272.22	
Credit agencies other than banks	61	7.91	8.02	8.19	8.24		287.92	295.94	297.30	302.41	
Savings and loan associations	612	7.42	7.53	7.64	7.70		266.38	274.09	274.28	277.97	
Personal credit institutions	614	7.44	7.52	7.70	7.71		272.30	275.98	280.28	284.50	
Insurance carriers	63	9.53	9.63	10.12	10.14		353.56	359.20	375.45	377.21	
Life insurance	631	8.88	8.98	9.56	9.56		326.78	331.36	349.90	352.76	
Medical service and health insurance	632	9.48	9.56	9.80	9.72		356.45	356.59	368.48	371.30	
Fire, marine, and casualty insurance	633	9.95	10.06	10.66	10.70		367.16	375.24	395.49	394.83	
Services		8.34	8.40	8.78	8.79	8.78	273.55	276.36	287.11	290.07	287.98
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	6.01	5.98	6.37	6.29		186.91	191.96	201.29	203.80	
Personal services:											
Laundry, cleaning, and garment services	721	6.18	6.17	6.32	6.36		211.36	212.25	217.41	217.51	
Beauty shops ⁴	723	6.44	6.43	6.92	6.88		189.98	191.61	208.29	206.40	
Business services	73	8.71	8.76	9.05	9.12		292.66	296.09	308.61	310.08	
Advertising	731	11.69	12.14	12.19	12.19		430.19	446.75	449.81	452.25	
Services to buildings	734	6.74	6.76	6.92	6.93		193.44	195.36	203.45	205.13	
Computer and data processing services	737	12.12	12.28	12.69	12.82		455.71	462.96	477.14	483.31	
Auto repair, services, and garages	75	7.78	7.81	8.12	8.18		288.64	290.53	298.00	303.48	
Automotive repair shops	753	8.40	8.42	8.78	8.80		324.24	324.17	334.52	335.28	
Miscellaneous repair services	76	9.16	9.17	9.51	9.48		351.74	353.05	365.18	364.98	
Motion pictures	78	10.73	11.64	11.09	10.76		327.27	363.17	316.07	316.34	
Motion picture production and services	781	15.15	16.53	15.52	15.23		590.85	647.98	571.14	569.60	
Amusement and recreation services	79	6.23	6.17	6.84	6.68		190.02	188.19	196.31	201.74	
Health services	80	8.68	8.72	9.16	9.23		282.97	284.27	296.78	300.90	
Offices of physicians	801	8.39	8.50	8.72	8.81		258.41	265.20	271.19	274.87	
Offices of dentists	802	8.41	8.49	8.84	8.90		238.00	241.12	251.06	251.87	
Nursing and personal care facilities	805	6.01	6.00	6.28	6.34		192.32	192.00	198.45	204.15	
Hospitals	806	9.82	9.86	10.43	10.53		337.81	338.20	355.66	361.18	
Legal services	81	11.89	12.08	12.65	12.71		412.58	421.59	438.96	444.85	
Miscellaneous services	89	11.99	12.20	12.42	12.57		459.22	466.04	471.96	480.17	
Engineering and architectural services	891	12.80	12.94	13.12	13.24		505.60	511.13	515.62	519.01	
Accounting, auditing, and bookkeeping	893	10.36	10.67	10.79	11.06		381.25	389.46	392.76	409.22	

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

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

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

⁴ Money payments only; tips, not included.

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

- Data not available.

^p = preliminary.

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

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

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

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

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

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

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

Series	Aircraft (SIC 3721)				Guided missiles and space vehicles (SIC 3761)			
	June 1987	July 1987	June 1988	July 1988 ^p	June 1987	July 1987	June 1988	July 1988 ^p
Average hourly earnings, excluding lump-sum payments	\$13.71	\$13.67	\$13.93	\$14.10	\$12.83	\$12.92	\$13.51	\$13.62
Average hourly earnings, including lump-sum payments	14.37	14.37	14.38	14.55	13.13	13.23	13.79	13.89

^p = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Manufacturing	\$9.45	\$9.42	\$9.70	\$9.72	\$9.65
Durable goods	9.95	9.93	10.19	10.20	10.14
Lumber and wood products	8.07	8.07	8.21	8.25	(?)
Furniture and fixtures	7.42	7.44	7.66	7.74	(?)
Stone, clay, and glass products	9.70	9.66	9.86	9.99	(?)
Primary metal industries	11.29	11.27	11.42	11.50	(?)
Fabricated metal products	9.52	9.49	9.78	9.75	(?)
Machinery, except electrical	10.21	10.21	10.40	10.43	(?)
Electrical and electronic equipment	9.54	9.53	9.76	9.77	(?)
Transportation equipment	12.26	12.29	12.63	12.60	(?)
Instruments and related products	9.41	9.41	9.53	9.62	(?)
Miscellaneous manufacturing	7.51	7.46	7.69	7.74	(?)
Nondurable goods	8.78	8.72	8.99	9.05	\$8.98
Food and kindred products	8.44	8.35	8.67	8.64	(?)
Tobacco manufactures	14.65	13.98	15.23	15.11	(?)
Textile mill products	6.78	6.79	7.00	7.00	(?)
Apparel and other textile products	5.74	5.73	5.93	5.88	(?)
Paper and allied products	10.84	10.76	11.02	11.08	(?)
Printing and publishing	9.87	9.89	10.08	10.09	(?)
Chemicals and allied products	11.82	11.77	12.01	12.11	(?)
Petroleum and coal products	13.71	13.76	14.12	14.11	(?)
Rubber and misc. plastics products	8.56	8.50	8.63	8.69	(?)
Leather and leather products	5.82	5.84	6.10	6.08	(?)

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

² Not available.

^p = preliminary.

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

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	Average hourly earnings					Average weekly earnings				
	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p	July 1987	Aug. 1987	June 1988	July 1988 ^p	Aug. 1988 ^p
Total private:										
Current dollars	\$8.90	\$8.94	\$9.23	\$9.24	\$9.24	\$311.50	\$314.69	\$322.13	\$324.32	\$323.40
Constant (1977) dollars	4.81	4.81	4.82	4.80	(²)	168.47	169.28	168.13	168.57	(²)
Mining:										
Current dollars	12.41	12.40	12.55	12.67	\$12.63	521.22	529.48	533.38	538.48	\$536.78
Constant (1977) dollars	6.71	6.67	6.55	6.59	(²)	281.89	284.82	278.38	279.88	(²)
Construction:										
Current dollars	12.60	12.68	12.85	12.90	\$12.93	486.36	489.45	497.30	497.94	\$499.10
Constant (1977) dollars	6.81	6.82	6.71	6.70	(²)	263.04	263.29	259.55	258.80	(²)
Manufacturing:										
Current dollars	9.87	9.86	10.16	10.16	\$10.11	400.72	403.27	418.59	413.51	\$412.49
Constant (1977) dollars	5.34	5.30	5.30	5.28	(²)	216.72	216.93	218.47	214.92	(²)
Transportation and public utilities:										
Current dollars	12.00	12.06	12.27	12.30	\$12.36	475.20	478.78	484.67	488.31	\$489.46
Constant (1977) dollars	6.49	6.49	6.40	6.39	(²)	257.00	257.55	252.96	253.80	(²)
Wholesale trade:										
Current dollars	9.56	9.60	9.85	9.93	\$9.89	365.19	367.68	375.29	380.32	\$375.82
Constant (1977) dollars	5.17	5.16	5.14	5.16	(²)	197.51	197.78	195.87	197.67	(²)
Retail trade:										
Current dollars	6.07	6.07	6.26	6.28	\$6.25	182.10	183.31	184.04	188.40	\$186.25
Constant (1977) dollars	3.28	3.27	3.27	3.26	(²)	98.49	98.61	96.05	97.92	(²)
Finance, insurance, and real estate:										
Current dollars	8.63	8.74	8.98	9.02	\$9.04	312.41	318.14	321.48	326.52	\$320.92
Constant (1977) dollars	4.67	4.70	4.69	4.69	(²)	168.96	171.14	167.79	169.71	(²)
Services:										
Current dollars	8.34	8.40	8.78	8.79	\$8.78	273.55	276.36	287.11	290.07	\$287.98
Constant (1977) dollars	4.51	4.52	4.58	4.57	(²)	147.94	148.66	149.85	150.76	(²)

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

² Not available.

^p = preliminary.

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

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

Industry	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	34.8	34.6	34.9	34.8	34.6	34.7	34.8	34.6	34.9	34.7	34.7	34.9	34.6
Mining	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Construction	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Manufacturing	41.0	40.6	41.2	41.2	41.0	41.1	41.0	40.9	41.2	41.0	41.1	41.2	41.0
<i>Overtime hours</i>	3.8	3.7	3.9	3.9	3.8	3.9	3.7	3.7	3.9	3.9	3.9	3.9	3.8
Durable goods	41.5	41.0	41.8	41.8	41.5	41.6	41.5	41.5	42.0	41.8	41.8	41.8	41.6
<i>Overtime hours</i>	3.9	3.7	4.0	4.0	3.9	4.0	3.8	3.8	4.2	4.2	4.1	4.0	4.0
Lumber and wood products	40.5	39.6	40.4	40.7	40.4	40.2	40.3	40.1	40.6	40.1	40.2	40.5	40.2
Furniture and fixtures	40.0	39.5	40.1	40.2	39.8	39.6	39.5	39.3	39.5	39.5	39.4	39.6	39.0
Stone, clay, and glass products	42.2	42.0	42.5	42.4	42.5	42.0	42.3	42.3	42.5	42.3	42.4	42.2	42.6
Primary metal industries	43.3	43.2	43.6	43.5	43.4	43.4	43.1	43.3	43.5	43.6	43.6	43.5	43.1
Blast furnaces and basic steel products ..	43.7	44.6	43.9	43.8	44.0	44.0	43.8	43.7	43.8	43.9	44.3	44.1	43.4
Fabricated metal products	41.5	40.9	41.9	42.1	41.7	41.8	41.6	41.6	42.0	41.9	42.0	41.8	41.8
Machinery, except electrical	42.3	41.7	42.6	42.7	42.6	42.7	42.6	42.5	42.8	42.6	42.5	43.0	42.4
Electrical and electronic equipment	40.9	40.4	41.0	41.0	40.9	41.1	40.9	40.9	41.2	41.0	41.1	41.0	40.7
Transportation equipment	41.8	41.4	42.4	42.3	41.5	42.0	42.0	42.1	43.0	43.0	43.0	42.6	42.3
Motor vehicles and equipment	41.9	41.5	42.8	42.9	41.4	42.1	42.3	42.3	44.1	44.0	44.2	42.5	42.6
Instruments and related products	41.6	41.0	41.9	41.4	41.2	41.8	41.3	41.4	41.8	41.4	41.3	41.8	41.6
Miscellaneous manufacturing	39.7	38.9	39.5	39.2	39.2	39.1	39.3	39.2	39.4	39.2	39.3	39.3	39.2
Nondurable goods	40.3	40.1	40.4	40.3	40.3	40.3	40.2	40.1	40.3	40.0	40.1	40.2	40.2
<i>Overtime hours</i>	3.7	3.6	3.8	3.7	3.7	3.8	3.6	3.6	3.6	3.6	3.6	3.7	3.6
Food and kindred products	40.2	40.2	40.4	40.4	40.5	40.6	40.3	40.1	40.1	40.1	40.3	40.5	40.4
Tobacco manufactures	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Textile mill products	42.0	41.4	41.8	41.6	41.5	41.5	41.6	41.2	41.6	40.8	40.7	41.1	40.9
Apparel and other textile products	37.2	36.4	37.3	37.1	37.1	36.8	37.0	37.0	37.4	36.8	36.9	36.9	36.8
Paper and allied products	43.4	43.7	43.6	43.5	43.3	43.4	43.3	43.2	43.3	43.3	43.2	43.3	43.4
Printing and publishing	38.1	38.1	38.1	38.0	38.0	38.1	38.1	38.1	38.2	37.7	38.0	38.1	38.1
Chemicals and allied products	42.4	42.5	42.5	42.5	42.5	42.5	42.4	42.5	42.1	42.0	42.4	42.3	42.1
Petroleum and coal products	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Rubber and misc. plastics products	41.6	41.3	41.8	41.8	41.6	41.7	41.6	41.7	42.0	41.7	41.6	41.6	41.6
Leather and leather products	38.9	37.8	38.8	38.3	38.0	38.0	37.8	37.9	37.3	37.3	36.9	37.1	37.7
Transportation and public utilities	39.3	39.1	39.3	39.2	39.1	39.5	39.1	38.8	39.5	39.4	39.3	39.4	39.2
Wholesale trade	38.2	38.0	38.2	38.2	38.0	38.1	38.2	38.1	38.3	38.0	37.9	38.2	37.8
Retail trade	29.4	29.5	29.2	29.2	28.8	29.0	29.1	29.0	29.2	29.0	29.1	29.3	29.0
Finance, insurance, and real estate	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Services	32.5	32.5	32.6	32.6	32.5	32.6	32.7	32.4	32.7	32.5	32.5	32.7	32.4

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

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

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

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

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

(1977 = 100)

Industry	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total private	121.6	121.1	122.5	122.8	122.5	123.0	123.9	123.6	125.1	124.4	125.4	126.4	125.5
Goods-producing	99.6	98.0	101.0	101.2	101.3	100.5	101.1	101.6	102.7	102.1	103.2	103.4	102.8
Mining	82.9	82.7	85.0	84.1	84.0	81.7	82.5	83.2	85.9	84.4	85.0	86.1	83.6
Construction	133.9	127.0	136.7	136.4	137.7	132.1	136.0	139.1	141.1	139.3	144.0	142.6	142.1
Manufacturing	93.8	93.2	94.8	95.1	95.0	95.2	95.2	95.2	96.1	95.7	96.1	96.6	96.1
Durable goods	91.3	90.3	92.5	92.9	92.5	92.7	92.7	92.7	94.0	93.9	94.3	94.8	94.3
Lumber and wood products	101.8	100.2	102.2	103.9	103.7	103.0	103.6	103.1	104.7	103.2	103.8	103.9	103.0
Furniture and fixtures	112.4	111.3	114.1	114.6	114.0	113.7	113.2	112.3	113.2	113.7	113.4	114.8	112.3
Stone, clay, and glass products	85.9	85.7	87.1	87.3	88.3	86.5	87.3	87.5	88.3	87.5	88.1	87.9	87.9
Primary metal industries	65.0	65.5	66.5	66.8	66.6	66.5	66.4	66.9	67.6	68.1	68.6	69.0	68.2
Blast furnaces and basic steel products	51.8	54.0	53.9	54.1	54.1	53.9	53.9	54.1	54.8	54.6	55.4	55.1	54.3
Fabricated metal products	88.2	87.5	90.1	91.2	90.7	90.9	90.8	90.8	91.8	92.1	92.8	93.1	92.8
Machinery, except electrical	86.5	85.7	88.1	89.0	89.3	90.0	90.2	90.4	91.5	91.6	91.6	93.6	92.7
Electrical and electronic equipment	100.4	99.3	101.4	101.5	101.8	102.2	101.8	101.9	102.8	102.3	103.0	103.3	103.2
Transportation equipment	99.4	97.5	99.7	99.1	97.1	97.5	97.3	96.8	100.0	100.2	100.0	99.8	99.5
Motor vehicles and equipment	88.5	85.7	88.9	88.7	84.6	84.7	85.7	84.8	89.8	89.9	90.3	88.2	89.4
Instruments and related products	103.0	102.1	105.2	104.4	103.9	106.0	105.0	105.2	106.5	106.1	106.6	108.5	108.5
Miscellaneous manufacturing	82.9	81.5	83.4	83.6	83.6	83.4	84.8	84.5	85.0	83.9	84.5	85.1	84.5
Nondurable goods	97.5	97.3	98.3	98.5	98.7	99.0	99.0	98.8	99.1	98.4	98.9	99.1	98.8
Food and kindred products	99.5	99.7	100.3	100.9	101.3	102.2	101.7	100.9	101.0	100.5	101.4	100.6	99.9
Tobacco manufactures	73.2	70.9	71.7	73.8	76.4	77.2	75.8	74.8	73.8	71.0	71.4	73.7	68.6
Textile mill products	83.0	82.1	82.9	82.7	82.5	82.5	82.7	81.7	82.2	80.6	80.2	81.3	79.7
Apparel and other textile products	85.4	84.0	86.3	86.1	85.9	85.1	85.5	85.7	86.2	84.7	84.8	84.3	84.1
Paper and allied products	100.8	102.3	101.7	101.4	101.2	101.6	101.5	101.3	101.4	101.5	101.7	102.1	102.8
Printing and publishing	132.2	132.7	133.0	133.4	133.7	134.9	135.5	136.0	136.5	134.9	136.4	136.9	137.2
Chemicals and allied products	95.5	96.2	96.2	96.7	97.4	97.4	97.1	97.9	97.1	97.4	98.8	99.0	99.1
Petroleum and coal products	83.7	84.7	85.1	85.3	86.3	86.3	84.5	83.5	84.9	85.3	86.8	87.8	89.8
Rubber and misc. plastics products	116.5	116.2	118.7	119.6	120.1	120.9	121.0	121.8	122.9	123.1	123.4	124.4	123.9
Leather and leather products	58.4	56.7	58.2	57.5	57.0	57.5	57.2	56.9	55.5	55.5	54.9	55.7	56.6
Service-producing	133.8	133.9	134.3	134.7	134.2	135.5	136.4	135.8	137.4	136.8	137.8	139.1	138.0
Transportation and public utilities	109.9	110.0	110.9	111.0	111.0	112.6	111.8	111.2	113.5	113.5	113.8	114.4	114.3
Wholesale trade	119.8	119.6	120.7	121.3	121.3	122.2	123.1	123.6	124.8	124.4	124.9	126.3	125.5
Retail trade	123.6	124.1	123.5	123.8	122.2	124.0	125.2	124.8	126.0	125.1	126.2	127.4	126.2
Finance, insurance, and real estate	141.8	140.6	141.1	141.3	139.6	141.3	141.6	139.6	141.1	140.1	140.1	142.3	139.5
Services	153.5	153.7	154.8	155.3	155.6	156.5	158.0	157.2	159.0	158.3	160.0	161.4	160.5

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

^P = preliminary.

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

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

C-7. The Hourly Earnings Index and average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, seasonally adjusted

Industry	1987					1988							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Hourly Earnings Index ² (1977=100)													
Total private (in current dollars)	174.1	174.6	174.9	175.6	175.7	176.6	176.7	177.0	178.0	178.7	178.6	179.3	179.4
Mining	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Construction	155.1	154.8	155.2	156.5	155.4	157.6	156.8	157.5	157.8	157.5	157.8	158.8	158.3
Manufacturing	175.3	176.3	176.1	176.4	176.6	176.8	177.0	177.3	177.9	178.4	178.8	178.8	179.1
Transportation and public utilities	177.0	176.8	177.5	177.6	178.2	178.3	179.1	179.4	180.6	181.6	181.0	181.5	182.2
Wholesale trade	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Retail trade	161.5	162.3	162.1	162.4	162.7	163.4	163.4	163.8	164.8	165.4	165.7	166.8	166.8
Finance, insurance, and real estate	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Services	182.4	182.5	183.9	184.9	185.2	186.5	186.3	186.9	188.3	189.9	189.4	190.8	191.0
Total private (in constant dollars) ⁴	93.8	93.7	93.5	93.8	93.7	93.8	93.7	93.5	93.6	93.6	93.2	93.2	(^q)
Average hourly earnings													
Total private	\$9.01	\$9.02	\$9.07	\$9.10	\$9.11	\$9.14	\$9.13	\$9.16	\$9.23	\$9.27	\$9.27	\$9.31	\$9.31
Mining	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Construction	\$12.72	\$12.70	\$12.72	\$12.61	\$12.74	\$12.91	\$12.82	\$12.90	\$12.93	\$12.91	\$12.93	\$13.02	\$12.97
Manufacturing	9.94	10.00	9.99	10.00	10.01	10.02	10.03	10.05	10.11	10.15	10.18	10.17	10.19
Transportation and public utilities	12.09	12.07	12.12	12.13	12.16	12.14	12.19	12.21	12.29	12.35	12.33	12.34	12.40
Wholesale trade	9.65	9.64	9.70	9.71	9.69	9.75	9.72	9.76	9.88	9.86	9.86	9.97	9.94
Retail trade	6.13	6.18	6.16	6.17	6.19	6.20	6.20	6.22	6.25	6.28	6.29	6.33	6.31
Finance, insurance, and real estate	8.79	8.76	8.82	8.89	8.84	8.92	8.91	8.90	8.99	9.08	9.00	9.09	9.09
Services	8.53	8.55	8.60	8.65	8.67	8.72	8.72	8.75	8.81	8.88	8.86	8.92	8.92
Average weekly earnings													
Total private:													
In current dollars	313.55	312.09	316.54	316.68	315.21	317.16	317.72	316.94	322.13	321.67	321.67	324.92	322.13
In constant (1977) dollars ⁴	168.85	167.52	169.27	169.08	168.02	168.43	168.46	167.43	169.36	168.41	167.89	168.88	(^q)

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

² Excludes the effects of two types of changes that are unrelated to underlying wage rate movements: Fluctuations in overtime in manufacturing and interindustry employment shifts.

³ 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.

⁴ The Consumer Price Index for Urban Wage Earners and Clerical

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

⁵ Not available.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1987 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1984 forward are subject to revision. Beginning in 1989, the Hourly Earnings Index series will no longer be published in *Employment and Earnings*. For further information, see "Employment Cost Index Series to Replace Hourly Earnings Index," *Monthly Labor Review*, July 1988, pp. 32-35.

**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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Alabama	41.3	41.5	40.9	\$8.76	\$9.00	\$9.02	\$361.79	\$373.50	\$368.92
Birmingham	41.0	41.3	40.7	9.09	9.15	9.05	372.69	377.90	368.34
Mobile	41.8	40.5	40.5	10.11	10.66	10.77	422.60	431.73	436.18
Alaska	47.0	44.3	44.8	9.76	11.32	10.33	458.72	501.48	462.78
Arizona	40.8	41.2	40.8	9.98	9.87	9.91	407.18	406.64	404.33
Arkansas	41.0	41.0	40.8	7.92	8.09	8.11	324.72	331.69	330.89
Fayetteville-Springdale	42.2	41.9	41.4	7.07	7.22	7.16	298.35	302.52	296.42
Fort Smith	40.3	40.2	40.3	8.52	8.60	8.68	343.36	345.72	349.80
Little Rock-North Little Rock	40.7	40.9	41.1	8.59	8.51	8.60	349.61	348.06	353.46
Pine Bluff	43.7	43.3	43.4	10.62	10.45	10.32	464.09	452.49	447.89
California	40.0	(¹)	(¹)	10.79	(¹)	(¹)	431.60	(¹)	(¹)
Colorado	39.7	40.7	39.9	10.11	10.30	10.50	401.37	419.21	418.95
Denver	39.2	41.1	40.4	10.39	10.74	10.99	407.29	441.41	444.00
Connecticut	42.0	41.7	41.6	10.52	10.77	10.74	441.84	449.11	446.78
Bridgeport-Milford	41.4	41.8	41.2	10.85	11.10	11.17	449.19	463.98	460.20
Hartford	41.8	42.5	41.9	10.70	11.21	11.39	447.26	476.43	477.24
New Haven-Meriden	40.5	40.8	40.5	10.11	10.29	10.38	409.46	419.83	420.39
Stamford	42.9	40.4	40.1	11.30	12.10	12.56	484.77	488.84	503.66
Waterbury	41.8	43.3	40.3	9.04	9.62	9.94	377.87	416.55	400.58
Delaware	39.6	40.3	37.3	10.31	10.73	10.65	408.28	432.42	397.25
Wilmington	40.3	41.0	37.9	12.49	13.40	13.71	503.35	549.40	519.61
District of Columbia:									
Washington MSA	39.0	39.8	39.3	10.60	11.19	11.30	413.40	445.36	444.09
Florida	40.2	41.0	39.9	8.16	8.36	8.42	328.03	342.76	335.96
Fort Lauderdale-Hollywood-Pompano Beach	41.9	41.7	40.6	8.03	8.38	8.40	336.46	349.45	341.04
Jacksonville	40.9	41.5	39.8	8.63	9.03	9.17	352.97	374.75	364.97
Miami-Hialeah	38.2	39.9	38.9	7.10	7.16	7.26	271.22	285.68	282.41
Orlando	40.9	40.4	40.0	8.57	8.84	8.97	350.51	357.14	358.80
Pensacola	42.1	42.5	41.7	10.70	10.74	10.77	450.47	456.45	449.11
Tampa-St. Petersburg-Clearwater	39.2	41.2	39.7	7.54	8.10	8.18	295.57	333.72	324.75
West Palm Beach-Boca Raton-DeRay Beach	40.8	40.2	40.8	8.89	9.14	9.04	362.71	367.43	368.83
Georgia	42.1	41.5	41.4	8.50	8.65	8.65	357.85	358.98	358.11
Atlanta	42.1	41.7	41.2	10.00	10.31	10.31	421.00	429.93	424.77
Savannah	46.2	48.9	48.2	10.94	11.28	11.40	505.43	551.59	549.48
Hawaii	38.7	39.4	40.1	9.26	9.95	9.89	358.36	392.03	396.59
Honolulu	38.3	39.5	40.7	9.46	10.08	10.05	362.32	398.16	409.04
Idaho	36.9	39.2	39.4	9.65	9.86	9.77	356.09	386.51	384.94
Illinois	41.5	41.9	41.6	10.86	11.09	11.11	450.69	464.67	462.18
Aurora-Elgin	41.2	41.9	41.7	10.49	10.69	10.67	432.19	447.91	444.94
Bloomington-Normal	40.6	43.1	38.8	10.71	11.53	11.59	434.83	496.94	449.69
Champaign-Urbana-Rantoul	39.8	39.8	40.4	9.12	8.99	9.24	362.98	357.80	373.30
Chicago	41.3	42.4	41.8	10.61	10.86	10.74	438.19	460.46	448.93
Davenport-Rock Island-Moline	40.8	39.4	39.3	12.90	12.81	12.92	526.32	504.71	507.76
Decatur	41.4	42.1	42.5	14.06	14.25	14.34	582.08	599.93	609.45
Joliet	41.7	42.4	41.8	11.82	11.91	11.97	492.89	504.98	500.35
Lake County	39.2	41.1	40.6	10.89	11.37	11.31	426.89	467.31	459.19
Peoria	43.4	47.3	44.1	13.09	13.57	13.59	568.11	641.86	599.32
Rockford	40.5	43.2	42.6	11.16	11.59	11.06	451.98	500.69	471.16
Springfield	42.5	42.8	43.3	11.71	11.61	11.77	497.68	496.91	509.64
Indiana	41.5	42.3	41.5	11.01	11.37	11.35	456.92	480.95	471.03

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Iowa	40.9	41.4	41.3	\$10.72	\$10.58	\$10.57	\$438.45	\$438.01	\$436.54
Cedar Rapids	40.1	39.9	39.8	12.30	12.16	12.15	493.23	485.18	483.57
Des Moines	41.4	42.1	41.0	11.70	11.93	11.88	484.38	502.25	487.08
Dubuque	42.0	40.6	40.9	12.66	11.88	11.90	531.72	482.33	486.71
Sioux City	38.6	33.4	30.5	7.99	8.39	8.18	308.41	280.23	249.49
Kansas	40.5	41.2	40.2	9.87	10.15	10.15	399.74	418.18	408.03
Topeka	40.6	43.4	42.8	11.32	11.25	11.28	459.59	488.25	482.78
Wichita	40.0	41.2	40.5	10.87	10.63	10.72	434.80	437.96	434.16
Kentucky	39.8	41.0	40.2	10.05	10.23	10.23	399.99	419.43	411.25
Lexington-Fayette	39.8	40.5	39.1	10.53	10.36	10.23	419.09	419.58	399.99
Louisville	40.5	42.2	41.8	11.42	11.83	11.90	462.51	499.23	497.42
Louisiana	41.1	42.9	42.3	10.97	11.04	11.08	450.87	473.62	468.68
Baton Rouge	43.4	42.5	43.1	11.90	12.78	13.17	516.46	543.15	567.63
New Orleans	40.0	41.0	41.1	10.66	10.43	10.60	426.40	427.63	435.66
Shreveport	40.0	42.5	41.5	11.59	11.98	11.61	463.60	509.15	481.82
Maine	40.8	40.2	39.7	8.80	9.03	9.37	359.04	363.01	371.99
Lewiston-Auburn	40.1	39.9	35.0	7.32	7.97	8.34	293.53	318.00	291.90
Portland	38.9	41.2	40.5	9.10	9.37	9.59	353.99	386.04	388.40
Maryland	40.7	41.6	41.4	10.08	10.44	10.35	410.26	434.30	428.49
Baltimore MSA	41.8	42.1	42.0	10.93	11.17	11.17	456.87	470.26	469.14
Massachusetts	40.9	41.5	41.4	9.73	10.23	10.37	397.96	424.55	429.32
Boston	40.0	41.8	42.1	10.67	10.90	11.05	426.80	455.62	465.21
Springfield	42.5	43.0	43.0	9.17	9.70	9.81	389.73	417.10	421.83
Worcester	40.3	40.4	40.4	9.88	10.41	10.50	398.16	420.56	424.20
Michigan	40.8	43.8	41.7	12.82	13.45	13.22	523.06	589.11	551.27
Ann Arbor	41.1	46.7	43.4	13.59	14.86	14.41	558.55	693.96	625.39
Battle Creek	42.7	41.9	42.1	14.03	14.27	14.94	599.08	597.91	628.97
Detroit	41.5	45.3	42.2	13.58	14.49	14.18	563.57	656.40	598.40
Flint	41.9	43.9	42.3	15.50	16.52	16.62	649.45	725.23	703.03
Grand Rapids	38.9	41.7	40.9	10.92	11.38	11.43	424.79	474.55	467.49
Kalamazoo	41.1	43.3	41.4	11.84	12.40	12.73	486.62	536.92	527.02
Lansing-East Lansing	43.7	43.6	37.7	13.98	15.49	15.13	610.93	675.36	570.40
Muskegon	39.8	40.7	41.0	12.05	12.17	11.94	479.59	495.32	489.54
Saginaw-Bay City-Midland	42.1	44.0	42.5	14.40	15.25	15.10	606.24	671.00	641.75
Minnesota	40.6	40.8	40.7	10.32	10.53	10.51	418.99	429.62	427.76
Duluth	36.8	43.0	33.7	10.84	10.92	10.87	398.91	469.56	366.32
Minneapolis-St. Paul	40.4	41.2	41.2	11.16	11.26	11.22	450.86	463.91	462.26
St. Cloud	38.5	39.5	38.9	9.35	9.89	9.93	359.98	390.66	386.28
Mississippi	39.9	40.7	40.1	7.54	7.82	7.74	300.85	318.27	310.37
Jackson	39.4	40.4	39.6	8.45	8.94	8.69	332.93	361.18	344.12
Missouri	39.8	41.0	40.2	9.90	10.14	10.07	394.02	415.74	404.81
Kansas City	39.7	41.7	40.0	10.84	11.41	11.17	430.35	475.80	446.80
St. Louis	40.6	41.2	40.4	11.64	11.77	11.80	472.58	484.92	476.72
Springfield	39.4	41.1	41.1	8.62	8.56	8.56	339.63	351.82	351.82
Montana	38.4	39.0	37.8	10.75	10.82	10.76	412.80	421.98	406.73
Nebraska	39.7	40.5	40.4	9.27	9.52	9.60	368.02	385.56	387.84
Lincoln	40.3	39.8	40.1	9.69	9.86	10.02	390.51	392.43	401.80
Omaha	40.1	40.9	41.8	10.10	10.32	10.52	405.01	422.09	439.74
Nevada	39.4	39.0	39.9	9.79	10.01	10.04	385.73	390.39	400.60
Las Vegas	39.7	39.8	39.9	12.13	12.47	12.58	481.56	496.31	501.94
New Hampshire	40.1	40.6	39.2	9.39	9.60	9.74	376.54	389.76	381.81
Nashua	40.5	40.1	38.2	11.25	11.76	11.82	455.63	471.58	451.52

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
New Jersey	40.6	41.1	40.7	\$10.44	\$10.85	\$10.87	\$423.86	\$445.94	\$442.41
New Mexico	39.4	39.9	40.3	8.89	8.90	8.94	350.27	355.11	360.28
Albuquerque	39.5	40.5	40.3	9.07	9.28	9.44	358.27	375.84	380.43
New York	39.4	40.0	39.7	10.09	10.41	10.46	397.55	416.40	415.26
Albany-Schenectady-Troy	39.7	41.0	40.4	10.50	10.89	10.95	416.85	446.49	442.38
Binghamton	40.2	39.9	40.4	9.24	9.48	9.59	371.45	378.25	387.44
Buffalo	40.8	43.5	43.6	11.92	12.41	12.50	486.34	539.84	545.00
Elmira	40.4	41.4	40.1	9.47	9.72	9.71	382.59	402.41	389.37
Nassau-Suffolk	40.3	39.3	39.0	10.94	11.01	11.18	440.88	432.69	436.02
New York PMSA	37.0	37.1	37.0	9.58	9.77	9.77	354.46	362.47	361.49
New York City	36.7	36.9	36.6	9.44	9.49	9.47	346.45	350.18	346.60
Niagara Falls	39.7	42.2	41.0	12.38	13.36	13.24	491.49	563.79	542.84
Orange County	37.4	39.8	39.5	7.88	8.19	8.25	294.71	325.96	325.88
Poughkeepsie	41.9	41.1	41.4	9.50	9.88	9.99	398.05	406.07	413.59
Rochester	41.4	43.1	42.4	11.83	12.36	12.26	489.76	532.72	519.82
Rockland County	38.9	35.4	34.9	10.83	11.19	11.37	421.29	396.13	396.81
Syracuse	40.3	42.0	40.9	11.11	11.92	12.23	447.73	500.64	500.21
Utica-Rome	41.4	41.2	41.1	9.64	9.62	9.71	399.10	396.34	399.08
Westchester County	39.2	40.3	40.7	10.25	11.53	11.57	401.80	464.66	470.90
North Carolina	40.6	40.5	40.1	7.83	8.11	8.13	317.90	328.46	326.01
Asheville	42.0	41.4	41.2	7.90	8.18	8.14	331.80	338.65	335.37
Charlotte-Gastonia-Rock Hill	42.1	40.4	40.1	8.02	8.34	8.36	337.64	336.94	335.24
Greensboro-Winston-Salem-High Point	39.6	40.1	39.3	8.68	9.00	8.96	343.73	360.90	352.13
Raleigh-Durham	41.5	41.7	41.2	8.99	9.19	9.26	373.09	383.22	381.51
North Dakota	38.4	39.1	38.8	8.35	8.38	8.36	320.64	327.66	324.37
Fargo-Moorhead	35.9	40.3	40.5	8.48	8.35	8.36	304.43	336.51	338.58
Ohio	41.9	43.3	42.4	11.58	12.05	11.90	485.20	521.77	504.56
Akron	42.1	44.1	43.0	11.15	11.76	11.51	469.42	518.62	494.93
Cincinnati	42.1	42.0	41.6	10.73	11.11	11.10	451.73	466.62	461.76
Cleveland	41.8	43.7	42.7	11.40	11.86	11.68	476.52	518.28	498.74
Columbus	41.3	41.5	41.4	11.48	11.57	11.56	474.12	480.16	478.58
Dayton-Springfield	41.5	44.0	42.9	11.86	12.71	12.54	492.19	559.24	537.97
Toledo	41.3	43.4	42.2	12.67	13.17	12.93	523.27	571.58	545.65
Youngstown-Warren	42.0	42.8	42.2	12.90	13.60	13.48	541.80	582.08	568.86
Oklahoma	40.9	41.2	40.1	10.23	10.29	10.23	418.41	423.95	410.22
Oklahoma City	40.2	42.0	39.8	11.00	11.49	11.37	442.20	482.58	452.53
Tulsa	41.2	40.5	40.9	10.72	10.74	10.66	441.66	434.97	435.99
Oregon	38.6	39.4	39.0	10.44	10.65	10.75	402.98	419.61	419.25
Eugene-Springfield	37.5	40.3	39.0	10.61	10.70	10.82	397.88	431.21	421.98
Portland	39.7	39.2	39.4	10.65	10.74	10.71	422.81	421.01	421.97
Salem	38.6	38.2	37.6	8.05	8.86	8.95	310.73	338.45	336.52

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Pennsylvania	40.9	41.2	40.8	\$9.91	\$10.23	\$10.27	\$405.32	\$421.48	\$419.02
Allentown-Bethlehem	40.0	39.9	40.3	10.52	10.32	10.42	420.80	411.77	419.93
Altoona	39.4	41.3	41.2	8.67	8.79	8.78	341.60	363.03	361.74
Beaver County	41.2	42.4	41.1	10.96	10.81	10.77	451.55	458.34	442.65
Erie	41.8	42.6	42.3	10.29	10.44	10.51	430.12	444.74	444.57
Harrisburg-Lebanon-Carlisle	39.8	39.9	39.9	9.28	9.53	9.60	369.34	380.25	383.04
Johnstown	39.2	39.9	39.8	8.32	8.31	8.48	326.14	331.57	337.50
Lancaster	40.0	40.3	39.6	9.61	10.05	10.10	384.40	405.02	399.96
Philadelphia PMSA	40.4	40.6	39.9	10.84	11.22	11.30	437.94	455.53	450.87
Pittsburgh	40.7	42.0	41.9	11.21	11.24	11.34	456.25	472.08	475.15
Reading	41.0	41.3	40.0	9.95	10.69	10.69	407.95	441.50	427.60
Scranton-Wilkes-Barre	38.9	38.9	39.3	8.77	8.92	9.01	341.15	346.99	354.09
Williamsport	41.2	42.1	42.4	8.38	8.87	8.84	345.26	373.43	374.82
York	43.1	42.8	42.4	9.36	9.88	9.84	403.42	422.86	417.22
Rhode Island	40.0	39.6	39.4	8.23	8.50	8.53	329.20	336.60	336.08
Pawtucket-Woonsocket-Attleboro	40.1	40.0	39.7	7.71	8.08	8.12	309.17	323.20	322.36
Providence	39.9	39.6	39.5	8.22	8.44	8.46	327.98	334.22	334.17
South Carolina	41.6	41.4	41.1	8.10	8.30	8.32	336.96	343.62	341.95
Charleston	41.5	40.8	41.0	9.06	9.16	9.20	375.99	373.73	377.20
Columbia	40.9	41.4	41.5	7.91	8.34	8.43	323.52	345.28	349.84
Greenville-Spartanburg	41.8	41.4	41.2	7.98	8.24	8.24	333.56	341.14	339.49
South Dakota	41.2	42.2	41.0	7.86	7.92	7.92	323.83	334.22	324.72
Sioux Falls	41.6	45.1	43.7	7.64	8.13	8.12	317.82	366.66	354.84
Tennessee	41.2	41.9	40.8	8.81	8.93	8.97	362.97	374.17	365.98
Chattanooga	41.9	41.1	41.6	7.87	8.15	8.27	329.75	334.97	344.03
Johnson City-Kingsport-Bristol	43.6	42.7	42.2	9.31	9.57	9.62	405.92	408.64	405.96
Knoxville	40.5	42.4	41.2	9.04	9.01	9.05	366.12	382.02	372.86
Memphis	42.9	42.3	41.2	8.76	8.95	8.94	375.80	378.59	368.33
Nashville	41.7	42.0	41.1	10.36	10.28	10.37	432.01	431.76	426.21
Texas	41.2	41.9	41.8	9.83	9.97	10.02	405.00	417.74	418.84
Dallas	41.3	41.5	41.3	9.83	9.73	9.77	405.98	403.80	403.50
Ft. Worth-Arlington	40.8	42.6	41.8	9.73	10.63	10.50	396.98	452.84	438.90
Houston	43.2	43.6	43.3	11.28	11.27	11.38	487.30	491.37	492.75
San Antonio	39.0	40.3	39.5	7.58	7.58	7.54	295.62	305.47	297.83
Utah	39.5	40.1	40.6	9.92	9.96	9.96	391.84	399.40	404.38
Salt Lake City-Ogden	40.4	41.0	41.2	9.85	9.92	9.94	397.94	406.72	409.53
Vermont	39.6	41.5	40.8	9.14	9.46	9.97	361.94	392.59	406.78
Burlington	39.7	39.7	41.2	10.06	9.66	10.03	399.38	383.50	413.24
Virginia	40.7	41.1	41.0	9.16	9.37	9.38	372.81	385.11	384.58
Bristol	42.1	42.5	46.4	8.06	7.78	7.45	339.33	330.65	345.68
Charlottesville	40.5	41.4	40.8	7.38	7.71	7.68	298.89	319.19	313.34
Danville	41.8	42.1	42.0	8.40	8.58	8.65	351.12	361.22	363.30
Lynchburg	40.9	41.2	41.3	8.55	8.86	8.82	349.70	365.03	364.27
Northern Virginia	39.3	39.5	39.5	9.71	10.55	10.72	381.60	416.73	423.44
Richmond-Petersburg	41.0	41.7	41.3	12.01	11.95	11.81	492.41	498.32	487.75
Roanoke	41.2	39.9	40.4	8.72	9.24	9.39	359.26	368.68	379.36
Washington	40.0	40.0	39.4	11.78	11.72	11.91	471.20	468.80	469.25

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		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
West Virginia	40.0	41.3	41.0	\$10.67	\$10.88	\$11.10	\$426.80	\$449.34	\$455.10
Charleston	41.4	43.1	42.2	13.38	13.43	13.78	553.93	578.83	581.52
Huntington-Ashland	39.6	41.3	41.1	11.87	12.19	12.27	470.05	503.45	504.30
Parkersburg-Marietta	42.0	41.2	40.9	12.02	12.85	12.47	504.84	529.42	510.02
Wheeling	41.3	42.4	41.1	13.06	12.02	12.04	539.38	509.65	494.84
Wisconsin	41.1	41.6	41.2	10.43	10.56	10.57	428.67	439.30	435.48
Appleton-Oshkosh	41.8	43.3	43.2	10.82	11.08	11.10	452.28	479.76	479.52
Eau Claire	41.7	40.5	40.3	10.85	10.54	10.58	452.45	426.87	426.37
Green Bay	42.0	42.7	42.3	10.94	11.46	11.36	459.48	489.34	480.53
Janesville-Beloit	38.9	42.3	40.6	12.26	12.80	12.31	476.91	541.44	499.79
Kenosha	39.0	39.2	38.5	12.11	12.78	12.24	472.29	500.98	471.24
La Crosse	38.1	39.2	39.7	9.21	9.05	8.97	350.90	354.76	356.11
Madison	40.9	41.8	42.1	9.74	10.05	10.15	398.37	420.09	427.32
Milwaukee	41.2	41.4	40.8	11.73	11.51	11.59	483.28	476.51	472.87
Racine	39.3	40.5	40.9	10.94	10.97	11.17	429.94	444.29	456.85
Wausau	43.0	42.7	42.7	9.88	10.04	9.98	424.84	428.71	426.15
Wyoming	39.9	38.7	38.9	9.95	10.13	10.32	397.01	392.03	401.45
Puerto Rico	38.5	38.9	39.2	5.41	5.52	5.54	208.29	214.73	217.17
Virgin Islands	42.8	40.4	40.5	9.26	9.42	9.56	396.33	380.57	387.18

¹ Not available.

^P = preliminary.

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

publication. All State and area data have been adjusted to March 1987 benchmarks, except Colorado. Data for Colorado have been adjusted to December 1986 benchmarks.

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

Industry	Millions of hours (annual rate) ¹			Percent change		
	June 1988 ^r	July 1988 ^r	Aug. 1988 ^p	Aug. 1987 to Aug. 1988 ^p	June 1988 to July 1988 ^r	July 1988 to Aug. 1988 ^p
Total	197,142	198,234	197,685	3.3	0.6	-0.3
Private sector	162,411	163,541	162,665	3.3	.7	-5
Mining	1,644	1,641	1,638	.6	-.2	-.2
Construction	10,565	10,462	10,478	6.4	-1.0	.2
Manufacturing	41,657	41,782	41,655	2.4	.3	-.3
Durable goods	24,861	24,943	24,866	2.9	.3	-.3
Nondurable goods	16,796	16,839	16,789	1.7	.3	-.3
Transportation and public utilities	11,431	11,515	11,479	3.7	.7	-.3
Wholesale trade	12,130	12,250	12,188	4.2	1.0	-.5
Retail trade	28,979	29,362	29,118	2.5	1.3	-.8
Finance, insurance, and real estate	12,465	12,611	12,397	-.7	1.2	-1.7
Services	43,541	43,918	43,713	4.9	.9	-.5
Government	34,731	34,694	35,020	3.3	-.1	.9

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

^p = preliminary.

^r = revised.

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

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

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

(1977 = 100)

Item	Annual average		Quarterly index										
	1986	1987	1985	1986				1987				1988	
			IV	I	II	III	IV	I	II	III	IV	I	II'
Business sector													
Output per hour of all persons	110.1	111.0	108.5	110.5	110.4	110.0	109.8	109.9	110.6	111.7	111.8	112.8	112.1
Output	128.6	133.3	125.9	128.4	128.2	128.5	129.3	130.5	132.2	134.3	136.2	138.0	139.2
Hours	116.8	120.1	116.1	116.2	116.1	116.8	117.8	118.8	119.5	120.3	121.8	122.3	124.2
Compensation per hour	183.1	190.4	178.8	180.4	182.0	184.0	186.2	187.3	189.0	191.1	194.0	195.8	198.0
Real compensation per hour	101.2	101.5	99.4	100.0	101.2	101.7	102.2	101.5	101.2	101.4	102.0	102.1	102.1
Unit labor costs	166.3	171.5	164.8	163.3	164.9	167.3	169.6	170.5	170.8	171.1	173.5	173.5	176.7
Unit nonlabor payments	165.0	168.7	161.6	164.5	165.2	166.6	163.7	165.6	168.7	171.5	168.9	170.0	170.2
Implicit price deflator	165.8	170.5	163.7	163.7	165.0	167.0	167.5	168.7	170.1	171.2	171.9	172.3	174.4
Nonfarm business sector													
Output per hour of all persons	108.2	109.0	106.5	108.6	108.4	108.0	107.8	107.8	108.6	109.6	109.9	110.8	110.4
Output	128.2	133.0	125.5	128.1	127.8	128.1	128.8	130.1	131.9	134.1	136.0	137.9	139.6
Hours	118.5	122.1	117.9	117.9	117.9	118.6	119.5	120.7	121.5	122.3	123.8	124.4	126.5
Compensation per hour	182.3	189.4	177.9	179.8	181.2	183.1	185.4	186.4	187.9	190.0	192.9	194.6	196.6
Real compensation per hour	100.8	101.0	99.0	99.6	100.7	101.2	101.8	101.0	100.6	100.8	101.4	101.5	101.3
Unit labor costs	168.6	173.8	167.1	165.5	167.1	169.5	172.1	172.9	173.0	173.3	175.6	175.7	178.1
Unit nonlabor payments	166.4	170.2	162.7	166.1	166.6	168.1	164.9	167.2	169.8	173.0	170.9	171.6	171.6
Implicit price deflator	167.8	172.5	165.5	165.7	167.0	169.0	169.5	170.9	171.9	173.2	174.0	174.2	175.8
Manufacturing													
Output per hour of all persons	127.7	132.0	125.3	126.6	127.2	128.0	128.8	130.0	131.7	132.8	133.2	134.3	135.5
Output	124.7	130.1	123.3	124.2	124.1	124.8	125.9	127.2	128.7	131.1	133.5	135.0	136.9
Hours	97.7	98.6	98.4	98.1	97.6	97.4	97.7	97.8	97.7	98.8	100.2	100.6	101.1
Compensation per hour	183.0	186.9	179.4	181.1	182.0	183.6	185.3	185.9	186.3	187.2	188.2	190.7	192.1
Real compensation per hour	101.2	99.7	99.8	100.3	101.2	101.5	101.7	100.8	99.7	99.3	99.0	99.4	99.0
Unit labor costs	143.3	141.7	143.2	143.0	143.2	143.4	143.8	143.1	141.4	141.0	141.3	142.1	141.9
Durable goods													
Output per hour of all persons	133.5	138.5	130.4	132.2	132.6	133.9	135.1	136.6	138.1	139.1	140.0	141.3	142.7
Output	130.8	136.0	129.5	130.5	130.0	130.7	131.8	133.3	134.2	136.5	139.9	141.3	144.0
Hours	98.0	98.2	99.3	98.7	98.0	97.6	97.6	97.6	97.2	98.2	99.9	100.0	100.9
Compensation per hour	181.9	185.2	178.6	180.3	180.8	182.2	184.2	184.9	184.4	185.3	186.2	189.5	190.2
Real compensation per hour	100.6	98.8	99.3	99.9	100.5	100.7	101.2	100.2	98.8	98.3	97.9	98.8	98.0
Unit labor costs	136.3	133.7	136.9	136.4	136.3	136.0	136.4	135.3	133.5	133.2	133.0	134.1	133.3
Nondurable goods													
Output per hour of all persons	118.9	122.3	117.6	118.1	118.9	119.2	119.6	120.1	122.4	123.5	123.2	123.9	124.7
Output	115.8	121.4	114.1	114.7	115.4	115.9	117.0	118.0	120.5	123.1	124.0	125.6	126.3
Hours	97.3	99.3	97.0	97.1	97.0	97.2	97.9	98.2	98.4	99.7	100.7	101.4	101.3
Compensation per hour	184.8	190.1	180.5	182.1	184.0	186.0	187.2	188.0	189.7	190.8	191.9	193.2	195.7
Real compensation per hour	102.2	101.4	100.4	100.9	102.3	102.8	102.8	101.9	101.6	101.2	100.9	100.8	100.8
Unit labor costs	155.4	155.4	153.5	154.3	154.7	156.0	156.5	156.4	155.0	154.5	155.8	156.0	156.9
Nonfinancial corporations													
Output per all-employee hour	109.7	111.3	108.0	109.5	109.3	109.6	110.3	110.1	110.9	112.2	112.2	113.3	113.5
Output	129.1	134.6	126.7	128.8	128.3	128.9	130.4	131.3	133.3	136.1	137.7	140.1	141.9
Hours	117.7	120.9	117.3	117.6	117.3	117.6	118.1	119.3	120.2	121.3	122.8	123.6	125.1
Compensation per hour	179.5	185.5	175.3	177.1	178.5	180.2	182.2	182.9	184.3	186.1	188.5	189.9	191.8
Real compensation per hour	99.2	98.9	97.5	98.1	99.2	99.6	100.1	99.1	98.7	98.7	99.1	99.0	98.9
Total unit costs	167.3	170.6	165.8	165.5	166.7	168.4	168.8	169.9	170.3	170.2	172.0	171.5	172.8
Unit labor costs	163.6	166.6	162.3	161.7	163.3	164.3	165.1	166.2	166.1	165.9	168.1	167.5	169.1
Unit nonlabor costs	178.4	182.5	176.3	176.7	176.9	180.3	179.6	180.8	182.6	183.0	183.6	183.4	184.0
Unit profits	132.4	130.8	132.4	133.7	132.7	133.6	129.7	128.5	129.8	136.4	128.3	132.5	133.9
Implicit price deflator	163.2	165.8	161.8	161.7	162.6	164.2	164.1	164.9	165.4	166.1	166.7	166.9	169.2

= revised.

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

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

Item	Percent change from											
	Previous quarter						Same quarter, previous year					
	I 1987	II 1987	III 1987	IV 1987	I 1988	II 1988'	I 1987	II 1987	III 1987	IV 1987	I 1988	II 1988'
Business sector												
Output per hour of all persons	0.3	2.7	3.9	0.6	3.5	-2.5	-0.6	0.2	1.5	1.9	2.7	1.3
Output	3.7	5.3	6.6	5.7	5.5	3.4	1.6	3.1	4.5	5.3	5.8	5.3
Hours	3.4	2.5	2.6	5.1	1.9	6.0	2.2	2.9	3.0	3.4	3.0	3.9
Compensation per hour	2.5	3.6	4.6	6.2	3.7	4.8	3.8	3.8	3.9	4.2	4.5	4.8
Real compensation per hour	-2.8	-1.2	.8	2.4	.3	.0	1.5	.0	-3	-2	.5	.9
Unit labor costs	2.2	.8	.7	5.6	.2	7.5	4.4	3.6	2.3	2.3	1.8	3.4
Unit nonlabor payments	4.6	7.9	6.7	-5.8	2.5	.6	.7	2.1	2.9	3.2	2.7	.9
Implicit price deflator	3.0	3.2	2.8	1.4	1.0	5.0	3.1	3.1	2.5	2.6	2.1	2.5
Nonfarm business sector												
Output per hour of all persons .....	.0	3.2	3.7	.9	3.4	-1.4	-.8	.2	1.5	1.9	2.8	1.6
Output	4.0	5.7	6.8	5.9	5.6	5.2	1.6	3.2	4.7	5.6	6.0	5.8
Hours	4.0	2.5	2.9	4.9	2.1	6.6	2.4	3.0	3.2	3.6	3.1	4.1
Compensation per hour	2.1	3.4	4.5	6.4	3.5	4.2	3.7	3.7	3.7	4.1	4.4	4.6
Real compensation per hour	-3.2	-1.4	.6	2.6	.1	-.6	1.4	-.1	-.4	-.4	.5	.7
Unit labor costs	2.1	.2	.7	5.4	.1	5.7	4.5	3.5	2.2	2.1	1.6	2.9
Unit nonlabor payments	5.7	6.5	7.7	-4.8	1.6	.2	.6	1.9	2.9	3.6	2.6	1.1
Implicit price deflator	3.3	2.3	3.1	1.8	.6	3.7	3.1	3.0	2.5	2.6	1.9	2.3
Manufacturing												
Output per hour of all persons	3.6	5.5	3.2	1.3	3.2	3.6	2.7	3.6	3.7	3.4	3.3	2.8
Output	4.1	4.9	7.8	7.5	4.6	5.7	2.4	3.7	5.1	6.0	6.2	6.4
Hours .....	.5	-.6	4.4	6.1	1.3	2.0	-.3	.1	1.4	2.6	2.8	3.4
Compensation per hour	1.4	.7	2.1	2.1	5.4	3.0	2.7	2.3	2.0	1.6	2.6	3.2
Real compensation per hour	-3.8	-4.0	-1.7	-1.5	2.0	-1.7	.4	-1.4	-2.1	-2.7	-1.3	-.7
Unit labor costs	-2.1	-4.6	-1.1	.8	2.2	-.6	.0	-1.2	-1.7	-1.8	-.7	.3
Durable goods												
Output per hour of all persons	4.7	4.4	2.9	2.6	3.8	3.9	3.3	4.1	3.8	3.7	3.4	3.3
Output	4.5	2.8	7.0	10.2	4.3	7.7	2.1	3.3	4.5	6.1	6.0	7.3
Hours	-.2	-1.5	4.0	7.3	.4	3.7	-1.2	-.8	.6	2.3	2.5	3.8
Compensation per hour	1.3	-1.0	2.0	1.9	7.1	1.5	2.6	2.0	1.7	1.1	2.5	3.1
Real compensation per hour	-3.9	-5.6	-1.7	-1.7	3.6	-3.1	.3	-1.7	-2.4	-3.2	-1.4	-.8
Unit labor costs	-3.2	-5.1	-.9	-.7	3.2	-2.3	-.8	-2.0	-2.1	-2.5	-.9	-.2
Nondurable goods												
Output per hour of all persons	1.9	7.6	3.8	-1.1	2.3	2.8	1.8	2.9	3.6	3.0	3.1	1.9
Output	3.4	8.5	9.0	3.1	5.1	2.4	2.9	4.4	6.2	6.0	6.4	4.9
Hours	1.5	.8	5.1	4.2	2.7	-.4	1.1	1.5	2.5	2.9	3.2	2.9
Compensation per hour	1.6	3.8	2.4	2.2	2.9	5.2	3.2	3.1	2.6	2.5	2.8	3.2
Real compensation per hour	-3.6	-1.0	-1.4	-1.4	-.5	.4	.9	-.7	-1.5	-1.9	-1.1	-.7
Unit labor costs	-.2	-3.6	-1.3	3.4	.6	2.3	1.4	.2	-1.0	-.5	-.3	1.2
Nonfinancial corporations												
Output per all-employee hour	-1.0	3.1	4.7	-.1	4.3	.4	.5	1.5	2.3	1.6	3.0	2.3
Output	2.9	6.1	8.8	4.7	7.2	5.2	2.0	3.9	5.6	5.6	6.7	6.5
Hours	4.0	2.9	4.0	4.8	2.8	4.7	1.5	2.4	3.2	3.9	3.6	4.1
Compensation per hour	1.6	2.9	4.1	5.2	3.0	4.2	3.3	3.2	3.3	3.4	3.8	4.1
Real compensation per hour	-3.6	-1.8	.3	1.5	-.4	-.6	1.0	-.6	-.9	-1.0	-.1	.2
Total unit costs	2.6	1.0	-.2	4.2	-1.0	3.0	2.6	2.1	1.1	1.9	1.0	1.5
Unit labor costs	2.6	-.2	-.6	5.3	-1.2	3.7	2.8	1.7	.9	1.8	.8	1.8
Unit nonlabor costs	2.5	4.1	.8	1.3	-.3	1.2	2.3	3.2	1.5	2.2	1.5	.7
Unit profits	-3.5	3.9	21.9	-21.5	13.8	4.1	-3.8	-2.2	2.0	-1.1	3.1	3.2
Implicit price deflator	2.0	1.2	1.7	1.5	.3	3.1	2.0	1.7	1.2	1.6	1.2	1.7

. = revised.

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

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Alabama	1,913.1	1,875.2	1,879.2	148.7	129.0	130.5	7.8	6.9	6.9
Birmingham	451.7	445.7	447.2	30.7	25.4	25.1	6.8	5.7	5.6
Huntsville	132.0	133.2	133.3	7.0	6.9	6.9	5.3	5.2	5.2
Mobile	215.8	206.9	209.3	19.9	17.8	16.9	9.2	8.6	8.1
Montgomery	139.5	135.0	136.0	9.2	8.3	8.1	6.6	6.2	6.0
Tuscaloosa	68.5	67.7	68.1	4.4	3.7	3.6	6.4	5.5	5.3
Alaska	266.0	251.1	255.0	25.2	21.7	19.4	9.5	8.7	7.6
Arizona	1,590.7	1,619.1	1,619.1	107.7	98.8	109.0	6.8	6.1	6.7
Phoenix	993.4	1,010.0	1,013.7	52.9	48.7	52.4	5.3	4.8	5.2
Tucson	299.8	306.1	302.9	15.2	14.7	15.8	5.1	4.8	5.2
Arkansas	1,096.3	1,130.5	1,123.3	83.5	88.5	86.7	7.6	7.8	7.7
Fayetteville-Springdale	57.2	60.8	60.5	2.1	2.7	2.7	3.7	4.5	4.5
Fort Smith	91.4	95.4	94.9	5.2	5.7	5.8	5.7	6.0	6.1
Little Rock-North Little Rock	258.8	267.1	264.7	19.0	17.8	17.5	7.3	6.7	6.6
Pine Bluff	36.6	37.6	37.2	3.2	3.3	3.3	8.7	8.8	8.9
California¹	13,960.3	14,175.7	14,299.1	837.3	770.6	838.5	6.0	5.4	5.9
Anaheim-Santa Ana	1,308.9	1,348.7	1,360.8	45.1	43.7	47.1	3.4	3.2	3.5
Bakersfield	231.8	236.1	237.6	21.5	22.7	23.1	9.3	9.6	9.7
Fresno	303.1	314.0	319.9	28.0	32.2	33.0	9.2	10.3	10.3
Los Angeles-Long Beach	4,287.0	4,129.1	4,180.1	283.0	208.5	234.6	6.6	5.1	5.6
Modesto	156.1	163.0	168.2	17.1	21.6	20.6	10.9	13.2	12.3
Oakland	1,046.0	1,073.7	1,087.1	56.1	52.3	56.7	5.4	4.9	5.2
Oxnard-Ventura	342.4	358.0	366.5	20.7	18.3	24.1	6.0	5.1	6.6
Riverside-San Bernardino	920.5	978.8	974.2	58.8	59.2	68.0	6.4	6.1	7.0
Sacramento	685.9	721.1	728.2	37.9	39.1	41.1	5.5	5.4	5.6
San Diego	1,075.0	1,126.9	1,135.3	52.4	50.9	55.5	4.9	4.5	4.9
San Francisco	883.9	900.3	908.2	36.5	34.3	37.5	4.1	3.8	4.1
San Jose	814.1	833.2	841.7	37.7	35.4	37.1	4.6	4.2	4.4
Santa Barbara-Santa Maria-Lompoc	180.2	184.3	183.8	8.0	7.5	8.3	4.5	4.1	4.5
Santa Rosa-Petaluma	190.5	199.6	199.7	9.2	9.7	10.0	4.8	4.9	5.0
Stockton	190.4	199.5	197.1	17.9	20.6	20.1	9.4	10.3	10.2
Vallejo-Fairfield-Napa	188.2	197.2	199.6	11.2	11.1	12.3	6.0	5.6	6.2
Colorado	1,683.6	1,691.7	1,688.0	119.5	105.1	95.6	7.1	6.2	5.7
Boulder-Longmont	128.8	129.0	129.7	7.0	6.1	5.7	5.5	4.7	4.4
Denver	883.2	883.6	881.0	59.3	51.6	47.9	6.7	5.8	5.4
Connecticut	1,752.5	1,761.8	1,759.3	58.4	53.0	55.6	3.3	3.0	3.2
Bridgeport-Milford	228.2	231.7	229.8	9.3	8.3	9.9	4.1	3.6	4.3
Hartford	425.9	427.4	427.1	12.5	12.2	11.6	2.9	2.9	2.7
New Haven-Meriden	273.5	274.3	274.9	8.8	8.0	8.6	3.2	2.9	3.1
Stamford	119.0	119.4	119.2	2.7	2.7	2.4	2.3	2.2	2.0
Waterbury	101.3	102.1	102.2	5.3	3.7	4.5	5.2	3.6	4.4
Delaware	336.2	352.8	354.1	10.8	10.6	11.0	3.2	3.0	3.1
Wilmington	286.9	302.6	303.9	12.1	10.6	12.0	4.2	3.5	3.9
District of Columbia	350.7	344.4	358.2	20.8	18.0	18.4	5.9	5.2	5.1
Washington	2,156.9	2,241.1	2,261.9	69.6	66.2	65.8	3.2	3.0	2.9
Florida¹	5,986.6	6,142.2	6,199.0	355.8	295.2	313.2	5.9	4.8	5.1
Daytona Beach	150.0	155.4	156.8	6.8	6.6	6.1	4.5	4.2	3.9
Fort Lauderdale-Hollywood-Pompano Beach	627.1	651.9	658.1	28.8	25.6	25.4	4.6	3.9	3.9
Fort Myers-Cape Coral	133.1	141.7	144.0	5.7	4.4	5.3	4.3	3.1	3.7
Jacksonville	456.5	474.8	482.8	26.7	23.8	25.4	5.9	5.0	5.3
Melbourne-Titusville-Palm Bay	181.3	184.0	188.2	10.4	8.0	8.6	5.7	4.4	4.5
Miami-Hialeah	937.7	931.9	938.8	59.2	48.2	49.0	6.3	5.2	5.2
Orlando	570.1	587.8	596.4	28.9	27.3	27.9	5.1	4.6	4.7
Pensacola	153.3	154.4	155.8	9.5	8.8	8.8	6.2	5.7	5.6
Sarasota	118.5	123.9	124.9	4.5	4.0	4.1	3.8	3.2	3.3
Tallahassee	126.0	127.6	130.1	5.7	4.5	5.0	4.5	3.5	3.8
Tampa-St. Petersburg-Clearwater	971.3	996.4	1,003.3	49.0	44.5	45.2	5.0	4.5	4.5
West Palm Beach-Boca Raton-Delray Beach	399.0	409.2	412.7	28.5	20.5	23.8	7.1	5.0	5.8

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
Georgia	3,074.9	3,150.1	3,179.3	175.3	201.6	206.7	5.7	6.4	6.5
Athens	71.7	73.1	73.5	3.1	3.2	3.9	4.3	4.4	5.3
Atlanta	1,454.4	1,495.8	1,506.5	72.0	84.6	81.8	5.0	5.7	5.4
Augusta	178.8	182.2	183.5	10.4	12.5	11.7	5.8	6.9	6.4
Columbus	100.0	100.8	101.9	5.9	7.1	7.1	5.9	7.0	7.0
Macon-Warner Robins	128.5	129.9	130.7	6.7	7.9	7.2	5.2	6.1	5.5
Savannah	111.0	113.3	113.7	6.7	8.5	7.9	6.0	7.5	6.9
Hawaii	522.5	523.3	518.9	20.7	16.2	16.0	4.0	3.1	3.1
Honolulu	389.3	390.7	387.0	14.0	10.6	10.3	3.6	2.7	2.7
Idaho	485.7	484.2	486.0	37.2	26.1	25.6	7.7	5.4	5.3
Boise City	105.9	104.9	105.3	5.7	3.9	3.7	5.4	3.7	3.6
Illinois ¹	5,911.1	5,808.2	5,868.6	421.9	403.6	361.6	7.1	6.9	6.2
Aurora-Elgin	177.2	179.8	178.3	10.3	9.3	8.6	5.8	5.2	4.8
Bloomington-Normal	65.6	65.2	65.8	3.0	3.0	2.9	4.5	4.6	4.4
Champaign-Urbana-Rantoul	86.6	85.6	85.7	3.7	3.7	3.3	4.2	4.3	3.9
Chicago	3,255.4	3,206.3	3,230.0	211.7	209.8	180.7	6.5	6.5	5.6
Davenport-Rock Island-Moline	184.8	181.0	183.2	13.7	13.0	13.9	7.4	7.2	7.6
Decatur	59.7	57.5	58.3	5.8	4.8	5.0	9.6	8.3	8.5
Joliet	199.6	192.8	193.3	17.0	14.6	13.4	8.5	7.6	6.9
Lake County	274.7	277.5	279.6	11.8	12.4	10.9	4.3	4.5	3.9
Peoria	156.8	155.3	157.3	12.0	10.8	10.2	7.6	6.9	6.5
Rockford	152.3	146.7	147.6	15.2	10.8	13.1	10.0	7.4	8.9
Springfield	111.6	108.6	110.2	5.4	5.4	4.9	4.8	5.0	4.5
Indiana	2,750.4	2,828.1	2,839.1	172.1	129.0	144.6	6.3	4.6	5.1
Anderson	59.4	58.5	59.0	4.4	3.1	4.8	7.4	5.3	8.1
Bloomington	55.3	59.3	59.8	2.2	1.8	1.9	3.9	3.0	3.2
Elkhart-Goshen	93.6	98.9	98.4	4.9	3.3	4.0	5.3	3.3	4.1
Evansville	142.2	144.0	144.5	10.1	7.8	7.8	7.1	5.4	5.4
Fort Wayne	193.7	202.6	203.5	10.4	7.9	9.1	5.4	3.9	4.5
Gary-Hammond	255.9	256.0	257.6	22.1	14.4	14.7	8.6	5.6	5.7
Indianapolis	657.7	679.9	682.0	34.2	28.1	29.4	5.2	4.1	4.3
Lafayette	63.3	65.2	65.5	2.7	1.9	1.9	4.2	3.0	2.9
Muncie	57.5	59.3	59.0	3.7	2.9	3.2	6.5	4.9	5.5
South Bend-Mishawaka	126.6	129.6	129.5	8.6	6.0	7.3	6.8	4.6	5.6
Terre Haute	57.4	58.7	58.6	3.6	3.0	3.2	6.3	5.0	5.5
Iowa	1,452.5	1,501.1	1,497.7	72.2	61.0	61.2	5.0	4.1	4.1
Cedar Rapids	92.8	97.2	96.3	4.5	3.4	3.3	4.8	3.5	3.4
Des Moines	222.4	232.6	231.6	9.3	7.8	7.7	4.2	3.4	3.3
Dubuque	43.5	45.0	44.5	2.3	2.1	2.1	5.4	4.7	4.7
Sioux City	61.2	62.3	62.4	4.8	3.0	2.9	7.8	4.8	4.7
Waterloo-Cedar Falls	67.1	68.6	68.3	4.7	3.6	3.7	7.1	5.2	5.5
Kansas	1,277.9	1,306.7	1,285.6	58.5	56.7	59.7	4.6	4.3	4.6
Topeka	90.9	94.6	92.6	4.1	3.8	4.0	4.5	4.1	4.3
Wichita	253.2	258.5	256.6	11.7	12.2	12.5	4.6	4.7	4.9
Kentucky	1,691.5	1,709.7	1,710.7	148.5	133.7	143.5	8.8	7.8	8.4
Lexington-Fayette	179.4	188.0	186.1	9.8	9.1	9.8	5.5	4.8	5.3
Louisville	496.3	513.3	516.9	34.4	30.7	31.7	6.9	6.0	6.1
Owensboro	44.3	44.1	44.1	4.8	3.8	3.9	10.9	8.6	8.9
Louisiana	1,956.1	1,916.2	1,928.2	233.1	204.1	197.3	11.9	10.6	10.2
Alexandria	61.8	60.6	61.3	6.3	5.7	6.0	10.1	9.4	9.8
Baton Rouge	263.4	260.6	262.3	27.0	24.4	24.4	10.2	9.4	9.3
Houma-Thibodaux	72.6	69.5	69.4	10.9	7.3	7.0	15.1	10.5	10.1
Lafayette	99.7	96.5	98.3	12.4	9.1	8.8	12.4	9.4	9.0
Monroe	71.0	67.8	68.5	7.1	7.0	7.0	10.0	10.3	10.3
New Orleans	604.9	598.7	602.3	61.3	56.6	53.9	10.1	9.5	8.9
Shreveport	168.1	165.4	164.6	18.0	16.7	15.8	10.7	10.1	9.6
Maine	614.6	607.1	612.7	33.1	22.2	29.1	5.4	3.7	4.7
Lewiston-Auburn	42.5	42.1	42.4	3.1	1.9	3.6	7.3	4.5	8.5
Portland	128.4	126.5	127.5	3.7	2.6	2.6	2.9	2.1	2.1

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p
Maryland	2,419.1	2,464.5	2,465.9	102.1	108.7	104.4	4.2	4.4	4.2
Baltimore	1,166.5	1,184.9	1,181.1	52.9	59.1	53.4	4.5	5.0	4.5
Massachusetts¹	3,143.0	3,216.7	3,200.4	80.2	110.2	115.6	2.6	3.4	3.6
Boston	1,551.9	1,583.4	1,569.9	34.3	47.6	48.9	2.2	3.0	3.1
Brockton	98.1	101.9	101.6	2.8	4.3	4.4	2.9	4.3	4.3
Fall River	75.4	77.1	76.0	3.6	4.0	4.6	4.8	5.2	6.1
Fitchburg-Leominster	45.3	46.8	45.0	1.6	2.1	2.5	3.5	4.5	5.5
Lawrence-Haverhill	184.5	189.2	185.2	7.6	7.7	8.2	4.1	4.1	4.4
Lowell	150.6	153.0	152.3	4.1	5.9	5.9	2.7	3.8	3.8
New Bedford	84.5	88.7	88.3	3.4	4.2	4.8	4.0	4.7	5.4
Springfield	254.4	261.0	257.2	6.4	8.7	9.3	2.5	3.3	3.6
Worcester	216.0	224.8	223.5	5.5	7.2	7.7	2.5	3.2	3.4
Michigan¹	4,601.3	4,593.8	4,658.0	407.1	326.4	362.1	8.8	7.1	7.8
Ann Arbor	155.2	162.3	162.5	7.0	6.0	6.4	4.5	3.7	3.9
Battle Creek	65.6	65.0	66.0	5.0	4.2	4.5	7.6	6.5	6.8
Benton Harbor	78.8	79.6	80.4	5.5	5.0	5.3	7.0	6.3	6.6
Detroit	2,228.1	2,208.9	2,242.6	214.9	161.8	190.2	9.6	7.3	8.5
Flint	201.8	202.0	202.4	25.6	29.7	30.1	12.7	14.7	14.9
Grand Rapids	351.2	358.4	361.3	23.4	18.6	19.9	6.7	5.2	5.5
Kalamazoo	114.9	115.7	117.3	7.3	5.1	6.1	6.4	4.4	5.2
Lansing-East Lansing	235.2	240.9	239.2	19.8	13.2	14.3	8.4	5.5	6.0
Muskegon	68.6	68.4	69.0	5.8	5.9	5.8	8.5	8.7	8.4
Saginaw-Bay City-Midland	186.5	188.2	190.5	15.0	12.6	13.6	8.1	6.7	7.1
Minnesota	2,265.4	2,366.3	2,347.9	108.6	81.0	81.5	4.8	3.4	3.5
Duluth	107.6	108.4	107.4	9.1	5.8	5.6	8.4	5.4	5.2
Minneapolis-St. Paul	1,352.0	1,399.3	1,400.1	55.3	41.8	43.1	4.1	3.0	3.1
Rochester	57.8	60.3	60.3	2.0	1.5	1.5	3.5	2.4	2.5
St. Cloud	89.4	95.6	95.5	4.6	3.7	3.6	5.2	3.9	3.7
Mississippi	1,154.7	1,143.9	1,145.6	122.0	89.6	90.5	10.6	7.8	7.9
Jackson	200.0	202.3	200.8	15.8	11.2	11.1	7.9	5.5	5.5
Missouri	2,602.8	2,610.1	2,614.8	170.4	134.3	153.1	6.5	5.1	5.9
Kansas City	843.5	840.8	844.9	50.7	39.9	48.9	6.0	4.7	5.8
St. Louis	1,293.0	1,278.7	1,283.1	92.6	80.0	81.5	7.2	6.3	6.4
Springfield	119.7	121.4	123.6	5.7	4.5	4.9	4.7	3.7	3.9
Montana	408.8	412.2	398.2	27.1	26.6	24.7	6.6	6.5	6.2
Nebraska	810.6	821.9	817.5	37.8	27.3	27.4	4.7	3.3	3.4
Lincoln	121.1	120.6	120.9	4.4	3.1	3.2	3.6	2.6	2.7
Omaha	322.4	327.7	326.3	16.5	12.8	12.6	5.1	3.9	3.9
Nevada	564.0	582.7	586.6	35.4	31.8	29.5	6.3	5.5	5.0
Las Vegas	325.9	338.6	338.9	22.8	20.7	19.2	7.0	6.1	5.7
Reno	139.5	141.8	144.0	7.1	6.3	5.9	5.1	4.4	4.1
New Hampshire	604.0	609.2	609.5	16.8	12.1	15.2	2.8	2.0	2.5
Nashua	97.3	100.3	98.1	2.7	2.6	2.6	2.7	2.6	2.7
Portsmouth-Dover-Rochester	135.6	137.1	136.2	3.6	2.0	2.9	2.7	1.4	2.1
New Jersey¹	4,037.0	4,024.4	4,052.8	182.0	146.8	168.4	4.5	3.6	4.2
Atlantic City	190.8	181.6	189.8	9.1	8.2	8.4	4.8	4.5	4.4
Bergen-Passaic	724.5	727.4	728.0	29.7	22.6	27.5	4.1	3.1	3.8
Jersey City	268.0	269.5	271.2	19.6	17.0	19.5	7.3	6.3	7.2
Middlesex-Somerset-Hunterdon	561.5	565.7	569.6	19.1	14.7	17.7	3.4	2.6	3.1
Monmouth-Ocean	495.6	496.1	503.2	17.3	15.5	17.6	3.5	3.1	3.5
Newark	977.8	966.2	971.1	47.0	37.0	42.1	4.8	3.8	4.3
Trenton	171.6	174.6	172.8	6.6	4.7	5.4	3.9	2.7	3.1
New Mexico	685.4	692.3	692.2	59.2	59.9	57.7	8.6	8.7	8.3
Albuquerque	259.4	266.2	265.8	16.5	17.6	17.6	6.4	6.6	6.6
Las Cruces	54.4	56.3	55.3	4.4	5.1	4.4	8.1	9.0	7.9
Santa Fe	67.9	69.2	69.3	3.7	3.7	3.6	5.4	5.4	5.2

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P	July 1987	June 1988	July 1988 ^P
New York¹	8,659.4	8,555.6	8,714.1	392.9	289.3	364.5	4.5	3.4	4.2
Albany-Schenectady-Troy	429.8	421.8	428.8	14.2	11.9	14.5	3.3	2.8	3.4
Binghamton	127.3	127.7	128.2	4.3	3.7	4.2	3.4	2.9	3.3
Buffalo	452.8	447.8	454.3	21.9	17.6	22.0	4.8	3.9	4.8
Elmira	42.3	42.7	43.4	1.4	1.4	1.7	3.4	3.2	4.0
Nassau-Suffolk	1,467.5	1,454.4	1,468.7	43.8	38.8	49.2	3.0	2.7	3.3
New York	3,948.5	3,900.2	3,992.1	215.6	140.8	182.2	5.5	3.6	4.6
New York City	3,238.0	3,214.4	3,289.6	194.0	125.0	161.6	6.0	3.9	4.9
Orange County	134.4	135.1	136.4	4.2	3.9	4.8	3.1	2.9	3.5
Poughkeepsie	128.9	130.1	132.5	2.8	2.6	2.9	2.2	2.0	2.2
Rochester	504.7	496.4	503.8	19.6	15.0	19.4	3.9	3.0	3.9
Syracuse	325.9	319.6	321.3	17.2	13.4	13.6	5.3	4.2	4.2
Utica-Rome	138.9	138.2	140.1	5.5	4.7	6.1	4.0	3.4	4.3
North Carolina¹	3,369.1	3,343.5	3,410.7	159.2	116.4	108.7	4.7	3.5	3.2
Asheville	90.7	89.4	91.5	4.2	2.6	2.2	4.6	2.9	2.4
Charlotte-Gastonia-Rock Hill	639.3	648.0	662.2	26.4	20.5	18.9	4.1	3.2	2.9
Greensboro-Winston-Salem-High Point	525.9	521.3	528.0	21.5	15.8	13.7	4.1	3.0	2.6
Raleigh-Durham	404.4	400.2	410.5	13.5	10.6	9.2	3.3	2.6	2.2
North Dakota	336.3	337.7	339.1	14.9	13.3	13.9	4.4	3.9	4.1
Bismarck	45.4	45.8	46.0	1.9	1.9	1.9	4.1	4.2	4.2
Fargo-Moorhead	83.8	86.7	86.7	2.7	2.2	2.3	3.3	2.5	2.7
Grand Forks	36.6	36.6	36.9	1.3	1.3	1.4	3.5	3.5	3.7
Ohio¹	5,340.5	5,324.5	5,336.0	359.0	322.9	271.9	6.7	6.1	5.1
Akron	321.9	319.5	320.8	21.6	19.0	15.4	6.7	6.0	4.8
Cincinnati	756.6	763.9	765.4	44.6	42.7	37.0	5.9	5.6	4.8
Cleveland	949.3	939.2	949.0	56.7	53.5	44.5	6.0	5.7	4.7
Columbus	700.4	712.1	712.6	36.0	34.9	30.5	5.1	4.9	4.3
Dayton-Springfield	464.6	467.0	465.7	24.8	24.2	20.7	5.3	5.2	4.5
Toledo	311.6	312.9	314.5	22.0	17.6	15.8	7.1	5.6	5.0
Youngstown-Warren	228.0	223.1	221.6	29.6	15.5	14.2	13.0	6.9	6.4
Oklahoma	1,575.9	1,529.6	1,512.2	114.8	94.8	92.7	7.3	6.2	6.1
Enid	30.7	29.9	29.4	1.9	1.5	1.4	6.1	4.9	4.8
Lawton	50.3	50.2	49.9	2.4	2.6	2.6	4.7	5.2	5.3
Oklahoma City	515.9	502.7	499.4	30.8	25.5	25.1	6.0	5.1	5.0
Tulsa	354.0	343.1	344.0	28.4	24.1	22.7	8.0	7.0	6.6
Oregon	1,399.7	1,454.4	1,431.0	76.3	84.6	79.2	5.5	5.8	5.5
Eugene-Springfield	135.1	144.0	138.1	6.7	8.3	7.3	5.0	5.7	5.3
Portland	631.2	659.8	650.3	31.2	32.2	31.3	4.9	4.9	4.8
Salem	134.8	136.2	135.8	6.9	8.2	7.2	5.1	6.0	5.3
Pennsylvania¹	5,793.5	5,786.1	5,882.1	335.1	325.3	314.6	5.8	5.6	5.3
Allentown-Bethlehem	325.8	325.9	328.9	18.2	17.1	16.1	5.6	5.2	4.9
Altoona	60.8	61.0	62.0	4.0	4.7	4.4	6.6	7.7	7.1
Beaver County	63.6	64.1	64.8	6.6	6.1	5.8	10.4	9.5	9.0
Erie	129.7	128.5	131.1	9.3	8.8	8.3	7.2	6.8	6.3
Harrisburg-Lebanon-Carlisle	322.3	320.1	328.4	13.8	13.1	13.7	4.3	4.1	4.2
Johnstown	96.2	96.3	96.9	7.7	7.7	7.2	8.0	8.0	7.5
Lancaster	218.7	219.8	224.6	8.4	9.1	8.8	3.9	4.1	3.9
Philadelphia	2,434.9	2,427.8	2,465.1	117.2	113.9	109.7	4.8	4.7	4.4
Pittsburgh	972.5	966.9	977.1	67.3	59.5	57.4	6.9	6.2	5.9
Reading	171.2	176.5	178.0	8.6	8.6	7.9	5.0	4.9	4.4
Scranton-Wilkes-Barre	354.9	355.5	364.3	24.2	23.5	25.4	6.8	6.6	7.0
Williamsport	59.8	61.1	62.6	3.1	3.2	3.1	5.2	5.2	5.0
York	211.7	216.1	219.5	9.3	9.6	9.6	4.4	4.5	4.4
Rhode Island	521.7	527.4	519.3	22.5	16.3	17.1	4.3	3.1	3.3
Pawtucket-Woonsocket-Attleboro	168.6	168.1	167.7	7.8	6.3	7.2	4.6	3.7	4.3
Providence	336.7	344.0	336.4	14.3	10.6	10.7	4.3	3.1	3.2
South Carolina	1,634.1	1,675.6	1,665.0	94.6	78.5	78.7	5.8	4.7	4.7
Charleston	222.4	232.1	231.6	11.0	9.7	9.6	5.0	4.2	4.1
Columbia	228.3	237.4	238.1	9.2	7.9	8.0	4.0	3.3	3.4
Greenville-Spartanburg	320.5	330.5	326.5	14.8	11.7	12.3	4.6	3.5	3.8
South Dakota	366.2	379.2	369.8	13.7	13.3	13.6	3.7	3.5	3.7
Rapid City	41.1	42.7	42.5	1.4	1.5	1.5	3.5	3.5	3.6
Sioux Falls	74.4	75.1	73.9	2.7	2.4	2.3	3.6	3.2	3.1

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p	July 1987	June 1988	July 1988 ^p
Tennessee	2,351.9	2,364.2	2,343.2	154.0	128.0	143.0	6.5	5.4	6.1
Chattanooga	204.6	213.8	210.8	11.8	11.8	11.7	5.8	5.5	5.5
Johnson City-Kingsport-Bristol	215.3	221.4	221.3	15.2	11.9	13.5	7.0	5.4	6.1
Knoxville	285.6	281.0	278.7	17.1	13.9	14.3	6.0	5.0	5.1
Memphis LMA	446.3	452.2	446.5	24.5	22.1	22.2	5.5	4.9	5.0
Nashville	522.3	514.0	507.8	23.0	22.6	24.3	4.4	4.4	4.8
Texas¹	8,492.9	8,596.7	8,492.0	741.3	685.8	562.2	8.7	8.0	6.6
Abilene	54.7	55.6	54.7	4.8	3.9	3.1	8.8	7.0	5.6
Amarillo	103.1	104.7	103.8	6.9	6.3	5.5	6.7	6.0	5.3
Austin	432.2	435.7	429.6	30.3	29.8	24.4	7.0	6.8	5.7
Beaumont-Port Arthur	166.8	166.1	163.2	21.6	18.7	15.4	13.0	11.2	9.5
Brazoria	83.1	85.3	83.9	8.7	7.7	6.2	10.4	9.0	7.4
Brownsville-Harlingen	99.2	101.9	99.5	14.3	14.8	12.0	14.5	14.5	12.1
Bryan-College Station	57.6	57.0	57.2	3.6	3.1	2.5	6.3	5.4	4.3
Corpus Christi	165.3	167.3	163.5	20.2	17.8	14.3	12.2	10.6	8.8
Dallas	1,497.1	1,513.7	1,506.6	99.6	98.0	79.7	6.7	6.5	5.3
El Paso	237.8	248.7	240.0	26.0	29.7	23.4	10.9	11.9	9.7
Fort Worth-Arlington	702.8	706.4	693.4	52.9	49.6	40.0	7.5	7.0	5.8
Galveston-Texas City	113.8	113.5	112.7	12.4	11.2	9.1	10.9	9.8	8.0
Houston	1,659.4	1,666.7	1,652.1	154.5	128.2	104.1	9.3	7.7	6.3
Killeen-Temple	96.1	98.8	98.3	7.7	8.3	6.9	8.1	8.4	7.0
Laredo	46.3	47.6	46.9	6.9	6.6	5.3	14.9	13.9	11.3
Longview-Marshall	81.8	82.0	81.4	9.1	7.6	6.4	11.1	9.3	7.9
Lubbock	114.6	117.4	117.6	7.6	7.1	5.9	6.7	6.0	5.0
McAllen-Edinburg-Mission	142.7	152.8	145.9	25.9	23.9	21.6	18.2	15.7	14.8
Midland	51.2	51.2	50.7	4.8	3.1	2.7	9.4	6.1	5.3
Odessa	54.7	56.2	55.2	6.1	4.5	3.8	11.1	8.1	6.8
San Angelo	46.1	46.8	46.3	2.9	3.0	2.6	6.3	6.5	5.6
San Antonio	626.8	648.9	640.6	51.7	56.4	46.8	8.2	8.7	7.3
Sherman-Denison	50.4	51.5	51.1	4.0	3.4	2.9	8.0	6.7	5.7
Texarkana	59.0	60.4	59.4	4.9	5.2	4.6	8.3	8.6	7.7
Tyler	79.8	79.2	78.0	7.1	6.4	5.3	8.9	8.1	6.7
Victoria	38.1	37.7	37.5	3.4	3.0	2.3	8.9	7.9	6.2
Waco	94.1	95.7	94.6	7.7	7.7	6.1	8.2	8.1	6.5
Wichita Falls	59.3	60.4	59.8	4.6	3.7	3.1	7.7	6.2	5.3
Utah	751.5	750.8	740.5	46.1	35.6	34.1	6.1	4.7	4.6
Provo-Orem	96.8	96.3	96.4	6.2	3.9	3.8	6.4	4.1	4.0
Salt Lake City-Ogden	496.4	497.1	489.6	28.0	22.3	21.3	5.6	4.5	4.4
Vermont	300.9	299.8	300.0	9.6	7.6	6.9	3.2	2.5	2.3
Burlington	74.9	77.8	77.8	1.8	1.5	1.4	2.4	2.0	1.8
Virginia	3,019.1	3,170.4	3,166.5	124.8	120.6	116.1	4.1	3.8	3.7
Charlottesville	64.9	68.2	69.0	1.9	1.8	2.0	2.9	2.7	2.9
Danville	50.4	53.7	52.8	3.1	3.7	3.2	6.2	6.8	6.1
Lynchburg	70.5	74.4	72.1	3.4	3.8	3.3	4.8	5.2	4.5
Norfolk-Virginia Beach-Newport News	605.1	635.5	635.9	28.4	28.0	26.5	4.7	4.4	4.2
Richmond-Petersburg	432.6	453.5	457.4	15.3	14.9	14.7	3.5	3.3	3.2
Roanoke	121.3	122.7	120.7	4.6	4.7	4.5	3.8	3.9	3.7
Washington	2,270.3	2,363.9	2,318.0	161.6	144.2	141.9	7.1	6.1	6.1
Seattle	998.5	1,047.8	1,038.6	58.5	52.3	51.3	5.9	5.0	4.9
West Virginia	757.1	736.0	740.6	79.3	65.0	66.8	10.5	8.8	9.0
Charleston	118.3	115.2	115.5	10.6	8.8	8.5	8.9	7.6	7.3
Huntington-Ashland	127.5	125.1	125.4	12.6	9.9	9.8	9.9	7.9	7.8
Parkersburg-Marietta	72.8	71.5	71.5	5.8	4.8	4.3	8.0	6.7	6.0
Wheeling	73.0	70.6	70.6	5.9	5.4	4.5	8.1	7.6	6.3
Wisconsin	2,510.0	2,581.8	2,586.6	135.0	103.3	107.5	5.4	4.0	4.2
Appleton-Oshkosh-Neenah	165.4	172.0	172.8	8.1	6.0	6.0	4.9	3.5	3.5
Eau Claire	69.9	74.4	73.9	3.7	2.9	2.7	5.2	3.9	3.6
Green Bay	105.5	109.5	109.9	5.3	4.1	4.0	5.0	3.8	3.6
Janesville-Beloit	71.2	73.6	72.8	4.8	3.3	3.1	6.8	4.4	4.2
Kenosha	55.2	55.3	57.7	3.8	2.7	4.5	6.8	4.9	7.8
La Crosse	52.2	56.5	57.3	2.3	2.0	2.5	4.4	3.6	4.3
Madison	213.5	221.4	221.5	7.9	5.7	5.4	3.7	2.6	2.4
Milwaukee	736.4	766.7	767.8	36.8	29.2	30.8	5.0	3.8	4.0
Racine	86.8	88.8	90.2	6.1	4.0	4.8	7.0	4.5	5.3
Wausau	59.3	61.9	61.2	3.1	2.7	2.4	5.3	4.3	4.0
Wyoming	243.9	239.4	236.4	17.9	11.5	11.2	7.3	4.8	4.7

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

² Not available.

^p = preliminary.

NOTE: Data refer to place of residence. Estimates for 1987 have been

benchmarked to 1987 Current Population Survey annual averages. Except in the 11 States designated by footnote 1, estimates for 1988 are provisional and will be revised when new benchmark information becomes available. Area definitions are published annually in the May issue of this publication.

Explanatory Notes

Introduction

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

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

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

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

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

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

Employment

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

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

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

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

Hours of work

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

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

Earnings

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

COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

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

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

unemployed in the household survey.

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

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

COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

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

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

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

Household Data (A tables)

COLLECTION AND COVERAGE

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

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

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

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

CONCEPTS AND DEFINITIONS

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

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

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

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

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

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

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

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

Jobseekers are all unemployed persons who made

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

HISTORICAL COMPARABILITY

Change in lower age limit

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

Report on the Labor Force, February 1967.

Noncomparability of labor force levels

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

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

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

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

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

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

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

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

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

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

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

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

Changes in the occupational and industrial classification system

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

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

The 1980 census occupational classification system evolved

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

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

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

Changes in the sample design

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

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

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

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

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

ESTIMATING METHODS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rounding of estimates

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

Reliability of the estimates

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

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

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

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

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

The effects of some components of nonsampling error in the CPS data can be examined as a result of the rotation plan used for the sample, since the level of the estimates varies by rotation group. A description of these effects appears in "The Effects of Rotation Group Bias on Estimates From Panel Surveys," by Barbara A. 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

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

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

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

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

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

Table D. Standard errors for estimates of monthly level

(in thousands)

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

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

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

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

(in thousands)

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

¹ See footnote 1, table D.

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

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

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

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

Standard error of year-to-year change =

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

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

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

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

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

or about 259,000.

Table F. Standard errors for unemployment rates

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

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

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

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

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

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

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

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

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

Characteristic	Factor				
	Year-to-year change of monthly estimate	Quarterly averages	Change in quarterly averages	Yearly averages	Change in yearly averages
Agricultural employment:					
Total or men	1.30	0.89	0.80	0.72	0.70
Women or teenagers (16 to 19 years)	1.30	.83	.80	.58	.70
Part time	1.40	.74	.80	.46	.70
Labor force data other than agricultural employment and unemployment:					
Total or white	1.30	.88	.88	.67	.70
Black 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 changes in number of employees on nonagricultural payrolls. These indexes measure the percent of industries which posted increases in employment over the specified time span. The indexes are calculated from 185 seasonally adjusted employment series (two-digit non-manufacturing industries and three-digit manufacturing industries) covering all nonagricultural payroll employment in the private sector. A more detailed discussion of these indexes appears in "Introduction of Diffusion Indexes," in the December 1974 issue of *Employment and Earnings*.

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 differ-

ent 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 establishment 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

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

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

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

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

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

from the records of the Social Security Administration, the Interstate Commerce Commission, and a number of other agencies in private industry or government.

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

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

THE SAMPLE

Design

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

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

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

¹Less than 0.05 percent.

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

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

Coverage

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

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

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

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

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

Reliability

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

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

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

(In percent)

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

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

² Relative errors relate to 1982 data.

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

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

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

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

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

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

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

STATISTICS FOR STATES AND AREAS

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

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

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

¹ Assuming 12-month intervals between benchmark revisions.

² Relative errors relate to 1982 data.

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

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

Table Q. Errors of preliminary employment estimates

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

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

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

COLLECTION

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

CONCEPTS

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

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

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

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

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

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

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

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

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

NOTES ON THE DATA

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

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

State and Area Labor Force Data (D table)

FEDERAL-STATE COOPERATIVE PROGRAM

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

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 and unemployment estimates for counties, 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, D.C. 20402. The report "Employment and Unemployment in States and Local Areas" is published monthly through GPO and is available on microfiche only on a subscription basis.

ESTIMATING METHODS

The civilian labor force and unemployment estimates in 11 large States: New York, California, Illinois, Ohio, New Jersey, Pennsylvania, Michigan, Texas, Massachusetts,

North Carolina, and Florida are sufficiently reliable to be used directly from the CPS. For a description of the CPS concepts, see "Household Data," above.

Monthly labor force and unemployment estimates in the remaining 39 States, the District of Columbia, and over 2,600 labor market areas are prepared in several stages. The civilian labor force is the sum of the employment and unemployment levels, which are estimated in accordance with the BLS *Manual for Developing Local Area Unemployment Statistics*.

1. *Preliminary estimate—employment*: The total civilian employment estimate is based on data from the survey of establishments which produces an estimate of payroll employment. This place-of-work estimate 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 the several categories of employment on the basis of employment relationships which existed at the time of the 1980 decennial census. These factors are applied to the payroll employment estimates for the current period to obtain adjusted employment estimates to which are added estimates for employment not covered by unemployment insurance (UI).

2. *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. This is referred to below as the UI-based estimate.

An estimate for those previously employed in covered industries is derived from a count of current employment insurance claimants, plus estimates of claimants whose benefits have been exhausted, those persons disqualified from receiving benefits for nonmonetary reasons (because they quit, were discharged for cause, etc., but would otherwise have been eligible), and persons who either filed claims late or not at all.

The estimate of those previously employed in industries not covered by UI is derived by applying to the employment estimate for each noncovered industry or class of worker subgroup in the State, the ratio of covered unemployment to covered employment weighted by factors reflecting national historical relationships.

For the third category, new entrants and reentrants into the labor force, a composite estimate is developed from equations that relate the total entrants into the labor force to the experienced unemployed and the experienced labor force. For each month, the estimate of entrants into the labor force

is a function of: (a) the month of the year; (b) the level of the experienced unemployed; (c) the level of the experienced labor force; and (d) the proportion of the working age population that is considered "youth."

3. *Monthly reconciliation with the CPS*. Each month correction factors for employment and unemployment are applied at the State level to the UI-based estimates obtained above for each of the 39 States and the District of Columbia. These correction factors are based on the ratio of the CPS to the UI-based estimates for the 6-month period ending in the current month (e.g., a 6-month moving average). The adjustment is necessary because the State-prepared estimates are not as reliable as the CPS data due to differences in the State UI laws, the structural limitations of the UI-based estimating method, and errors in the UI data.

4. *Substate adjustment for additivity*. Independent estimates of employment and unemployment are prepared for the State (obtained directly from the CPS in the 11 large States or by the UI-based method in the remaining States), and labor market areas (LMA's) within the State. The total of the geographic areas in the LMA's exhausts the geographic boundaries of the State. A proportional adjustment is applied to all substate LMA estimates to ensure that the sub-State estimates of employment and unemployment add to the independent State totals.

5. *Benchmark correction procedures*. Once each year, monthly estimates prepared by the State employment security agencies using UI-based estimating procedures are adjusted, or benchmarked, by BLS to the annual average CPS estimates for the 39 States and the District of Columbia for which monthly CPS estimates are not used directly. This adjustment is made because the State-prepared monthly estimates are not as reliable as the CPS annual averages due to the limitations of the 6-month moving average adjustment procedure. Revisions to the inputs used in the UI-based estimates are also made at the time of the annual benchmark.

The State wide benchmarked estimates are produced in three stages. First the monthly UI-based estimates are adjusted by the ratio of the CPS to the UI-based annual averages. Second, the difference between the ratio of annual averages for two consecutive years is wedged into the monthly estimates in order to minimize the disturbance to the original series. Finally, the third-stage estimates are forced into agreement with CPS annual averages. In the 11 States for which CPS estimates are used monthly, no benchmark correction is required, as the average of the 12 monthly State CPS estimates will equal CPS annual averages.

Seasonal Adjustment

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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