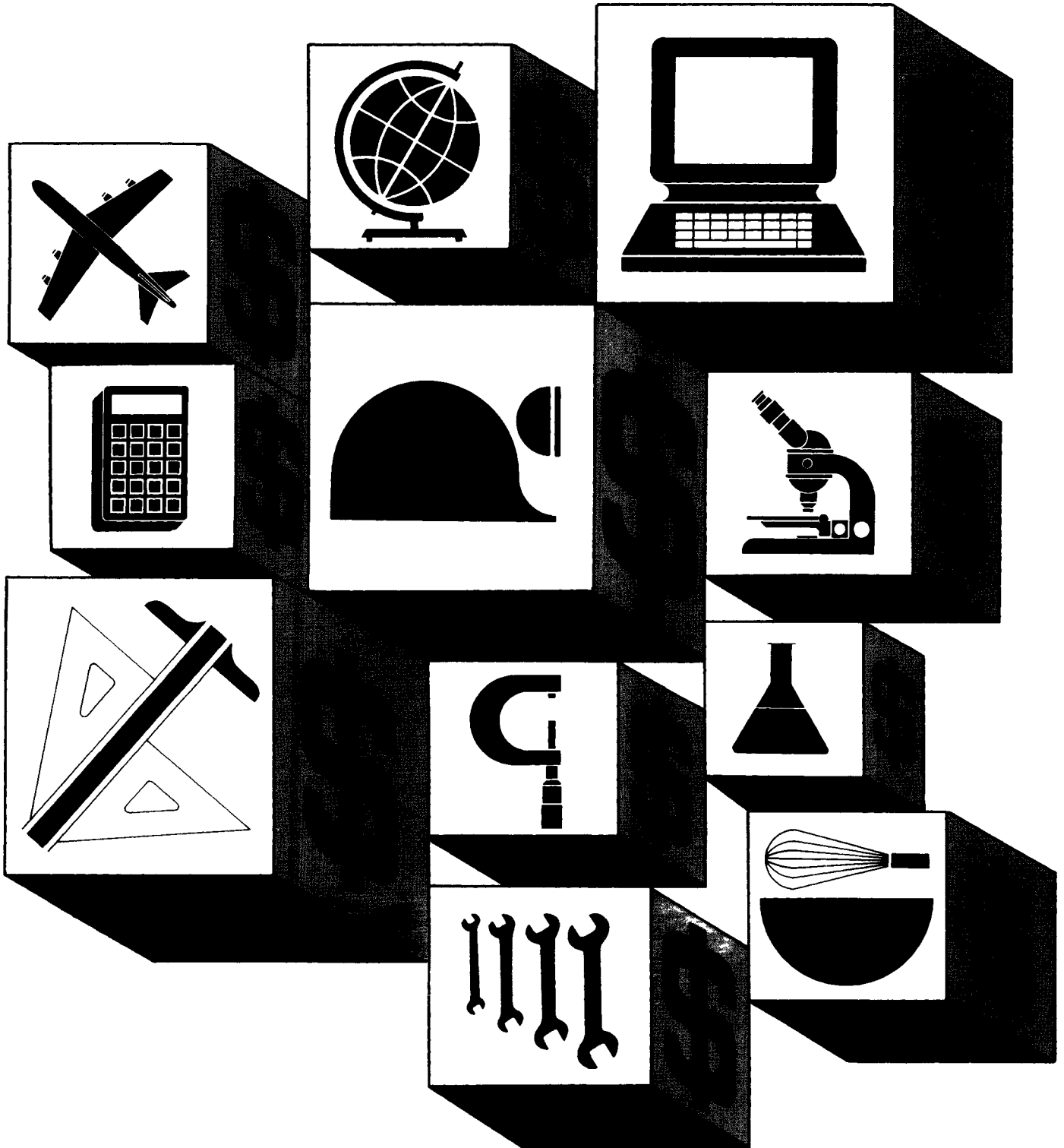




EMPLOYMENT AND EARNINGS

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





U.S. DEPARTMENT OF LABOR
Elizabeth Dole, Secretary

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

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

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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.
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Establishment data

National annual averages:	
Industry divisions (preliminary)	Jan.

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

Annual averages	May
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¹ The latest supplement was published in August 1989

Employment and Earnings

Vol. 36 No. 9 September 1989

Editors: Gloria Peterson Green, Rosalie K. Epstein

Editors' Note

With the release of data for August 1989, household survey statistics derived from the Current Population Survey (CPS) reflect a complete reprogramming of the processing system. This reprogramming was necessitated by modifications in the Census Bureau's computing environment and provided an opportunity to make some refinements to all phases of CPS processing at the Census Bureau, including editing, weighting, and tabulation of survey responses. These refinements tend to cause slight differences in estimates of levels for the various labor force characteristics from the estimates the old system would have produced but virtually no differences, in most cases, in percentages or rates derived from these estimates.

Third-quarter and annual averages for 1989 will be based completely on data derived from the new processing system and thus can be expected to differ slightly from the results that would be obtained by combining the monthly data through July, based on the old system, with the monthly data for August forward, based on the reprogrammed system.

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Employment and Unemployment Developments, August 1989

Employment rose moderately and unemployment was unchanged in August. The overall jobless rate was 5.1 percent and the civilian worker rate was 5.2 percent; both measures were 5.2 percent in July.

Nonagricultural payroll employment, as measured by the survey of business establishments, rose by 110,000 in August to 108.9 million. The overall increase would have been twice as large were it not for the effects of strike activity during the survey reference period. Total civilian employment, as measured by the survey of households, was little changed over the month.

Unemployment

At 6.4 million, seasonally adjusted, the number of unemployed persons was essentially unchanged in August. The civilian unemployment rate held at 5.2 percent over the month and has shown little movement since April. August jobless rates for adult men (4.4 percent), teenagers (14.5 percent), whites (4.5 percent), blacks (11.1 percent), and Hispanics (9.0 percent) were all about the same as in the previous month. The rate for adult women fell 0.3 percentage point to 4.7 percent, after rising by half a point over the prior 5 months. (See tables A-33 and A-34.)

At 11.3 weeks in August, mean duration of unemployment declined over the month, as the number of long-term unemployed—those jobless for 15 weeks or more—fell by 170,000. Median duration of unemployment was also lower in August than in July, but that change resulted primarily from an improved method of calculating the median. (See table A-40.)

Civilian employment and the labor force

Total civilian employment was 117.6 million, seasonally adjusted, in August, little changed from the previous month. The proportion of the working-age population that was employed (the employment-population ratio) held at 63.0 percent. It has been at or near that high level since the beginning of the year. (See table A-33.)

The civilian labor force (124.0 million) and the labor force participation rate (66.5 percent) both were unchanged from July, after seasonal adjustment. Over the past year, the labor force has risen by 2.0 million. (See table A-33.)

Industry payroll employment

Total nonagricultural payroll employment rose by 110,000 in August to a seasonally adjusted level of 108.9 million. The size of the increase was reduced by a net loss of 108,000 workers from payrolls due to labor-management disputes. Over the past year, nonfarm employment has increased by 3.0 million. (See table B-4.)

In the goods-producing sector, mining employment grew by 20,000 in August, as workers in the coal industry returned to work from wildcat strikes. Construction employment increased slightly in August, following a large job gain in the previous month.

Manufacturing employment showed little growth over the month. In the durable goods sector, only the auto industry posted a substantial gain, as an increase of 25,000 offset declines in the previous 2 months. Job losses continued in the electrical equipment industry, where employment has declined by more than 40,000 since last November. Employment in nondurable goods was virtually unchanged in August. Food industry employment fell slightly after showing gains in the previous 2 months, and printing and publishing continued its pattern of small job gains.

In the service-producing sector, employment in communication and public utilities fell by 130,000, due to the strikes in the telephone communications industry. Job growth in finance, insurance, and real estate was especially strong—25,000. Employment in the services industry rose by 85,000; the health services component increased by 50,000, continuing its strong growth, while employment in business services rose by 20,000, reversing a decrease in the previous month. Over the year, employment in services has grown by 1.3 million. Retail and wholesale trade both showed little job growth in August.

Weekly hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls declined by 0.2 hour in August to 34.6 hours, seasonally adjusted, following an increase of the same magnitude in July. The manufacturing workweek and factory overtime both edged down 0.1 hour to 40.9 hours and 3.8 hours, respectively. (See table C-5.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls

declined by 0.5 percent to 128.5 (1977 = 100), after seasonal adjustment. The manufacturing index was 96.4 for the fourth consecutive month. (See table C-6.)

Hourly and weekly earnings

Average hourly earnings of private production or

nonsupervisory workers were about unchanged in August, after seasonal adjustment, while average weekly earnings declined by 0.7 percent. Prior to seasonal adjustment, average hourly earnings fell 3 cents to \$9.60, and average weekly earnings declined \$2.01 to \$336.00. Over the year, both average hourly and average weekly earnings increased by 3.9 percent. (See tables C-1 and C-7.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
September	October 6	December	January 5
October	November 3	January	February 2
November	December 8	February	March 9

**HOUSEHOLD DATA
HISTORICAL**

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

(Numbers in thousands)

Year and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
1955	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660	
1956	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402	
1957	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336	
1958	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088	
1959	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960	
1960 ¹	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617	
1961	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312	
1962 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	52,257	
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	
1988	186,322	123,378	66.2	116,677	1,709	114,968	3,169	111,800	6,701	5.4	62,944	
Monthly data, seasonally adjusted²												
1988:												
August	186,522	123,692	66.3	116,895	1,692	115,203	3,142	112,061	6,797	5.5	62,830	
September	186,666	123,688	66.3	117,074	1,704	115,370	3,176	112,194	6,614	5.3	62,978	
October	186,801	123,778	66.3	117,260	1,687	115,573	3,238	112,335	6,518	5.3	63,023	
November	186,949	124,215	66.4	117,652	1,705	115,947	3,238	112,709	6,563	5.3	62,734	
December	187,098	124,259	66.4	117,705	1,696	116,009	3,193	112,816	6,554	5.3	62,839	
1989:												
January	187,340	125,124	66.8	118,407	1,696	116,711	3,300	113,411	6,716	5.4	62,216	
February	187,461	124,865	66.6	118,537	1,684	116,853	3,223	113,630	6,328	5.1	62,596	
March	187,581	124,948	66.6	118,820	1,684	117,136	3,206	113,930	6,128	4.9	62,633	
April	187,708	125,343	66.8	118,797	1,684	117,113	3,104	114,009	6,546	5.2	62,365	
May	187,854	125,283	66.7	118,888	1,673	117,215	3,112	114,102	6,395	5.1	62,571	
June	187,995	125,768	66.9	119,207	1,666	117,541	3,096	114,445	6,561	5.2	62,228	
July	188,149	125,622	66.8	119,125	1,666	117,459	3,219	114,240	6,497	5.2	62,527	
August	188,286	125,706	66.8	119,285	1,688	117,597	3,307	114,290	6,421	5.1	62,580	

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

² The population and Armed Forces figures are not adjusted for

seasonal variation.

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

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

(Numbers in thousands)

Sex, year, and month	Noninstitutional population	Labor force									Not in labor force	
		Number	Percent of population	Employed						Unemployed		
				Total	Resident Armed Forces	Civilian			Number	Percent of labor force		
						Total	Agriculture	Nonagricultural industries				
Annual averages												
MEN												
1978 ¹	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	
1988	89,404	68,474	76.6	64,820	1,547	63,273	2,493	60,780	3,655	5.3	20,930	
Monthly data, seasonally adjusted²												
1988:												
August	89,504	68,685	76.7	64,931	1,529	63,402	2,491	60,911	3,754	5.5	20,819	
September	89,577	68,604	76.6	65,015	1,540	63,475	2,488	60,987	3,589	5.2	20,973	
October	89,637	68,569	76.5	64,976	1,526	63,450	2,544	60,906	3,593	5.2	21,068	
November	89,716	68,686	76.6	65,074	1,542	63,532	2,533	60,999	3,612	5.3	21,030	
December	89,792	68,638	76.4	65,055	1,534	63,521	2,477	61,044	3,583	5.2	21,154	
1989:												
January	89,914	69,032	76.8	65,322	1,532	63,790	2,501	61,289	3,710	5.4	20,882	
February	89,973	69,113	76.8	65,572	1,521	64,051	2,509	61,542	3,540	5.1	20,860	
March	90,032	69,190	76.9	65,920	1,521	64,399	2,497	61,902	3,270	4.7	20,842	
April	90,094	69,360	77.0	65,767	1,521	64,246	2,440	61,806	3,593	5.2	20,734	
May	90,167	69,114	76.7	65,713	1,511	64,202	2,447	61,755	3,401	4.9	21,053	
June	90,237	69,507	77.0	66,110	1,501	64,609	2,455	62,154	3,397	4.9	20,730	
July	90,315	69,245	76.7	65,961	1,499	64,462	2,552	61,909	3,284	4.7	21,070	
August	90,384	69,337	76.7	65,934	1,519	64,415	2,622	61,792	3,403	4.9	21,047	
Annual averages												
WOMEN												
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	43,088	
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	
1988	96,918	54,904	56.6	51,858	162	51,696	676	51,020	3,046	5.5	42,014	
Monthly data, seasonally adjusted²												
1988:												
August	97,018	55,007	56.7	51,964	163	51,801	651	51,150	3,043	5.5	42,011	
September	97,089	55,084	56.7	52,059	164	51,895	688	51,207	3,025	5.5	42,005	
October	97,164	55,209	56.8	52,284	161	52,123	694	51,429	2,925	5.3	41,955	
November	97,234	55,529	57.1	52,578	163	52,415	705	51,710	2,951	5.3	41,705	
December	97,306	55,621	57.2	52,650	162	52,488	716	51,772	2,971	5.3	41,685	
1989:												
January	97,427	56,091	57.6	53,085	164	52,921	799	52,122	3,006	5.4	41,336	
February	97,488	55,752	57.2	52,965	163	52,802	713	52,089	2,787	5.0	41,736	
March	97,550	55,758	57.2	52,900	163	52,737	709	52,028	2,858	5.1	41,792	
April	97,614	55,983	57.4	53,029	163	52,866	663	52,203	2,953	5.3	41,631	
May	97,687	56,169	57.5	53,175	162	53,013	666	52,347	2,994	5.3	41,518	
June	97,758	56,261	57.6	53,097	165	52,932	641	52,290	3,164	5.6	41,497	
July	97,834	56,377	57.6	53,164	167	52,997	666	52,331	3,213	5.7	41,457	
August	97,902	56,370	57.6	53,352	169	53,183	685	52,498	3,018	5.4	41,532	

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

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

**HOUSEHOLD DATA
HISTORICAL**

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

(Numbers in thousands)

Year and month	Civilian noninstitutional population	Civilian labor force				Unemployment rates		
		Total	Percent of population	Employed	Unemployed	Total	Men	Women
Annual averages								
1955	109,683	65,023	59.3	62,170	2,852	4.4	4.2	4.9
1956	110,954	66,552	60.0	63,799	2,750	4.1	3.8	4.8
1957	112,265	66,929	59.6	64,071	2,859	4.3	4.1	4.7
1958	113,727	67,639	59.5	63,036	4,602	6.8	6.8	6.8
1959	115,329	68,369	59.3	64,630	3,740	5.5	5.2	5.9
1960 ¹	117,245	69,628	59.4	65,778	3,852	5.5	5.4	5.9
1961	118,771	70,459	59.3	65,746	4,714	6.7	6.4	7.2
1962 ¹	120,153	70,614	58.8	66,702	3,911	5.5	5.2	6.2
1963	122,416	71,833	58.7	67,762	4,070	5.7	5.2	6.5
1964	124,485	73,091	58.7	69,305	3,786	5.2	4.6	6.2
1965	126,513	74,455	58.9	71,088	3,366	4.5	4.0	5.5
1966	128,058	75,770	59.2	72,895	2,875	3.8	3.2	4.8
1967	129,874	77,347	59.6	74,372	2,975	3.8	3.1	5.2
1968	132,028	78,737	59.6	75,920	2,817	3.6	2.9	4.8
1969	134,335	80,734	60.1	77,902	2,832	3.5	2.8	4.7
1970	137,085	82,771	60.4	78,678	4,093	4.9	4.4	5.9
1971	140,216	84,382	60.2	79,367	5,016	5.9	5.3	6.9
1972 ¹	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 ¹	147,096	89,429	60.8	85,064	4,365	4.9	4.2	6.0
1974	150,120	91,949	61.3	86,794	5,156	5.6	4.9	6.7
1975	153,153	93,775	61.2	85,846	7,929	8.5	7.9	9.3
1976	156,150	96,158	61.6	88,752	7,406	7.7	7.1	8.6
1977	159,033	99,009	62.3	92,017	6,991	7.1	6.3	8.2
1978 ¹	161,910	102,251	63.2	96,048	6,202	6.1	5.3	7.2
1979	164,863	104,962	63.7	98,824	6,137	5.8	5.1	6.8
1980	167,745	106,940	63.8	99,303	7,637	7.1	6.9	7.4
1981	170,130	108,670	63.9	100,397	8,273	7.6	7.4	7.9
1982	172,271	110,204	64.0	99,526	10,678	9.7	9.9	9.4
1983	174,215	111,550	64.0	100,834	10,717	9.6	9.9	9.2
1984	176,383	113,544	64.4	105,005	8,539	7.5	7.4	7.6
1985	178,206	115,461	64.8	107,150	8,312	7.2	7.0	7.4
1986 ¹	180,587	117,834	65.3	109,597	8,237	7.0	6.9	7.1
1987	182,753	119,865	65.6	112,440	7,425	6.2	6.2	6.2
1988	184,613	121,669	65.9	114,968	6,701	5.5	5.5	5.6
Monthly data, seasonally adjusted²								
1988:								
August	184,830	122,000	66.0	115,203	6,797	5.6	5.6	5.5
September	184,962	121,984	66.0	115,370	6,614	5.4	5.4	5.5
October	185,114	122,091	66.0	115,573	6,518	5.3	5.4	5.3
November	185,244	122,510	66.1	115,947	6,563	5.4	5.4	5.3
December	185,402	122,563	66.1	116,009	6,554	5.3	5.3	5.4
1989:								
January	185,644	123,428	66.5	116,711	6,716	5.4	5.5	5.4
February	185,777	123,181	66.3	116,853	6,328	5.1	5.2	5.0
March	185,897	123,264	66.3	117,136	6,128	5.0	4.8	5.1
April	186,024	123,659	66.5	117,113	6,546	5.3	5.3	5.3
May	186,181	123,610	66.4	117,215	6,395	5.2	5.0	5.3
June	186,329	124,102	66.6	117,541	6,561	5.3	5.0	5.6
July	186,483	123,956	66.5	117,459	6,497	5.2	4.8	5.7
August	186,598	124,018	66.5	117,597	6,421	5.2	5.0	5.4

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 1989										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
TOTAL											
16 years and over	186,598	125,444	67.2	119,092	6,352	5.1	61,155	27,391	1,829	3,459	28,475
16 to 19 years	14,160	9,276	65.5	8,137	1,140	12.3	4,884	712	691	48	3,434
16 to 17 years	6,826	3,810	55.8	3,261	549	14.4	3,016	260	357	12	2,387
18 to 19 years	7,334	5,466	74.5	4,875	591	10.8	1,868	452	334	36	1,047
20 to 24 years	17,983	14,843	82.5	13,631	1,212	8.2	3,140	1,486	549	58	1,046
25 to 54 years	103,836	86,234	83.0	82,671	3,563	4.1	17,602	11,988	573	1,330	3,711
25 to 34 years	42,876	35,850	83.6	34,061	1,789	5.0	7,026	4,986	380	346	1,314
25 to 29 years	21,161	17,709	83.7	16,770	939	5.3	3,452	2,356	278	151	666
30 to 34 years	21,715	18,141	83.5	17,291	850	4.7	3,574	2,630	102	195	647
35 to 44 years	36,167	30,561	84.5	29,390	1,171	3.8	5,606	3,820	155	486	1,144
35 to 39 years	19,432	16,332	84.0	15,637	694	4.3	3,100	2,168	99	256	577
40 to 44 years	16,735	14,230	85.0	13,753	477	3.3	2,506	1,653	56	230	567
45 to 54 years	24,794	19,823	80.0	19,220	603	3.0	4,971	3,182	37	498	1,253
45 to 49 years	13,464	11,144	82.8	10,779	365	3.3	2,320	1,498	31	213	577
50 to 54 years	11,330	8,679	76.6	8,441	237	2.7	2,651	1,684	6	285	676
55 to 64 years	21,406	11,730	54.8	11,372	357	3.0	9,676	4,435	15	793	4,434
55 to 59 years	10,647	7,000	65.7	6,780	220	3.1	3,648	1,944	7	410	1,286
60 to 64 years	10,759	4,730	44.0	4,593	138	2.9	6,028	2,491	7	383	3,148
65 years and over	29,213	3,361	11.5	3,281	80	2.4	25,852	8,770	2	1,230	15,851
65 to 69 years	10,033	2,016	20.1	1,972	44	2.2	8,018	2,794	2	293	4,928
70 to 74 years	7,807	862	11.0	832	30	3.5	6,945	2,349		238	4,357
75 years and over	11,373	483	4.2	477	6	1.2	10,890	3,626		699	6,565
Men											
16 years and over	88,865	69,068	77.7	65,912	3,157	4.6	19,797	514	884	1,950	16,449
16 to 19 years	7,111	4,901	68.9	4,308	593	12.1	2,210	45	325	26	1,814
16 to 17 years	3,519	2,079	59.1	1,789	290	14.0	1,439	19	161	7	1,253
18 to 19 years	3,592	2,822	78.6	2,519	303	10.7	770	26	164	20	561
20 to 24 years	8,711	7,797	89.5	7,142	656	8.4	914	33	252	45	584
25 to 54 years	50,799	47,656	93.8	46,002	1,654	3.5	3,142	184	295	890	1,772
25 to 34 years	21,114	20,008	94.8	19,202	806	4.0	1,106	87	203	243	572
25 to 29 years	10,396	9,799	94.3	9,365	433	4.4	598	54	142	108	294
30 to 34 years	10,717	10,209	95.3	9,837	372	3.6	508	34	61	136	278
35 to 44 years	17,660	16,664	94.4	16,111	554	3.3	995	54	79	331	532
35 to 39 years	9,534	9,012	94.5	8,681	331	3.7	522	35	51	172	265
40 to 44 years	8,126	7,652	94.2	7,429	223	2.9	473	18	28	160	267
45 to 54 years	12,025	10,984	91.3	10,689	295	2.7	1,041	44	14	316	668
45 to 49 years	6,560	6,094	92.9	5,927	167	2.7	466	17	8	140	301
50 to 54 years	5,465	4,890	89.5	4,762	128	2.6	575	26	6	176	367
55 to 64 years	10,097	6,723	66.6	6,516	207	3.1	3,374	75	12	479	2,808
55 to 59 years	5,075	4,014	79.1	3,895	119	3.0	1,061	16	6	259	780
60 to 64 years	5,022	2,709	53.9	2,621	89	3.3	2,313	59	6	220	2,029
65 years and over	12,147	1,991	16.4	1,944	47	2.3	10,156	177		510	9,471
65 to 69 years	4,538	1,156	25.5	1,132	24	2.1	3,382	35		167	3,180
70 to 74 years	3,399	540	15.9	518	22	4.1	2,859	47		114	2,699
75 years and over	4,210	294	7.0	294	-	.1	3,915	95		229	3,591
Women											
16 years and over	97,733	56,375	57.7	53,180	3,195	5.7	41,357	26,876	946	1,508	12,027
16 to 19 years	7,049	4,375	62.1	3,828	547	12.5	2,674	666	366	22	1,620
16 to 17 years	3,307	1,731	52.3	1,472	259	14.9	1,577	241	197	6	1,134
18 to 19 years	3,742	2,644	70.7	2,356	288	10.9	1,098	426	170	16	486
20 to 24 years	9,272	7,046	76.0	6,489	556	7.9	2,226	1,453	297	13	463
25 to 54 years	53,038	38,578	72.7	36,670	1,908	4.9	14,460	11,804	277	440	1,938
25 to 34 years	21,762	15,842	72.8	14,859	984	6.2	5,920	4,899	178	102	741
25 to 29 years	10,765	7,910	73.5	7,405	506	6.4	2,854	2,303	136	43	372
30 to 34 years	10,997	7,932	72.1	7,454	478	6.0	3,066	2,596	41	59	369
35 to 44 years	18,507	13,897	75.1	13,280	617	4.4	4,610	3,767	77	155	612
35 to 39 years	9,898	7,320	74.0	6,956	364	5.0	2,578	2,132	49	84	312
40 to 44 years	8,609	6,577	76.4	6,324	253	3.9	2,032	1,634	28	71	300
45 to 54 years	12,768	8,839	69.2	8,531	308	3.5	3,930	3,138	23	183	585
45 to 49 years	6,904	5,050	73.2	4,853	198	3.9	1,853	1,481	22	73	277
50 to 54 years	5,865	3,789	64.6	3,679	110	2.9	2,076	1,657	1	109	309
55 to 64 years	11,309	5,007	44.3	4,857	150	3.0	6,302	4,360	3	314	1,625
55 to 59 years	5,572	2,986	53.6	2,885	101	3.4	2,586	1,928	1	151	506
60 to 64 years	5,736	2,021	35.2	1,972	49	2.4	3,715	2,432	2	163	1,119
65 years and over	17,066	1,370	8.0	1,336	33	2.4	15,696	8,593	2	720	6,380
65 to 69 years	5,495	859	15.6	839	20	2.3	4,636	2,759	2	127	1,748
70 to 74 years	4,408	322	7.3	314	8	2.4	4,086	2,302	1	124	1,658
75 years and over	7,163	188	2.6	183	6	3.1	6,974	3,531		469	2,974

**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 1989										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
WHITE											
16 years and over	159,470	107,597	67.5	102,938	4,659	4.3	51,872	23,683	1,233	2,631	24,325
16 to 19 years	11,501	7,945	69.1	7,122	823	10.4	3,556	509	441	37	2,569
16 to 17 years	5,448	3,231	59.3	2,827	404	12.5	2,217	183	230	8	1,796
18 to 19 years	6,053	4,714	77.9	4,295	419	8.9	1,339	326	211	28	773
20 to 24 years	14,826	12,492	84.3	11,640	853	6.8	2,333	1,157	378	43	756
25 to 54 years	88,214	73,786	83.6	71,129	2,657	3.6	14,429	10,191	399	978	2,860
25 to 34 years	35,958	30,297	84.3	29,045	1,252	4.1	5,662	4,186	263	239	973
25 to 29 years	17,668	14,918	84.4	14,298	620	4.2	2,750	1,969	196	104	481
30 to 34 years	18,290	15,379	84.1	14,747	632	4.1	2,912	2,217	67	136	492
35 to 44 years	30,890	26,233	84.9	25,315	918	3.5	4,657	3,262	110	397	889
35 to 39 years	16,440	13,900	84.5	13,361	538	3.9	2,540	1,841	70	203	425
40 to 44 years	14,450	12,333	85.3	11,953	380	3.1	2,117	1,420	40	193	463
45 to 54 years	21,366	17,256	80.8	16,769	487	2.8	4,110	2,744	25	342	999
45 to 49 years	11,624	9,739	83.8	9,445	294	3.0	1,885	1,271	19	152	443
50 to 54 years	9,742	7,517	77.2	7,324	193	2.6	2,225	1,473	6	190	556
55 to 64 years	18,707	10,384	55.5	10,107	277	2.7	8,322	3,861	12	588	3,861
55 to 59 years	9,236	6,143	66.5	5,975	168	2.7	3,093	1,689	6	301	1,097
60 to 64 years	9,470	4,241	44.8	4,132	109	2.6	5,230	2,172	7	287	2,764
65 years and over	26,222	2,990	11.4	2,941	49	1.7	23,232	7,965	2	985	14,279
65 to 69 years	8,914	1,802	20.2	1,773	29	1.6	7,112	2,487	2	224	4,400
70 to 74 years	7,014	747	10.7	733	14	1.9	6,267	2,152		197	3,918
75 years and over	10,293	441	4.3	435	6	1.4	9,852	3,326		565	5,962
Men											
16 years and over	76,537	59,970	78.4	57,638	2,331	3.9	16,567	409	593	1,490	14,074
16 to 19 years	5,803	4,204	72.5	3,771	433	10.3	1,599	35	213	19	1,331
16 to 17 years	2,787	1,744	62.6	1,543	201	11.5	1,044	18	109	5	912
18 to 19 years	3,015	2,460	81.6	2,228	232	9.4	555	18	104	14	419
20 to 24 years	7,254	6,632	91.4	6,162	470	7.1	622	12	174	34	402
25 to 54 years	43,678	41,334	94.6	40,090	1,244	3.0	2,344	141	198	668	1,337
25 to 34 years	17,910	17,119	95.6	16,530	588	3.4	791	60	136	170	425
25 to 29 years	8,768	8,342	95.1	8,038	304	3.6	426	36	101	75	214
30 to 34 years	9,142	8,776	96.0	8,492	284	3.2	365	24	35	95	211
35 to 44 years	15,296	14,533	95.0	14,108	424	2.9	763	39	53	276	395
35 to 39 years	8,170	7,789	95.3	7,537	252	3.2	381	23	34	141	183
40 to 44 years	7,126	6,744	94.6	6,572	172	2.6	382	17	19	135	211
45 to 54 years	10,472	9,683	92.5	9,451	231	2.4	790	42	8	222	518
45 to 49 years	5,713	5,374	94.1	5,253	120	2.2	339	17	4	99	220
50 to 54 years	4,760	4,309	90.5	4,198	111	2.6	451	25	5	122	299
55 to 64 years	8,885	5,999	67.5	5,841	158	2.6	2,886	62	9	360	2,455
55 to 59 years	4,437	3,555	80.1	3,470	86	2.4	881	9	4	189	679
60 to 64 years	4,448	2,443	54.9	2,372	72	2.9	2,004	52	5	171	1,776
65 years and over	10,918	1,801	16.5	1,775	26	1.5	9,117	158		410	8,549
65 to 69 years	4,073	1,057	25.9	1,039	18	1.7	3,016	28		128	2,860
70 to 74 years	3,047	468	15.4	460	8	1.7	2,579	42		95	2,442
75 years and over	3,798	276	7.3	276	-	.1	3,522	88		187	3,247
Women											
16 years and over	82,933	47,628	57.4	45,300	2,328	4.9	35,306	23,274	639	1,141	10,251
16 to 19 years	5,698	3,741	65.7	3,352	389	10.4	1,957	474	228	17	1,238
16 to 17 years	2,661	1,488	55.9	1,284	203	13.7	1,173	165	121	3	884
18 to 19 years	3,037	2,253	74.2	2,067	186	8.3	784	308	107	14	354
20 to 24 years	7,572	5,860	77.4	5,477	383	6.5	1,711	1,145	204	9	354
25 to 54 years	44,537	32,452	72.9	31,039	1,413	4.4	12,085	10,050	201	319	1,523
25 to 34 years	18,049	13,178	73.0	12,514	664	5.0	4,871	4,126	127	70	548
25 to 29 years	8,900	6,576	73.9	6,260	316	4.8	2,324	1,933	95	29	267
30 to 34 years	9,149	6,602	72.2	6,255	348	5.3	2,546	2,193	32	41	281
35 to 44 years	15,594	11,700	75.0	11,206	494	4.2	3,894	3,222	57	121	494
35 to 39 years	8,270	6,111	73.9	5,824	286	4.7	2,159	1,818	36	63	242
40 to 44 years	7,324	5,589	76.3	5,382	208	3.7	1,735	1,404	21	58	252
45 to 54 years	10,894	7,574	69.5	7,318	255	3.4	3,320	2,702	17	120	481
45 to 49 years	5,911	4,365	73.9	4,192	173	4.0	1,546	1,254	16	52	224
50 to 54 years	4,983	3,208	64.4	3,126	82	2.6	1,775	1,448	1	68	257
55 to 64 years	9,822	4,385	44.6	4,266	120	2.7	5,437	3,799	3	228	1,407
55 to 59 years	4,800	2,588	53.9	2,505	82	3.2	2,212	1,679	1	112	419
60 to 64 years	5,023	1,797	35.8	1,760	37	2.1	3,225	2,120	2	116	988
65 years and over	15,304	1,189	7.8	1,166	23	1.9	14,115	7,806	3	576	5,730
65 to 69 years	4,842	746	15.4	734	12	1.5	4,096	2,459	2	96	1,540
70 to 74 years	3,967	279	7.0	273	6	2.1	3,688	2,110	1	102	1,475
75 years and over	6,495	165	2.5	159	6	3.5	6,330	3,238		378	2,715

**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 1989										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
BLACK											
16 years and over	21,060	13,694	65.0	12,197	1,497	10.9	7,366	2,842	399	757	3,367
16 to 19 years	2,173	1,092	50.3	801	291	26.6	1,081	176	197	7	702
16 to 17 years	1,150	488	42.4	358	130	26.7	663	69	104	2	488
18 to 19 years	1,023	605	59.1	444	161	26.6	418	107	92	5	214
20 to 24 years	2,475	1,855	74.9	1,541	314	16.9	620	280	103	14	223
25 to 54 years	11,831	9,429	79.7	8,627	802	8.5	2,402	1,284	98	319	700
25 to 34 years	5,318	4,276	80.4	3,798	478	11.2	1,042	607	64	95	276
25 to 29 years	2,677	2,133	79.7	1,851	282	13.2	544	293	49	44	157
30 to 34 years	2,641	2,143	81.1	1,947	196	9.1	499	314	15	51	119
35 to 44 years	3,951	3,261	82.5	3,036	225	6.9	691	366	28	84	213
35 to 39 years	2,207	1,792	81.2	1,652	139	7.8	416	217	17	52	130
40 to 44 years	1,744	1,469	84.2	1,383	86	5.8	275	150	11	31	84
45 to 54 years	2,562	1,892	73.9	1,793	99	5.2	669	312	7	141	211
45 to 49 years	1,344	1,015	75.5	954	61	6.0	329	159	6	54	110
50 to 54 years	1,217	877	72.0	839	38	4.3	341	152	1	87	101
55 to 64 years	2,122	1,013	47.7	954	59	5.8	1,109	441	1	180	487
55 to 59 years	1,100	657	59.7	619	38	5.7	443	193	1	94	155
60 to 64 years	1,022	356	34.8	334	21	6.0	666	248		86	332
65 years and over	2,459	305	12.4	275	30	9.9	2,153	661		238	1,255
65 to 69 years	907	169	18.7	155	14	8.5	738	247		68	422
70 years and over	1,551	136	8.8	120	16	11.8	1,415	413		170	832
Men											
16 years and over	9,457	6,850	72.4	6,128	722	10.5	2,607	94	179	415	1,917
16 to 19 years	1,073	587	54.7	442	145	24.6	486	6	89	7	385
16 to 17 years	612	291	47.5	211	80	27.6	321	1	43	2	276
18 to 19 years	461	296	64.2	231	64	21.8	165	5	46	5	109
20 to 24 years	1,128	913	81.0	754	159	17.4	215	21	40	10	144
25 to 54 years	5,304	4,662	87.9	4,297	365	7.8	642	39	49	200	354
25 to 34 years	2,409	2,169	90.1	1,980	190	8.7	239	24	30	65	120
25 to 29 years	1,212	1,076	88.8	963	114	10.6	136	18	19	31	68
30 to 34 years	1,197	1,093	91.3	1,017	76	6.9	104	7	11	34	52
35 to 44 years	1,745	1,558	89.3	1,439	119	7.6	187	13	16	51	107
35 to 39 years	985	864	87.7	793	72	8.3	121	11	8	31	70
40 to 44 years	760	694	91.3	646	47	6.8	66	2	8	20	37
45 to 54 years	1,150	934	81.2	878	57	6.1	216	1	4	84	126
45 to 49 years	614	507	82.5	464	43	8.5	107	-	3	38	66
50 to 54 years	536	428	79.8	414	13	3.2	108	1	1	46	60
55 to 64 years	960	535	55.7	501	33	6.2	426	13	2	101	310
55 to 59 years	500	346	69.2	322	24	6.9	154	7	2	60	86
60 to 64 years	460	188	40.9	179	10	5.1	272	6		42	224
65 years and over	991	154	15.6	134	20	13.1	837	15		97	725
65 to 69 years	372	76	20.3	69	6	8.2	297	4		38	255
70 years and over	619	79	12.7	65	14	17.8	540	12		60	469
Women											
16 years and over	11,603	6,844	59.0	6,070	775	11.3	4,759	2,747	220	342	1,450
16 to 19 years	1,100	506	46.0	359	146	28.9	594	170	108	-	317
16 to 17 years	538	197	36.6	147	50	25.3	341	67	62		212
18 to 19 years	562	309	55.0	212	97	31.3	253	102	46		105
20 to 24 years	1,348	942	69.9	787	155	16.5	406	259	63	4	79
25 to 54 years	6,527	4,767	73.0	4,330	437	9.2	1,760	1,246	49	119	346
25 to 34 years	2,910	2,107	72.4	1,818	288	13.7	803	582	35	30	156
25 to 29 years	1,465	1,057	72.1	888	169	15.9	408	275	30	13	89
30 to 34 years	1,445	1,050	72.7	930	120	11.4	395	307	4	17	67
35 to 44 years	2,206	1,703	77.2	1,597	106	6.2	503	353	11	33	106
35 to 39 years	1,222	927	75.9	860	68	7.3	295	205	8	21	60
40 to 44 years	984	776	78.8	737	39	5.0	209	148	3	11	46
45 to 54 years	1,411	958	67.9	915	42	4.4	454	310	3	56	84
45 to 49 years	730	509	69.7	491	18	3.5	222	160	3	15	44
50 to 54 years	681	449	65.9	425	24	5.4	232	151		41	41
55 to 64 years	1,162	478	41.2	452	26	5.4	683	427		78	178
55 to 59 years	600	310	51.8	297	14	4.5	289	186		34	69
60 to 64 years	562	168	29.8	156	12	7.1	394	242		44	108
65 years and over	1,467	151	10.3	141	10	6.7	1,316	645		141	530
65 to 69 years	535	94	17.5	85	8	8.6	441	244		31	167
70 years and over	932	57	6.1	55	2	(¹)	875	402		110	363

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 1989								Not in labor force
	Civilian noninstitutional population	Civilian labor force							
		Total	Percent of population	Employed			Unemployed		
				Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
TOTAL									
16 years and over	27,128	17,846	65.8	16,154	225	15,929	1,692	9.5	9,282
16 to 19 years	2,659	1,331	50.0	1,014	34	981	317	23.8	1,328
16 to 17 years	1,378	579	42.0	434	30	404	145	25.0	799
18 to 19 years	1,281	752	58.7	580	4	576	172	22.9	529
20 to 24 years	3,157	2,351	74.5	1,991	20	1,971	359	15.3	806
25 to 54 years	15,622	12,449	79.7	11,543	129	11,414	906	7.3	3,173
25 to 34 years	6,917	5,553	80.3	5,016	58	4,958	537	9.7	1,364
25 to 29 years	3,493	2,791	79.9	2,472	35	2,437	319	11.4	702
30 to 34 years	3,425	2,762	80.7	2,544	23	2,521	218	7.9	662
35 to 44 years	5,277	4,329	82.0	4,076	45	4,031	253	5.8	948
35 to 39 years	2,992	2,432	81.3	2,276	24	2,252	156	6.4	560
40 to 44 years	2,285	1,896	83.0	1,800	21	1,779	97	5.1	388
45 to 54 years	3,428	2,567	74.9	2,451	26	2,425	116	4.5	861
45 to 49 years	1,840	1,405	76.4	1,334	8	1,326	71	5.1	435
50 to 54 years	1,588	1,162	73.2	1,117	18	1,099	44	3.8	426
55 to 64 years	2,699	1,345	49.8	1,265	22	1,243	80	6.0	1,354
55 to 59 years	1,411	856	60.7	805	13	792	52	6.0	555
60 to 64 years	1,288	489	38.0	461	10	451	29	5.9	799
65 years and over	2,991	371	12.4	340	20	321	30	8.2	2,621
65 to 69 years	1,119	213	19.1	199	11	188	14	6.7	905
70 to 74 years	793	115	14.6	99	6	94	16	13.9	678
75 years and over	1,079	42	3.9	42	3	39	-	(¹)	1,038
Men									
16 years and over	12,329	9,098	73.8	8,273	193	8,081	825	9.1	3,230
16 to 19 years	1,308	697	53.3	537	33	504	159	22.9	611
16 to 17 years	732	336	45.9	246	30	216	89	26.6	396
18 to 19 years	577	361	62.7	291	3	288	70	19.4	215
20 to 24 years	1,457	1,165	80.0	980	13	966	186	15.9	292
25 to 54 years	7,121	6,322	88.8	5,912	110	5,802	410	6.5	799
25 to 34 years	3,204	2,889	90.2	2,672	51	2,620	217	7.5	315
25 to 29 years	1,628	1,456	89.5	1,327	32	1,296	129	8.9	172
30 to 34 years	1,576	1,433	90.9	1,344	20	1,325	88	6.2	143
35 to 44 years	2,364	2,132	90.2	2,002	38	1,964	129	6.1	233
35 to 39 years	1,364	1,223	89.6	1,145	19	1,125	78	6.4	141
40 to 44 years	1,000	909	90.9	857	19	838	51	5.6	91
45 to 54 years	1,553	1,301	83.8	1,238	20	1,218	64	4.9	252
45 to 49 years	848	720	85.0	673	6	667	47	6.5	127
50 to 54 years	705	581	82.4	565	14	551	16	2.8	124
55 to 64 years	1,213	724	59.7	674	17	657	49	6.8	489
55 to 59 years	638	458	71.8	425	8	417	33	7.1	180
60 to 64 years	574	266	46.3	249	9	240	17	6.3	309
65 years and over	1,230	190	15.5	170	19	151	20	10.7	1,039
65 to 69 years	466	100	21.4	94	10	83	6	6.3	366
70 to 74 years	352	72	20.4	58	6	52	14	(¹)	280
75 years and over	412	19	4.5	19	3	16	-	(¹)	393
Women									
16 years and over	14,800	8,748	59.1	7,881	33	7,848	867	9.9	6,052
16 to 19 years	1,351	634	46.9	477	1	476	157	24.8	717
16 to 17 years	646	243	37.6	188	-	188	56	22.8	403
18 to 19 years	705	391	55.4	289	1	288	102	26.0	314
20 to 24 years	1,700	1,186	69.7	1,012	7	1,005	174	14.6	514
25 to 54 years	8,501	6,126	72.1	5,631	19	5,612	495	8.1	2,375
25 to 34 years	3,714	2,664	71.7	2,344	7	2,337	320	12.0	1,049
25 to 29 years	1,865	1,335	71.6	1,145	3	1,141	190	14.2	530
30 to 34 years	1,849	1,330	71.9	1,199	3	1,196	130	9.8	519
35 to 44 years	2,913	2,197	75.4	2,074	7	2,067	123	5.6	716
35 to 39 years	1,628	1,209	74.3	1,132	4	1,127	78	6.4	419
40 to 44 years	1,285	988	76.9	942	2	940	45	4.6	297
45 to 54 years	1,875	1,265	67.5	1,213	6	1,207	52	4.1	609
45 to 49 years	992	685	69.0	661	2	658	24	3.5	308
50 to 54 years	882	580	65.8	552	4	548	28	4.8	302
55 to 64 years	1,486	622	41.8	591	5	586	31	4.9	865
55 to 59 years	773	398	51.5	379	4	375	19	4.7	375
60 to 64 years	714	224	31.3	212	1	211	12	5.3	490
65 years and over	1,762	181	10.2	170	1	170	10	5.6	1,581
65 to 69 years	653	114	17.4	105	1	105	8	7.1	539
70 to 74 years	441	44	9.9	42		42	2	(¹)	397
75 years and over	668	23	3.5	23		23	-	(¹)	644

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
TOTAL								
Civilian noninstitutional population	184,830	186,598	80,669	81,754	89,670	90,684	14,491	14,160
Civilian labor force	123,396	125,444	63,396	64,167	50,637	52,000	9,363	9,276
Percent of population	66.8	67.2	78.6	78.5	56.5	57.3	64.6	65.5
Employed	116,737	119,092	60,594	61,603	48,003	49,352	8,140	8,137
Agriculture	3,455	3,633	2,438	2,529	650	682	368	422
Nonagricultural industries	113,282	115,460	58,156	59,074	47,354	48,670	7,773	7,715
Unemployed	6,659	6,352	2,803	2,564	2,633	2,648	1,222	1,140
Unemployment rate	5.4	5.1	4.4	4.0	5.2	5.1	13.1	12.3
Not in labor force	61,434	61,155	17,273	17,587	39,033	38,683	5,128	4,884
White								
Civilian noninstitutional population	158,340	159,470	69,968	70,734	76,539	77,235	11,833	11,501
Civilian labor force	106,146	107,597	55,233	55,766	42,884	43,886	8,028	7,945
Percent of population	67.0	67.5	78.9	78.8	56.0	56.8	67.8	69.1
Employed	101,213	102,938	53,094	53,868	40,985	41,948	7,134	7,122
Agriculture	3,210	3,407	2,240	2,370	620	650	350	388
Nonagricultural industries	98,003	99,531	50,854	51,498	40,365	41,298	6,784	6,734
Unemployed	4,933	4,659	2,139	1,898	1,899	1,938	894	823
Unemployment rate	4.6	4.3	3.9	3.4	4.4	4.4	11.1	10.4
Not in labor force	52,194	51,872	14,735	14,968	33,654	33,348	3,805	3,556
Black								
Civilian noninstitutional population	20,736	21,060	8,235	8,384	10,318	10,503	2,183	2,173
Civilian labor force	13,481	13,694	6,212	6,263	6,166	6,338	1,103	1,092
Percent of population	65.0	65.0	75.4	74.7	59.8	60.3	50.5	50.3
Employed	11,962	12,197	5,644	5,686	5,516	5,710	802	801
Agriculture	181	184	149	133	22	21	11	30
Nonagricultural industries	11,781	12,013	5,496	5,553	5,494	5,689	791	771
Unemployed	1,519	1,497	568	578	650	628	302	291
Unemployment rate	11.3	10.9	9.1	9.2	10.5	9.9	27.3	26.6
Not in labor force	7,255	7,366	2,023	2,120	4,152	4,165	1,079	1,081

**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 1989									
	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 ENROLLED										
Total, 16 to 24 years	3,588	2,132	59.4	1,959	944	1,015	173	59	114	8.1
16 to 19 years	1,812	964	53.2	881	335	546	83	18	65	8.6
20 to 24 years	1,776	1,168	65.8	1,078	609	469	90	41	49	7.7
High school	956	413	43.2	353	123	230	60	13	47	14.4
College	2,632	1,719	65.3	1,606	821	785	114	46	68	6.6
Full-time students	1,896	1,107	58.4	1,021	449	572	86	29	57	7.8
Part-time students	736	612	83.2	585	372	213	28	17	10	4.5
Men, 16 to 24 years	1,669	967	57.9	874	477	397	93	37	56	9.6
16 to 19 years	858	442	51.5	399	180	219	43	8	36	9.8
20 to 24 years	811	525	64.7	475	298	177	50	29	20	9.5
High school	533	240	45.0	197	84	113	42	13	30	17.7
College	1,136	727	64.0	676	393	284	51	24	26	7.0
Full-time students	836	472	56.5	431	225	205	42	18	24	8.8
Part-time students	301	255	84.7	246	168	78	9	6	3	3.5
Women, 16 to 24 years	1,919	1,166	60.7	1,085	467	619	80	22	58	6.9
16 to 19 years	954	522	54.7	482	155	327	40	11	29	7.6
20 to 24 years	965	644	66.7	603	311	292	41	12	29	6.3
High school	424	173	40.9	156	39	117	17	-	17	10.0
College	1,495	992	66.4	929	428	501	63	22	41	6.4
Full-time students	1,060	635	59.9	590	224	366	44	11	33	7.0
Part-time students	435	358	82.2	339	204	135	19	11	8	5.2
White										
Total, 16 to 24 years	2,797	1,782	63.7	1,671	827	844	111	41	70	6.2
16 to 19 years	1,396	818	58.6	769	303	467	49	7	42	5.9
20 to 24 years	1,401	964	68.8	902	524	377	63	34	29	6.5
Men	1,331	827	62.1	762	411	352	65	26	39	7.8
Women	1,467	955	65.1	909	416	493	47	15	31	4.9
High school	689	319	46.3	286	96	191	33	7	26	10.3
College	2,108	1,463	69.4	1,385	732	653	78	34	44	5.3
Full-time students	1,486	928	62.5	870	399	471	58	23	35	6.3
Part-time students	622	535	86.0	515	332	183	20	11	9	3.7
Black										
Total, 16 to 24 years	567	257	45.3	205	85	120	52	14	38	20.2
16 to 19 years	326	113	34.8	78	24	53	36	12	24	31.5
20 to 24 years	241	144	59.6	128	61	67	16	2	14	11.2
Men	222	90	40.8	71	41	30	19	7	13	21.0
Women	345	167	48.2	134	44	90	33	8	25	19.7
High school	214	70	32.6	42	16	26	28	7	21	(²)
College	354	188	53.1	164	69	95	24	8	16	12.8
Full-time students	283	133	46.9	113	42	71	20	4	16	14.9
Part-time students	70	55	78.1	51	27	24	4	4	1	(²)
Hispanic origin										
Total, 16 to 24 years	323	151	46.9	138	54	84	13	2	11	8.7
16 to 19 years	197	65	32.8	56	11	45	9	-	11	(²)
20 to 24 years	125	87	69.0	83	43	39	4	4	-	4.6
Men	140	73	51.8	60	21	40	12	2	10	(²)
Women	182	79	43.1	78	33	44	1	-	-	1.0
High school	129	26	19.9	16	6	10	9	-	11	(²)
College	193	126	65.0	122	48	74	4	4	-	3.1
Full-time students	97	47	48.4	47	4	43	-	-	1	(²)
Part-time students	96	78	81.8	75	44	31	4	5	-	4.8

See footnotes at end of table.

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

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	August 1989									
	Civilian noninstitutional population	Civilian labor force								
		Total	Percent of population	Employed			Unemployed			Percent of labor force
Total	Full time ¹			Part time ¹	Total	Looking for full-time work	Looking for part-time work			
TOTAL NOT ENROLLED										
Total, 16 to 24 years	28,555	21,987	77.0	19,809	14,728	5,081	2,178	1,604	574	9.9
16 to 19 years	12,348	8,312	67.3	7,256	3,933	3,323	1,057	607	450	12.7
20 to 24 years	16,207	13,675	84.4	12,553	10,795	1,758	1,122	998	124	8.2
Less than 4 years of high school	9,873	6,005	60.8	5,023	2,778	2,245	981	605	376	16.3
4 years of high school	10,831	9,017	83.2	8,144	6,522	1,622	873	740	132	9.7
1 to 3 years of college	5,912	5,178	87.6	4,937	3,911	1,025	241	178	63	4.7
4 years of college or more	1,939	1,788	92.2	1,704	1,516	188	83	81	2	4.7
Men, 16 to 24 years	14,153	11,732	82.9	10,576	8,323	2,253	1,155	893	263	9.8
16 to 19 years	6,253	4,459	71.3	3,909	2,298	1,612	550	333	217	12.3
20 to 24 years	7,900	7,273	92.1	6,667	6,025	642	606	560	46	8.3
Less than 4 years of high school	5,270	3,693	70.1	3,097	1,960	1,137	596	398	198	16.1
4 years of high school	5,229	4,752	90.9	4,334	3,709	625	418	375	43	8.8
1 to 3 years of college	2,843	2,529	89.0	2,421	1,998	424	108	85	23	4.3
4 years of college or more	812	757	93.2	723	656	67	34	35	-	4.5
Women, 16 to 24 years	14,402	10,255	71.2	9,233	6,405	2,828	1,023	712	311	10.0
16 to 19 years	6,095	3,853	63.2	3,346	1,635	1,711	507	274	233	13.2
20 to 24 years	8,307	6,402	77.1	5,886	4,770	1,117	516	438	78	8.1
Less than 4 years of high school	4,603	2,312	50.2	1,926	818	1,108	386	207	179	16.7
4 years of high school	5,602	4,264	76.1	3,810	2,813	997	455	365	90	10.7
1 to 3 years of college	3,070	2,649	86.3	2,516	1,914	602	133	93	40	5.0
4 years of college or more	1,127	1,030	91.4	981	860	121	49	47	2	4.8
White										
Total, 16 to 24 years	23,529	18,655	79.3	17,091	12,806	4,285	1,564	1,121	444	8.4
16 to 19 years	10,105	7,127	70.5	6,353	3,517	2,836	774	441	333	10.9
20 to 24 years	13,424	11,528	85.9	10,738	9,289	1,449	790	680	110	6.9
Men	11,726	10,009	85.4	9,170	7,281	1,889	839	648	191	8.4
Women	11,803	8,646	73.2	7,920	5,525	2,396	726	473	253	8.4
Less than 4 years of high school	7,921	5,066	64.0	4,342	2,419	1,924	724	440	283	14.3
4 years of high school	8,931	7,601	85.1	6,996	5,670	1,326	605	500	105	8.0
1 to 3 years of college	4,969	4,396	88.5	4,227	3,354	873	170	116	54	3.9
4 years of college or more	1,708	1,592	93.2	1,525	1,364	161	66	65	2	4.2
Black										
Total, 16 to 24 years	4,081	2,690	65.9	2,137	1,491	645	553	444	109	20.6
16 to 19 years	1,847	979	53.0	724	324	400	255	151	104	26.1
20 to 24 years	2,234	1,711	76.6	1,413	1,168	245	298	294	5	17.4
Men	1,979	1,409	71.2	1,125	822	303	284	224	60	20.2
Women	2,102	1,281	60.9	1,012	670	342	269	220	49	21.0
Less than 4 years of high school	1,624	778	47.9	543	266	277	235	150	84	30.2
4 years of high school	1,606	1,191	74.2	948	708	240	244	225	19	20.4
1 to 3 years of college	705	589	83.5	527	420	107	61	56	5	10.4
4 years of college or more	146	132	90.7	119	97	22	13	13	1	10.2
Hispanic origin										
Total, 16 to 24 years	3,089	2,196	71.1	1,873	1,560	312	323	241	81	14.7
16 to 19 years	1,205	714	59.2	586	405	180	128	84	44	17.9
20 to 24 years	1,884	1,482	78.7	1,287	1,155	132	195	158	37	13.2
Men	1,607	1,365	84.9	1,177	1,030	146	188	155	33	13.8
Women	1,481	831	56.1	696	530	166	134	86	48	16.2
Less than 4 years of high school	1,666	1,013	60.8	844	676	167	170	123	47	16.8
4 years of high school	1,067	870	81.5	745	643	102	125	98	27	14.4
1 to 3 years of college	310	270	87.3	244	204	41	26	19	7	9.6
4 years of college or more	46	42	(²)	40	38	2	2	2		(²)

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

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

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

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Aug. 1988	Aug. 1989	Total		Employed		Unemployed			
			Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Number		Percent of labor force	
							Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,896	7,927	7,311	7,250	7,066	7,036	245	214	3.4	2.9
30 to 44 years	5,864	5,449	5,621	5,178	5,416	5,018	205	160	3.6	3.1
30 to 34 years	655	456	612	423	576	411	36	12	5.9	2.8
35 to 39 years	2,106	1,702	2,007	1,598	1,935	1,521	72	77	3.6	4.8
40 to 44 years	3,103	3,291	3,002	3,157	2,905	3,086	97	72	3.2	2.3
45 years and over	2,032	2,478	1,690	2,071	1,650	2,018	40	53	2.4	2.6
NONVETERANS										
Total, 30 to 44 years	20,542	21,589	19,525	20,429	18,739	19,718	786	712	4.0	3.5
30 to 34 years	9,155	9,388	8,747	8,953	8,352	8,639	395	315	4.5	3.5
35 to 39 years	6,888	7,487	6,555	7,094	6,305	6,849	250	245	3.8	3.5
40 to 44 years	4,499	4,714	4,223	4,382	4,082	4,230	141	152	3.3	3.5

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 1989							
	Employed						Unemployed	
	Full time			Part time			Looking for full-time work	Looking for part-time work
	Total	Full-time schedules ¹	Part time for economic reasons, usually work full time	Total	Voluntary ¹	Part time for economic reasons, usually work part time		
TOTAL								
Total, 16 years and over	100,940	99,166	1,774	18,152	14,801	3,351	5,161	1,191
16 to 19 years	4,268	4,070	197	3,869	2,927	941	625	515
16 to 17 years	1,139	1,066	72	2,123	1,702	420	196	353
18 to 19 years	3,129	3,004	125	1,746	1,225	521	428	162
20 years and over	96,673	95,096	1,577	14,283	11,874	2,409	4,536	676
20 to 24 years	11,404	11,096	308	2,227	1,659	568	1,039	173
25 years and over	85,269	84,000	1,269	12,056	10,214	1,841	3,497	502
25 to 54 years	74,117	73,032	1,085	8,554	7,033	1,521	3,183	380
55 years and over	11,152	10,968	184	3,501	3,181	320	315	122
Men, 16 years and over	60,210	59,210	1,001	5,701	4,275	1,427	2,733	424
16 to 19 years	2,477	2,336	142	1,831	1,320	511	340	253
20 years and over	57,733	56,874	859	3,871	2,955	915	2,392	171
20 to 24 years	6,323	6,133	189	819	573	246	589	66
25 years and over	51,410	50,741	669	3,051	2,383	669	1,803	105
25 to 54 years	44,362	43,795	567	1,640	1,089	551	1,601	53
55 years and over	7,048	6,946	102	1,412	1,294	118	202	52
Women, 16 years and over	40,730	39,956	774	12,450	10,526	1,924	2,428	767
16 to 19 years	1,790	1,735	56	2,038	1,608	430	285	262
20 years and over	38,940	38,222	718	10,412	8,919	1,494	2,144	505
20 to 24 years	5,081	4,963	118	1,408	1,087	322	449	107
25 years and over	33,859	33,259	600	9,004	7,832	1,172	1,694	397
25 to 54 years	29,755	29,237	518	6,915	5,944	970	1,581	327
55 years and over	4,104	4,022	82	2,090	1,887	202	113	71
White								
Men, 16 years and over	52,809	51,954	855	4,829	3,707	1,122	2,025	306
16 to 19 years	2,200	2,087	114	1,571	1,153	417	261	173
20 years and over	50,609	49,868	741	3,259	2,554	705	1,765	133
20 to 24 years	5,492	5,330	162	670	473	197	413	57
25 years and over	45,117	44,538	579	2,589	2,080	509	1,352	76
25 to 54 years	38,796	38,313	484	1,294	891	402	1,208	36
55 years and over	6,320	6,225	95	1,295	1,189	106	144	40
Women, 16 years and over	34,385	33,721	664	10,915	9,428	1,487	1,701	627
16 to 19 years	1,620	1,566	53	1,732	1,382	351	188	202
20 years and over	32,765	32,155	610	9,183	8,046	1,137	1,514	425
20 to 24 years	4,321	4,226	96	1,156	925	231	300	82
25 years and over	28,444	27,930	514	8,027	7,121	905	1,213	342
25 to 54 years	24,869	24,431	438	6,170	5,424	746	1,133	280
55 years and over	3,575	3,498	76	1,857	1,697	160	80	63
Black								
Men, 16 years and over	5,451	5,319	132	677	422	255	621	101
16 to 19 years	218	191	27	224	136	88	73	71
20 years and over	5,233	5,128	105	453	286	166	548	30
20 to 24 years	645	619	26	109	64	45	157	2
25 years and over	4,588	4,510	79	344	222	121	390	28
25 to 54 years	4,046	3,974	72	251	138	113	348	17
55 years and over	542	536	7	93	85	8	42	12
Women, 16 years and over	4,891	4,796	95	1,178	821	357	650	125
16 to 19 years	130	127	3	229	153	76	90	57
20 years and over	4,761	4,669	93	949	668	281	561	68
20 to 24 years	584	563	21	203	131	72	138	17
25 years and over	4,178	4,106	72	746	537	209	422	51
25 to 54 years	3,786	3,718	68	544	373	171	393	44
55 years and over	392	388	4	202	164	38	29	6

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 1989									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over ¹	101,191	67.9	95,958	5,233	5.2	47,791	22,349	1,567	2,434	21,441
Husbands	40,217	78.4	39,163	1,054	2.6	11,074	192	118	947	9,818
With employed wife	25,750	92.3	25,115	635	2.5	2,138	91	58	333	1,656
With unemployed wife	1,155	96.0	1,052	103	8.9	49	-	8	14	27
With wife not in labor force	13,312	60.0	12,996	316	2.4	8,888	102	52	600	8,135
Wives	29,092	56.7	27,888	1,204	4.1	22,200	17,472	152	329	4,247
With employed husband	26,168	66.8	25,115	1,052	4.0	12,996	11,307	128	113	1,447
With unemployed husband	738	70.0	635	103	13.9	316	264	9	6	37
With husband not in labor force	2,186	19.7	2,138	49	2.2	8,888	5,901	15	210	2,763
Relatives in married-couple families	14,709	72.4	13,442	1,267	8.6	5,614	791	768	374	3,681
16 to 19 years	6,083	67.4	5,486	597	9.8	2,944	231	415	26	2,272
20 to 24 years	5,102	83.9	4,711	391	7.7	980	147	304	30	499
25 years and over	3,524	67.6	3,245	279	7.9	1,690	413	49	318	910
Women who maintain families	6,874	63.2	6,298	577	8.4	4,001	2,690	85	237	990
Relatives in families maintained by women	6,012	64.5	5,136	876	14.6	3,303	813	347	384	1,760
16 to 19 years	1,739	57.5	1,363	376	21.6	1,283	204	211	19	849
20 to 24 years	1,705	80.7	1,462	243	14.2	409	146	73	21	169
25 years and over	2,568	61.5	2,311	257	10.0	1,611	463	63	344	742
Men who maintain families	2,309	78.3	2,211	98	4.3	638	36	20	99	483
Relatives in families maintained by men	1,978	67.3	1,821	157	7.9	961	355	77	64	465
16 to 19 years	385	63.0	341	44	11.5	226	44	18	-	164
20 to 24 years	563	86.0	505	58	10.3	92	19	23	2	48
25 years and over	1,030	61.6	975	55	5.3	643	292	36	62	253

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total, 16 years and over	3,450	3,157	5.0	4.6	3,209	3,195	5.8	5.7
Married, spouse present	1,252	1,147	3.0	2.7	1,325	1,304	4.5	4.4
Widowed, divorced, or separated	413	419	6.0	5.7	679	686	6.4	6.2
Single (never married)	1,785	1,590	9.2	8.1	1,205	1,205	8.1	7.9
White, 16 years and over	2,611	2,331	4.4	3.9	2,322	2,328	5.0	4.9
Married, spouse present	1,033	909	2.8	2.4	1,091	1,098	4.2	4.1
Widowed, divorced, or separated	302	314	5.3	5.2	479	488	5.6	5.5
Single (never married)	1,276	1,109	7.9	6.8	752	742	6.3	6.1
Black, 16 years and over	722	722	10.6	10.5	797	775	11.9	11.3
Married, spouse present	166	195	5.2	6.1	181	170	7.5	7.2
Widowed, divorced, or separated	99	96	10.1	9.5	187	179	9.8	9.4
Single (never married)	457	431	17.5	16.3	430	425	18.0	16.4
Total, 25 years and over	2,183	1,908	3.9	3.4	2,064	2,092	4.7	4.7
Married, spouse present	1,158	1,056	2.9	2.6	1,117	1,097	4.1	3.9
Widowed, divorced, or separated	379	370	5.8	5.2	611	631	6.0	5.9
Single (never married)	646	482	7.5	5.4	336	364	5.6	5.6
White, 25 years and over	1,705	1,428	3.5	2.9	1,509	1,556	4.1	4.1
Married, spouse present	958	833	2.7	2.3	921	922	3.8	3.8
Widowed, divorced, or separated	280	277	5.1	4.7	421	444	5.2	5.2
Single (never married)	466	317	6.6	4.3	167	190	3.6	3.9
Black, 25 years and over	401	419	7.6	7.8	486	473	9.2	8.8
Married, spouse present	150	183	4.9	6.0	148	143	6.7	6.5
Widowed, divorced, or separated	87	84	9.2	8.4	176	169	9.5	9.1
Single (never married)	164	153	13.3	11.8	162	161	13.1	12.0

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-12. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total, 16 years and over	6,659	6,352	5.4	5.1	5.0	4.6	5.8	5.7
Managerial and professional specialty	773	642	2.6	2.1	2.2	1.5	3.1	2.8
Executive, administrative, and managerial	379	317	2.5	2.1	2.4	1.5	2.7	2.9
Professional specialty	394	325	2.7	2.1	1.9	1.5	3.4	2.8
Technical, sales, and administrative support	1,546	1,494	4.1	3.9	3.7	2.9	4.4	4.4
Technicians and related support	76	83	2.1	2.2	2.0	2.1	2.1	2.2
Sales occupations	655	658	4.4	4.4	2.9	2.7	6.1	6.1
Administrative support, including clerical	816	753	4.3	3.9	6.2	4.0	3.8	3.9
Service occupations	1,107	1,104	6.6	6.4	6.3	6.0	6.8	6.7
Private household	48	67	4.8	6.7	(¹)	(¹)	4.7	6.9
Protective service	81	80	3.6	3.6	3.7	3.0	3.0	6.1
Service, except private household and protective	978	958	7.3	6.9	7.3	7.1	7.2	6.7
Precision production, craft, and repair	615	659	4.2	4.5	4.2	4.3	4.3	7.0
Mechanics and repairers	133	132	2.9	2.8	3.0	2.7	.3	6.1
Construction trades	306	317	5.3	5.6	5.4	5.5	3.9	8.8
Other precision production, craft, and repair	176	211	4.1	4.8	3.9	4.2	4.9	6.9
Operators, fabricators, and laborers	1,506	1,490	7.6	7.5	7.0	6.8	9.2	9.5
Machine operators, assemblers, and inspectors	684	682	7.7	7.6	6.5	6.0	9.5	9.7
Transportation and material moving occupations	288	297	5.5	5.7	5.0	5.7	10.9	5.8
Handlers, equipment cleaners, helpers, and laborers	534	512	9.1	9.1	9.5	8.8	7.4	10.4
Construction laborers	140	147	12.3	14.8	12.7	14.5	(¹)	(¹)
Other handlers, equipment cleaners, helpers, and laborers	394	366	8.4	7.9	8.6	7.4	7.6	10.0
Farming, forestry, and fishing	255	218	6.1	5.1	6.0	4.7	6.9	6.8
No previous work experience	826	712						
16 to 19 years	550	486						
20 to 24 years	143	123						
25 years and over	133	103						

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total, 16 years and over	6,659	6,352	5.4	5.1	5.0	4.6	5.8	5.7
Nonagricultural private wage and salary workers	4,868	4,763	5.2	5.1	5.1	4.6	5.4	5.6
Mining	48	43	6.2	5.6	6.3	5.8	5.6	4.8
Construction	535	507	8.1	7.8	8.4	7.8	4.8	7.4
Manufacturing	1,155	1,107	5.2	4.9	4.4	4.0	6.7	6.8
Durable goods	640	616	4.9	4.7	4.3	3.9	6.4	6.9
Lumber and wood products	44	40	5.8	5.1	5.5	5.9	7.4	.5
Furniture and fixtures	34	27	4.6	4.1	3.5	2.9	7.2	7.2
Stone, clay, and glass products	32	33	5.1	4.7	3.4	4.0	11.1	7.5
Primary metal industries	46	45	5.5	5.0	5.6	5.1	5.1	4.4
Fabricated metal products	65	80	4.6	5.8	4.6	4.3	4.7	9.8
Machinery, except electrical	112	102	4.1	3.7	3.7	2.8	5.2	6.7
Electrical machinery, equipment, and supplies	100	99	4.7	4.8	3.4	3.8	6.6	6.3
Transportation equipment	156	146	5.7	5.4	4.8	4.2	8.5	9.8
Automobiles	80	92	6.3	7.2	4.6	5.6	12.5	13.2
Other transportation equipment	76	54	5.1	3.7	5.0	2.9	5.2	6.7
Professional and photographic equipment	19	21	2.5	3.3	2.7	4.3	2.2	2.0
Other durable goods industries	32	23	6.9	4.3	5.8	1.4	8.2	7.2
Nondurable goods	515	491	5.6	5.3	4.6	4.3	7.0	6.7
Food and kindred products	121	127	6.4	6.4	3.6	5.8	11.6	7.7
Textile mill products	30	34	4.0	4.5	5.4	2.7	2.3	6.6
Apparel and other textile products	145	115	11.0	9.1	18.0	9.0	8.6	9.1
Paper and allied products	26	30	3.3	3.8	2.4	2.6	5.6	7.1
Printing and publishing	105	63	5.5	3.3	5.2	3.0	5.9	3.7
Chemicals and allied products	27	37	2.1	2.9	1.7	2.3	3.2	4.0
Rubber and miscellaneous plastics products	50	62	6.1	7.0	4.2	5.9	9.2	9.1
Other nondurable goods industries	11	25	2.8	5.8	4.1	5.3	-	7.0
Transportation and public utilities	228	224	3.6	3.5	3.8	3.3	2.9	3.8
Transportation	192	172	5.2	4.5	5.2	4.6	4.8	4.3
Communications and other public utilities	36	52	1.4	1.9	1.6	1.2	1.0	3.3
Wholesale and retail trade	1,437	1,401	6.1	5.8	5.6	4.7	6.6	7.1
Wholesale trade	201	189	4.4	4.3	4.0	3.5	5.4	6.0
Retail trade	1,236	1,212	6.5	6.2	6.2	5.0	6.8	7.2
Finance, insurance, and real estate	254	185	3.4	2.5	2.9	2.0	3.7	2.7
Service industries	1,212	1,297	4.7	4.9	4.8	4.7	4.7	5.0
Professional services	472	490	3.4	3.4	3.0	2.8	3.6	3.6
Other service industries	740	807	6.3	6.7	6.0	6.1	6.6	7.2
Agricultural wage and salary workers	188	161	9.6	7.6	9.1	6.7	11.6	10.9
Government, self-employed, and unpaid family workers	777	716	2.8	2.5	2.3	2.2	3.4	2.9
No previous work experience	826	712	-	-	-	-	-	-

**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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
NUMBER OF UNEMPLOYED												
Total unemployed	6,659	6,352	2,803	2,564	2,633	2,648	1,222	1,140	4,933	4,659	1,519	1,497
Job losers	2,887	2,766	1,767	1,600	905	971	215	196	2,195	2,066	632	628
On layoff	739	736	424	414	256	282	58	39	628	606	96	114
Other job losers	2,148	2,030	1,343	1,185	649	689	157	157	1,567	1,460	536	514
Job leavers	1,062	1,122	449	385	452	504	162	233	840	924	191	167
Reentrants	1,888	1,814	500	500	1,089	1,035	300	278	1,400	1,237	414	505
New entrants	822	650	87	79	188	138	546	433	498	433	282	197
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	43.4	43.5	63.0	62.4	34.3	36.7	17.5	17.2	44.5	44.3	41.6	41.9
On layoff	11.1	11.6	15.1	16.2	9.7	10.7	4.7	3.4	12.7	13.0	6.3	7.6
Other job losers	32.3	32.0	47.9	46.2	24.6	26.0	12.8	13.8	31.8	31.3	35.3	34.3
Job leavers	15.9	17.7	16.0	15.0	17.1	19.0	13.2	20.4	17.0	19.8	12.6	11.1
Reentrants	28.4	28.6	17.8	19.5	41.3	39.1	24.5	24.4	28.4	26.5	27.3	33.8
New entrants	12.3	10.2	3.1	3.1	7.2	5.2	44.7	38.0	10.1	9.3	18.6	13.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers	2.3	2.2	2.8	2.5	1.8	1.9	2.3	2.1	2.1	1.9	4.7	4.6
Job leavers .....	.9	.9	.7	.6	.9	1.0	1.7	2.5	.8	.9	1.4	1.2
Reentrants	1.5	1.4	.8	.8	2.1	2.0	3.2	3.0	1.3	1.1	3.1	3.7
New entrants .....	.7	.5	.1	.1	.4	.3	5.8	4.7	.5	.4	2.1	1.4

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

(Percent distribution)

Reason, sex, and age	August 1989						
	Total unemployed		Duration of unemployment				
	Thousands of persons	Percent	Less than 5 weeks	5 to 14 weeks	15 weeks and over		
					Total	15 to 26 weeks	27 weeks and over
Total, 16 years and over	6,352	100.0	47.6	33.9	18.5	9.6	8.9
Job losers	2,766	100.0	39.8	33.8	26.4	14.3	12.1
On layoff	736	100.0	59.0	29.4	11.6	7.3	4.3
Other job losers	2,030	100.0	32.9	35.3	31.8	16.9	14.9
Job leavers	1,122	100.0	56.9	30.6	12.5	6.5	6.1
Reentrants	1,814	100.0	53.3	32.9	13.8	6.3	7.5
New entrants	650	100.0	48.5	42.9	8.6	4.6	4.1
Men, 20 years and over	2,564	100.0	40.6	32.6	26.8	12.3	14.5
Job losers	1,600	100.0	37.7	31.7	30.7	15.5	15.1
On layoff	414	100.0	60.8	26.6	12.7	8.8	3.9
Other job losers	1,185	100.0	29.6	33.5	37.0	17.9	19.1
Job leavers	385	100.0	52.8	31.6	15.7	5.0	10.7
Reentrants	500	100.0	41.7	35.6	22.7	8.2	14.5
New entrants	79	100.0	33.5	39.3	27.2	8.3	18.9
Women, 20 years and over	2,648	100.0	50.9	32.7	16.4	9.5	6.9
Job losers	971	100.0	39.1	37.9	23.0	13.9	9.1
On layoff	282	100.0	50.7	37.6	11.8	6.2	5.6
Other job losers	689	100.0	34.3	38.0	27.6	17.1	10.6
Job leavers	504	100.0	56.4	29.7	13.9	9.2	4.8
Reentrants	1,035	100.0	58.6	29.7	11.8	5.4	6.4
New entrants	138	100.0	57.4	29.7	12.9	10.2	2.7
Both sexes, 16 to 19 years	1,140	100.0	55.4	39.4	5.1	3.9	1.2
Job losers	196	100.0	61.2	30.3	8.5	6.2	2.3
On layoff	39	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Other job losers	157	100.0	51.6	37.5	10.9	8.1	2.8
Job leavers	233	100.0	64.7	31.0	4.3	3.0	1.2
Reentrants	278	100.0	54.7	39.9	5.4	6.1	-
New entrants	433	100.0	48.3	47.8	3.9	2.1	1.8

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total, 16 years and over	6,659	6,352	100.0	100.0	5,413	5,161	100.0	100.0
Less than 5 weeks	3,095	3,022	46.5	47.6	2,320	2,248	42.9	43.6
5 to 14 weeks	2,094	2,152	31.4	33.9	1,719	1,816	31.8	35.2
5 to 10 weeks	1,506	1,599	22.6	25.2	1,227	1,324	22.7	25.7
11 to 14 weeks	587	554	8.8	8.7	492	491	9.1	9.5
15 weeks and over	1,470	1,178	22.1	18.5	1,374	1,097	25.4	21.3
15 to 26 weeks	669	612	10.1	9.6	626	565	11.6	10.9
27 weeks and over	800	566	12.0	8.9	748	532	13.8	10.3
27 to 51 weeks	285	255	4.3	4.0	270	240	5.0	4.7
52 weeks and over	515	311	7.7	4.9	478	292	8.8	5.7
Average (mean) duration, in weeks	13.5	11.3			14.9	12.5		
Median duration, in weeks	5.9	5.0		-	6.8	5.9		

**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. 1988	Aug. 1989	Aug. 1988	Aug. 1989
	August 1989										
Total, 16 years and over	6,352	3,022	2,152	612	566	11.3	5.0	46.5	47.6	22.1	18.5
16 to 19 years	1,140	632	450	45	13	6.0	4.1	58.0	55.4	4.8	5.1
20 to 24 years	1,212	641	419	71	81	9.4	4.3	53.2	52.9	16.4	12.5
25 to 34 years	1,789	852	572	194	172	11.2	5.1	45.0	47.6	24.0	20.5
35 to 44 years	1,171	507	373	143	148	14.0	6.0	40.2	43.3	30.8	24.9
45 to 54 years	603	236	182	96	88	16.1	7.4	33.9	39.2	34.0	30.6
55 to 64 years	357	120	129	55	54	16.9	8.7	37.2	33.5	37.6	30.4
65 years and over	80	35	28	8	9	14.9	6.2	41.5	43.4	29.4	21.4
Men, 16 years and over	3,157	1,355	1,086	338	377	13.5	6.1	42.3	42.9	25.4	22.6
16 to 19 years	593	315	249	22	6	6.2	4.2	57.3	53.1	5.2	4.9
20 to 24 years	656	305	243	47	60	11.3	5.5	50.4	46.5	15.0	16.4
25 to 34 years	806	357	252	94	103	12.9	5.8	39.8	44.3	26.7	24.5
35 to 44 years	554	198	189	71	96	17.4	7.9	30.7	35.7	38.8	30.3
45 to 54 years	295	91	87	55	62	21.0	9.6	30.4	30.7	43.2	39.6
55 to 64 years	207	65	58	42	42	21.4	11.3	32.2	31.6	47.0	40.5
65 years and over	47	25	8	6	7	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,195	1,666	1,066	274	189	9.1	4.3	51.0	52.2	18.5	14.5
16 to 19 years	547	317	200	22	7	5.8	3.9	58.7	58.0	4.4	5.4
20 to 24 years	556	336	176	23	21	7.3	3.7	56.1	60.4	18.0	8.0
25 to 34 years	984	495	320	99	70	9.8	4.5	50.7	50.3	21.1	17.2
35 to 44 years	617	309	184	72	51	11.0	4.5	49.3	50.1	23.1	20.0
45 to 54 years	308	146	94	41	27	11.5	5.3	37.2	47.3	25.5	22.0
55 to 64 years	150	54	71	13	12	10.7	6.9	45.6	36.1	22.0	16.5
65 years and over	33	9	20	2	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	4,659	2,303	1,529	442	385	10.7	4.6	47.7	49.4	20.6	17.8
Men	2,331	1,048	765	244	274	13.1	5.6	42.4	45.0	25.1	22.2
Women	2,328	1,255	764	199	111	8.4	4.2	53.6	53.9	15.7	13.3
Black, 16 years and over	1,497	626	556	152	163	12.9	6.2	42.4	41.9	26.2	21.0
Men	722	257	295	84	86	14.3	7.6	41.1	35.6	27.1	23.6
Women	775	369	261	68	76	11.5	4.9	43.6	47.7	25.3	18.6
Men, 16 years and over:											
Married, spouse present	1,147	433	357	176	181	16.4	7.7	32.5	37.8	36.1	31.1
Widowed, divorced, or separated	419	155	134	59	71	17.6	8.0	50.7	37.0	27.5	31.0
Single (never married)	1,590	767	595	103	125	10.3	4.8	47.2	48.2	17.3	14.3
Women, 16 years and over:											
Married, spouse present	1,304	742	384	101	76	8.4	4.0	53.9	56.9	18.6	13.6
Widowed, divorced, or separated	686	291	265	76	54	11.0	6.2	41.0	42.4	26.5	19.0
Single (never married)	1,205	633	417	96	59	8.7	4.3	53.5	52.5	14.0	12.9

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989
August 1989											
OCCUPATION											
Managerial and professional specialty	642	253	235	89	66	12.6	6.6	43.4	39.4	24.8	24.1
Technical, sales, and administrative support	1,494	749	495	144	106	9.9	4.5	43.7	50.1	25.0	16.7
Service occupations	1,104	566	343	115	80	9.5	4.4	52.3	51.3	17.6	17.7
Precision production, craft, and repair	659	287	215	69	88	14.9	6.2	43.3	43.6	28.1	24.0
Operators, fabricators, and laborers	1,490	669	500	154	167	13.0	6.0	45.1	44.9	25.2	21.6
Farming, forestry, and fishing	218	123	59	11	26	12.6	4.0	52.8	56.4	21.3	17.0
INDUSTRY¹											
Agriculture	161	92	47	9	13	10.0	3.9	58.6	57.1	20.3	13.7
Construction	524	255	150	51	68	13.3	4.8	52.4	48.7	23.0	22.7
Manufacturing	1,111	451	355	160	146	14.5	6.7	43.7	40.6	27.4	27.5
Durable goods	618	223	224	86	84	14.7	7.3	38.1	36.1	31.1	27.5
Nondurable goods	493	228	130	73	62	14.3	5.6	50.7	46.2	22.8	27.4
Transportation and public utilities	249	100	79	40	31	15.6	7.9	43.1	40.2	30.0	28.1
Wholesale and retail trade	1,409	671	520	128	90	9.6	5.0	47.0	47.6	21.5	15.5
Finance and service industries	1,803	920	595	164	125	9.6	4.4	45.2	51.0	21.1	15.9
Public administration	170	72	41	21	36	18.1	7.0	36.6	42.4	28.7	32.9
No previous work experience	712	358	293	31	31	8.7	4.5	50.5	50.3	10.2	8.7

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 1989								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	6,352	5,460	21.3	8.8	71.9	41.1	19.5	4.0	1.67
16 to 19 years	1,140	1,071	11.8	5.8	78.0	33.8	17.2	2.7	1.49
20 to 24 years	1,212	1,082	19.5	8.5	69.6	42.6	19.1	3.5	1.63
25 to 34 years	1,789	1,517	24.3	9.0	70.3	44.2	18.5	3.7	1.70
35 to 44 years	1,171	944	26.7	10.7	72.7	42.4	21.2	5.4	1.79
45 to 54 years	603	493	26.7	11.3	68.0	44.7	23.5	7.3	1.82
55 to 64 years	357	280	24.2	10.7	74.4	41.8	20.1	2.4	1.74
65 years and over	80	73	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Men, 16 years and over	3,157	2,658	23.1	9.4	72.7	40.2	24.2	4.2	1.74
16 to 19 years	593	547	11.8	5.2	78.1	34.4	20.2	3.3	1.53
20 to 24 years	656	582	18.7	9.1	70.1	41.7	22.5	3.7	1.66
25 to 34 years	806	652	28.5	9.4	70.5	42.4	23.5	4.3	1.79
35 to 44 years	554	419	32.3	13.0	75.2	43.9	25.6	3.9	1.94
45 to 54 years	295	243	29.8	11.2	69.3	39.4	31.3	9.2	1.90
55 to 64 years	207	169	24.0	13.4	75.1	45.4	25.3	2.2	1.85
65 years and over	47	44	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,195	2,803	19.6	8.2	71.2	42.0	15.1	3.9	1.60
16 to 19 years	547	524	11.9	6.4	78.0	33.1	14.0	2.1	1.45
20 to 24 years	556	501	20.5	7.9	69.1	43.6	15.1	3.2	1.59
25 to 34 years	984	864	21.1	8.7	70.1	45.5	14.7	3.2	1.63
35 to 44 years	617	524	22.3	8.8	70.6	41.2	17.7	6.5	1.67
45 to 54 years	308	250	23.6	11.4	66.7	49.9	15.8	5.5	1.73
55 to 64 years	150	111	24.6	6.6	73.3	36.4	12.2	2.6	1.56
65 years and over	33	29	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	4,659	3,917	20.6	8.6	72.2	43.0	19.3	4.4	1.68
Men	2,331	1,922	23.7	8.9	73.0	42.5	23.9	4.6	1.77
Women	2,328	1,995	17.6	8.3	71.4	43.6	14.9	4.1	1.60
Black, 16 years and over	1,497	1,367	24.2	9.6	72.4	34.9	20.0	3.0	1.64
Men	722	643	22.8	11.1	73.2	33.3	25.2	3.2	1.69
Women	775	724	25.4	8.3	71.7	36.3	15.5	2.8	1.60

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 1989								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers					Other	
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives		
Total, 16 years and over	6,352	5,460	21.3	8.8	71.9	41.1	19.5	4.0	1.67
Job losers ¹	2,766	1,996	27.7	11.2	74.4	44.1	23.9	3.3	1.85
Job leavers	1,122	1,076	19.8	8.5	68.9	44.7	16.8	3.6	1.62
Reentrants	1,814	1,756	17.7	7.7	69.2	39.2	17.3	5.6	1.57
New entrants	650	632	13.6	4.5	76.8	31.0	16.8	2.9	1.46
Men, 16 years and over	3,157	2,658	23.1	9.4	72.7	40.2	24.2	4.2	1.74
Job losers ¹	1,719	1,250	27.6	10.7	76.0	41.6	27.2	3.7	1.87
Job leavers	499	484	18.6	8.9	71.1	42.0	21.9	4.0	1.67
Reentrants	638	627	23.1	9.8	65.0	40.5	23.8	5.8	1.68
New entrants	299	297	11.2	4.1	77.8	31.2	16.5	3.6	1.44
Women, 16 years and over	3,195	2,803	19.6	8.2	71.2	42.0	15.1	3.9	1.60
Job losers ¹	1,047	746	27.9	12.2	71.7	48.5	18.4	2.5	1.81
Job leavers	623	593	20.7	8.1	67.0	47.0	12.6	3.3	1.59
Reentrants	1,175	1,129	14.8	6.6	71.6	38.4	13.7	5.5	1.51
New entrants	350	335	15.7	4.9	75.9	30.9	17.0	2.4	1.47

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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
All industries	116,737	119,092	64,876	65,912	51,861	53,180
16 to 19 years	8,140	8,137	4,282	4,308	3,858	3,828
16 to 17 years	3,370	3,261	1,804	1,789	1,566	1,472
18 to 19 years	4,771	4,875	2,478	2,519	2,292	2,356
20 to 24 years	13,839	13,631	7,324	7,142	6,515	6,489
25 to 54 years	80,247	82,671	44,736	46,002	35,511	36,670
25 to 34 years	33,536	34,061	18,807	19,202	14,729	14,859
35 to 44 years	28,228	29,390	15,650	16,111	12,578	13,280
45 to 54 years	18,483	19,220	10,279	10,689	8,203	8,531
55 to 64 years	11,395	11,372	6,611	6,516	4,784	4,857
55 to 59 years	6,936	6,780	4,001	3,895	2,935	2,885
60 to 64 years	4,459	4,593	2,610	2,621	1,849	1,972
65 years and over	3,116	3,281	1,922	1,944	1,193	1,336
Agriculture	3,455	3,633	2,742	2,891	713	741
16 to 19 years	368	422	304	362	63	59
16 to 17 years	176	240	147	218	29	21
18 to 19 years	192	182	158	144	34	38
20 to 24 years	413	452	354	378	59	74
25 to 54 years	1,887	1,985	1,456	1,500	432	485
25 to 34 years	821	861	664	683	158	178
35 to 44 years	630	664	467	489	163	175
45 to 54 years	436	460	325	327	111	133
55 to 64 years	460	492	350	401	111	92
55 to 59 years	267	260	199	205	67	54
60 to 64 years	194	233	151	195	43	38
65 years and over	327	282	279	251	48	31
Nonagricultural industries	113,282	115,460	62,134	63,020	51,148	52,439
16 to 19 years	7,773	7,715	3,978	3,946	3,795	3,769
16 to 17 years	3,194	3,022	1,658	1,571	1,536	1,451
18 to 19 years	4,579	4,693	2,320	2,375	2,258	2,318
20 to 24 years	13,426	13,179	6,970	6,764	6,456	6,416
25 to 54 years	78,360	80,686	43,280	44,502	35,079	36,184
25 to 34 years	32,715	33,199	18,143	18,519	14,571	14,681
35 to 44 years	27,598	28,727	15,183	15,622	12,415	13,105
45 to 54 years	18,047	18,760	9,954	10,362	8,093	8,399
55 to 64 years	10,935	10,880	6,261	6,115	4,674	4,765
55 to 59 years	6,669	6,520	3,802	3,690	2,868	2,831
60 to 64 years	4,266	4,360	2,459	2,425	1,806	1,934
65 years and over	2,789	2,999	1,644	1,693	1,145	1,306

**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. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total	116,737	119,092	64,876	65,912	60,594	61,603	51,861	53,180	48,003	49,352
Managerial and professional specialty	28,980	29,909	16,069	16,557	15,963	16,459	12,911	13,352	12,800	13,193
Executive, administrative, and managerial	14,575	15,024	8,787	9,084	8,744	9,038	5,788	5,941	5,738	5,859
Officials and administrators, public administration	627	625	341	360	341	360	285	265	281	263
Other executive, administrative, and managerial	10,115	10,622	6,494	6,800	6,453	6,775	3,622	3,822	3,586	3,753
Management-related occupations	3,833	3,777	1,952	1,923	1,950	1,903	1,881	1,854	1,870	1,842
Professional specialty	14,405	14,885	7,282	7,473	7,219	7,421	7,123	7,412	7,062	7,334
Engineers	1,828	1,770	1,684	1,624	1,680	1,623	145	146	145	145
Mathematical and computer scientists	748	856	502	563	494	562	246	293	246	293
Natural scientists	420	400	317	280	315	277	103	121	103	121
Health diagnosing occupations	873	864	702	724	702	724	171	140	170	140
Health assessment and treating occupations	2,218	2,209	339	354	338	353	1,879	1,855	1,877	1,849
Teachers, college and university	504	589	303	357	300	358	201	232	200	232
Teachers, except college and university	3,126	3,300	802	856	795	841	2,325	2,443	2,313	2,424
Lawyers and judges	759	798	628	602	629	602	131	196	131	196
Other professional specialty occupations	3,928	4,100	2,005	2,114	1,968	2,082	1,923	1,986	1,877	1,935
Technical, sales, and administrative support	35,904	36,679	12,651	12,953	11,890	12,106	23,253	23,726	21,171	21,755
Technicians and related support	3,609	3,735	1,881	2,002	1,824	1,936	1,729	1,733	1,686	1,711
Health technologists and technicians	1,273	1,267	220	263	214	258	1,054	1,004	1,036	1,000
Engineering and science technicians	1,151	1,195	908	940	874	906	243	255	227	245
Technicians, except health, engineering, and science	1,185	1,272	753	799	737	772	433	474	423	466
Sales occupations	14,064	14,387	7,211	7,279	6,753	6,791	6,853	7,108	5,664	5,952
Supervisors and proprietors	3,703	3,967	2,457	2,611	2,427	2,569	1,247	1,356	1,216	1,324
Sales representatives, finance and business services	2,427	2,434	1,465	1,342	1,445	1,320	962	1,092	930	1,040
Sales representatives, commodities, except retail	1,616	1,594	1,316	1,256	1,306	1,243	300	339	291	329
Sales workers, retail and personal services	6,257	6,312	1,951	2,048	1,555	1,638	4,306	4,264	3,195	3,209
Sales-related occupations	60	80	22	23	20	21	38	57	32	50
Administrative support, including clerical	18,231	18,557	3,560	3,673	3,314	3,379	14,671	14,884	13,821	14,092
Supervisors	818	737	337	297	330	291	480	440	478	440
Computer equipment operators	898	883	283	298	277	285	615	585	575	553
Secretaries, stenographers, and typists	4,889	4,673	105	61	93	57	4,784	4,612	4,534	4,427
Financial records processing	2,476	2,431	238	222	223	210	2,238	2,209	2,186	2,154
Mail and message distributing	908	949	569	618	543	589	339	331	310	312
Other administrative support, including clerical	8,241	8,884	2,028	2,177	1,848	1,947	6,214	6,707	5,738	6,207
Service occupations	15,628	16,052	6,332	6,392	5,223	5,196	9,296	9,660	7,981	8,340
Private household	947	925	40	37	29	26	907	888	720	733
Protective service	2,167	2,146	1,787	1,759	1,704	1,658	380	387	314	302
Service, except private household and protective	12,514	12,981	4,504	4,595	3,490	3,513	8,010	8,386	6,947	7,305
Food service	5,216	5,390	2,027	2,165	1,314	1,364	3,189	3,225	2,444	2,526
Health service	1,887	2,057	182	187	163	166	1,705	1,869	1,624	1,754
Cleaning and building service	3,083	3,200	1,751	1,810	1,554	1,623	1,331	1,390	1,241	1,296
Personal service	2,329	2,334	544	434	459	360	1,784	1,901	1,637	1,728
Precision production, craft, and repair	13,910	14,002	12,709	12,818	12,265	12,418	1,201	1,184	1,165	1,128
Mechanics and repairers	4,415	4,497	4,266	4,344	4,144	4,245	149	153	145	148
Construction trades	5,421	5,360	5,302	5,251	5,034	5,015	120	108	115	102
Other precision production, craft, and repair	4,074	4,145	3,142	3,223	3,087	3,158	932	923	904	878
Operators, fabricators, and laborers	18,404	18,350	13,834	13,741	12,454	12,479	4,569	4,609	4,328	4,365
Machine operators, assemblers, and inspectors	8,176	8,307	4,891	4,928	4,678	4,736	3,285	3,379	3,191	3,259
Manufacturing industries	6,848	6,851	4,029	3,999	3,875	3,866	2,820	2,852	2,748	2,752
Durable goods	3,768	3,691	2,637	2,493	2,540	2,404	1,131	1,199	1,115	1,166
Nondurable goods	3,080	3,159	1,391	1,506	1,335	1,461	1,689	1,653	1,633	1,586
Nonmanufacturing industries	1,328	1,456	863	929	803	870	465	527	443	507
Transportation and material moving occupations	4,912	4,926	4,524	4,529	4,369	4,361	389	397	378	382
Motor vehicle operators	3,629	3,631	3,283	3,288	3,154	3,142	346	342	336	331
Other transportation and material moving occupations	1,284	1,295	1,241	1,241	1,216	1,219	43	55	42	51
Handlers, equipment cleaners, helpers, and laborers	5,315	5,116	4,419	4,283	3,407	3,382	896	833	759	724
Construction laborers	1,001	845	954	821	809	703	47	24	39	16
Other handlers, equipment cleaners, helpers, and laborers	4,314	4,271	3,465	3,462	2,598	2,680	849	808	720	708
Farming, forestry, and fishing	3,911	4,100	3,280	3,451	2,798	2,945	631	649	558	572
Farm operators and managers	1,293	1,378	1,095	1,171	1,078	1,154	198	207	197	204
Other farming, forestry, and fishing occupations	2,618	2,722	2,185	2,280	1,721	1,790	433	442	360	369

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
TOTAL						
Total, 16 years and over (thousands)	116,737	119,092	64,876	65,912	51,861	53,180
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.8	25.1	24.8	25.1	24.9	25.1
Executive, administrative, and managerial	12.5	12.6	13.5	13.8	11.2	11.2
Professional specialty	12.3	12.5	11.2	11.3	13.7	13.9
Technical, sales, and administrative support	30.8	30.8	19.5	19.7	44.8	44.6
Technicians and related support	3.1	3.1	2.9	3.0	3.3	3.3
Sales occupations	12.0	12.1	11.1	11.0	13.2	13.4
Administrative support, including clerical	15.6	15.6	5.5	5.6	28.3	28.0
Service occupations	13.4	13.5	9.8	9.7	17.9	18.2
Private household .....	.8	.8	.1	.1	1.7	1.7
Protective service	1.9	1.8	2.8	2.7	.7	.7
Service, except private household and protective	10.7	10.9	6.9	7.0	15.4	15.8
Precision production, craft, and repair	11.9	11.8	19.6	19.4	2.3	2.2
Operators, fabricators, and laborers	15.8	15.4	21.3	20.8	8.8	8.7
Machine operators, assemblers, and inspectors	7.0	7.0	7.5	7.5	6.3	6.4
Transportation and material moving occupations	4.2	4.1	7.0	6.9	.8	.7
Handlers, equipment cleaners, helpers, and laborers	4.6	4.3	6.8	6.5	1.7	1.6
Farming, forestry, and fishing	3.4	3.4	5.1	5.2	1.2	1.2
White						
Total, 16 years and over (thousands)	101,213	102,938	56,827	57,638	44,386	45,300
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	25.9	26.1	25.8	26.3	25.9	25.9
Executive, administrative, and managerial	13.2	13.2	14.3	14.6	11.7	11.6
Professional specialty	12.7	12.9	11.5	11.8	14.2	14.3
Technical, sales, and administrative support	31.1	31.1	19.7	19.8	45.6	45.5
Technicians and related support	3.0	3.1	2.8	3.0	3.2	3.2
Sales occupations	12.7	12.6	11.8	11.7	13.7	13.8
Administrative support, including clerical	15.4	15.4	5.0	5.2	28.7	28.5
Service occupations	12.2	12.3	8.8	8.5	16.6	17.0
Private household .....	.7	.7	(¹)	-	1.6	1.4
Protective service	1.7	1.7	2.6	2.4	.7	.7
Service, except private household and protective	9.8	9.9	6.1	6.1	14.4	14.9
Precision production, craft, and repair	12.3	12.1	20.2	20.0	2.3	2.1
Operators, fabricators, and laborers	15.1	14.7	20.4	19.8	8.2	8.1
Machine operators, assemblers, and inspectors	6.6	6.6	7.2	7.2	5.9	5.9
Transportation and material moving occupations	4.0	4.0	6.6	6.6	.7	.8
Handlers, equipment cleaners, helpers, and laborers	4.4	4.0	6.5	6.1	1.7	1.5
Farming, forestry, and fishing	3.5	3.7	5.2	5.5	1.3	1.3
Black						
Total, 16 years and over (thousands)	11,962	12,197	6,072	6,128	5,890	6,070
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	15.1	15.2	12.4	12.0	17.8	18.4
Executive, administrative, and managerial	7.1	7.2	6.5	6.4	7.7	7.9
Professional specialty	8.0	8.0	5.9	5.5	10.2	10.4
Technical, sales, and administrative support	28.0	28.3	17.2	17.4	39.2	39.3
Technicians and related support	3.3	3.2	3.0	2.8	3.5	3.5
Sales occupations	7.1	8.0	4.9	5.7	9.5	10.3
Administrative support, including clerical	17.6	17.2	9.3	8.9	26.1	25.5
Service occupations	23.0	23.3	18.5	19.3	27.6	27.2
Private household	1.7	1.9	.2	.2	3.3	3.6
Protective service	3.1	3.1	4.8	5.1	1.4	1.0
Service, except private household and protective	18.1	18.3	13.6	14.0	22.8	22.7
Precision production, craft, and repair	9.1	9.1	15.7	15.5	2.4	2.6
Operators, fabricators, and laborers	22.4	21.9	32.0	31.8	12.5	11.9
Machine operators, assemblers, and inspectors	9.8	9.5	10.5	10.0	9.1	9.1
Transportation and material moving occupations	6.3	5.8	11.3	10.7	1.3	.8
Handlers, equipment cleaners, helpers, and laborers	6.3	6.6	10.1	11.1	2.2	2.1
Farming, forestry, and fishing	2.4	2.2	4.2	3.9	.5	.6

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 1989								
	Nonagricultural industries					Agriculture			
	Wage and salary workers				Self-employed workers	Unpaid family workers	Wage and salary workers	Self-employed workers	Unpaid family workers
	Total	Private household workers	Government	Other					
Total, 16 years and over	106,390	1,217	16,887	88,286	8,797	273	1,958	1,494	181
16 to 19 years	7,596	227	507	6,861	98	21	328	49	44
16 to 17 years	2,979	157	207	2,615	35	8	190	19	31
18 to 19 years	4,617	70	300	4,247	64	13	138	30	14
20 to 24 years	12,864	138	1,077	11,649	299	17	369	63	19
25 to 34 years	31,195	186	4,148	26,862	1,947	57	550	291	21
35 to 44 years	25,907	197	5,190	20,521	2,730	89	297	341	26
45 to 54 years	16,905	176	3,603	13,126	1,804	51	189	238	33
55 to 64 years	9,572	173	1,943	7,456	1,281	27	162	309	22
55 to 59 years	5,814	96	1,212	4,506	688	18	91	153	15
60 to 64 years	3,758	78	731	2,949	593	9	71	156	7
65 years and over	2,351	120	419	1,812	637	11	64	204	14
Men, 16 years and over	57,239	204	7,975	49,059	5,733	49	1,577	1,248	66
16 to 19 years	3,861	66	254	3,541	71	15	281	45	36
16 to 17 years	1,544	48	118	1,378	22	5	175	18	26
18 to 19 years	2,317	18	136	2,163	49	9	106	27	10
20 to 24 years	6,561	21	472	6,068	191	12	306	60	12
25 to 34 years	17,249	32	1,963	15,254	1,262	7	433	245	5
35 to 44 years	13,878	23	2,388	11,466	1,741	3	219	269	1
45 to 54 years	9,172	26	1,746	7,400	1,187	3	145	181	1
55 to 64 years	5,281	13	948	4,321	829	4	134	263	4
55 to 59 years	3,220	6	587	2,628	467	3	72	130	3
60 to 64 years	2,061	7	361	1,693	363	2	61	133	1
65 years and over	1,237	23	205	1,009	452	5	59	185	7
Women, 16 years and over	49,151	1,013	8,911	39,226	3,064	225	380	246	115
16 to 19 years	3,735	161	253	3,320	28	6	47	4	8
16 to 17 years	1,435	109	89	1,237	13	3	16	1	5
18 to 19 years	2,300	53	164	2,084	15	3	31	3	4
20 to 24 years	6,303	116	605	5,581	108	5	63	3	8
25 to 34 years	13,946	154	2,185	11,607	685	50	116	46	16
35 to 44 years	12,030	173	2,802	9,055	989	86	77	72	26
45 to 54 years	7,733	150	1,858	5,725	617	48	44	57	32
55 to 64 years	4,290	160	995	3,135	452	23	28	46	17
55 to 59 years	2,594	90	625	1,879	222	16	19	23	12
60 to 64 years	1,697	71	370	1,256	230	7	9	23	6
65 years and over	1,114	98	214	803	185	6	5	18	7

A-25. Employed civilians by industry and occupation

(In thousands)

Industry	August 1989												
	Total employed	Managerial and professional specialty		Technical, sales, and administrative support			Service occupations		Precision production, craft, and repair	Operators, fabricators, and laborers			Farming, forestry, and fishing
		Executive, administrative, and managerial	Professional specialty	Technicians and related support	Sales	Administrative support, including clerical	Private household	Other service ¹		Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment cleaners, helpers, and laborers	
Agriculture	3,633	72	82	26	16	117		22	31	12	48	14	3,193
Mining	750	131	57	39	9	74		7	237	44	118	34	-
Construction	7,998	1,047	127	54	60	435		38	4,594	76	587	962	19
Manufacturing	21,884	2,669	1,812	759	746	2,420		387	4,106	6,851	849	1,186	99
Durable goods	12,879	1,671	1,197	510	326	1,374		217	2,793	3,691	452	550	97
Nondurable goods	9,005	998	615	248	420	1,046		170	1,313	3,159	397	636	3
Transportation and public utilities	8,139	978	454	287	340	2,141		261	1,243	122	1,775	518	21
Wholesale and retail trade	24,720	2,118	404	111	10,315	2,461	-	4,571	1,538	343	996	1,833	29
Wholesale trade	4,606	496	83	33	1,819	832		23	349	135	486	334	16
Retail trade	20,114	1,623	321	78	8,496	1,630		4,548	1,190	207	510	1,499	13
Finance, insurance, and real estate	8,167	2,028	209	108	1,956	3,233	-	314	145	21	14	32	109
Services	38,009	4,772	10,926	2,112	916	6,083	925	8,096	1,887	805	478	466	544
Private households	1,223	5	3	5	1	5	925	99	14	3	6	20	137
Other service industries	36,786	4,767	10,923	2,107	915	6,078	-	7,997	1,873	803	472	445	407
Professional services	23,599	2,575	9,497	1,699	124	4,309		4,299	450	203	221	116	105
Public administration	5,792	1,209	815	240	30	1,593		1,431	222	33	61	73	86

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. 1988	Aug. 1989	Total		Wage and salary workers ¹			
			Aug. 1988	Aug. 1989	Paid absences		Unpaid absences	
					Aug. 1988	Aug. 1989	Aug. 1988	Aug. 1989
Total, 16 years and over	11,943	11,939	11,760	11,795	6,624	6,688	4,261	4,321
Vacation	9,435	9,266	9,311	9,176	5,833	5,846	2,919	2,824
Illness	1,293	1,351	1,277	1,327	500	538	693	702
Bad weather	46	26	36	17	(²)	(²)	(²)	(²)
Industrial dispute	41	161	41	161	(²)	(²)	(²)	(²)
All other reasons	1,128	1,135	1,095	1,114	291	304	648	795
Men, 16 years and over	5,181	5,071	5,041	4,958	3,150	3,198	1,446	1,357
Vacation	3,983	3,818	3,884	3,749	2,762	2,799	854	703
Illness	674	699	662	680	265	289	353	336
All other reasons ³	524	554	495	528	122	110	239	319
Women, 16 years and over	6,762	6,868	6,719	6,837	3,473	3,489	2,816	2,962
Vacation	5,452	5,449	5,427	5,427	3,069	3,047	2,065	2,121
Illness	619	651	616	647	235	249	341	366
All other reasons ³	691	768	677	763	169	194	410	475

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 1989					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	107,153	3,488	103,665	100.0	100.0	100.0
1 to 34 hours	23,340	909	22,431	21.8	26.1	21.6
1 to 4 hours	736	46	690	.7	1.3	.7
5 to 14 hours	3,511	191	3,320	3.3	5.5	3.2
15 to 29 hours	11,629	402	11,228	10.9	11.5	10.8
30 to 34 hours	7,464	270	7,194	7.0	7.7	6.9
35 hours and over	83,813	2,579	81,233	78.2	73.9	78.4
35 to 39 hours	7,248	168	7,080	6.8	4.8	6.8
40 hours	43,240	706	42,534	40.4	20.2	41.0
41 hours and over	33,325	1,705	31,620	31.1	48.9	30.5
41 to 48 hours	11,769	301	11,467	11.0	8.6	11.1
49 to 59 hours	12,096	430	11,666	11.3	12.3	11.3
60 hours and over	9,461	974	8,487	8.8	27.9	8.2
Average hours, total at work	40.1	45.8	39.9			
Average hours, workers on full-time schedules	43.9	53.0	43.6			

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 1989					
	All industries			Nonagricultural industries		
	Total	Usually work full time	Usually work part time	Total	Usually work full time	Usually work part time
Total, 16 years and over	23,340	7,529	15,811	22,431	7,262	15,169
Economic reasons	5,125	1,774	3,351	4,849	1,665	3,184
Slack work	2,250	1,314	936	2,084	1,209	875
Material shortages or repairs to plant and equipment	60	60	-	60	60	-
New job started during week	266	266	-	263	263	-
Job terminated during week	135	135	-	133	133	-
Could find only part-time work	2,415	-	2,415	2,309	-	2,309
Other reasons	18,215	5,755	12,460	17,582	5,597	11,985
Does not want, or unavailable for, full-time work	9,597	-	9,597	9,282	-	9,282
Vacation	2,766	2,766	-	2,730	2,730	-
Illness	1,327	1,179	148	1,295	1,157	138
Bad weather	244	244	-	183	182	-
Industrial dispute	-	-	-	-	-	-
Legal or religious holiday	22	22	-	22	22	-
Full time for this job	1,870	-	1,870	1,803	-	1,804
All other reasons	2,390	1,545	845	2,268	1,507	761
Average hours:						
Economic reasons	22.2	24.5	21.1	22.3	24.4	21.1
Other reasons	21.8	24.7	20.6	21.9	24.7	20.6
Worked 30 to 34 hours:						
Economic reasons	1,705	791	914	1,601	736	865
Other reasons	5,759	2,703	3,056	5,592	2,646	2,946

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

(Numbers in thousands)

Industry	August 1989								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over	103,665	4,849	11,985	86,831	55,210	11,467	20,153	39.9	43.6
Wage and salary workers	95,310	4,299	10,575	80,436	52,281	10,868	17,287	39.8	43.3
Mining	656	10	11	635	292	96	247	47.3	48.2
Construction	6,162	350	245	5,567	3,570	700	1,297	41.5	43.7
Manufacturing	19,822	521	573	18,728	11,754	3,041	3,933	42.2	43.4
Durable goods	11,613	194	226	11,194	6,966	1,778	2,450	42.7	43.5
Nondurable goods	8,209	327	347	7,535	4,788	1,263	1,484	41.6	43.3
Transportation and public utilities	6,956	158	361	6,437	3,976	822	1,639	43.0	44.8
Wholesale and retail trade	21,195	1,501	3,938	15,756	9,569	2,272	3,915	38.2	43.7
Finance, insurance, and real estate	6,938	160	597	6,181	4,274	776	1,130	40.1	42.3
Service industries	28,241	1,541	4,594	22,106	15,122	2,606	4,379	37.8	42.6
Private households	1,150	250	457	444	281	43	120	27.1	45.3
All other industries	27,091	1,291	4,137	21,662	14,840	2,563	4,259	38.3	42.5
Public administration	5,339	57	255	5,026	3,724	556	747	40.9	42.1
Self-employed workers	8,081	540	1,290	6,251	2,848	589	2,814	41.4	48.0
Unpaid family workers	273	10	120	144	81	10	52	36.0	48.9

**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 1989							
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules			Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 hours or more		
TOTAL								
Total, 16 years and over	103,665	4,849	11,985	86,831	55,210	31,620	39.9	43.6
16 to 19 years	7,294	1,069	2,526	3,699	2,872	827	31.0	40.6
16 to 17 years	2,784	458	1,402	924	757	167	26.6	39.6
18 to 19 years	4,510	611	1,125	2,775	2,115	660	33.7	40.9
20 years and over	96,370	3,780	9,459	83,132	52,339	30,793	40.6	43.7
20 to 24 years	12,459	835	1,445	10,179	7,084	3,095	38.8	42.5
25 years and over	83,911	2,945	8,014	72,953	45,255	27,698	40.9	43.9
25 to 44 years	55,554	1,942	4,275	49,337	29,890	19,447	41.5	44.0
45 to 64 years	25,714	906	2,477	22,331	14,484	7,847	40.7	43.7
65 years and over	2,643	96	1,263	1,284	881	403	29.6	42.2
Men, 16 years and over	58,063	2,219	3,460	52,384	29,716	22,668	42.8	45.1
16 to 19 years	3,771	592	1,101	2,079	1,578	501	32.2	41.1
16 to 17 years	1,452	264	658	529	420	109	27.5	39.7
18 to 19 years	2,320	328	442	1,550	1,158	392	35.2	41.5
20 years and over	54,291	1,627	2,359	50,305	28,138	22,167	43.6	45.3
20 to 24 years	6,488	400	506	5,581	3,572	2,009	40.7	43.7
25 years and over	47,804	1,227	1,853	44,724	24,566	20,158	43.9	45.5
25 to 44 years	31,577	849	637	30,091	15,966	14,125	44.7	45.8
45 to 64 years	14,705	334	554	13,817	8,088	5,729	43.7	45.1
65 years and over	1,521	43	662	816	512	304	31.4	43.4
Women, 16 years and over	45,602	2,630	8,525	34,447	25,495	8,952	36.3	41.3
16 to 19 years	3,523	477	1,426	1,620	1,294	327	29.6	39.9
16 to 17 years	1,333	194	743	395	337	58	25.6	39.3
18 to 19 years	2,191	284	682	1,225	957	268	32.1	40.1
20 years and over	42,079	2,153	7,100	32,827	24,201	8,626	36.9	41.3
20 to 24 years	5,972	435	939	4,598	3,511	1,087	36.8	41.0
25 years and over	36,107	1,718	6,161	28,229	20,690	7,539	36.9	41.4
25 to 44 years	23,977	1,094	3,638	19,245	13,923	5,322	37.4	41.3
45 to 64 years	11,008	571	1,922	8,515	6,397	2,118	36.8	41.5
65 years and over	1,122	53	600	468	369	99	27.0	40.0
RACE								
White, 16 years and over	89,252	3,904	10,613	74,735	46,155	28,580	40.1	43.8
Men	50,568	1,809	3,006	45,752	25,099	20,653	43.1	45.4
Women	38,684	2,095	7,606	28,983	21,056	7,927	36.2	41.3
Black, 16 years and over	10,832	795	1,026	9,011	6,902	2,108	38.5	42.0
Men	5,531	352	340	4,839	3,440	1,399	40.6	43.2
Women	5,301	444	686	4,171	3,462	709	36.4	40.5
MARITAL STATUS								
Men, 16 years and over:								
Married, spouse present	35,663	779	1,235	33,648	17,987	15,661	44.3	45.7
Widowed, divorced, or separated	6,146	227	288	5,631	3,092	2,539	43.8	45.8
Single (never married)	16,254	1,213	1,937	13,104	8,636	4,468	39.2	43.5
Women, 16 years and over:								
Married, spouse present	23,615	1,090	4,970	17,555	13,160	4,394	35.8	41.1
Widowed, divorced, or separated	9,166	544	1,112	7,510	5,363	2,147	38.1	41.8
Single (never married)	12,821	996	2,443	9,382	6,972	2,411	36.0	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 1989								
	Total at work	On part time for economic reasons	On voluntary part time	On full-time schedules				Average hours, total at work	Average hours, workers on full-time schedules
				Total	40 hours or less	41 to 48 hours	49 hours or more		
Total, 16 years and over ¹	103,229	4,779	11,908	86,543	54,923	11,480	20,139	40.0	43.6
Managerial and professional specialty	25,056	492	1,972	22,593	12,339	3,004	7,250	42.6	45.0
Executive, administrative, and managerial	13,780	185	610	12,985	6,672	1,725	4,589	44.5	45.9
Professional specialty	11,276	307	1,361	9,608	5,667	1,279	2,662	40.3	43.8
Technical, sales, and administrative support	33,672	1,322	5,011	27,339	18,498	3,542	5,300	38.6	42.7
Technicians and related support	3,458	46	328	3,084	2,108	462	515	39.9	42.0
Sales occupations	13,385	748	2,305	10,332	5,557	1,398	3,377	39.9	45.4
Administrative support, including clerical	16,829	528	2,378	13,923	10,833	1,682	1,408	37.4	40.8
Service occupations	14,579	1,454	3,396	9,729	7,055	1,072	1,602	35.4	42.6
Private household	868	171	346	351	231	36	84	27.4	44.3
Protective service	1,960	43	152	1,765	1,085	281	398	42.8	45.0
Service, except private household and protective	11,751	1,240	2,898	7,613	5,738	754	1,120	34.7	41.9
Precision production, craft, and repair	12,915	541	380	11,994	7,350	1,776	2,869	42.4	44.0
Operators, fabricators, and laborers	17,007	970	1,149	14,887	9,682	2,086	3,119	41.0	43.6
Machine operators, assemblers, and inspectors	7,712	378	316	7,019	4,905	1,047	1,067	40.6	42.3
Transportation and material moving occupations	4,473	138	212	4,124	2,101	550	1,473	45.0	47.0
Handlers, equipment cleaners, helpers, and laborers	4,821	455	622	3,744	2,676	489	579	37.9	42.5
Men, 16 years and over ¹	57,542	2,148	3,344	52,050	29,414	7,148	15,489	42.9	45.2
Managerial and professional specialty	14,722	223	616	13,883	6,691	1,762	5,430	45.2	46.7
Executive, administrative, and managerial	8,366	79	223	8,064	3,675	995	3,394	46.5	47.4
Professional specialty	6,356	144	394	5,819	3,016	767	2,036	43.5	45.8
Technical, sales, and administrative support	12,168	324	870	10,974	5,831	1,541	3,602	43.2	45.6
Technicians and related support	1,889	23	86	1,780	1,123	269	389	41.8	43.1
Sales occupations	6,851	196	514	6,141	2,608	852	2,681	44.9	47.7
Administrative support, including clerical	3,428	104	270	3,054	2,100	421	532	40.6	43.0
Service occupations	5,953	462	824	4,667	3,182	541	945	38.9	43.6
Private household	37	6	20	11	2	2	7	(²)	(²)
Protective service	1,611	32	100	1,479	868	230	381	43.9	45.8
Service, except private household and protective	4,306	424	704	3,177	2,311	310	556	37.1	42.5
Precision production, craft, and repair	11,832	470	272	11,090	6,696	1,654	2,740	42.8	44.2
Operators, fabricators, and laborers	12,867	669	762	11,436	7,013	1,650	2,773	42.0	44.5
Machine operators, assemblers, and inspectors	4,614	177	119	4,318	2,799	710	809	42.0	43.3
Transportation and material moving occupations	4,211	116	169	3,926	1,965	529	1,432	45.5	47.2
Handlers, equipment cleaners, helpers, and laborers	4,042	376	474	3,192	2,249	411	532	38.4	42.7
Women, 16 years and over ¹	45,687	2,631	8,564	34,493	25,510	4,332	4,651	36.3	41.3
Managerial and professional specialty	10,335	269	1,356	8,710	5,648	1,243	1,820	38.8	42.3
Executive, administrative, and managerial	5,415	106	388	4,921	2,996	730	1,195	41.4	43.4
Professional specialty	4,920	163	968	3,789	2,651	513	625	36.0	40.8
Technical, sales, and administrative support	21,504	998	4,141	16,365	12,667	2,000	1,698	36.0	40.7
Technicians and related support	1,569	22	242	1,305	985	193	126	37.7	40.6
Sales occupations	6,534	552	1,791	4,191	2,949	546	696	34.6	42.0
Administrative support, including clerical	13,401	424	2,108	10,870	8,733	1,261	876	36.6	40.2
Service occupations	8,626	992	2,573	5,061	3,873	531	657	32.9	41.6
Private household	831	165	326	340	229	34	77	27.4	44.0
Protective service	350	12	52	286	217	52	17	37.4	41.0
Service, except private household and protective	7,445	816	2,194	4,436	3,428	445	564	33.3	41.5
Precision production, craft, and repair	1,083	71	108	905	653	122	129	37.9	41.4
Operators, fabricators, and laborers	4,139	301	387	3,452	2,669	437	346	38.0	40.9
Machine operators, assemblers, and inspectors	3,098	201	196	2,701	2,106	337	258	38.5	40.7
Transportation and material moving occupations	263	22	43	198	136	21	41	37.8	43.3
Handlers, equipment cleaners, helpers, and laborers	778	78	147	553	426	79	48	35.8	41.0

¹ Excludes farming, forestry, and fishing occupations.

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status and sex	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Noninstitutional population ¹	186,522	186,666	186,801	186,949	187,098	187,340	187,461	187,581	187,708	187,854	187,995	188,149	188,286
Labor force ¹	123,692	123,688	123,778	124,215	124,259	125,124	124,865	124,948	125,343	125,283	125,768	125,622	125,706
Percent of population ²	66.3	66.3	66.3	66.4	66.4	66.8	66.6	66.6	66.6	66.7	66.9	66.8	66.8
Total employed ¹	116,895	117,074	117,260	117,652	117,705	118,407	118,537	118,820	118,797	118,888	119,207	119,125	119,285
Employment-population ratio ³	62.7	62.7	62.8	62.9	62.9	63.2	63.2	63.3	63.3	63.3	63.4	63.3	63.4
Resident Armed Forces	1,692	1,704	1,687	1,705	1,696	1,696	1,684	1,684	1,684	1,673	1,666	1,666	1,688
Civilian employed	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459	117,597
Agriculture	3,142	3,176	3,238	3,238	3,193	3,300	3,223	3,206	3,104	3,112	3,096	3,219	3,307
Nonagricultural industries	112,061	112,194	112,335	112,709	112,816	113,411	113,630	113,930	114,009	114,102	114,445	114,240	114,290
Unemployed	6,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497	6,421
Unemployment rate ⁴	5.5	5.3	5.3	5.3	5.3	5.3	5.1	4.9	5.2	5.1	5.2	5.2	5.1
Not in labor force	62,830	62,978	63,023	62,734	62,839	62,216	62,596	62,633	62,365	62,571	62,228	62,527	62,580
Men													
Noninstitutional population ¹	89,504	89,577	89,637	89,716	89,792	89,914	89,973	90,032	90,094	90,167	90,237	90,315	90,384
Labor force ¹	68,685	68,604	68,569	68,686	68,638	69,032	69,113	69,190	69,360	69,114	69,507	69,245	69,337
Percent of population ²	76.7	76.6	76.5	76.6	76.4	76.8	76.8	76.9	77.0	76.7	77.0	76.7	76.7
Total employed ¹	64,931	65,015	64,976	65,074	65,055	65,322	65,572	65,920	65,767	65,713	66,110	65,961	65,934
Employment-population ratio ³	72.5	72.6	72.5	72.5	72.5	72.6	72.9	73.2	73.0	72.9	73.3	73.0	72.9
Resident Armed Forces	1,529	1,540	1,526	1,542	1,534	1,532	1,521	1,521	1,521	1,511	1,501	1,499	1,519
Civilian employed	63,402	63,475	63,450	63,532	63,521	63,790	64,051	64,399	64,246	64,202	64,609	64,462	64,415
Unemployed	3,754	3,589	3,593	3,612	3,583	3,710	3,540	3,270	3,593	3,401	3,397	3,284	3,403
Unemployment rate ⁴	5.5	5.2	5.2	5.3	5.2	5.4	5.1	4.7	5.2	4.9	4.9	4.7	4.9
Not in labor force	20,819	20,973	21,068	21,030	21,154	20,882	20,860	20,842	20,734	21,053	20,730	21,070	21,047
Women													
Noninstitutional population ¹	97,018	97,089	97,164	97,234	97,306	97,427	97,488	97,550	97,614	97,687	97,758	97,834	97,902
Labor force ¹	55,007	55,084	55,209	55,529	55,621	56,091	55,752	55,758	55,983	56,169	56,261	56,377	56,370
Percent of population ²	56.7	56.7	56.8	57.1	57.2	57.6	57.2	57.2	57.4	57.5	57.6	57.6	57.6
Total employed ¹	51,964	52,059	52,284	52,578	52,650	53,085	52,965	52,900	53,029	53,175	53,097	53,164	53,352
Employment-population ratio ³	53.6	53.6	53.8	54.1	54.1	54.5	54.3	54.2	54.3	54.4	54.3	54.3	54.5
Resident Armed Forces	163	164	161	163	162	164	163	163	163	162	165	167	169
Civilian employed	51,801	51,895	52,123	52,415	52,488	52,921	52,802	52,737	52,866	53,013	52,932	52,997	53,183
Unemployed	3,043	3,025	2,925	2,951	2,971	3,006	2,787	2,858	2,953	2,994	3,164	3,213	3,018
Unemployment rate ⁴	5.5	5.5	5.3	5.3	5.3	5.4	5.0	5.1	5.3	5.3	5.6	5.7	5.4
Not in labor force	42,011	42,005	41,955	41,705	41,685	41,336	41,736	41,792	41,631	41,518	41,497	41,457	41,532

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.

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

(Numbers in thousands)

Employment status, sex, and age	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Civilian noninstitutional population ¹	184,830	184,962	185,114	185,244	185,402	185,644	185,777	185,897	186,024	186,181	186,329	186,483	186,598
Civilian labor force	122,000	121,984	122,091	122,510	122,563	123,428	123,181	123,264	123,659	123,610	124,102	123,956	124,018
Percent of population	66.0	66.0	66.0	66.1	66.1	66.5	66.3	66.3	66.5	66.4	66.6	66.5	66.5
Employed	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459	117,597
Employment-population ratio ²	62.3	62.4	62.4	62.6	62.6	62.9	62.9	63.0	63.0	63.0	63.1	63.0	63.0
Unemployed	6,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497	6,421
Unemployment rate	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2	5.2
Men, 20 years and over													
Civilian noninstitutional population ¹	80,669	80,751	80,851	80,924	81,001	81,162	81,256	81,333	81,413	81,524	81,592	81,679	81,754
Civilian labor force	62,916	62,884	62,915	62,995	63,002	63,358	63,490	63,557	63,709	63,503	63,831	63,656	63,643
Percent of population	78.0	77.9	77.8	77.8	77.8	78.1	78.1	78.1	78.3	77.9	78.2	77.9	77.8
Employed	59,839	59,979	60,004	59,999	60,049	60,420	60,636	60,869	60,757	60,798	61,093	60,921	60,853
Employment-population ratio ²	74.2	74.3	74.2	74.1	74.1	74.4	74.6	74.8	74.6	74.6	74.9	74.6	74.4
Agriculture	2,273	2,249	2,315	2,313	2,292	2,277	2,320	2,317	2,252	2,284	2,256	2,342	2,364
Nonagricultural industries	57,566	57,730	57,689	57,686	57,757	58,143	58,316	58,552	58,505	58,514	58,837	58,579	58,489
Unemployed	3,077	2,905	2,911	2,996	2,953	2,938	2,853	2,688	2,952	2,705	2,737	2,734	2,790
Unemployment rate	4.9	4.6	4.6	4.8	4.7	4.6	4.5	4.2	4.6	4.3	4.3	4.3	4.4
Not in labor force	17,753	17,867	17,936	17,929	17,999	17,804	17,766	17,776	17,704	18,021	17,761	18,023	18,111
Women, 20 years and over													
Civilian noninstitutional population ¹	89,670	89,735	89,807	89,887	89,954	90,072	90,153	90,242	90,318	90,432	90,526	90,607	90,684
Civilian labor force	50,959	50,991	51,201	51,558	51,587	51,998	51,821	51,851	51,992	52,171	52,231	52,463	52,373
Percent of population	56.8	56.8	57.0	57.4	57.3	57.7	57.5	57.5	57.6	57.7	57.7	57.9	57.8
Employed	48,492	48,535	48,788	49,113	49,165	49,543	49,514	49,484	49,544	49,690	49,661	49,850	49,905
Employment-population ratio ²	54.1	54.1	54.3	54.6	54.7	55.0	54.9	54.8	54.9	54.9	54.9	55.0	55.0
Agriculture	609	638	640	640	646	715	666	664	615	628	610	627	644
Nonagricultural industries	47,883	47,897	48,148	48,473	48,519	48,827	48,849	48,819	48,929	49,062	49,051	49,223	49,261
Unemployed	2,467	2,456	2,413	2,445	2,422	2,455	2,306	2,367	2,448	2,480	2,570	2,613	2,468
Unemployment rate	4.8	4.8	4.7	4.7	4.7	4.7	4.5	4.6	4.7	4.8	4.9	5.0	4.7
Not in labor force	38,711	38,744	38,606	38,329	38,367	38,074	38,332	38,391	38,326	38,261	38,295	38,144	38,311
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹	14,491	14,477	14,456	14,433	14,447	14,410	14,367	14,323	14,293	14,224	14,211	14,196	14,160
Civilian labor force	8,125	8,109	7,975	7,957	7,974	8,071	7,871	7,856	7,958	7,936	8,040	7,837	8,003
Percent of population	56.1	56.0	55.2	55.1	55.2	56.0	54.8	54.9	55.7	55.8	56.6	55.2	56.5
Employed	6,872	6,856	6,781	6,835	6,795	6,748	6,703	6,783	6,812	6,726	6,786	6,687	6,840
Employment-population ratio ²	47.4	47.4	46.9	47.4	47.0	46.8	46.7	47.4	47.7	47.3	47.8	47.1	48.3
Agriculture	260	289	283	285	255	307	237	224	237	200	230	249	300
Nonagricultural industries	6,612	6,567	6,498	6,550	6,540	6,441	6,466	6,559	6,575	6,526	6,556	6,438	6,540
Unemployed	1,253	1,253	1,194	1,122	1,179	1,323	1,168	1,073	1,146	1,210	1,254	1,150	1,163
Unemployment rate	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7	14.5
Not in labor force	6,366	6,368	6,481	6,476	6,473	6,339	6,496	6,467	6,335	6,288	6,171	6,359	6,157

¹ The population figures are not adjusted for seasonal variation.

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
WHITE													
Civilian noninstitutional population ¹	158,340	158,422	158,524	158,603	158,705	158,865	158,947	159,020	159,098	159,200	159,297	159,400	159,470
Civilian labor force	105,013	105,036	105,051	105,395	105,411	106,106	105,798	105,988	106,312	106,164	106,455	106,424	106,446
Percent of population	66.3	66.3	66.3	66.5	66.4	66.8	66.6	66.7	66.8	66.7	66.8	66.8	66.8
Employed	99,907	100,058	100,199	100,543	100,567	101,183	101,278	101,554	101,458	101,465	101,693	101,581	101,670
Employment-population ratio ²	63.1	63.2	63.2	63.4	63.4	63.7	63.7	63.9	63.8	63.7	63.8	63.7	63.8
Unemployed	5,106	4,978	4,852	4,852	4,844	4,923	4,521	4,434	4,854	4,699	4,762	4,843	4,777
Unemployment rate	4.9	4.7	4.6	4.6	4.6	4.6	4.3	4.2	4.6	4.4	4.5	4.6	4.5
Men, 20 years and over													
Civilian labor force	54,864	54,839	54,861	54,922	54,898	55,213	55,308	55,382	55,448	55,249	55,557	55,437	55,377
Percent of population	78.4	78.3	78.3	78.3	78.2	78.5	78.6	78.6	78.7	78.3	78.7	78.4	78.3
Employed	52,487	52,579	52,612	52,624	52,636	53,007	53,197	53,387	53,246	53,248	53,500	53,343	53,282
Employment-population ratio ²	75.0	75.1	75.1	75.0	75.0	75.4	75.6	75.8	75.5	75.5	75.8	75.5	75.3
Unemployed	2,377	2,260	2,249	2,298	2,262	2,205	2,111	1,995	2,202	2,001	2,057	2,094	2,095
Unemployment rate	4.3	4.1	4.1	4.2	4.1	4.0	3.8	3.6	4.0	3.6	3.7	3.8	3.8
Women, 20 years and over													
Civilian labor force	43,149	43,191	43,298	43,625	43,644	43,936	43,770	43,780	44,016	44,084	44,050	44,302	44,169
Percent of population	56.4	56.4	56.5	56.9	56.9	57.2	56.9	56.9	57.2	57.2	57.1	57.4	57.2
Employed	41,378	41,413	41,583	41,889	41,930	42,201	42,177	42,115	42,207	42,282	42,236	42,411	42,372
Employment-population ratio ²	54.1	54.1	54.2	54.6	54.6	54.9	54.8	54.7	54.8	54.9	54.8	55.0	54.9
Unemployed	1,771	1,778	1,715	1,736	1,714	1,734	1,593	1,665	1,810	1,803	1,814	1,891	1,798
Unemployment rate	4.1	4.1	4.0	4.0	3.9	3.9	3.6	3.8	4.1	4.1	4.1	4.3	4.1
Both sexes, 16 to 19 years													
Civilian labor force	7,000	7,006	6,892	6,848	6,869	6,958	6,720	6,826	6,848	6,831	6,848	6,685	6,900
Percent of population	59.2	59.4	58.5	58.3	58.6	59.6	57.7	58.7	59.0	59.0	59.2	57.9	60.0
Employed	6,042	6,066	6,004	6,030	6,001	5,975	5,904	6,052	6,005	5,936	5,957	5,827	6,016
Employment-population ratio ²	51.1	51.4	51.0	51.3	51.2	51.1	50.7	52.1	51.8	51.3	51.5	50.5	52.3
Unemployed	958	940	888	818	868	983	816	774	843	895	891	858	884
Unemployment rate	13.7	13.4	12.9	11.9	12.6	14.1	12.1	11.3	12.3	13.1	13.0	12.8	12.8
Men	13.9	14.5	14.4	12.6	13.4	16.4	14.0	12.3	13.1	14.8	13.4	12.4	12.9
Women	13.5	12.3	11.3	11.3	11.8	11.7	10.2	10.2	11.5	11.2	12.6	13.4	12.7
BLACK													
Civilian noninstitutional population ¹	20,736	20,762	20,786	20,811	20,842	20,877	20,905	20,930	20,956	20,986	21,012	21,038	21,060
Civilian labor force	13,236	13,201	13,290	13,330	13,405	13,477	13,476	13,425	13,287	13,444	13,600	13,555	13,448
Percent of population	63.8	63.6	63.9	64.1	64.3	64.6	64.5	64.1	63.4	64.1	64.7	64.4	63.9
Employed	11,733	11,758	11,807	11,831	11,856	11,860	11,873	11,961	11,846	11,968	11,982	12,082	11,958
Employment-population ratio ²	56.6	56.6	56.8	56.8	56.9	56.8	57.1	56.5	57.0	57.0	57.4	57.4	56.8
Unemployed	1,503	1,443	1,483	1,499	1,549	1,617	1,603	1,464	1,442	1,476	1,618	1,473	1,490
Unemployment rate	11.4	10.9	11.2	11.2	11.6	12.0	11.9	10.9	10.8	11.0	11.9	10.9	11.1
Men, 20 years and over													
Civilian labor force	6,131	6,117	6,157	6,146	6,179	6,226	6,199	6,230	6,171	6,207	6,200	6,205	6,189
Percent of population	74.5	74.2	74.6	74.3	74.6	75.0	74.6	74.8	74.0	74.3	74.1	74.1	73.8
Employed	5,539	5,563	5,566	5,545	5,561	5,576	5,549	5,620	5,554	5,622	5,619	5,629	5,580
Employment-population ratio ²	67.3	67.5	67.4	67.1	67.1	67.2	66.7	67.5	66.6	67.3	67.2	67.2	66.6
Unemployed	592	554	591	601	618	650	650	611	617	586	581	576	609
Unemployment rate	9.7	9.1	9.6	9.8	10.0	10.4	10.5	9.8	10.0	9.4	9.4	9.3	9.8
Women, 20 years and over													
Civilian labor force	6,188	6,174	6,234	6,280	6,316	6,369	6,349	6,315	6,227	6,340	6,405	6,394	6,359
Percent of population	60.0	59.8	60.2	60.6	60.9	61.2	61.0	60.5	59.6	60.6	61.2	61.0	60.5
Employed	5,571	5,575	5,620	5,663	5,654	5,706	5,697	5,739	5,677	5,740	5,732	5,759	5,762
Employment-population ratio ²	54.0	54.0	54.3	54.6	54.5	54.9	54.7	55.0	54.3	54.9	54.7	54.9	54.9
Unemployed	617	599	614	617	662	663	651	576	550	600	674	635	597
Unemployment rate	10.0	9.7	9.8	9.8	10.5	10.4	10.3	9.1	8.8	9.5	10.5	9.9	9.4

See footnotes at end of table.

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	917	910	899	904	910	881	928	880	889	897	994	956	900
Percent of population	42.0	41.7	41.2	41.5	41.7	40.5	42.7	40.5	40.9	41.3	45.7	44.0	41.4
Employed	623	620	621	623	641	577	627	602	615	606	631	694	616
Employment-population ratio ²	28.5	28.4	28.5	28.6	29.4	26.5	28.8	27.7	28.3	27.9	29.0	31.9	28.3
Unemployed	294	290	278	281	269	304	301	278	274	291	363	262	284
Unemployment rate	32.1	31.9	30.9	31.1	29.6	34.5	32.4	31.6	30.8	32.4	36.5	27.4	31.6
Men	32.1	31.9	32.8	32.1	29.8	36.7	33.1	28.6	35.5	36.9	33.5	22.1	30.0
Women	32.0	31.9	28.6	29.9	29.3	32.0	31.6	34.8	26.2	28.4	40.2	33.1	33.4
HISPANIC ORIGIN													
Civilian noninstitutional population ¹	13,381	13,419	13,458	13,495	13,533	13,564	13,606	13,649	13,690	13,731	13,772	13,813	13,853
Civilian labor force	8,963	9,061	9,075	9,148	9,133	9,205	9,219	9,210	9,262	9,428	9,272	9,433	9,364
Percent of population	67.0	67.5	67.4	67.8	67.5	67.9	67.8	67.5	67.7	68.7	67.3	68.3	67.6
Employed	8,214	8,378	8,368	8,419	8,441	8,434	8,596	8,607	8,495	8,686	8,524	8,587	8,521
Employment-population ratio ²	61.4	62.4	62.2	62.4	62.4	62.2	63.2	63.1	62.1	63.3	61.9	62.2	61.5
Unemployed	749	683	707	729	692	771	624	603	767	742	748	846	843
Unemployment rate	8.4	7.5	7.8	8.0	7.6	8.4	6.8	6.5	8.3	7.9	8.1	9.0	9.0

¹ The population figures are not adjusted for seasonal variation.

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

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

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

(In thousands)

Category	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459	117,597
Married men, spouse present	40,511	40,513	40,504	40,407	40,483	40,925	40,928	41,083	40,890	40,902	41,102	41,089	40,636
Married women, spouse present	28,809	28,836	28,890	28,995	29,053	29,589	29,412	29,569	29,656	29,739	29,481	29,552	29,220
Women who maintain families	6,280	6,253	6,344	6,375	6,399	6,416	6,385	6,256	6,243	6,331	6,403	6,456	6,342
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers	1,607	1,612	1,661	1,672	1,698	1,684	1,645	1,656	1,554	1,610	1,550	1,695	1,803
Self-employed workers	1,411	1,421	1,405	1,450	1,349	1,387	1,419	1,403	1,419	1,358	1,412	1,434	1,420
Unpaid family workers	158	137	177	125	149	189	150	138	124	127	126	126	137
Nonagricultural industries:													
Wage and salary workers	103,207	103,501	103,733	103,770	103,904	104,510	104,797	104,982	104,985	105,245	105,519	105,321	105,259
Government	17,111	17,145	17,240	17,387	17,423	17,393	17,311	17,382	17,180	17,230	17,261	17,519	17,591
Private industries	86,096	86,356	86,493	86,383	86,481	87,117	87,486	87,600	87,806	88,015	88,259	87,803	87,668
Private households	1,128	1,119	1,152	1,209	1,210	1,196	1,135	1,163	1,117	1,128	1,140	1,093	1,146
Other industries	84,968	85,237	85,341	85,174	85,271	85,921	86,350	86,437	86,689	86,887	87,118	86,710	86,522
Self-employed workers	8,508	8,570	8,479	8,619	8,602	8,718	8,517	8,645	8,671	8,516	8,570	8,606	8,625
Unpaid family workers	241	230	232	300	266	298	285	332	281	322	241	239	264
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons	5,192	5,097	4,963	5,061	5,321	5,097	4,981	4,968	5,143	4,837	4,957	4,750	4,785
Slack work	2,315	2,266	2,220	2,279	2,549	2,302	2,303	2,232	2,373	2,296	2,318	2,311	2,282
Could only find part-time work	2,473	2,389	2,399	2,375	2,410	2,352	2,333	2,393	2,425	2,343	2,289	2,138	2,107
Voluntary part time	14,999	15,270	15,161	15,446	15,363	15,401	15,126	15,561	15,498	15,316	15,416	15,652	15,614
Nonagricultural industries:													
Part time for economic reasons	4,972	4,862	4,727	4,819	5,033	4,837	4,697	4,709	4,930	4,609	4,801	4,505	4,553
Slack work	2,171	2,102	2,095	2,116	2,377	2,144	2,105	2,048	2,243	2,102	2,190	2,185	2,129
Could only find part-time work	2,408	2,317	2,319	2,288	2,307	2,283	2,272	2,317	2,369	2,301	2,236	2,057	2,024
Voluntary part time	14,564	14,819	14,679	14,986	14,928	14,970	14,688	15,127	15,060	14,976	14,977	15,219	15,094

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(In thousands)

Sex and age	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	115,203	115,370	115,573	115,947	116,009	116,711	116,853	117,136	117,113	117,215	117,541	117,459	117,597
16 to 24 years	20,123	20,050	19,930	19,877	19,852	19,741	19,797	19,996	19,899	19,784	19,959	19,796	19,877
16 to 19 years	6,872	6,856	6,781	6,835	6,795	6,748	6,703	6,783	6,812	6,726	6,786	6,687	6,840
16 to 17 years	2,671	2,669	2,689	2,770	2,686	2,602	2,563	2,639	2,639	2,593	2,526	2,439	2,563
18 to 19 years	4,148	4,195	4,090	4,045	4,150	4,125	4,163	4,186	4,177	4,123	4,221	4,244	4,245
20 to 24 years	13,251	13,194	13,149	13,042	13,057	12,993	13,095	13,213	13,088	13,059	13,173	13,109	13,038
25 years and over	95,145	95,332	95,619	96,062	96,151	96,988	97,020	97,125	97,167	97,384	97,602	97,740	97,758
25 to 54 years	80,608	80,697	80,950	81,242	81,399	82,036	82,160	82,165	82,204	82,436	82,721	82,852	83,066
55 years and over	14,583	14,664	14,690	14,790	14,771	14,924	14,803	14,933	14,928	14,948	14,863	14,912	14,727
Men, 16 years and over	63,402	63,475	63,450	63,532	63,521	63,790	64,051	64,399	64,246	64,202	64,609	64,462	64,415
16 to 24 years	10,475	10,401	10,303	10,379	10,288	10,198	10,377	10,530	10,385	10,243	10,412	10,303	10,301
16 to 19 years	3,563	3,496	3,446	3,533	3,472	3,370	3,415	3,530	3,489	3,403	3,515	3,540	3,562
16 to 17 years	1,395	1,397	1,404	1,433	1,385	1,270	1,298	1,377	1,338	1,304	1,296	1,273	1,379
18 to 19 years	2,126	2,106	2,040	2,105	2,135	2,088	2,134	2,179	2,149	2,089	2,206	2,264	2,163
20 to 24 years	6,912	6,905	6,857	6,846	6,816	6,828	6,962	7,000	6,896	6,839	6,897	6,763	6,739
25 years and over	52,983	53,072	53,136	53,152	53,227	53,573	53,659	53,897	53,842	53,949	54,222	54,208	54,155
25 to 54 years	44,471	44,577	44,669	44,712	44,779	45,001	45,091	45,278	45,163	45,398	45,619	45,644	45,725
55 years and over	8,514	8,502	8,482	8,436	8,470	8,563	8,536	8,603	8,643	8,543	8,589	8,605	8,430
Women, 16 years and over	51,801	51,895	52,123	52,415	52,488	52,921	52,802	52,737	52,866	53,013	52,932	52,997	53,183
16 to 24 years	9,648	9,649	9,627	9,498	9,564	9,543	9,420	9,466	9,515	9,541	9,547	9,493	9,576
16 to 19 years	3,309	3,360	3,335	3,302	3,323	3,378	3,287	3,253	3,323	3,322	3,271	3,147	3,278
16 to 17 years	1,276	1,272	1,285	1,337	1,301	1,332	1,265	1,262	1,301	1,289	1,230	1,166	1,184
18 to 19 years	2,022	2,089	2,050	1,940	2,015	2,037	2,029	2,007	2,028	2,034	2,015	1,980	2,082
20 to 24 years	6,339	6,289	6,292	6,196	6,241	6,165	6,133	6,213	6,192	6,219	6,276	6,346	6,298
25 years and over	42,162	42,260	42,483	42,910	42,924	43,415	43,361	43,228	43,325	43,434	43,379	43,533	43,603
25 to 54 years	36,137	36,120	36,281	36,530	36,620	37,035	37,069	36,886	37,042	37,039	37,102	37,208	37,341
55 years and over	6,069	6,162	6,208	6,354	6,301	6,361	6,267	6,331	6,285	6,404	6,274	6,306	6,297

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

(In thousands)

Sex and age	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	6,797	6,614	6,518	6,563	6,554	6,716	6,328	6,128	6,546	6,395	6,561	6,497	6,421
16 to 24 years	2,476	2,457	2,429	2,363	2,421	2,663	2,316	2,182	2,344	2,303	2,544	2,381	2,420
16 to 19 years	1,253	1,253	1,194	1,122	1,179	1,323	1,168	1,073	1,146	1,210	1,254	1,150	1,163
16 to 17 years	605	650	559	520	535	581	572	477	463	500	535	529	565
18 to 19 years	660	615	629	599	637	751	605	597	667	701	737	603	609
20 to 24 years	1,223	1,204	1,235	1,241	1,242	1,340	1,148	1,109	1,198	1,093	1,290	1,231	1,257
25 years and over	4,334	4,179	4,061	4,193	4,125	4,101	4,026	3,921	4,191	4,074	4,036	4,099	4,031
25 to 54 years	3,828	3,733	3,651	3,739	3,687	3,632	3,559	3,542	3,761	3,628	3,503	3,641	3,556
55 years and over	475	436	419	433	457	474	466	396	451	453	515	485	468
Men, 16 years and over	3,754	3,589	3,593	3,612	3,583	3,710	3,540	3,270	3,593	3,401	3,397	3,284	3,403
16 to 24 years	1,351	1,329	1,376	1,274	1,280	1,494	1,302	1,128	1,238	1,270	1,358	1,196	1,328
16 to 19 years	677	684	682	616	630	772	687	582	641	696	660	550	613
16 to 17 years	301	367	318	300	290	330	317	258	274	301	323	268	290
18 to 19 years	362	329	360	314	333	455	379	330	368	390	347	270	315
20 to 24 years	674	645	694	658	650	722	615	546	597	574	698	646	715
25 years and over	2,417	2,270	2,195	2,331	2,296	2,245	2,246	2,136	2,344	2,099	2,057	2,095	2,106
25 to 54 years	2,088	2,014	1,946	2,050	1,999	1,986	1,943	1,890	2,076	1,845	1,768	1,840	1,800
55 years and over	298	255	266	275	286	269	303	246	283	258	270	274	291
Women, 16 years and over	3,043	3,025	2,925	2,951	2,971	3,006	2,787	2,858	2,953	2,994	3,164	3,213	3,018
16 to 24 years	1,125	1,128	1,053	1,089	1,141	1,169	1,014	1,054	1,106	1,034	1,186	1,185	1,092
16 to 19 years	576	569	512	506	549	551	481	491	505	514	594	600	550
16 to 17 years	304	283	241	220	245	251	255	219	189	199	212	261	275
18 to 19 years	298	286	269	285	304	296	226	267	299	311	390	333	294
20 to 24 years	549	559	541	583	592	618	533	563	601	520	592	585	542
25 years and over	1,917	1,909	1,866	1,862	1,829	1,856	1,780	1,784	1,847	1,975	1,979	2,004	1,925
25 to 54 years	1,740	1,719	1,705	1,689	1,688	1,646	1,616	1,652	1,685	1,782	1,735	1,801	1,756
55 years and over	177	181	153	158	171	205	164	151	169	195	245	211	178

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

(Civilian workers)

Sex and age	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2	5.2
16 to 24 years	11.0	10.9	10.9	10.6	10.9	11.9	10.5	9.8	10.5	10.4	11.3	10.7	10.9
16 to 19 years	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7	14.5
16 to 17 years	18.5	19.6	17.2	15.8	16.6	18.3	18.2	15.3	14.9	16.2	17.5	17.8	18.1
18 to 19 years	13.7	12.8	13.3	12.9	13.3	15.4	12.7	12.5	13.8	14.5	14.9	12.4	12.5
20 to 24 years	8.4	8.4	8.6	8.7	8.7	9.3	8.1	7.7	8.4	7.7	8.9	8.6	8.8
25 years and over	4.4	4.2	4.1	4.2	4.1	4.1	4.0	3.9	4.1	4.0	4.0	4.0	4.0
25 to 54 years	4.5	4.4	4.3	4.4	4.3	4.2	4.2	4.1	4.4	4.2	4.1	4.2	4.1
55 years and over	3.2	2.9	2.8	2.8	3.0	3.1	3.1	2.6	2.9	2.9	3.3	3.1	3.1
Men, 16 years and over	5.6	5.4	5.4	5.4	5.3	5.5	5.2	4.8	5.3	5.0	5.0	4.8	5.0
16 to 24 years	11.4	11.3	11.8	10.9	11.1	12.8	11.1	9.7	10.7	11.0	11.5	10.4	11.4
16 to 19 years	16.0	16.4	16.5	14.8	15.4	18.6	16.7	14.2	15.5	17.0	15.8	13.4	14.7
16 to 17 years	17.7	20.8	18.5	17.3	17.3	20.6	19.6	15.8	17.0	18.8	20.0	17.4	17.4
18 to 19 years	14.5	13.5	15.0	13.0	13.5	17.9	15.1	13.2	14.6	15.7	13.6	10.7	12.7
20 to 24 years	8.9	8.5	9.2	8.8	8.7	9.6	8.1	7.2	8.0	7.7	9.2	8.7	9.6
25 years and over	4.4	4.1	4.0	4.2	4.1	4.0	4.0	3.8	4.2	3.7	3.7	3.7	3.7
25 to 54 years	4.5	4.3	4.2	4.4	4.3	4.2	4.1	4.0	4.4	3.9	3.7	3.9	3.8
55 years and over	3.4	2.9	3.0	3.2	3.3	3.0	3.4	2.8	3.2	2.9	3.0	3.1	3.3
Women, 16 years and over	5.5	5.5	5.3	5.3	5.4	5.4	5.0	5.1	5.3	5.3	5.6	5.7	5.4
16 to 24 years	10.4	10.5	9.9	10.3	10.7	10.9	9.7	10.0	10.4	9.8	11.0	11.1	10.2
16 to 19 years	14.8	14.5	13.3	13.3	14.2	14.0	12.8	13.1	13.2	13.4	15.4	16.0	14.4
16 to 17 years	19.2	18.2	15.8	14.1	15.8	15.9	16.8	14.8	12.7	13.4	14.7	18.3	18.8
18 to 19 years	12.8	12.0	11.6	12.8	13.1	12.7	10.0	11.7	12.8	13.3	16.2	14.4	12.4
20 to 24 years	8.0	8.2	7.9	8.6	8.7	9.1	8.0	8.3	8.9	7.7	8.6	8.4	7.9
25 years and over	4.3	4.3	4.2	4.2	4.1	4.1	3.9	4.0	4.1	4.4	4.4	4.4	4.2
25 to 54 years	4.6	4.5	4.5	4.4	4.4	4.3	4.2	4.3	4.4	4.6	4.5	4.6	4.5
55 years and over	2.8	2.9	2.4	2.4	2.6	3.1	2.5	2.3	2.6	3.0	3.8	3.2	2.7

A-39. Selected unemployment indicators, seasonally adjusted

(Unemployment rates)

Category	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total (all civilian workers)	5.6	5.4	5.3	5.4	5.3	5.4	5.1	5.0	5.3	5.2	5.3	5.2	5.2
Men, 20 years and over	4.9	4.6	4.6	4.8	4.7	4.6	4.5	4.2	4.6	4.3	4.3	4.3	4.4
Women, 20 years and over ..	4.8	4.8	4.7	4.7	4.7	4.7	4.5	4.6	4.7	4.8	4.9	5.0	4.7
Both sexes, 16 to 19 years	15.4	15.5	15.0	14.1	14.8	16.4	14.8	13.7	14.4	15.2	15.6	14.7	14.5
White	4.9	4.7	4.6	4.6	4.6	4.6	4.3	4.2	4.6	4.4	4.5	4.6	4.5
Black and other	10.0	9.5	9.8	10.0	10.0	10.6	10.6	9.8	9.6	9.5	10.3	9.6	9.5
Black	11.4	10.9	11.2	11.2	11.6	12.0	11.9	10.9	10.8	11.0	11.9	10.9	11.1
Hispanic origin	8.4	7.5	7.8	8.0	7.6	8.4	6.8	6.5	8.3	7.9	8.1	9.0	9.0
Married men, spouse present	3.4	3.1	3.1	3.3	3.1	3.1	3.1	2.9	3.2	2.9	2.8	2.9	3.1
Married women, spouse present	4.0	3.8	3.7	3.8	3.7	3.6	3.4	3.5	4.0	3.8	3.8	3.8	3.9
Women who maintain families	7.5	8.1	7.9	7.7	8.2	8.0	8.0	7.9	7.6	8.3	7.9	8.7	8.0
Full-time workers	5.3	5.1	5.0	5.0	5.1	5.0	4.8	4.8	5.0	4.8	4.8	4.9	4.9
Part-time workers	7.4	7.4	7.4	7.1	7.0	7.9	7.3	6.2	7.2	6.9	7.7	7.2	6.9
Unemployed 15 weeks and over ¹	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.2	1.1	1.0	1.2	1.1
Labor force time lost ²	6.4	6.3	6.1	6.2	6.3	6.2	5.9	5.8	6.0	5.9	6.1	6.0	5.9
INDUSTRY													
Nonagricultural private wage and salary workers	5.6	5.4	5.4	5.5	5.4	5.6	5.1	5.0	5.4	5.2	5.3	5.4	5.4
Goods-producing industries	6.7	6.4	6.4	6.4	6.4	6.4	6.1	5.8	6.0	5.8	6.2	6.2	6.4
Mining	7.0	8.6	8.8	8.9	7.7	6.1	8.0	7.0	5.6	4.5	3.7	5.5	6.5
Construction	10.7	9.6	10.0	10.6	10.4	10.4	10.0	9.4	9.7	9.3	10.0	10.5	10.3
Manufacturing	5.5	5.4	5.3	5.1	5.2	5.3	4.9	4.8	4.9	4.9	5.2	5.0	5.2
Durable goods	5.0	5.2	5.0	4.9	5.0	5.0	4.4	4.7	4.7	4.5	4.6	4.7	4.8
Nondurable goods	6.3	5.8	5.7	5.3	5.5	5.7	5.5	4.9	5.2	5.5	6.1	5.5	5.9
Service-producing industries	5.1	5.0	4.9	5.1	4.9	5.2	4.7	4.6	5.1	4.9	4.9	5.0	4.9
Transportation and public utilities	3.8	3.8	3.5	4.0	3.8	3.8	3.9	3.9	4.0	4.0	4.4	4.2	3.6
Wholesale and retail trade	6.4	6.2	6.0	6.2	6.3	6.3	5.6	5.6	5.9	5.5	6.0	6.2	6.0
Finance and service industries	4.4	4.4	4.5	4.6	4.1	4.7	4.3	4.1	4.8	4.7	4.3	4.4	4.4
Government workers	2.9	2.7	2.6	2.5	2.7	2.7	2.7	2.6	2.7	2.9	3.0	2.8	2.7
Agricultural wage and salary workers	11.0	10.8	10.2	9.3	8.8	9.5	8.9	8.9	10.5	10.3	11.0	8.5	8.6

¹ Unemployment as a percent of the civilian labor force.

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Weeks of unemployment	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
DURATION													
Less than 5 weeks	3,158	3,116	3,059	3,117	3,029	3,181	3,247	3,055	3,090	3,041	3,309	3,149	3,071
5 to 14 weeks	1,956	1,896	1,835	1,935	2,039	2,081	1,865	1,821	2,034	2,017	1,999	1,927	2,011
15 weeks and over	1,636	1,568	1,554	1,502	1,495	1,512	1,304	1,310	1,426	1,313	1,258	1,472	1,305
15 to 26 weeks	831	775	788	787	758	757	665	648	689	702	659	846	737
27 weeks and over	805	793	766	715	737	755	639	663	737	611	599	626	567
Average (mean) duration, in weeks	13.5	13.5	13.4	12.6	12.8	12.7	12.1	12.4	12.7	11.8	11.1	12.0	11.3
Median duration, in weeks	5.9	5.7	5.7	5.6	5.8	5.7	5.3	5.4	5.4	5.3	5.5	5.6	5.0
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	46.8	47.4	47.4	47.6	46.2	47.0	50.6	49.4	47.2	47.7	50.4	48.1	48.1
5 to 14 weeks	29.0	28.8	28.5	29.5	31.1	30.7	29.1	29.4	31.1	31.7	30.4	29.4	31.5
15 weeks and over	24.2	23.8	24.1	22.9	22.8	22.3	20.3	21.2	21.8	20.6	19.2	22.5	20.4
15 to 26 weeks	12.3	11.8	12.2	12.0	11.5	11.2	10.4	10.5	10.5	11.0	10.0	12.9	11.5
27 weeks and over	11.9	12.1	11.9	10.9	11.2	11.1	10.0	10.7	11.3	9.6	9.1	9.6	8.9

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

(Numbers in thousands)

Reasons for unemployment	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
NUMBER OF UNEMPLOYED													
Job losers	3,112	3,079	2,951	3,031	3,066	3,121	2,876	2,831	2,984	2,724	2,765	2,920	2,984
On layoff	880	833	844	814	819	827	774	808	847	790	806	822	873
Other job losers	2,232	2,246	2,107	2,217	2,247	2,294	2,102	2,023	2,137	1,934	1,958	2,097	2,111
Job leavers	986	985	984	963	998	985	985	885	978	1,114	1,023	1,010	1,040
Reentrants	1,843	1,767	1,747	1,766	1,725	1,835	1,740	1,730	1,894	1,852	2,051	1,934	1,768
New entrants	800	761	747	799	799	780	765	713	671	683	742	724	628
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	46.2	46.7	45.9	46.2	46.5	46.4	45.2	46.0	45.7	42.7	42.0	44.3	46.5
On layoff	13.1	12.6	13.1	12.4	12.4	12.3	12.2	13.1	13.0	12.4	12.3	12.5	13.6
Other job losers	33.1	34.1	32.8	33.8	34.1	34.1	33.0	32.8	32.7	30.3	29.8	31.8	32.9
Job leavers	14.6	14.9	15.3	14.7	15.1	14.7	15.5	14.4	15.0	17.5	15.5	15.3	16.2
Reentrants	27.3	26.8	27.2	26.9	26.2	27.3	27.3	28.1	29.0	29.1	31.2	29.4	27.5
New entrants	11.9	11.5	11.6	12.2	12.1	11.6	12.0	11.6	10.3	10.7	11.3	11.0	9.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	2.6	2.5	2.4	2.5	2.5	2.5	2.3	2.3	2.4	2.2	2.2	2.4	2.4
Job leavers .....	.8	.8	.8	.8	.8	.8	.8	.7	.8	.9	.8	.8	.8
Reentrants	1.5	1.4	1.4	1.4	1.4	1.5	1.4	1.4	1.5	1.5	1.7	1.6	1.4
New entrants .....	.7	.6	.6	.7	.7	.6	.6	.6	.5	.6	.6	.6	.5

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

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

(In thousands)

Year and month	Total	Total private	Goods-producing				Service-producing						Government		
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Federal	State	Local
Annual averages															
1937	31,011	27,255	12,936	1,015	1,127	10,794	18,075	3,134	(¹)	(¹)	1,417	3,503	(¹)	(¹)	(¹)
1938	29,194	25,311	11,401	891	1,070	9,440	17,793	2,863	(¹)	(¹)	1,410	3,458	(¹)	(¹)	(¹)
1939	30,603	26,608	12,297	854	1,165	10,278	18,306	2,936	1,762	4,664	1,447	3,502	905	(¹)	(¹)
1940	32,361	28,159	13,221	925	1,311	10,985	19,140	3,038	1,835	4,914	1,485	3,665	996	(¹)	(¹)
1941	36,539	31,877	15,963	957	1,814	13,192	20,574	3,274	1,960	5,251	1,525	3,905	1,340	(¹)	(¹)
1942	40,106	34,624	18,470	992	2,198	15,280	21,636	3,460	1,906	5,212	1,509	4,066	2,213	(¹)	(¹)
1943	42,434	36,356	20,114	925	1,587	17,602	22,320	3,647	1,822	5,160	1,481	4,130	2,905	(¹)	(¹)
1944	41,864	35,822	19,328	892	1,108	17,328	22,536	3,829	1,845	5,214	1,461	4,145	2,928	(¹)	(¹)
1945	40,374	34,431	17,507	836	1,147	15,524	22,867	3,906	1,949	5,365	1,481	4,222	2,808	(¹)	(¹)
1946	41,652	36,056	17,248	862	1,683	14,703	24,404	4,061	2,291	6,084	1,675	4,697	2,254	(¹)	(¹)
1947	43,857	38,382	18,509	955	2,009	15,545	25,348	4,166	2,471	6,485	1,728	5,025	1,892	(¹)	(¹)
1948	44,866	39,216	18,774	994	2,198	15,582	26,092	4,189	2,605	6,667	1,800	5,181	1,863	(¹)	(¹)
1949	43,754	37,897	17,565	930	2,194	14,441	26,189	4,001	2,602	6,662	1,828	5,240	1,908	(¹)	(¹)
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	2,635	6,751	1,888	5,357	1,928	(¹)	(¹)
1951	47,819	41,430	19,959	929	2,637	16,393	27,860	4,226	2,727	7,015	1,956	5,547	2,302	(¹)	(¹)
1952	48,793	42,185	20,198	898	2,668	16,632	28,595	4,248	2,812	7,192	2,035	5,699	2,420	(¹)	(¹)
1953	50,202	43,556	21,074	866	2,659	17,549	29,128	4,290	2,854	7,393	2,111	5,835	2,305	(¹)	(¹)
1954	48,990	42,238	19,751	791	2,646	16,314	29,239	4,084	2,867	7,368	2,200	5,969	2,188	(¹)	(¹)
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	2,926	7,610	2,298	6,240	2,187	1,168	3,558
1956	52,369	45,091	21,104	822	3,039	17,243	31,266	4,244	3,018	7,840	2,389	6,497	2,209	1,250	3,819
1957	52,853	45,239	20,964	828	2,962	17,174	31,889	4,241	3,028	7,858	2,438	6,708	2,217	1,328	4,071
1958	51,324	43,483	19,513	751	2,817	15,945	31,811	3,976	2,980	7,770	2,481	6,765	2,191	1,415	4,232
1959 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	21,400	63,363	5,136	5,204	14,989	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,275	15,035	5,160	17,890	2,866	3,610	9,765
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	5,358	15,189	5,298	18,619	2,772	3,640	9,619
1982	89,566	73,729	23,813	1,128	3,905	18,781	65,753	5,082	5,278	15,179	5,341	19,036	2,739	3,640	9,458
1983	90,200	74,330	23,334	952	3,948	18,434	66,866	4,954	5,268	15,613	5,468	19,694	2,774	3,662	9,434
1984	94,496	78,472	24,727	966	4,383	19,378	69,769	5,159	5,555	16,545	5,689	20,797	2,807	3,734	9,482
1985	97,519	81,125	24,859	927	4,673	19,260	72,660	5,238	5,717	17,356	5,955	22,000	2,875	3,832	9,687
1986	99,525	82,632	24,558	777	4,816	18,965	74,967	5,255	5,753	17,930	6,283	23,053	2,899	3,893	9,901
1987	102,200	85,190	24,708	717	4,967	19,024	77,492	5,372	5,844	18,483	6,547	24,236	2,943	3,967	10,100
1988	105,584	88,212	25,249	721	5,125	19,403	80,335	5,548	6,029	19,110	6,676	25,600	2,971	4,063	10,339
Monthly data, seasonally adjusted															
1988:															
August	105,954	88,578	25,303	725	5,153	19,425	80,651	5,572	6,051	19,182	6,686	25,784	2,967	4,079	10,330
September	106,207	88,736	25,313	719	5,163	19,431	80,894	5,581	6,071	19,188	6,695	25,888	2,985	4,088	10,398
October	106,475	88,991	25,384	717	5,162	19,505	81,091	5,596	6,086	19,229	6,710	25,986	2,986	4,081	10,417
November	106,824	89,299	25,460	712	5,191	19,557	81,364	5,616	6,104	19,282	6,726	26,111	2,983	4,085	10,457
December	107,097	89,574	25,513	711	5,213	19,589	81,584	5,634	6,125	19,328	6,744	26,230	2,981	4,085	10,457
1989:															
January	107,442	89,897	25,626	711	5,267	19,648	81,816	5,654	6,146	19,407	6,746	26,318	2,978	4,084	10,483
February	107,711	90,124	25,629	711	5,270	19,648	82,082	5,667	6,171	19,460	6,763	26,434	2,982	4,095	10,510
March	107,888	90,291	25,646	714	5,252	19,680	82,242	5,666	6,197	19,488	6,774	26,520	2,982	4,102	10,513
April	108,101	90,475	25,671	720	5,279	19,672	82,430	5,682	6,206	19,489	6,776	26,651	2,982	4,111	10,533
May	108,310	90,623	25,672	722	5,283	19,667	82,638	5,700	6,222	19,528	6,790	26,711	2,999	4,119	10,569
June	108,607	90,884	25,648	715	5,283	19,650	82,959	5,716	6,230	19,551	6,808	26,931	2,995	4,136	10,592
July ^p	108,791	91,030	25,683	707	5,317	19,659	83,108	5,741	6,240	19,582	6,812	26,972	2,999	4,161	10,601
August ^p	108,901	91,083	25,724	729	5,325	19,670	83,177	5,619	6,246	19,601	6,836	27,057	3,004	4,176	10,638

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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1988) and all seasonally adjusted data (beginning January 1985) are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Total		105,560	105,729	109,534	108,562	108,680					
Total private		89,120	89,431	91,742	91,746	91,974	72,201	72,498	74,343	74,317	74,505
Mining		732	734	719	715	739	528	530	515	510	533
Metal mining	10	52.7	53.9	63.1	64.4		40.6	42.1	50.2	51.1	
Iron ores	101	8.4	8.4	9.6	9.8		6.8	6.9	7.9	8.1	
Copper ores	102	13.4	13.7	14.1	14.2		10.4	10.7	11.2	11.2	
Coal mining	11,12	150.0	150.0	134.3	123.2		122.4	122.0	108.3	97.0	
Bituminous coal and lignite mining	12	148.0	147.9	132.1	121.1		120.7	120.2	106.4	95.2	
Oil and gas extraction	13	411.4	411.4	400.9	406.6	407.8	274.3	274.5	263.0	268.7	
Crude petroleum, natural gas, and natural gas liquids ...	131,2	202.7	201.9	198.8	199.1	-	101.7	101.0	97.8	98.1	
Oil and gas field services	138	208.7	209.5	202.1	207.5		172.6	173.5	165.2	170.6	
Nonmetallic minerals, except fuels	14	118.3	118.7	121.0	121.2		91.1	91.4	93.0	93.1	
Crushed and broken stone	142	43.2	43.2	43.5	43.5		34.2	34.2	34.6	34.5	
Sand and gravel	144	37.9	38.0	38.6	38.8		-	-	-	-	
Chemical and fertilizer minerals	147	16.8	17.1	18.0	18.0						
Construction		5,451	5,497	5,494	5,625	5,682	4,311	4,353	4,308	4,429	4,488
General building contractors	15	1,443.6	1,449.4	1,430.0	1,464.0	1,481.9	1,072.6	1,078.7	1,047.2	1,079.6	
Residential building construction	152	773.8	775.8	775.6	793.0	-	563.9	566.1	556.4	573.1	
Operative builders	153	50.0	49.4	46.3	46.5		23.4	22.7	20.6	20.8	
Nonresidential building construction	154	619.8	624.2	608.1	624.5		485.3	489.9	470.2	485.7	
Heavy construction contractors	16	833.0	850.3	849.3	867.5		705.5	721.5	713.2	730.4	
Highway and street construction	161	294.1	298.6	281.2	288.4		248.8	252.6	234.9	241.9	
Heavy construction, except highway	162	538.9	551.7	568.1	579.1		456.7	468.9	478.3	488.5	
Special trade contractors	17	3,174.1	3,197.6	3,214.8	3,293.3		2,532.9	2,553.0	2,547.5	2,619.4	
Plumbing, heating, and air conditioning	171	678.3	680.6	680.3	690.5		506.0	507.6	503.7	512.6	
Painting, paper hanging, and decorating	172	188.4	191.1	189.0	197.3		161.0	162.8	158.9	166.4	
Electrical work	173	563.5	568.0	563.3	574.8		441.4	446.0	436.2	446.9	
Masonry, stonework, and plastering	174	533.3	538.9	531.1	544.8		463.9	468.7	458.0	470.6	
Carpentering and flooring	175	202.0	204.5	207.8	210.5		158.2	160.2	162.9	165.8	
Roofing and sheet metal work	176	222.2	227.1	224.5	236.4		178.3	183.1	178.9	191.0	
Manufacturing		19,364	19,504	19,759	19,577	19,748	13,179	13,320	13,487	13,302	13,475
Durable goods		11,415	11,448	11,631	11,493	11,550	7,591	7,628	7,760	7,620	7,682
Lumber and wood products	24	782.4	784.5	786.3	786.8	789.0	653.5	656.0	653.6	655.0	656.5
Logging camps and logging contractors	241	96.9	96.8	97.0	101.3	-	80.7	80.8	80.0	84.1	-
Sawmills and planing mills	242	206.4	207.2	211.4	210.8		182.0	182.4	185.0	184.5	
Sawmills and planing mills, general	2421	168.8	169.0	171.9	172.5		149.0	148.7	150.5	151.2	
Hardwood dimension and flooring	2426	33.9	34.5	35.9	34.9		29.8	30.5	31.5	30.5	
Millwork, plywood, and structural members	243	276.8	277.3	276.8	274.4		228.4	228.8	227.0	225.0	
Millwork	2431	112.0	111.4	110.5	109.3		91.2	90.6	89.1	88.1	
Wood kitchen cabinets	2434	73.4	73.7	72.8	71.9		58.8	59.2	58.2	57.5	
Hardwood veneer and plywood	2435	24.0	24.5	24.9	24.5		21.0	21.4	21.6	21.2	
Softwood veneer and plywood	2436	37.1	37.4	37.6	37.5		33.5	33.7	33.9	33.9	
Wood containers	244	44.4	44.4	43.9	43.9		37.8	37.9	37.2	37.1	
Wood buildings and mobile homes	245	72.8	72.9	70.9	71.9		55.3	56.0	53.9	55.3	
Mobile homes	2451	47.4	48.3	49.7	49.9		38.6	39.9	40.4	40.9	
Miscellaneous wood products	249	85.1	85.9	86.3	84.5		69.3	70.1	70.5	69.0	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Durable goods—Continued											
Furniture and fixtures	25	519.0	526.9	531.9	522.4	529.0	412.1	419.9	424.0	413.8	421.1
Household furniture	251	297.6	304.4	308.0	299.3	-	250.5	256.5	260.2	251.8	-
Wood household furniture	2511	132.6	137.8	137.1	134.0	-	115.3	120.4	120.0	116.8	-
Upholstered household furniture	2512	98.4	99.7	102.3	100.1	-	82.6	83.5	85.6	83.6	-
Metal household furniture	2514	24.0	23.2	24.6	22.6	-	19.0	18.1	19.6	17.6	-
Mattresses and bedsprings	2515	30.3	30.9	30.4	29.3	-	23.5	24.1	23.4	22.5	-
Office furniture	252	70.9	70.7	70.2	70.6	-	53.3	53.2	52.5	51.9	-
Public building and related furniture	253	33.3	33.7	34.9	33.0	-	25.9	26.3	27.3	25.5	-
Partitions and fixtures	254	79.6	79.8	80.5	81.0	-	57.3	58.2	58.1	58.5	-
Miscellaneous furniture and fixtures	259	37.6	38.3	38.3	38.5	-	25.1	25.7	25.9	26.1	-
Stone, clay, and glass products	32	612.4	612.7	616.0	611.9	615.2	478.4	479.3	480.2	475.9	480.3
Flat glass	321	16.0	15.9	16.4	15.3	-	12.5	12.5	13.3	12.1	-
Glass and glassware, pressed or blown	322	85.4	86.2	84.6	83.6	-	73.9	74.7	73.1	72.0	-
Glass containers	3221	44.4	44.5	42.9	42.6	-	40.4	40.5	38.9	38.6	-
Pressed and blown glass, nec	3229	41.0	41.7	41.7	41.0	-	33.5	34.2	34.2	33.4	-
Products of purchased glass	323	54.9	55.4	56.2	55.3	-	41.6	42.1	43.1	42.3	-
Cement, hydraulic	324	20.2	20.2	20.0	20.1	-	15.6	15.5	15.4	15.5	-
Structural clay products	325	39.5	39.5	38.7	38.4	-	30.9	30.8	30.0	29.8	-
Pottery and related products	326	37.4	37.4	38.9	38.6	-	29.9	29.8	30.7	30.6	-
Concrete, gypsum, and plaster products	327	224.7	223.6	223.0	224.3	-	174.6	173.9	172.2	173.3	-
Concrete block and brick	3271	21.4	21.1	19.9	19.9	-	14.1	13.8	13.1	12.9	-
Concrete products, nec	3272	74.8	75.0	76.8	77.0	-	57.2	57.6	58.7	58.9	-
Ready-mixed concrete	3273	108.4	107.7	106.3	107.5	-	87.7	87.1	85.0	86.1	-
Misc. nonmetallic mineral products	329	120.4	120.1	122.2	120.9	-	88.6	88.7	90.0	88.6	-
Abrasive products	3291	22.2	22.1	22.9	22.7	-	15.4	15.4	16.6	16.3	-
Asbestos products	3292	9.0	9.1	8.9	8.8	-	6.8	6.9	6.6	6.5	-
Mineral wool	3296	26.5	26.5	26.7	26.6	-	-	-	-	-	-
Primary metal industries	33	770.1	772.8	790.6	776.4	783.4	588.2	591.7	605.0	591.5	597.5
Blast furnaces and basic steel products	331	279.2	277.1	277.7	276.9	277.2	216.8	215.2	214.4	213.3	213.6
Blast furnaces and steel mills	3312	209.5	208.1	208.4	208.2	-	164.1	163.1	162.3	161.9	-
Steel pipe and tubes	3317	25.1	25.0	25.0	25.0	-	18.9	19.0	18.8	18.8	-
Iron and steel foundries	332	137.0	137.9	144.9	140.1	-	109.5	110.7	116.2	111.1	-
Gray iron foundries	3321	83.9	85.2	87.9	83.1	-	68.3	69.6	72.2	67.7	-
Malleable iron foundries	3322	9.1	8.8	9.3	9.4	-	6.8	6.5	7.4	6.9	-
Steel foundries, nec	3325	29.2	29.1	31.5	31.3	-	22.8	23.0	24.8	24.6	-
Primary nonferrous metals	333	44.4	44.7	46.1	45.9	-	32.6	33.0	34.5	34.5	-
Primary aluminum	3334	26.3	26.4	27.3	27.2	-	19.8	20.0	21.1	21.1	-
Nonferrous rolling and drawing	335	177.6	180.6	183.0	178.4	-	126.6	129.6	131.5	127.8	-
Copper rolling and drawing	3351	22.9	23.5	23.8	23.0	-	17.3	18.0	18.4	17.6	-
Aluminum sheet, plate, and foil	3353	28.0	28.1	28.0	27.7	-	19.4	19.3	18.7	18.4	-
Nonferrous wire drawing and insulating	3357	74.4	76.5	77.7	74.6	-	53.3	55.5	56.8	54.4	-
Nonferrous foundries	336	86.9	87.4	91.9	88.5	-	69.6	70.1	73.5	70.2	-
Aluminum foundries	3361	53.9	54.0	54.8	52.1	-	44.2	44.2	44.6	42.0	-
Fabricated metal products	34	1,422.1	1,430.4	1,455.8	1,430.0	1,436.8	1,057.1	1,064.9	1,080.8	1,056.9	1,064.0
Metal cans and shipping containers	341	53.4	53.2	53.8	53.2	-	45.9	45.9	46.2	45.8	-
Metal cans	3411	42.8	42.7	42.6	42.3	-	37.2	37.2	37.0	36.8	-
Cutlery, hand tools, and hardware	342	137.8	138.7	135.4	132.4	-	101.4	101.8	99.8	97.1	-
Hand and edge tools, and hand saws and blades	3423,5	47.1	47.0	45.8	44.9	-	33.8	33.9	33.3	32.5	-
Hardware, nec	3429	79.9	80.7	78.3	76.4	-	60.3	60.4	58.6	57.0	-
Plumbing and heating, except electric	343	60.0	60.3	60.6	60.2	-	43.4	43.8	44.0	43.3	-
Plumbing fittings and brass goods	3432	24.8	24.8	26.2	25.7	-	18.0	18.2	19.5	18.8	-
Heating equipment, except electric	3433	21.8	22.5	21.8	21.8	-	15.1	15.8	14.8	14.8	-
Fabricated structural metal products	344	432.4	432.9	438.8	438.3	-	310.0	310.1	314.3	313.5	-
Fabricated structural metal	3441	77.0	78.2	79.1	79.1	-	55.8	56.8	56.8	56.7	-
Metal doors, sash, and trim	3442	86.3	86.0	84.6	84.6	-	63.7	63.4	61.7	61.8	-
Fabricated plate work (boiler shops)	3443	102.5	101.2	108.2	106.8	-	68.6	67.0	73.3	72.1	-
Sheet metal work	3444	100.3	100.7	100.5	101.0	-	75.3	75.7	75.6	75.7	-
Architectural metal work	3446	32.5	32.4	33.2	33.5	-	24.0	24.0	24.2	24.3	-

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Durable goods—Continued											
Fabricated metal products—Continued											
Screw machine products, bolts, etc	345	98.7	99.7	101.4	99.2		75.4	76.5	77.2	75.2	
Screw machine products	3451	49.1	49.3	49.9	48.6		40.4	40.6	40.5	39.3	
Bolts, nuts, rivets, and washers	3452	49.6	50.4	51.5	50.6		35.0	35.9	36.7	35.9	
Metal forgings and stampings	346	223.5	224.8	233.7	221.4		177.3	178.5	186.2	174.8	
Iron and steel forgings	3462	30.9	31.2	33.1	32.8		23.6	24.0	25.5	25.3	
Automotive stampings	3465	98.2	98.2	103.7	96.2		82.4	82.2	87.1	79.7	
Metal stampings, nec	3469	81.8	82.9	84.1	79.8		62.0	63.0	63.9	60.3	
Metal services, nec	347	119.0	121.0	130.6	126.3		94.9	96.9	103.8	99.9	
Plating and polishing	3471	77.4	78.8	84.8	81.1		62.2	63.6	67.9	64.7	
Metal coating and allied services	3479	41.6	42.2	45.8	45.2		32.7	33.3	35.9	35.2	
Ordnance and accessories, nec	348	76.3	76.3	72.1	71.7		48.2	48.4	43.3	43.2	
Ammunition, except for small arms, nec	3483	42.3	42.4	40.0	39.8		24.0	24.3	21.0	20.9	
Misc. fabricated metal products	349	221.0	223.5	229.4	227.3		160.6	163.0	166.0	164.1	
Valves and pipe fittings	3494	75.8	76.4	79.3	79.2		51.1	51.5	53.1	52.9	
Misc. fabricated wire products	3496	53.5	54.0	56.3	55.8		40.7	41.3	43.0	42.6	
Machinery, except electrical	35	2,082.9	2,084.1	2,161.3	2,147.7	2,145.7	1,247.6	1,247.6	1,309.1	1,295.9	1,296.9
Engines and turbines	351	93.0	94.1	97.8	96.9	-	61.6	62.5	64.0	63.2	-
Turbines and turbine generator sets	3511	24.7	24.9	28.3	28.4		14.4	14.6	16.6	16.6	
Internal combustion engines, nec	3519	68.3	69.2	69.5	68.5		47.2	47.9	47.4	46.6	
Farm and garden machinery	352	102.0	100.3	107.9	104.7		71.7	70.6	78.0	74.6	
Farm machinery and equipment	3523	76.3	76.0	80.4	79.6		52.0	52.2	56.9	55.8	
Construction and related machinery	353	229.3	230.3	239.9	237.3		140.2	140.7	147.6	145.4	
Construction machinery	3531	82.8	82.8	87.4	86.2		51.6	51.6	54.6	53.7	
Mining machinery	3532	16.5	16.5	16.8	16.4		10.1	10.2	10.4	10.1	
Oil field machinery	3533	42.3	42.4	42.6	41.9		25.6	25.5	25.0	24.5	
Conveyors and conveying equipment	3535	35.3	35.7	37.1	36.9		18.9	19.1	20.2	20.0	
Industrial trucks and tractors	3537	27.1	27.3	28.6	28.6		18.7	18.7	19.6	19.6	
Metalworking machinery	354	312.0	314.3	337.6	334.5		222.8	224.8	244.4	240.5	
Machine tools, metal cutting types	3541	49.0	49.3	54.3	54.3		30.9	31.2	35.7	35.5	
Machine tools, metal forming types	3542	18.5	18.5	19.6	19.7		11.8	11.8	12.7	12.6	
Special dies, tools, jigs, and fixtures	3544	146.8	148.2	157.8	156.0		112.3	113.4	122.1	120.0	
Machine tool accessories	3545	57.6	58.1	62.2	61.9		40.8	41.3	44.4	43.8	
Power driven hand tools	3546	22.2	22.6	23.9	22.9		16.0	16.4	17.0	16.1	
Special industry machinery	355	171.2	172.4	180.0	178.7		102.3	103.3	107.5	106.7	
Food products machinery	3551	35.1	35.0	36.4	36.4		21.0	20.9	22.0	22.1	
Textile machinery	3552	20.6	20.9	21.2	20.8		13.7	14.0	14.0	13.8	
Printing trades machinery	3555	28.8	29.0	29.6	29.5		17.5	17.8	17.3	17.3	
General industrial machinery	356	249.7	249.4	257.9	257.8		160.6	160.2	167.5	166.9	
Pumps and pumping equipment	3561	44.3	44.6	46.1	46.0		25.7	25.7	26.8	26.8	
Ball and roller bearings	3562	42.2	41.7	44.2	44.1		32.6	32.1	34.5	34.2	
Air and gas compressors	3563	22.7	22.6	23.0	23.1		13.2	13.1	13.1	13.1	
Blowers and fans	3564	30.8	30.6	31.9	32.2		19.8	19.6	21.6	21.7	
Speed changers, drives, and gears	3566	16.9	17.1	17.7	17.6		11.7	11.7	12.3	12.3	
Power transmission equipment, nec	3568	18.2	18.3	18.9	19.0		12.2	12.4	12.8	12.9	
Office and computing machines	357	475.6	476.6	476.9	477.9		154.2	154.3	155.0	156.7	
Electronic computing equipment	3573	420.0	421.4	421.8	422.2		128.3	129.0	129.7	131.4	
Refrigeration and service machinery	358	185.9	183.7	191.6	191.0		134.3	131.8	138.7	137.7	
Refrigeration and heating equipment	3585	129.8	127.6	134.7	134.6		96.4	94.0	100.6	100.2	
Misc. machinery, except electrical	359	264.2	263.0	271.7	268.9		199.9	199.4	206.4	204.2	
Carburetors, pistons, rings, and valves	3592	30.2	30.0	30.1	29.1		23.8	23.7	23.7	22.8	
Machinery, except electrical, nec	3599	234.0	233.0	241.6	239.8		176.1	175.7	182.7	181.4	
Electrical and electronic equipment	36	2,059.3	2,073.2	2,043.2	2,026.1	2,032.1	1,209.8	1,223.6	1,198.3	1,181.6	1,189.0
Electric distributing equipment	361	105.8	105.0	107.3	105.9	-	76.0	75.2	75.5	74.7	-
Transformers	3612	52.7	52.6	52.8	51.3		38.2	38.1	37.7	36.7	
Switchgear and switchboard apparatus	3613	53.1	52.4	54.5	54.6		37.8	37.1	37.8	38.0	
Electrical industrial apparatus	362	184.0	184.0	187.8	187.1		128.4	128.2	131.9	130.7	
Motors and generators	3621	90.3	89.7	91.6	90.8		70.9	70.1	72.2	71.6	
Industrial controls	3622	59.3	59.8	61.1	61.1		34.4	35.0	36.2	35.8	
Household appliances	363	136.8	140.6	137.1	135.4		109.3	112.9	109.5	108.0	
Household refrigerators and freezers	3632	29.5	29.7	28.6	28.8		23.8	24.1	23.2	23.5	
Household laundry equipment	3633	22.9	22.8	22.4	21.8		18.7	18.6	17.9	17.6	
Electric housewares and fans	3634	35.6	38.6	37.6	36.3		27.9	30.5	29.6	28.2	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Durable goods—Continued											
Electrical and electronic equipment—Continued											
Electric lighting and wiring equipment	364	192.5	197.0	198.7	194.4		138.6	142.4	143.2	139.6	
Electric lamps	3641	26.2	26.6	26.4	26.2		22.3	22.7	22.5	22.4	
Current-carrying wiring devices	3643	76.3	77.9	77.8	75.7		49.7	50.8	50.5	48.9	
Noncurrent-carrying wiring devices	3644	15.3	16.2	17.0	16.2		11.1	12.0	12.7	12.0	
Residential lighting fixtures	3645	26.8	27.7	26.8	26.9		20.2	21.1	19.8	19.8	
Radio and TV receiving equipment	365	84.0	86.2	93.2	93.0		57.9	59.9	65.5	65.1	
Radio and TV receiving sets	3651	61.8	63.6	69.4	69.2		41.0	42.4	47.6	47.0	
Communication equipment	366	567.5	565.9	541.0	539.0		235.9	235.9	217.9	215.6	
Telephone and telegraph apparatus	3661	112.6	111.7	103.5	101.9		66.0	65.9	62.1	60.6	
Radio and TV communication equipment	3662	454.9	454.2	437.5	437.1		169.9	170.0	155.8	155.0	
Electronic components and accessories	367	636.0	638.0	622.0	618.9		356.8	358.7	345.6	342.5	
Electronic tubes	3671-3	38.0	38.8	38.5	38.3		24.5	25.0	24.3	24.1	
Semiconductors and related devices	3674	264.6	265.4	259.6	259.7		104.1	104.3	97.2	96.7	
Electronic components, nec	3679	256.6	256.7	250.6	249.0		171.5	172.2	170.0	169.0	
Misc. electrical equipment and supplies	369	152.7	156.5	156.1	152.4		106.9	110.4	109.2	105.4	
Storage batteries	3691	27.3	29.6	27.8	26.5		20.4	22.7	21.2	19.8	
Engine electrical equipment	3694	67.9	68.4	69.3	68.7		51.9	52.3	53.1	52.4	
Transportation equipment	37	2,035.0	2,017.1	2,068.1	2,028.2	2,039.2	1,257.0	1,244.3	1,290.7	1,245.3	1,255.9
Motor vehicles and equipment	371	846.6	833.1	869.3	832.8	847.1	655.3	645.7	674.5	635.5	648.5
Motor vehicles and car bodies	3711	347.9	336.1	362.1	337.9	-	258.0	250.0	270.3	244.4	-
Truck and bus bodies	3713	44.0	43.7	45.0	44.6		34.3	34.0	35.2	34.7	
Motor vehicle parts and accessories	3714	402.8	400.6	412.6	401.3		321.8	319.7	329.9	318.0	
Truck trailers	3715	31.1	31.7	30.1	29.7		24.7	25.3	23.9	23.4	
Aircraft and parts	372	694.5	691.6	703.2	704.1		335.7	332.7	342.2	340.1	
Aircraft	3721	367.3	366.6	380.3	382.9		160.6	159.0	167.8	167.9	
Aircraft engines and engine parts	3724	154.4	151.9	150.3	150.3		75.4	73.3	75.2	74.6	
Aircraft equipment, nec	3728	172.8	173.1	172.6	170.9		99.7	100.4	99.2	97.6	
Ship and boat building and repairing	373	188.7	186.4	187.9	186.1		139.2	138.5	139.6	137.1	
Ship building and repairing	3731	117.4	116.9	120.3	121.1		80.6	81.3	83.4	83.9	
Boat building and repairing	3732	71.3	69.5	67.6	65.0		58.6	57.2	56.2	53.2	
Railroad equipment	374	32.3	32.7	39.2	38.6		23.6	24.0	29.2	28.7	
Guided missiles, space vehicles, and parts	376	212.2	212.5	207.1	207.0		62.5	63.1	63.1	63.2	
Guided missiles and space vehicles	3761	154.7	154.9	152.3	152.7		42.6	43.4	42.6	42.9	
Miscellaneous transportation equipment	379	50.0	50.1	48.2	47.2		33.5	33.0	32.6	31.7	
Travel trailers and campers	3792	21.2	21.3	19.7	19.2		16.5	16.5	15.3	15.0	
Instruments and related products	38	751.3	756.5	782.6	780.9	783.6	411.8	415.7	431.2	429.0	432.3
Engineering and scientific instruments	381	95.6	95.7	99.6	99.7	-	43.0	43.0	46.0	45.9	-
Measuring and controlling devices	382	260.8	262.4	272.1	271.6		148.7	149.9	155.5	153.9	
Environmental controls	3822	48.5	48.7	50.3	49.8		31.7	32.0	33.7	33.2	
Process control instruments	3823	59.6	60.1	63.8	63.8		32.1	32.2	34.2	33.7	
Instruments to measure electricity	3825	106.9	107.7	109.5	110.0		54.0	54.7	55.1	54.8	
Optical instruments and lenses	383	29.8	29.8	30.6	30.5		15.3	15.3	16.3	16.2	
Medical instruments and supplies	384	200.6	203.6	212.4	211.9		120.7	123.0	127.2	127.0	
Surgical and medical instruments	3841	100.0	101.7	105.6	106.2		57.2	59.0	61.2	61.5	
Surgical appliances and supplies	3842	86.0	87.3	91.7	90.6		55.2	55.7	57.5	57.0	
Ophthalmic goods	385	39.1	39.3	39.8	39.0		26.5	26.8	27.4	27.1	
Photographic equipment and supplies	386	114.2	114.2	117.3	117.2		49.3	49.2	50.7	50.8	
Watches, clocks, and watchcases	387	11.2	11.5	10.8	11.0		8.3	8.5	8.1	8.1	
Miscellaneous manufacturing	39	380.5	390.2	395.1	382.8	396.0	275.9	284.8	287.3	274.8	288.0
Jewelry, silverware, and plated ware	391	50.6	54.2	54.0	50.7	-	34.9	38.0	38.4	35.1	-
Jewelry, precious metal	3911	35.7	38.6	39.1	36.4		24.4	26.9	27.6	25.2	
Musical instruments	393	12.7	13.1	13.5	12.9		10.5	11.0	11.2	10.6	
Toys and sporting goods	394	104.4	104.8	107.0	105.1		77.7	77.9	78.7	76.4	
Dolls, games, toys, and children's vehicles	3942,4	45.8	46.7	45.3	44.6		32.8	34.1	32.1	31.4	
Sporting and athletic goods, nec	3949	58.6	58.1	61.7	60.5		44.9	43.8	46.6	45.0	
Pens, pencils, office, and art supplies	395	34.2	33.8	34.9	34.4	-	24.3	23.8	24.3	23.9	
Costume jewelry and notions	396	37.9	42.6	42.7	40.0		28.9	33.5	33.5	30.8	
Costume jewelry	3961	18.7	22.4	23.0	21.2		13.9	17.4	17.7	15.9	
Miscellaneous manufactures	399	140.7	141.7	143.0	139.7		99.6	100.6	101.2	98.0	
Signs and advertising displays	3993	61.4	61.4	62.1	61.4		42.5	42.8	42.6	42.2	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Nondurable goods		7,949	8,056	8,128	8,084	8,198	5,588	5,692	5,727	5,682	5,793
Food and kindred products	20	1,661.1	1,711.9	1,668.4	1,710.4	1,755.2	1,184.3	1,232.5	1,191.0	1,230.9	1,273.1
Meat products	201	404.1	405.1	421.9	423.8	-	342.4	343.3	357.8	360.0	-
Meat packing plants	2011	140.8	141.4	144.1	144.5	-	117.6	118.3	120.2	121.0	-
Sausages and other prepared meats	2013	80.9	81.2	84.1	83.7	-	59.8	59.8	61.9	61.8	-
Poultry dressing plants	2016	159.8	159.8	170.4	172.2	-	144.8	145.0	154.9	156.3	-
Dairy products	202	162.6	162.0	162.0	161.4	-	99.2	98.5	100.6	100.5	-
Cheese, natural and processed	2022	42.9	43.1	43.7	43.9	-	32.8	32.9	33.6	33.8	-
Fluid milk	2026	76.9	77.0	75.3	75.1	-	38.1	38.2	38.1	38.3	-
Preserved fruits and vegetables	203	266.0	304.0	252.4	291.7	-	221.0	256.9	206.6	244.2	-
Canned specialties	2032	23.0	24.8	23.0	24.1	-	16.2	18.0	16.6	17.8	-
Canned fruits and vegetables	2033	95.1	125.9	80.7	113.4	-	80.6	110.5	66.9	97.9	-
Frozen fruits and vegetables	2037	52.6	58.0	54.2	54.4	-	46.4	51.6	47.9	47.6	-
Grain mill products	204	124.9	125.5	127.4	126.8	-	86.7	87.5	89.0	87.9	-
Flour and other grain mill products	2041	22.0	21.9	22.6	23.0	-	15.3	15.1	15.5	15.5	-
Prepared feeds, nec	2048	42.9	42.5	42.8	42.5	-	27.1	26.9	27.1	26.8	-
Bakery products	205	203.2	204.3	203.6	204.3	-	123.8	125.2	125.6	125.6	-
Bread, cake, and related products	2051	158.0	158.0	157.8	159.0	-	89.0	89.3	90.5	91.0	-
Cookies and crackers	2052	45.2	46.3	45.8	45.3	-	34.8	35.9	35.1	34.6	-
Sugar and confectionery products	206	90.8	98.1	93.0	92.3	-	70.4	77.2	71.1	70.5	-
Cane and beet sugar	2061-3	17.0	18.7	16.7	16.3	-	12.9	14.4	12.5	12.2	-
Confectionery products	2065	51.7	57.3	54.8	54.0	-	42.5	47.8	44.4	43.6	-
Fats and oils	207	31.8	31.6	31.8	31.2	-	23.2	23.0	23.2	23.0	-
Beverages	208	205.9	208.0	203.9	204.7	-	88.3	90.0	87.5	87.5	-
Malt beverages	2082	42.7	42.5	41.9	41.9	-	25.6	25.7	25.7	25.7	-
Bottled and canned soft drinks	2086	119.0	118.7	115.6	116.3	-	40.6	40.3	38.8	39.3	-
Misc. food and kindred products	209	171.8	173.3	172.4	174.2	-	129.3	130.9	129.6	131.7	-
Tobacco manufactures	21	51.7	54.9	49.4	49.6	51.7	37.7	40.8	35.3	35.6	37.9
Cigarettes	211	41.1	40.8	38.8	39.0	-	30.7	30.4	28.1	28.4	-
Textile mill products	22	717.3	725.5	733.0	718.2	731.5	621.4	628.1	633.8	619.8	631.4
Weaving mills, cotton	221	98.8	98.7	96.3	94.2	-	89.2	89.3	86.6	84.5	-
Weaving mills, synthetics	222	88.1	86.4	91.2	90.2	-	78.0	75.8	80.8	79.9	-
Weaving and finishing mills, wool	223	18.3	18.8	19.7	18.6	-	14.8	15.3	15.9	14.9	-
Narrow fabric mills	224	23.0	24.2	24.9	23.6	-	19.5	20.8	21.1	19.9	-
Knitting mills	225	210.3	212.7	214.2	210.8	-	185.7	187.9	188.8	185.2	-
Women's hosiery, except socks	2251	32.9	32.9	33.4	32.3	-	30.1	30.1	30.0	28.9	-
Hosiery, nec	2252	36.4	36.5	37.6	37.8	-	32.8	32.9	34.1	34.3	-
Knit outerwear mills	2253	71.1	72.0	71.5	70.4	-	63.5	64.4	63.7	62.4	-
Knit underwear mills	2254	26.0	26.5	25.4	25.3	-	21.9	22.2	21.4	21.3	-
Circular knit fabric mills	2257	25.4	25.7	27.4	27.3	-	22.1	22.4	23.9	23.8	-
Textile finishing, except wool	226	57.6	60.3	62.3	60.4	-	47.7	49.6	51.2	49.7	-
Finishing plants, cotton	2261	23.7	25.1	25.9	24.8	-	19.5	20.6	21.2	20.2	-
Finishing plants, synthetics	2262	20.7	21.4	22.1	21.5	-	16.7	17.1	17.8	17.4	-
Floor covering mills	227	59.8	60.3	62.9	62.4	-	48.5	48.7	51.3	50.8	-
Yarn and thread mills	228	106.5	108.1	105.5	103.0	-	95.5	96.9	94.7	92.2	-
Yarn mills, except wool	2281	80.3	81.0	79.5	78.1	-	72.7	73.4	71.9	70.3	-
Throwing and winding mills	2282	14.7	14.9	14.6	13.7	-	12.9	13.1	13.0	12.3	-
Miscellaneous textile goods	229	54.9	56.0	56.0	55.0	-	42.5	43.8	43.4	42.7	-
Apparel and other textile products	23	1,057.8	1,084.4	1,104.2	1,063.1	1,097.3	885.1	911.6	932.0	891.6	924.3
Men's and boys' suits and coats	231	56.8	58.3	57.0	54.1	-	48.9	50.5	49.0	46.2	-
Men's and boys' furnishings	232	294.8	299.8	303.6	294.0	-	253.7	258.6	262.2	252.8	-
Men's and boys' shirts and nightwear	2321	74.7	75.5	75.9	73.9	-	63.9	64.5	65.3	63.3	-
Men's and boys' separate trousers	2327	48.8	49.5	50.1	46.1	-	42.5	42.9	43.2	39.4	-
Men's and boys' work clothing	2328	89.4	91.0	93.2	91.2	-	78.1	79.7	81.6	79.8	-
Women's and misses' outerwear	233	324.9	337.5	340.4	322.6	-	268.7	280.3	285.5	268.4	-
Women's and misses' blouses and waists	2331	43.2	44.5	42.9	41.4	-	35.3	36.6	35.3	34.1	-
Women's and misses' dresses	2335	69.8	76.3	77.2	68.3	-	56.9	63.1	64.3	55.9	-
Women's and misses' suits and coats	2337	36.9	38.5	39.9	39.4	-	30.3	31.8	33.4	32.8	-
Women's and misses' outerwear, nec	2339	175.0	178.2	180.4	173.5	-	146.2	148.8	152.5	145.6	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	69.9	70.9	70.2	67.7		57.6	58.6	57.9	55.8	
Women's and children's underwear	2341	57.0	57.3	56.3	55.2		48.8	49.1	48.3	47.3	
Brassieres and allied garments	2342	12.9	13.6	13.9	12.5		8.8	9.5	9.6	8.5	
Children's outerwear	236	57.9	57.8	58.0	56.8		48.7	48.9	48.8	47.8	
Children's dresses and blouses	2361	22.6	22.6	22.6	22.1		19.7	19.9	19.7	19.3	
Misc. apparel and accessories	238	41.8	43.8	45.1	43.2		34.2	36.3	37.2	35.6	
Misc. fabricated textile products	239	194.6	199.1	211.0	205.7		159.7	164.6	176.0	169.6	
Curtains and draperies	2391	25.0	25.5	26.8	26.0		20.5	21.1	22.4	21.5	
House furnishings, nec	2392	51.9	53.6	55.4	54.9		43.6	45.6	46.6	45.9	
Automotive and apparel trimmings	2396	40.7	41.0	44.2	43.3		33.4	34.0	37.7	36.1	
Paper and allied products	26	696.4	697.3	703.5	701.7	703.0	526.7	527.0	530.9	528.4	530.2
Paper and pulp mills	261,2,6	197.5	196.6	197.0	197.3	-	150.8	149.5	150.3	150.0	-
Paper mills, except building paper	262	176.1	175.6	176.5	177.0		133.8	133.0	134.0	133.9	
Paperboard mills	263	53.7	53.4	53.8	53.7		40.9	40.7	41.3	41.3	
Misc. converted paper products	264	239.6	240.0	240.5	240.8		175.6	176.0	174.8	174.3	
Paper coating and glazing	2641	61.0	60.8	61.3	61.1		37.3	37.0	35.6	35.4	
Envelopes	2642	26.5	26.6	26.8	25.8		20.3	20.4	20.7	20.0	
Bags, except textile bags	2643	52.3	52.8	53.0	52.8		40.9	41.4	41.6	41.2	
Paperboard containers and boxes	265	205.6	207.3	212.2	209.9		159.4	160.8	164.5	162.8	
Folding paperboard boxes	2651	45.2	45.6	47.0	46.6		35.8	36.1	37.6	37.2	
Corrugated and solid fiber boxes	2653	111.6	112.1	114.7	113.3		83.9	84.4	86.3	85.4	
Sanitary food containers	2654	23.4	23.2	23.1	23.0		20.0	19.8	19.5	19.5	
Printing and publishing	27	1,560.7	1,563.6	1,610.4	1,606.1	1,608.9	869.0	872.4	892.9	888.7	891.8
Newspapers	271	475.2	473.9	479.0	477.3	-	170.3	169.6	168.4	166.1	-
Periodicals	272	130.0	130.2	135.4	136.2		46.2	46.3	48.0	48.0	
Books	273	116.2	116.1	122.3	121.7		62.0	61.3	64.4	64.1	
Book publishing	2731	85.9	85.8	90.5	90.1		37.7	36.9	39.2	39.2	
Book printing	2732	30.3	30.3	31.8	31.6		24.3	24.4	25.2	24.9	
Miscellaneous publishing	274	79.3	79.3	82.8	83.0		40.1	40.2	41.8	41.4	
Commercial printing	275	551.4	554.0	573.6	571.1		400.9	404.0	415.3	413.6	
Commercial printing, letterpress	2751	169.9	171.4	178.0	177.1		121.4	122.9	127.9	126.8	
Commercial printing, lithographic	2752	355.2	356.2	368.2	367.2		258.7	260.0	265.4	265.4	
Manifold business forms	276	49.1	49.2	49.3	48.7		33.5	33.7	33.4	33.1	
Blankbooks and bookbinding	278	77.4	78.5	82.1	82.1		61.0	62.0	63.9	64.1	
Printing trade services	279	57.7	58.0	61.2	61.0		42.6	42.8	44.9	44.6	
Chemicals and allied products	28	1,074.6	1,078.3	1,103.4	1,102.1	1,101.5	601.1	605.2	621.6	618.9	619.4
Industrial inorganic chemicals	281	134.2	133.7	135.3	135.7	-	67.6	67.1	69.8	69.9	-
Industrial inorganic chemicals, nec	2819	90.9	90.6	91.0	91.3		49.1	48.9	48.3	48.3	
Plastics materials and synthetics	282	179.6	180.7	189.0	188.8		117.7	118.9	124.0	123.2	
Plastics materials and resins	2821	84.1	84.7	88.3	88.6		49.7	50.3	52.1	52.1	
Organic fibers, noncellulosic	2824	66.9	67.1	71.1	70.5		47.5	47.9	50.9	50.3	
Drugs	283	233.4	234.6	243.2	244.4		102.7	103.3	107.5	107.6	
Pharmaceutical preparations	2834	191.7	192.7	200.3	201.2		82.9	83.4	88.7	88.8	
Soap, cleaners, and toilet goods	284	161.3	164.3	163.8	162.6		104.0	106.5	104.1	102.5	
Soap and other detergents	2841	44.5	44.9	44.2	43.9		27.8	28.0	27.5	27.4	
Polishing, sanitation, and finishing preparations	2842,3	43.8	44.5	46.0	45.8		24.9	25.4	26.0	25.3	
Toilet preparations	2844	73.0	74.9	73.6	72.9		51.3	53.1	50.6	49.8	
Paints and allied products	285	65.1	64.6	64.0	63.9		32.6	32.6	32.8	33.1	
Industrial organic chemicals	286	147.6	147.3	151.2	151.1		85.3	85.4	88.4	89.0	
Cyclic crudes and intermediates	2865	30.1	30.0	30.9	31.0		18.5	18.5	19.1	19.1	
Gum, wood, and industrial organic chemicals, nec	2861,9	117.5	117.3	120.3	120.1		66.8	66.9	69.3	69.9	
Agricultural chemicals	287	51.5	51.2	54.5	53.7		32.7	32.5	34.0	33.0	
Miscellaneous chemical products	289	101.9	101.9	102.4	101.9		58.5	58.9	61.0	60.6	
Petroleum and coal products	29	165.3	165.3	165.7	166.1	166.5	108.1	108.4	108.9	109.2	109.4
Petroleum refining	291	123.8	123.8	123.8	124.3	-	79.0	79.0	78.9	79.2	-
Paving and roofing materials	295	28.9	28.9	28.8	28.8		22.2	22.5	22.6	22.6	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Nondurable goods—Continued											
Rubber and misc. plastics products	30	825.9	828.8	846.8	831.6	839.4	640.9	644.8	661.4	646.9	656.0
Tires and inner tubes	301	84.8	83.3	86.0	86.0	-	61.6	61.2	64.4	64.6	-
Rubber and plastics footwear	302	11.2	11.4	11.0	10.7	-	9.0	9.5	9.0	8.7	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	26.4	26.5	27.9	27.4	-	19.6	19.6	20.9	20.3	-
Fabricated rubber products, nec	306	100.3	100.5	100.7	98.0	-	77.1	77.0	77.4	74.7	-
Miscellaneous plastics products	307	603.2	607.1	621.2	609.5	-	473.6	477.5	489.7	478.6	-
Leather and leather products	31	138.4	146.4	143.6	134.6	142.9	113.4	120.8	119.1	111.5	119.3
Leather tanning and finishing	311	12.7	13.7	14.5	13.8	-	10.5	11.3	12.3	11.6	-
Footwear, except rubber	314	79.8	84.1	81.7	75.8	-	67.4	71.8	69.6	64.6	-
Men's footwear, except athletic	3143	35.3	36.9	36.0	33.0	-	28.1	29.8	29.2	27.1	-
Women's footwear, except athletic	3144	28.4	29.5	28.1	26.3	-	24.9	26.1	25.0	23.3	-
Luggage	316	10.8	11.6	12.1	11.4	-	7.6	8.3	8.8	8.2	-
Handbags and personal leather goods	317	16.7	17.5	15.9	15.1	-	12.9	13.6	12.5	11.9	-
Transportation and public utilities		5,561	5,574	5,753	5,742	5,618	4,616	4,630	4,796	4,773	4,642
Transportation		3,322	3,337	3,524	3,508	3,519					
Railroad transportation	40	304.0	303.0	299.7	296.9	-	-	-	-	-	-
Class I railroads ²	4011	263.3	262.3	256.0	253.0	-	-	-	-	-	-
Local and interurban passenger transit	41	266.1	263.7	328.1	280.1	-	241.4	239.0	300.6	252.5	-
Local and suburban transportation	411	119.5	120.3	130.9	130.1	-	108.7	109.6	118.7	118.0	-
Taxicabs	412	35.5	35.2	34.2	33.8	-	-	-	-	-	-
Intercity highway transportation	413	29.3	29.7	29.7	30.1	-	26.4	26.7	26.9	26.9	-
School buses	415	54.7	51.3	101.2	55.9	-	-	-	-	-	-
Trucking and warehousing	42	1,580.0	1,595.6	1,670.2	1,681.0	-	1,378.8	1,391.9	1,459.3	1,469.6	-
Trucking and trucking terminals	421,3	1,470.9	1,483.4	1,551.4	1,561.1	-	1,287.7	1,297.8	1,360.5	1,369.5	-
Public warehousing	422	109.1	112.2	118.8	119.9	-	91.1	94.1	98.8	100.1	-
Water transportation	44	184.7	180.5	184.2	190.7	-	-	-	-	-	-
Local water transportation	445	31.0	31.5	32.5	34.0	-	-	-	-	-	-
Water transportation services	446	101.2	97.3	100.5	104.6	-	-	-	-	-	-
Transportation by air	45	649.8	655.3	678.3	695.9	-	-	-	-	-	-
Air transportation	451,2	562.6	566.9	581.9	597.5	-	-	-	-	-	-
Air transportation services	458	87.2	88.4	96.4	98.4	-	-	-	-	-	-
Pipe lines, except natural gas	46	19.1	19.1	19.2	19.5	-	13.4	13.4	13.8	14.1	-
Transportation services	47	318.7	320.1	343.8	344.1	-	-	-	-	-	-
Freight forwarding	471	70.3	71.0	75.4	75.4	-	-	-	-	-	-
Communication and public utilities		2,239	2,237	2,229	2,234	2,099	-	-	-	-	-
Communication	48	1,291.6	1,290.9	1,284.3	1,286.5	-	975.2	974.7	977.8	979.1	-
Telephone communication	481	906.1	904.4	887.7	889.4	-	664.4	663.2	656.7	657.6	-
Radio and television broadcasting	483	240.2	240.5	245.1	245.3	-	197.6	198.0	202.6	202.8	-
Radio broadcasting	4832	120.4	120.3	122.2	122.3	-	-	-	-	-	-
Television broadcasting	4833	119.8	120.2	122.9	123.0	-	-	-	-	-	-
Electric, gas, and sanitary services	49	946.9	946.3	944.4	947.1	-	751.2	751.5	746.9	749.0	-
Electric services	491	458.4	457.6	453.3	453.2	-	350.3	350.6	347.4	347.6	-
Gas production and distribution	492	168.6	168.6	169.2	170.7	-	134.0	133.9	133.3	134.6	-
Combination utility services	493	196.7	196.1	195.0	194.8	-	162.0	161.3	158.5	157.7	-
Sanitary services	495	94.1	94.7	96.8	98.2	-	81.7	82.5	83.9	85.3	-
Wholesale trade		6,077	6,086	6,266	6,282	6,283	4,906	4,911	5,051	5,062	5,065
Durable goods	50	3,590	3,596	3,711	3,722	3,725	2,872	2,877	2,968	2,976	-
Motor vehicles and automotive equipment	501	436.0	435.8	439.9	441.3	-	350.7	350.2	356.4	357.8	-
Automobiles and other motor vehicles	5012	120.3	120.5	123.7	124.5	-	-	-	-	-	-
Automotive parts and supplies	5013	285.2	284.1	285.3	285.5	-	-	-	-	-	-

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Wholesale trade—Continued											
Durable goods—Continued											
Furniture and home furnishings	502	152.1	153.3	155.8	156.3		122.4	123.3	126.1	126.4	
Furniture	5021	70.4	70.8	72.4	72.9		-	-	-	-	
Home furnishings	5023	81.7	82.5	83.4	83.4		-	-	-	-	
Lumber and construction materials	503	230.9	230.2	239.6	242.3		189.5	189.0	196.9	199.1	
Lumber, plywood, and millwork	5031	120.3	119.7	123.9	125.2		-	-	-	-	
Construction materials, nec	5039	110.6	110.5	115.7	117.1		-	-	-	-	
Sporting goods, toys, and hobby goods	504	90.0	90.2	99.1	99.1		73.5	73.5	79.9	80.0	
Metals and minerals, except petroleum	505	141.0	141.4	146.2	145.4		111.9	112.6	116.1	115.5	
Electrical goods	506	506.5	508.1	524.9	528.2		389.6	390.9	399.4	401.3	
Electrical apparatus and equipment	5063	264.3	265.9	275.8	278.7		-	-	-	-	
Electrical appliances, TV and radios	5064	65.9	66.2	68.3	68.2		-	-	-	-	
Electronic parts and equipment	5065	176.3	176.0	180.8	181.3		-	-	-	-	
Hardware, plumbing, and heating equipment	507	281.0	281.3	285.6	285.3		227.2	227.6	231.9	231.7	
Hardware	5072	98.8	98.3	98.4	97.6		-	-	-	-	
Plumbing and hydronic heating supplies	5074	113.7	114.4	117.6	117.4		-	-	-	-	
Machinery, equipment, and supplies	508	1,529.4	1,529.9	1,579.6	1,584.7		1,226.2	1,227.3	1,267.3	1,271.0	
Commercial machines and equipment	5081	549.6	549.3	558.6	559.4		-	-	-	-	
Construction and mining machinery	5082	83.0	82.7	86.7	87.0		-	-	-	-	
Farm machinery and equipment	5083	120.3	119.7	127.1	127.2		-	-	-	-	
Industrial machinery and equipment	5084	336.8	337.6	349.3	351.9		-	-	-	-	
Industrial supplies	5085	139.0	139.2	147.3	148.2		-	-	-	-	
Professional equipment and supplies	5086	175.0	175.1	179.1	179.0		-	-	-	-	
Miscellaneous durable goods	509	223.5	225.7	240.0	239.7		180.8	182.2	193.8	193.6	
Scrap and waste materials	5093	104.4	105.4	113.8	113.6		-	-	-	-	
Nondurable goods	51	2,487	2,490	2,555	2,560	2,558	2,034	2,034	2,083	2,086	
Paper and paper products	511	220.3	220.5	229.9	230.4	-	178.9	179.3	184.9	186.3	
Drugs, proprietaries, and sundries	512	181.1	181.0	188.5	188.9		152.1	151.8	158.4	158.3	
Apparel, piece goods, and notions	513	192.1	193.3	200.7	202.4		148.2	149.2	155.0	156.0	
Groceries and related products	514	833.6	834.2	845.5	847.3		706.5	703.9	715.3	715.9	
Groceries, general line	5141	265.3	265.9	274.2	275.9		-	-	-	-	
Meats and meat products	5147	65.7	65.7	67.5	67.1		-	-	-	-	
Fresh fruits and vegetables	5148	106.7	105.0	106.6	106.4		-	-	-	-	
Chemicals and allied products	516	127.8	127.5	132.5	132.3		94.4	94.1	96.1	96.5	
Petroleum and petroleum products	517	204.4	204.5	209.7	209.8		160.4	160.8	164.9	164.9	
Petroleum bulk stations and terminals	5171	85.3	85.2	88.5	88.7		-	-	-	-	
Petroleum products, nec	5172	119.1	119.3	121.2	121.1		-	-	-	-	
Beer, wine, and distilled beverages	518	154.9	153.9	156.2	158.1		128.0	126.9	128.0	130.2	
Beer and ale	5181	99.1	98.7	100.5	101.9		-	-	-	-	
Wines and distilled beverages	5182	55.8	55.2	55.7	56.2		-	-	-	-	
Miscellaneous nondurable goods	519	450.9	445.9	474.6	474.0		366.7	361.5	385.5	384.0	
Farm supplies	5191	153.7	149.7	162.1	161.6		-	-	-	-	
Retail trade		19,240	19,312	19,727	19,680	19,738	17,053	17,118	17,473	17,438	17,490
Building materials and garden supplies	52	798.8	789.6	797.5	790.7		663.8	655.0	663.1	657.4	
Lumber and other building materials	521	448.9	445.3	439.4	439.6		378.9	375.4	371.5	372.6	
Hardware stores	525	164.4	163.5	171.2	170.4		136.8	136.2	141.8	140.8	
General merchandise stores	53	2,398.9	2,400.3	2,432.9	2,423.6	2,422.3	2,216.6	2,215.9	2,253.8	2,251.8	
Department stores	531	1,984.5	1,985.0	2,010.6	2,004.5	-	1,845.6	1,843.9	1,874.0	1,875.0	
Variety stores	533	237.7	237.9	233.9	231.5		217.2	217.6	214.5	212.3	
Misc. general merchandise stores	539	176.7	177.4	188.4	187.6		153.8	154.4	165.3	164.5	
Food stores	54	3,118.9	3,123.9	3,271.9	3,289.2	3,295.3	2,869.2	2,875.9	3,012.6	3,029.3	
Grocery stores	541	2,763.8	2,766.8	2,886.8	2,908.9	-	2,555.7	2,560.7	2,672.8	2,693.6	
Meat markets and freezer provisioners	542	55.1	54.5	58.1	57.5		-	-	-	-	
Dairy products stores	545	28.3	28.5	34.8	34.6		-	-	-	-	
Retail bakeries	546	171.8	172.2	178.2	175.8		155.3	155.2	160.6	158.4	
Automotive dealers and service stations	55	2,123.4	2,136.6	2,176.2	2,182.2	2,183.3	1,778.5	1,790.0	1,820.1	1,825.3	
New and used car dealers	551,2	1,036.6	1,044.0	1,045.5	1,045.5	-	860.1	866.4	868.8	868.7	
Auto and home supply stores	553	339.6	342.8	357.8	361.7		275.6	278.2	287.1	291.0	
Gasoline service stations	554	637.1	639.4	647.7	650.1		553.8	555.9	563.0	564.9	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Retail trade—Continued											
Apparel and accessory stores	56	1,156.4	1,162.5	1,184.0	1,176.3		978.2	983.3	993.8	986.2	
Men's and boys' clothing and furnishings	561	107.1	106.7	105.9	105.3		87.1	86.4	85.0	84.4	-
Women's ready-to-wear stores	562	407.4	405.0	419.4	412.1		342.9	340.1	350.7	345.0	-
Family clothing stores	565	275.7	276.4	279.3	279.8		240.6	241.5	241.4	240.5	
Shoe stores	566	219.9	222.7	229.3	229.0		183.4	186.3	189.9	189.8	-
Furniture and home furnishings stores	57	794.2	796.0	804.5	806.2		650.1	650.8	659.3	661.2	
Furniture and home furnishings stores	571	461.2	459.7	473.5	472.8	-	375.7	373.8	384.5	384.4	
Furniture stores	5712	283.4	283.1	291.8	291.6		-	-	-	-	-
Household appliance stores	572	86.2	86.7	77.5	77.4	-	72.6	73.1	64.5	64.5	
Radio, television, and music stores	573	246.8	249.6	253.5	256.0		201.8	203.9	210.3	212.3	-
Radio and television stores	5732	173.7	175.8	176.9	178.9		-	-	-	-	-
Music stores	5733	73.1	73.8	76.6	77.1		-	-	-	-	-
Eating and drinking places	58	6,446.8	6,491.5	6,572.0	6,535.4	6,576.8	5,880.5	5,920.7	5,986.7	5,953.2	-
Miscellaneous retail	59	2,402.8	2,411.6	2,488.4	2,476.0		2,015.9	2,026.4	2,083.4	2,073.3	-
Drug stores and proprietary stores	591	590.6	591.1	605.5	602.3		503.5	504.1	513.6	511.0	-
Liquor stores	592	122.7	122.1	125.7	126.6		-	-	-	-	-
Miscellaneous shopping goods stores	594	841.9	846.1	881.8	880.0		701.7	706.5	733.1	731.9	-
Sporting goods and bicycle shops	5941	149.8	152.6	160.7	162.4	-	-	-	-	-	-
Book stores	5942	81.0	82.2	87.3	87.0		-	-	-	-	-
Stationery stores	5943	82.1	81.7	85.1	84.4		-	-	-	-	-
Jewelry stores	5944	153.5	154.9	160.7	158.2		-	-	-	-	-
Gift, novelty, and souvenir shops	5947	188.2	185.8	196.3	198.2		-	-	-	-	-
Sewing, needlework, and piece goods	5949	60.8	61.3	64.0	62.3		-	-	-	-	-
Nonstore retailers	596	280.6	283.4	258.5	257.3		251.0	253.2	228.4	227.8	-
Mail order houses	5961	139.5	140.8	125.5	125.6		-	-	-	-	-
Merchandising machine operators	5962	85.3	85.3	85.5	85.3		-	-	-	-	-
Fuel and ice dealers	598	107.3	107.8	115.5	115.2		88.8	89.2	95.9	95.1	-
Retail stores, nec	599	380.0	381.8	415.4	407.8		306.0	308.7	340.4	333.6	-
Finance, insurance, and real estate³		6,773	6,769	6,878	6,910	6,920	4,937	4,936	4,997	5,033	5,042
Finance		3,317	3,309	3,343	3,355	3,361					-
Banking	60	1,753.0	1,751.7	1,783.5	1,795.4		1,254.4	1,251.5	1,272.4	1,282.4	-
Commercial and stock savings banks	602	1,571.5	1,568.2	1,581.1	1,590.4		1,121.5	1,118.3	1,125.1	1,133.6	-
State banks, Federal Reserve	6022	318.3	317.5	315.2	317.6		-	-	-	-	-
State banks, not Federal Reserve	6023,4	364.7	364.4	371.1	372.7		-	-	-	-	-
Mutual savings banks	603	80.5	80.2	81.3	81.2		-	-	-	-	-
Credit agencies other than banks	61	903.0	901.1	909.4	908.7		675.6	673.9	681.7	682.3	
Savings and loan associations	612	403.9	402.5	405.8	404.9		307.1	306.0	308.1	307.7	
Federal savings and loan associations	6122	232.9	232.1	234.4	234.3		-	-	-	-	-
State associations, insured	6123	165.8	165.2	166.2	165.4		-	-	-	-	-
Personal credit institutions	614	256.6	257.0	266.9	267.6		198.7	199.5	207.6	208.6	
Business credit institutions	615	58.7	59.4	67.1	67.5		-	-	-	-	-
Mortgage bankers and brokers	616	160.0	159.0	147.5	146.6		-	-	-	-	-
Security, commodity brokers, and services	62	451.9	447.6	438.0	437.8						
Security brokers and dealers	621	355.3	351.0	338.7	338.4						
Holding and other investment offices	67	209.2	208.7	212.1	213.1						
Insurance		2,094	2,094	2,135	2,141	2,141					
Insurance carriers	63	1,450.1	1,448.5	1,472.8	1,477.8		972.0	973.8	979.7	985.5	
Life insurance	631	579.2	578.0	578.4	578.9		349.4	346.8	348.0	350.3	
Medical service and health insurance	632	218.9	219.7	233.8	235.3		177.1	177.5	189.1	190.0	
Fire, marine, and casualty insurance	633	543.3	541.7	548.5	550.0		363.0	366.7	357.1	358.2	
Title insurance	636	59.0	59.2	58.8	59.9		-	-	-	-	-
Insurance agents, brokers, and service	64	643.8	645.4	662.2	663.2						

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Finance, insurance, and real estate—Continued											
Real estate, and combined real estate, insurance, etc		1,362	1,366	1,400	1,414	1,418					
Real estate	65	1,352.7	1,356.9	1,391.2	1,405.1						
Real estate operators and lessors	651	581.2	586.0	604.9	611.5						
Real estate agents and managers	653	559.8	559.7	562.7	568.7						
Subdividers and developers	655	179.8	179.3	191.0	192.1						
Combined real estate, insurance, etc	66	9.6	9.5	9.0	9.1						
Services		25,922	25,955	27,146	27,215	27,246	22,671	22,700	23,716	23,770	23,770
Hotels and other lodging places	70	1,675.7	1,679.3	1,690.8	1,728.2		-	-	-	-	
Hotels, motels, and tourist courts	701	1,600.3	1,601.1	1,619.1	1,639.2		1,433.7	1,433.3	1,444.9	1,465.3	
Personal services	72	1,150.0	1,146.6	1,181.1	1,167.4		-	-	-	-	
Laundry, cleaning, and garment services	721	412.4	412.6	415.1	411.6		367.2	366.5	369.3	366.0	
Photographic studios, portrait	722	55.9	56.8	58.1	58.0		-	-	-	-	
Beauty shops	723	362.5	361.9	370.9	368.0		323.6	323.0	331.0	328.1	
Funeral service and crematories	726	79.7	80.5	82.1	81.0		-	-	-	-	
Business services	73	5,635.5	5,677.1	5,827.8	5,822.1	5,864.6	4,836.2	4,873.1	4,970.4	4,962.5	
Advertising	731	238.1	241.0	259.8	258.1	-	176.4	178.6	192.3	191.4	
Advertising agencies	7311	171.6	173.9	188.9	187.2		-	-	-	-	
Credit reporting and collection	732	92.7	92.3	96.8	97.1		-	-	-	-	
Mailing, reproduction, and stenographic	733	208.3	211.5	241.0	243.2		-	-	-	-	
Services to buildings	734	794.8	806.6	817.9	815.3		718.1	730.7	740.9	737.6	
Personnel supply services	736	1,396.9	1,408.0	1,365.4	1,350.9		-	-	-	-	
Employment agencies	7361	223.7	225.7	217.7	216.4		-	-	-	-	
Temporary help supply services	7362	1,067.5	1,076.1	1,044.2	1,031.8		-	-	-	-	
Computer and data processing services	737	682.0	688.0	760.2	771.2		531.9	535.6	590.9	601.3	
Computer programming and software	7372	310.7	313.4	351.7	358.8		-	-	-	-	
Data processing services	7374	257.0	258.4	284.2	287.5		-	-	-	-	
Miscellaneous business services	739	2,211.2	2,217.9	2,273.2	2,273.1		-	-	-	-	
Research development laboratories, nec	7391	216.8	216.5	220.0	221.8		-	-	-	-	
Management and public relations	7392	543.2	544.8	556.7	554.6		-	-	-	-	
Detective and protective services	7393	466.9	470.2	476.2	478.3		-	-	-	-	
Equipment rental and leasing	7394	268.5	268.3	281.3	280.1		-	-	-	-	
Photofinishing laboratories	7395	83.0	83.6	82.2	82.1		-	-	-	-	
Auto repair, services, and garages	75	846.5	851.3	904.9	907.1		702.9	705.9	744.4	746.4	
Automotive rentals, without drivers	751	166.6	168.6	186.6	188.2		-	-	-	-	
Automotive repair shops	753	493.5	496.4	525.0	526.5		408.7	410.7	429.4	430.6	
Miscellaneous repair services	76	351.0	352.4	361.4	364.0		287.3	288.0	296.1	299.5	
Electrical repair shops	762	111.8	112.7	122.6	124.4		-	-	-	-	
Motion pictures	78	246.5	250.5	272.8	279.1		206.7	211.1	231.0	237.6	
Motion picture production and services	781	109.7	115.6	136.2	137.1		85.1	91.2	109.8	111.2	
Motion picture theaters	783	118.5	117.0	119.3	124.0		-	-	-	-	
Amusement and recreation services	79	1,081.8	1,080.6	1,122.5	1,159.1		931.6	933.8	989.8	1,024.9	
Health services	80	7,188.1	7,210.3	7,646.4	7,688.6	7,720.8	6,391.8	6,411.6	6,796.8	6,834.3	
Offices of physicians	801	1,115.9	1,123.4	1,204.9	1,214.4	-	915.9	920.8	986.4	992.3	
Offices of dentists	802	490.4	489.1	515.3	514.2		430.5	429.6	450.4	449.4	
Nursing and personal care facilities	805	1,326.7	1,331.8	1,388.2	1,392.7		1,199.6	1,204.1	1,254.7	1,259.7	
Skilled nursing care facilities	8051	918.5	922.4	961.8	964.7		-	-	-	-	
Nursing and personal care, nec	8059	408.2	409.4	426.4	428.0		-	-	-	-	
Hospitals	806	3,323.2	3,328.6	3,497.5	3,517.4		3,037.2	3,043.9	3,198.9	3,218.4	
General medical and surgical hospitals	8062	3,074.7	3,079.5	3,234.3	3,254.0		-	-	-	-	
Psychiatric hospitals	8063	92.7	92.7	97.5	97.0		-	-	-	-	
Specialty hospitals, excluding psychiatric	8069	155.8	156.4	165.7	166.4		-	-	-	-	
Medical and dental laboratories	807	149.6	150.9	170.4	172.9		-	-	-	-	
Outpatient care facilities	808	266.9	271.0	315.0	320.4		-	-	-	-	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Services—Continued											
Legal services	81	871.8	868.4	913.2	917.2		731.6	728.3	760.1	763.7	
Educational services	82	1,349.1	1,345.9	1,488.0	1,419.5						-
Elementary and secondary schools	821	348.0	345.2	393.1	358.1						
Colleges and universities	822	796.4	791.0	857.4	819.0						
Correspondence and vocational schools	824	89.1	92.0	104.1	102.5						
Social services	83	1,607.3	1,591.9	1,733.2	1,725.3						
Individual and family services	832	344.2	344.0	354.4	359.8						
Job training and related services	833	266.5	256.5	253.1	265.3						-
Residential care	836	396.2	398.4	428.7	429.8						
Museums, botanical and zoological gardens	84	54.5	53.9	56.2	56.2						
Membership organizations	86	1,786.6	1,772.6	1,793.6	1,820.4						
Business associations	861	101.1	102.8	102.2	103.1			-			
Labor organizations	863	129.6	130.8	136.0	134.3						
Civic and social associations	864	433.7	416.2	430.5	459.0						
Miscellaneous services	89	1,397.9	1,404.1	1,460.9	1,469.1		1,126.7	1,131.5	1,169.0	1,174.2	
Engineering and architectural services	891	737.0	740.8	768.2	773.7		616.6	619.8	636.6	641.6	
Noncommercial research organizations	892	138.3	138.4	147.9	150.0		-	-	-	-	
Accounting, auditing, and bookkeeping	893	489.8	491.6	510.0	511.3		374.5	375.8	389.2	387.3	
Government		16,440	16,298	17,792	16,816	16,706					
Federal Government⁴		2,992	2,980	3,025	3,032	3,016					
Executive, by agency ⁴		2,931.5	2,920.5	2,964.4							
Department of Defense		963.6	959.0	980.2							
Postal Service ⁵		831.5	827.3	830.6							
Other executive agencies		1,136.4	1,134.2	1,153.6							
Legislative		39.4	38.3	39.2							
Judicial		21.0	21.2	21.4							
Federal government, by industry:											
Manufacturing activities		121.4	121.1	124.6	125.0						
Shipbuilding and repairing	3731	73.9	73.8	74.3	74.4						
Transportation and public utilities, except Postal Service		42.1	40.5	38.3	38.6						
Services		425.1	426.3	436.7	438.1						
Hospitals	806	248.8	248.2	249.6	250.3						
State government		3,853	3,855	4,016	3,936	3,946					
Hospitals	806	449.8	447.6	448.5	450.6	-					
Education	82	1,344.5	1,340.8	1,481.2	1,375.2						
General administration, including executive, legislative, and judicial functions		1,514.2	1,514.4	1,538.2	1,555.1						
Local government		9,595	9,463	10,751	9,848	9,744					
Transportation and public utilities		496.1	493.8	502.2	502.9	-					
Hospitals	806	626.8	627.9	647.6	651.5						
Education	82	4,707.4	4,619.2	5,882.4	4,805.9						
General administration, including executive, legislative, and judicial functions		3,400.5	3,356.9	3,346.3	3,482.2						

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 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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	May 1988	June 1988	Apr. 1989	May 1989	June 1989
Total	49,108	49,306	50,646	50,923	51,094
Total private	39,949	40,371	41,271	41,520	41,907
Goods-producing	6,994	7,071	7,121	7,141	7,202
Mining	96	97	97	97	99
Construction	545	555	568	576	584
Manufacturing	6,353	6,419	6,456	6,468	6,519
Durable goods	3,059	3,085	3,104	3,104	3,116
Lumber and wood products	124	128	125	126	128
Furniture and fixtures	164	163	168	167	166
Stone, clay, and glass products	121	123	123	124	125
Primary metal industries	105	107	108	108	109
Fabricated metal products	324	326	327	327	328
Machinery, except electrical	460	463	473	474	477
Electrical and electronic equipment	861	868	854	849	850
Transportation equipment	400	402	409	409	410
Instruments and related products	324	328	338	338	339
Miscellaneous manufacturing	178	179	181	182	184
Nondurable goods	3,294	3,334	3,352	3,364	3,403
Food and kindred products	505	523	509	515	537
Tobacco manufactures	17	17	17	16	16
Textile mill products	353	355	353	353	355
Apparel and other textile products	875	876	879	877	879
Paper and allied products	168	171	170	171	174
Printing and publishing	672	676	704	706	709
Chemicals and allied products	308	314	320	324	329
Petroleum and coal products	24	25	26	26	27
Rubber and misc. plastics products	288	291	292	292	293
Leather and leather products	86	86	83	84	84
Service-producing	42,114	42,235	43,525	43,782	43,892
Transportation and public utilities	1,590	1,605	1,628	1,640	1,653
Wholesale trade	1,786	1,805	1,867	1,880	1,897
Retail trade	10,082	10,193	10,182	10,342	10,449
Finance, insurance, and real estate	4,147	4,194	4,239	4,257	4,301
Services	15,350	15,503	16,234	16,260	16,405
Government	9,159	8,935	9,375	9,403	9,187
Federal	1,059	1,066	1,063	1,073	1,082
State	2,011	1,922	2,086	2,065	1,974
Local	6,089	5,947	6,226	6,265	6,131

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

introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
Total	105,954	106,207	106,475	106,824	107,097	107,442	107,711	107,888	108,101	108,310	108,607	108,791	108,901
Total private	88,578	88,736	88,991	89,299	89,574	89,897	90,124	90,291	90,475	90,623	90,884	91,030	91,083
Goods-producing	25,303	25,313	25,384	25,460	25,513	25,626	25,629	25,646	25,671	25,672	25,648	25,683	25,724
Mining	725	719	717	712	711	711	711	714	720	722	715	707	729
Oil and gas extraction	408	404	400	396	394	393	394	397	400	401	402	404	404
Construction	5,153	5,163	5,162	5,191	5,213	5,267	5,270	5,252	5,279	5,283	5,283	5,317	5,325
General building contractors	1,372	1,374	1,363	1,375	1,380	1,404	1,398	1,380	1,377	1,388	1,384	1,392	1,403
Manufacturing	19,425	19,431	19,505	19,557	19,589	19,648	19,648	19,680	19,672	19,667	19,650	19,659	19,670
Durable goods	11,462	11,464	11,509	11,545	11,565	11,605	11,594	11,604	11,600	11,594	11,567	11,554	11,567
Lumber and wood products	761	763	770	775	780	784	778	777	772	771	769	767	766
Furniture and fixtures	529	530	531	532	532	532	534	535	537	534	534	535	531
Stone, clay, and glass products	600	600	603	605	607	607	608	607	606	604	603	602	603
Primary metal industries	776	779	783	784	785	786	786	788	788	787	787	786	787
Blast furnaces and basic steel products	277	277	277	277	276	276	276	276	275	276	276	276	277
Fabricated metal products	1,435	1,436	1,442	1,445	1,449	1,458	1,458	1,457	1,454	1,452	1,449	1,446	1,443
Machinery, except electrical	2,094	2,098	2,110	2,120	2,126	2,134	2,138	2,143	2,144	2,150	2,151	2,156	2,156
Electrical and electronic equipment	2,073	2,072	2,073	2,075	2,067	2,065	2,062	2,060	2,058	2,050	2,041	2,038	2,032
Transportation equipment	2,052	2,044	2,055	2,060	2,063	2,079	2,067	2,071	2,073	2,076	2,062	2,051	2,074
Motor vehicles and equipment	859	859	865	867	867	882	871	869	875	876	861	848	873
Instruments and related products	755	756	758	762	767	770	772	776	777	778	779	781	782
Miscellaneous manufacturing	387	386	384	387	389	390	391	390	391	392	392	392	393
Nondurable goods	7,963	7,967	7,996	8,012	8,024	8,043	8,054	8,076	8,072	8,073	8,083	8,105	8,103
Food and kindred products	1,629	1,627	1,644	1,648	1,646	1,650	1,650	1,655	1,657	1,656	1,663	1,677	1,670
Tobacco manufactures	55	55	55	56	56	56	56	56	54	53	52	53	52
Textile mill products	723	726	726	725	724	728	728	729	728	728	729	731	729
Apparel and other textile products	1,085	1,085	1,083	1,088	1,090	1,092	1,096	1,101	1,098	1,095	1,093	1,096	1,098
Paper and allied products	694	693	695	695	696	696	696	697	696	697	697	700	700
Printing and publishing	1,568	1,573	1,577	1,581	1,588	1,595	1,595	1,600	1,601	1,603	1,607	1,609	1,614
Chemicals and allied products	1,071	1,072	1,074	1,075	1,079	1,084	1,085	1,088	1,090	1,094	1,096	1,094	1,094
Petroleum and coal products	162	162	162	162	162	160	161	161	162	162	163	163	163
Rubber and misc. plastics products	832	830	836	839	840	839	843	845	843	843	841	842	843
Leather and leather products	144	144	144	143	143	143	144	144	143	142	142	140	140
Service-producing	80,651	80,894	81,091	81,364	81,584	81,816	82,082	82,242	82,430	82,638	82,959	83,108	83,177
Transportation and public utilities	5,572	5,581	5,596	5,616	5,634	5,654	5,667	5,666	5,682	5,700	5,716	5,741	5,619
Transportation	3,353	3,365	3,381	3,402	3,421	3,439	3,453	3,452	3,467	3,484	3,500	3,529	3,537
Communication and public utilities	2,219	2,216	2,215	2,214	2,213	2,215	2,214	2,214	2,215	2,216	2,216	2,212	2,082
Wholesale trade	6,051	6,071	6,086	6,104	6,125	6,146	6,171	6,197	6,206	6,222	6,230	6,240	6,246
Durable goods	3,578	3,590	3,599	3,612	3,626	3,638	3,657	3,676	3,676	3,685	3,693	3,700	3,706
Nondurable goods	2,473	2,481	2,487	2,492	2,499	2,508	2,514	2,521	2,530	2,537	2,537	2,540	2,540
Retail trade	19,182	19,188	19,229	19,282	19,328	19,407	19,460	19,488	19,489	19,528	19,551	19,582	19,601
General merchandise stores	2,454	2,452	2,447	2,452	2,460	2,472	2,481	2,490	2,492	2,491	2,493	2,481	2,477
Food stores	3,117	3,122	3,149	3,165	3,182	3,200	3,212	3,223	3,233	3,245	3,262	3,273	3,289
Automotive dealers and service stations	2,107	2,115	2,124	2,131	2,136	2,143	2,150	2,155	2,159	2,159	2,155	2,154	2,153
Eating and drinking places	6,302	6,296	6,314	6,322	6,328	6,323	6,332	6,322	6,335	6,348	6,362	6,370	6,385
Finance, insurance, and real estate	6,686	6,695	6,710	6,726	6,744	6,746	6,763	6,774	6,776	6,790	6,808	6,812	6,836
Finance	3,285	3,288	3,293	3,299	3,307	3,308	3,311	3,316	3,312	3,320	3,320	3,322	3,338
Insurance	2,087	2,092	2,098	2,102	2,110	2,109	2,116	2,117	2,119	2,123	2,129	2,130	2,135
Real estate	1,314	1,315	1,319	1,325	1,327	1,329	1,336	1,341	1,345	1,347	1,359	1,360	1,363
Services	25,784	25,888	25,986	26,111	26,230	26,318	26,434	26,520	26,651	26,711	26,931	26,972	27,057
Business services	5,617	5,651	5,667	5,682	5,715	5,707	5,729	5,736	5,760	5,776	5,799	5,782	5,801
Health services	7,187	7,228	7,267	7,313	7,359	7,396	7,442	7,488	7,528	7,570	7,616	7,650	7,698
Government	17,376	17,471	17,484	17,525	17,523	17,545	17,587	17,597	17,626	17,687	17,723	17,761	17,818
Federal	2,967	2,985	2,986	2,983	2,981	2,978	2,982	2,982	2,982	2,999	2,995	2,999	3,004
State	4,079	4,088	4,081	4,085	4,085	4,084	4,095	4,102	4,111	4,119	4,136	4,161	4,176
Local	10,330	10,398	10,417	10,457	10,457	10,483	10,510	10,513	10,533	10,569	10,592	10,601	10,638

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1988

benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1985 forward are subject to revision.

**ESTABLISHMENT DATA
WOMEN EMPLOYEES
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1988							1989					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total	49,119	49,207	49,338	49,488	49,586	49,799	49,963	50,130	50,302	50,414	50,515	50,670	50,894
Total private	40,191	40,296	40,393	40,503	40,602	40,776	40,943	41,093	41,239	41,340	41,418	41,530	41,717
Goods-producing	7,035	7,053	7,049	7,054	7,069	7,095	7,112	7,141	7,152	7,159	7,161	7,166	7,165
Mining	97	97	98	97	97	97	97	97	97	97	97	97	99
Construction	548	551	554	555	555	557	561	566	571	571	573	577	577
Manufacturing	6,390	6,405	6,397	6,402	6,417	6,441	6,454	6,478	6,484	6,491	6,491	6,492	6,489
Durable goods	3,073	3,084	3,084	3,082	3,087	3,097	3,103	3,113	3,111	3,109	3,111	3,108	3,103
Lumber and wood products	125	125	125	125	125	127	127	127	127	127	126	126	125
Furniture and fixtures	164	165	164	165	165	165	165	166	166	166	167	167	167
Stone, clay, and glass products	121	122	122	121	122	122	123	123	123	123	124	124	123
Primary metal industries	106	106	106	106	106	106	107	108	107	108	108	108	108
Fabricated metal products	324	326	325	325	325	327	327	330	329	328	327	327	326
Machinery, except electrical	460	463	464	465	467	469	469	471	471	471	471	472	474
Electrical and electronic equipment	868	868	868	867	868	869	866	864	863	860	859	853	850
Transportation equipment	401	401	401	399	401	402	405	407	407	408	409	410	409
Instruments and related products	326	328	330	330	331	332	335	337	337	337	338	339	338
Miscellaneous manufacturing	178	180	179	179	177	178	179	180	181	180	182	182	183
Nondurable goods	3,317	3,321	3,313	3,320	3,330	3,344	3,351	3,365	3,373	3,382	3,380	3,384	3,386
Food and kindred products	526	525	520	524	531	535	532	536	537	537	537	537	540
Tobacco manufactures	18	18	18	18	18	18	19	18	19	19	18	17	17
Textile mill products	352	351	349	349	349	350	350	352	352	354	353	353	353
Apparel and other textile products	869	867	863	863	862	867	869	871	874	877	875	873	871
Paper and allied products	169	170	170	171	171	171	171	171	171	171	171	171	172
Printing and publishing	675	678	681	682	685	688	692	697	698	700	702	706	708
Chemicals and allied products	311	312	313	314	315	315	316	318	319	321	322	325	325
Petroleum and coal products	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Rubber and misc. plastics products	288	290	289	289	289	291	292	292	292	293	292	292	291
Leather and leather products	85	86	85	85	85	84	84	84	85	84	84	84	83
Service-producing	42,084	42,154	42,289	42,434	42,517	42,704	42,851	42,989	43,150	43,255	43,354	43,504	43,729
Transportation and public utilities	1,597	1,598	1,604	1,604	1,608	1,614	1,621	1,626	1,630	1,629	1,628	1,635	1,645
Wholesale trade	1,801	1,808	1,811	1,820	1,827	1,835	1,845	1,854	1,862	1,866	1,876	1,888	1,893
Retail trade	10,137	10,149	10,171	10,179	10,190	10,213	10,238	10,287	10,318	10,336	10,337	10,373	10,387
Finance, insurance, and real estate	4,164	4,169	4,178	4,188	4,199	4,212	4,222	4,227	4,242	4,249	4,247	4,257	4,271
Services	15,457	15,519	15,580	15,658	15,709	15,807	15,905	15,958	16,035	16,101	16,169	16,211	16,356
Government	8,928	8,911	8,945	8,985	8,984	9,023	9,020	9,037	9,063	9,074	9,097	9,140	9,177
Federal	1,054	1,055	1,059	1,065	1,067	1,066	1,065	1,063	1,064	1,064	1,064	1,070	1,070
State	1,989	1,998	2,003	2,015	2,009	2,013	2,013	2,012	2,017	2,020	2,023	2,034	2,043
Local	5,885	5,858	5,883	5,905	5,908	5,944	5,942	5,962	5,982	5,990	6,010	6,036	6,064

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

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

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	71,723	71,825	72,021	72,273	72,494	72,774	72,949	73,101	73,204	73,315	73,555	73,662	73,699
Goods-producing	17,815	17,813	17,865	17,929	17,963	18,065	18,048	18,052	18,053	18,058	18,022	18,054	18,096
Mining	522	518	515	511	510	510	510	514	519	521	511	504	524
Construction	4,023	4,032	4,026	4,053	4,068	4,132	4,112	4,096	4,104	4,111	4,111	4,135	4,148
Manufacturing	13,270	13,263	13,324	13,365	13,385	13,423	13,426	13,442	13,430	13,426	13,400	13,415	13,424
Durable goods	7,658	7,653	7,690	7,717	7,730	7,758	7,749	7,749	7,744	7,735	7,706	7,699	7,712
Lumber and wood products	634	635	641	645	647	652	648	646	642	641	638	637	635
Furniture and fixtures	422	424	425	426	426	426	427	428	428	427	426	426	423
Stone, clay, and glass products	468	466	469	470	472	473	474	472	471	469	468	467	469
Primary metal industries	595	597	600	601	602	603	602	603	603	601	602	602	601
Blast furnaces and basic steel products	216	217	216	217	216	215	215	213	211	210	211	210	214
Fabricated metal products	1,070	1,069	1,076	1,079	1,082	1,089	1,087	1,086	1,080	1,079	1,074	1,073	1,069
Machinery, except electrical	1,260	1,261	1,270	1,279	1,285	1,292	1,298	1,298	1,298	1,302	1,303	1,309	1,310
Electrical and electronic equipment	1,227	1,227	1,228	1,233	1,224	1,222	1,218	1,214	1,213	1,205	1,198	1,197	1,193
Transportation equipment	1,284	1,276	1,283	1,283	1,285	1,294	1,286	1,292	1,297	1,297	1,284	1,275	1,295
Motor vehicles and equipment	673	671	676	676	676	687	677	675	680	681	667	654	676
Instruments and related products	416	417	419	421	425	424	425	427	428	430	429	431	432
Miscellaneous manufacturing	282	281	279	280	282	283	284	283	284	284	284	282	285
Nondurable goods	5,612	5,610	5,634	5,648	5,655	5,665	5,677	5,693	5,686	5,691	5,694	5,716	5,712
Food and kindred products	1,158	1,156	1,169	1,173	1,172	1,175	1,177	1,182	1,184	1,184	1,190	1,203	1,197
Tobacco manufactures	41	40	41	42	42	41	41	41	40	38	38	39	38
Textile mill products	626	629	629	628	628	630	630	630	630	630	630	632	629
Apparel and other textile products	912	912	912	916	919	922	926	930	927	925	922	923	925
Paper and allied products	525	523	524	525	525	524	524	525	524	525	525	528	528
Printing and publishing	877	878	881	883	886	887	888	891	889	891	892	894	896
Chemicals and allied products	600	600	602	602	604	607	608	610	609	614	616	616	614
Petroleum and coal products	106	106	106	106	105	104	105	105	105	106	107	107	107
Rubber and misc. plastics products	649	647	652	655	656	656	659	660	660	660	656	657	661
Leather and leather products	118	119	118	118	118	119	119	119	118	118	118	117	117
Service-producing	53,908	54,012	54,156	54,344	54,531	54,709	54,901	55,049	55,151	55,257	55,533	55,608	55,603
Transportation and public utilities	4,631	4,635	4,653	4,671	4,691	4,704	4,718	4,718	4,735	4,752	4,763	4,773	4,642
Wholesale trade	4,876	4,890	4,903	4,917	4,931	4,948	4,970	4,990	4,996	5,007	5,016	5,022	5,030
Retail trade	17,001	16,997	17,017	17,066	17,106	17,171	17,215	17,244	17,235	17,280	17,317	17,334	17,368
Finance, insurance, and real estate	4,856	4,858	4,866	4,873	4,879	4,886	4,893	4,900	4,902	4,918	4,933	4,944	4,958
Services	22,544	22,632	22,717	22,817	22,924	23,000	23,105	23,197	23,283	23,300	23,504	23,535	23,605

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

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

(Percent)

Year	Private nonagricultural payrolls, 349 industries ¹											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span												
1977	63.5	60.5	70.3	67.9	68.6	63.8	64.5	61.3	65.9	61.3	67.0	67.9
1978	62.5	64.3	70.2	70.1	64.6	67.6	61.6	62.2	62.0	64.3	70.9	66.6
1979	63.9	61.0	64.8	52.7	61.6	61.3	55.7	53.2	50.7	61.3	54.2	53.9
1980	54.6	53.4	49.7	37.4	40.8	38.0	42.3	59.0	55.7	63.8	59.3	58.6
1981	58.5	52.7	54.0	64.5	57.0	53.3	57.7	51.3	45.8	42.3	40.3	36.0
1982	37.2	47.3	40.1	41.5	49.3	38.1	42.8	39.1	44.7	36.2	40.1	43.6
1983	55.0	47.9	60.2	65.6	66.3	66.5	67.2	68.9	70.1	66.6	67.6	64.6
1984	67.8	70.6	65.2	67.8	63.3	67.2	59.6	61.9	57.2	62.9	59.3	57.7
1985	58.5	52.3	60.2	53.2	58.5	51.4	57.6	60.7	53.6	56.3	56.6	59.7
1986	55.4	53.7	53.2	56.3	55.2	50.7	54.7	56.3	57.9	54.6	58.0	61.7
1987	55.6	59.3	61.0	61.9	58.6	59.7	65.3	60.6	63.0	67.8	64.5	60.7
1988	60.7	63.5	63.0	62.8	61.3	67.2	63.6	58.0	55.4	63.9	68.2	64.6
1989	68.3	60.5	61.0	58.2	55.6	59.7	^P 54.9	^P 58.5				
Over 3-month span												
1977	70.2	74.5	76.4	79.2	74.8	72.1	69.3	72.1	70.5	73.5	73.6	72.5
1978	71.9	73.8	76.9	76.9	74.9	71.1	69.2	65.8	68.3	73.5	74.8	76.2
1979	69.5	71.8	65.8	66.2	62.0	64.0	58.9	53.3	57.6	58.6	62.2	56.2
1980	56.6	51.4	42.0	38.3	35.5	37.4	42.8	50.9	65.3	66.9	68.5	64.3
1981	59.5	55.6	58.9	64.6	63.3	60.7	57.0	52.4	43.3	40.0	34.0	30.9
1982	31.2	34.8	37.7	41.5	40.3	40.3	34.8	38.3	35.4	35.8	34.0	46.6
1983	48.4	57.0	62.6	71.9	72.1	74.4	72.6	77.2	77.2	74.6	71.6	73.6
1984	74.9	75.5	78.2	72.8	73.6	68.8	67.8	65.5	64.6	62.2	61.9	61.6
1985	58.3	58.3	55.6	59.0	55.4	57.6	56.6	58.7	58.5	56.9	59.5	59.3
1986	57.7	53.0	54.4	55.4	53.3	51.4	52.9	58.7	57.0	59.7	62.0	62.0
1987	60.7	62.0	66.6	65.2	65.8	65.9	67.8	71.1	71.2	72.3	70.9	65.9
1988	64.8	65.6	69.5	70.2	71.1	71.9	71.2	64.2	65.3	70.1	73.4	74.6
1989	71.6	70.1	64.5	61.9	61.6	^P 60.7	^P 63.2					
Over 6-month span												
1977	79.1	81.8	78.7	78.4	78.1	79.7	76.2	76.2	77.5	76.6	78.1	78.4
1978	77.8	81.4	81.2	79.8	78.7	76.2	73.6	76.9	75.6	76.8	76.1	77.8
1979	74.6	73.9	71.2	66.8	68.2	57.9	62.9	59.5	57.7	58.6	60.9	57.7
1980	48.6	44.7	41.1	37.4	37.1	37.5	44.4	51.9	61.2	70.9	68.9	66.2
1981	66.5	65.2	62.9	64.9	61.3	58.0	50.3	43.0	39.0	32.2	32.5	28.7
1982	28.5	29.7	33.0	38.8	37.2	36.8	34.5	33.8	34.8	38.1	39.1	43.1
1983	55.2	62.2	67.3	71.1	76.4	78.2	79.4	79.5	78.2	77.2	78.1	77.7
1984	78.7	78.9	80.2	77.1	74.4	72.6	70.1	68.6	64.9	63.9	61.6	62.6
1985	58.7	59.7	58.2	57.6	58.6	57.6	57.6	56.2	59.5	59.7	58.3	55.6
1986	55.6	56.6	52.7	52.9	53.4	56.0	55.6	57.0	62.3	61.6	62.9	63.2
1987	67.3	65.8	64.8	66.8	67.6	69.5	71.3	73.5	73.2	71.5	71.8	72.2
1988	69.9	70.2	71.5	73.9	73.9	69.1	70.2	74.6	73.5	73.9	74.5	75.8
1989	75.1	69.5	68.2	^P 65.3	^P 63.8							
Over 12-month span												
1977	79.2	80.1	81.8	81.9	84.8	84.7	84.5	83.4	83.7	83.0	82.5	82.1
1978	81.9	82.2	81.8	81.9	83.0	82.8	83.4	81.4	81.7	75.8	78.1	75.5
1979	75.9	75.4	74.8	72.1	68.2	66.0	66.0	63.6	59.7	57.6	52.0	48.7
1980	47.0	46.4	46.8	45.3	43.7	43.8	43.6	42.8	44.3	50.6	57.2	62.2
1981	71.2	68.3	68.1	61.3	53.4	48.0	42.3	38.8	36.4	33.1	34.1	32.2
1982	32.4	31.1	29.7	30.4	30.4	31.4	35.0	35.1	38.8	43.4	46.7	51.4
1983	57.0	61.9	66.5	72.8	75.8	77.2	76.8	80.7	80.4	81.4	83.0	81.9
1984	81.7	79.5	78.7	77.1	76.2	74.1	73.1	70.2	69.1	65.2	63.8	61.5
1985	59.5	59.2	59.2	56.9	56.6	58.5	55.9	55.9	56.7	55.6	55.2	53.7
1986	54.4	54.6	53.9	55.6	55.2	56.3	57.2	59.3	60.0	62.0	61.3	63.6
1987	66.6	68.2	68.2	71.8	71.9	72.5	72.2	74.1	75.4	72.5	73.8	76.9
1988	76.2	76.1	74.8	74.6	75.8	74.9	78.1	75.5	75.5	74.8	74.9	74.1
1989	^P 73.5	^P 74.2										

See footnotes at end of table.

**ESTABLISHMENT DATA
DIFFUSION INDEXES
SEASONALLY ADJUSTED**

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

(Percent)

Year	Manufacturing payrolls, 141 industries ¹											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span												
1977	66.0	59.9	68.4	70.9	67.0	59.6	60.3	54.3	62.1	57.4	63.1	70.2
1978	63.1	64.5	63.8	65.6	61.0	62.4	56.0	58.5	57.1	62.8	66.3	69.1
1979	60.3	55.0	58.9	50.4	55.7	61.7	50.0	45.0	41.1	57.4	46.8	47.9
1980	48.6	46.1	47.5	28.4	24.8	27.0	28.7	58.2	55.0	63.1	61.7	53.9
1981	53.2	45.0	55.0	63.1	61.3	56.7	56.0	42.2	39.4	30.5	29.4	23.4
1982	27.0	39.4	28.0	31.9	36.2	26.6	34.4	28.4	35.5	26.6	26.2	39.4
1983	53.2	48.6	55.3	67.0	67.4	59.9	68.8	64.9	68.1	70.9	62.4	62.1
1984	61.7	70.6	64.5	63.8	54.6	61.0	56.0	52.8	42.9	52.8	44.7	48.6
1985	46.5	40.4	44.0	37.6	41.5	39.4	47.9	48.6	37.9	44.3	44.0	50.7
1986	48.9	45.0	43.6	43.6	46.5	43.3	38.7	51.1	48.6	45.0	50.7	52.8
1987	44.3	53.9	54.3	55.7	55.3	54.3	62.8	59.9	63.8	59.9	65.6	56.4
1988	58.5	56.0	55.0	59.9	58.5	61.7	59.6	51.1	49.3	62.8	64.9	58.5
1989	62.4	53.5	53.2	49.6	46.8	48.6	^P 48.6	^P 52.1				
Over 3-month span												
1977	70.6	77.0	78.7	78.7	72.0	66.7	62.4	64.9	62.4	67.7	69.1	76.2
1978	77.0	72.3	72.3	69.9	69.1	62.8	61.3	58.2	62.4	67.0	70.9	73.4
1979	64.9	62.8	59.6	59.9	58.5	59.2	50.0	36.5	44.0	43.6	52.5	42.9
1980	44.7	40.4	28.4	20.2	18.4	19.5	27.7	39.7	64.2	67.7	67.4	61.3
1981	51.8	50.4	56.4	64.5	66.7	64.9	55.0	42.6	28.0	25.5	17.7	17.4
1982	17.0	19.1	21.3	22.0	22.0	22.3	18.1	18.8	20.6	18.4	17.7	33.3
1983	46.1	53.9	61.7	71.3	70.9	73.8	70.6	76.2	77.0	74.1	72.0	67.4
1984	71.6	71.6	75.2	65.6	65.2	58.9	57.1	50.7	47.5	42.9	45.7	44.7
1985	43.6	37.9	32.6	33.0	31.2	37.6	40.8	37.9	38.3	36.5	42.9	46.8
1986	45.0	40.8	38.3	38.7	39.4	37.2	37.2	44.0	46.5	47.5	52.5	49.3
1987	52.1	51.4	59.6	61.3	58.5	62.8	67.0	71.6	68.4	70.6	67.7	64.5
1988	63.1	61.0	62.4	64.9	67.4	67.0	64.5	58.2	62.1	66.7	71.3	70.9
1989	67.4	63.8	55.7	51.8	49.3	^P 48.9	^P 52.5					
Over 6-month span												
1977	81.6	81.9	79.1	77.3	75.2	74.8	67.7	68.4	70.9	75.2	80.5	77.7
1978	77.7	79.8	78.0	72.3	73.0	68.8	63.5	68.1	69.9	71.3	67.0	69.9
1979	68.4	66.3	62.1	58.2	52.1	43.6	48.2	41.5	39.7	40.1	42.6	42.9
1980	33.0	27.0	23.4	16.7	17.4	19.1	26.2	39.7	52.8	70.6	67.4	65.2
1981	65.2	62.8	62.8	68.1	61.7	55.3	40.1	29.1	22.3	17.0	18.4	12.4
1982	10.3	10.6	13.5	20.6	15.6	15.2	12.4	12.1	14.5	18.1	21.3	27.3
1983	46.8	59.6	64.9	67.0	75.5	76.2	78.7	77.3	76.2	73.8	75.9	74.8
1984	75.2	72.3	72.7	70.2	62.1	58.2	54.6	52.5	48.6	44.7	39.4	41.8
1985	35.5	34.8	29.4	31.9	33.3	33.0	31.9	32.6	38.3	40.1	38.3	37.6
1986	37.6	38.7	35.5	33.3	34.0	38.3	37.9	41.1	45.4	49.6	50.4	51.1
1987	57.4	56.7	55.3	62.4	64.9	67.0	67.4	70.6	71.3	69.5	69.5	68.1
1988	66.3	66.3	67.7	69.5	66.7	64.2	66.0	70.9	68.8	69.9	71.6	74.1
1989	69.5	58.5	55.7	^P 52.5	^P 52.1							
Over 12-month span												
1977	77.0	77.7	75.9	76.6	81.2	82.6	84.0	81.9	83.3	80.5	78.0	77.3
1978	75.2	77.7	76.2	77.0	77.0	77.0	75.2	70.6	70.9	65.6	69.1	64.9
1979	67.0	64.2	62.4	57.4	51.8	48.6	48.9	47.5	42.2	36.5	29.1	24.8
1980	20.6	22.3	23.8	25.2	23.0	22.3	21.3	22.7	23.8	30.5	45.7	59.6
1981	72.0	69.1	69.1	52.8	40.4	35.1	27.7	21.6	17.7	15.2	13.8	12.4
1982	12.1	12.4	9.2	11.3	8.2	9.9	13.5	14.2	15.2	21.6	25.5	33.7
1983	43.3	50.0	56.0	66.0	71.6	75.5	76.2	78.4	78.0	78.7	80.1	76.2
1984	77.0	72.3	68.1	66.0	62.4	61.0	57.8	54.6	50.4	44.0	40.1	33.7
1985	31.6	30.9	30.1	28.4	27.7	28.4	29.1	29.8	32.6	30.9	32.6	29.8
1986	30.9	30.1	34.8	34.8	36.2	39.0	38.3	39.7	42.9	46.1	48.6	50.0
1987	55.3	58.5	58.5	63.5	66.3	67.4	71.6	72.7	71.6	69.1	68.4	72.3
1988	73.8	70.2	70.9	71.6	72.0	69.9	70.9	69.1	71.6	70.2	69.9	67.0
1989	^P 63.5	^P 65.6										

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

^P = preliminary.

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

equal balance between industries with increasing and decreasing employment. Establishment survey estimates are currently projected from March 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data (beginning April 1988) and all seasonally adjusted data (beginning January 1985) are subject to revision.

**ESTABLISHMENT DATA
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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Alabama	1,560.5	1,575.2	1,569.8	11.4	11.4	6.2	81.1	74.9	75.0
Birmingham	404.0	409.1	406.6	5.3	4.9	2.9	25.7	25.0	24.7
Huntsville	129.7	134.4	133.9	.1	.1	.1	6.0	6.1	6.2
Mobile	168.2	166.5	167.4	.7	.7	.7	10.3	10.2	10.2
Montgomery	130.8	128.7	129.5	.1	.1	.1	9.4	8.0	7.8
Tuscaloosa	59.6	61.0	58.8	2.7	2.7	.8	3.3	3.1	3.1
Alaska	227.9	232.0	237.8	10.1	10.8	10.9	10.6	10.0	11.0
Arizona	1,376.2	1,412.2	1,395.2	12.2	12.1	12.0	95.2	90.9	91.8
Phoenix	916.7	933.7	923.5	.7	.8	.8	65.6	60.9	61.5
Tucson	237.0	246.3	240.8	1.8	2.1	2.1	17.1	16.9	16.8
Arkansas	857.4	889.0	881.6	4.4	4.4	4.4	35.4	34.8	35.8
Fayetteville-Springdale	49.5	51.1	51.2	(¹)	(¹)	(¹)	1.8	1.8	1.8
Fort Smith	78.8	77.1	77.1	1.0	.9	.9	2.6	2.6	2.7
Little Rock-North Little Rock	235.8	243.3	241.5	.4	.4	.4	10.7	10.6	10.9
Pine Bluff	32.8	34.0	33.6	(¹)	(¹)	(¹)	1.7	1.9	1.9
California	12,030.8	12,453.6	12,365.0	43.1	42.3	42.7	618.4	646.3	654.1
Anaheim-Santa Ana	1,130.4	1,165.9	1,155.5	1.4	1.2	1.2	67.1	69.9	69.9
Bakersfield	159.7	162.5	160.0	14.6	14.2	14.1	10.1	9.4	10.0
Fresno	206.1	213.1	210.6	.6	.6	.5	12.4	12.5	12.8
Los Angeles-Long Beach	4,089.6	4,197.0	4,167.1	9.9	10.0	9.9	147.7	155.8	156.2
Modesto	108.9	115.7	119.4	(¹)	(¹)	(¹)	7.4	8.2	8.2
Oakland	837.1	874.8	868.8	3.3	3.6	3.6	51.4	52.5	53.5
Oxnard-Ventura	215.5	223.5	223.2	2.9	2.9	2.9	14.5	15.2	15.4
Riverside-San Bernardino	619.2	641.7	632.4	1.3	1.3	1.3	54.4	55.3	55.9
Sacramento	566.4	597.8	593.2	.7	.6	.7	35.2	36.4	37.1
San Diego	907.2	957.6	948.4	.8	.8	.8	58.7	62.2	62.4
San Francisco	941.8	958.8	955.8	.9	.9	.9	36.0	36.8	37.2
San Jose	821.4	826.0	825.9	.1	.1	.1	34.2	33.7	34.4
Santa Barbara-Santa Maria-Lompoc	144.0	149.9	147.1	1.5	1.5	1.5	6.7	7.0	7.0
Santa Rosa-Petaluma	125.7	130.7	128.5	.7	.7	.7	9.2	9.1	9.5
Stockton	147.2	148.9	148.5	.1	.1	.1	8.9	8.8	8.8
Vallejo-Fairfield-Napa	131.1	136.1	136.8	.6	.7	.7	10.1	11.1	11.4
Colorado	1,424.1	1,451.6	1,439.0	21.0	20.4	20.9	62.4	59.6	61.2
Boulder-Longmont	107.3	108.5	107.5	.3	.3	.3	3.8	3.7	3.8
Denver	802.8	813.9	805.7	13.1	12.0	12.1	33.7	30.5	31.1
Connecticut	1,663.7	1,709.1	1,690.9	1.6	1.5	1.5	84.0	78.9	80.6
Bridgeport-Milford	197.5	206.0	201.1	(¹)	(¹)	(¹)	9.8	9.6	9.8
Hartford	483.4	494.3	489.0	.4	.4	.4	21.6	22.3	22.4
New Britain	64.9	66.9	65.3	(¹)	(¹)	(¹)	5.4	4.8	5.0
New Haven-Meriden	258.2	267.9	265.3	.4	.4	.4	14.6	15.2	15.5
Stamford	126.7	128.0	127.8	.5	.4	.4	5.9	5.7	6.1
Waterbury	85.2	89.6	84.4	(¹)	(¹)	(¹)	5.0	5.3	5.4
Delaware	335.5	347.9	341.6	.1	.1	.1	23.3	21.3	21.0
Wilmington	285.2	294.5	286.3	.2	.2	.2	20.1	18.6	18.5
District of Columbia	686.2	692.5	699.3	.1	.1	.1	13.4	13.5	13.4
Washington MSA	2,183.5	2,261.9	2,263.9	1.2	1.2	1.2	145.3	151.2	153.7
Florida	5,022.6	5,261.4	5,194.4	9.0	9.5	9.5	351.7	349.4	348.3
Daytona Beach	116.4	121.6	119.9	(¹)	(¹)	(¹)	8.6	8.5	8.6
Fort Lauderdale-Hollywood-Pompano Beach	475.7	495.0	486.3	.3	.3	.3	37.6	37.0	36.7
Fort Myers-Cape Coral	113.6	124.3	122.0	(¹)	(¹)	(¹)	12.7	14.1	14.0
Jacksonville	405.3	421.7	417.4	.6	.6	.7	26.7	27.7	27.6
Melbourne-Titusville-Palm Bay	152.6	158.6	158.5	(¹)	(¹)	(¹)	8.9	9.2	9.3
Miami-Hialeah	845.0	875.1	861.2	.9	.9	.9	40.9	38.7	38.8
Orlando	501.0	522.3	517.9	(¹)	(¹)	(¹)	37.5	36.8	36.8
Pensacola	124.2	126.9	125.5	.3	.3	.4	8.3	8.4	8.5
Sarasota	107.9	113.8	112.5	(¹)	(¹)	(¹)	10.0	10.4	10.3
Tallahassee	111.7	116.8	114.4	(¹)	(¹)	(¹)	5.8	5.7	5.6
Tampa-St. Petersburg-Clearwater	822.4	860.5	854.0	.7	.8	.8	57.7	56.9	57.0
West Palm Beach-Boca Raton-Delray Beach	328.5	359.8	349.6	(¹)	(¹)	(¹)	29.9	29.9	29.8

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Alabama	381.0	387.4	382.4	80.4	79.5	79.8	339.0	345.5	345.0
Birmingham	57.3	59.0	58.3	32.8	31.9	32.0	98.7	101.5	101.3
Huntsville	32.9	33.5	33.5	2.9	3.0	3.0	24.6	25.6	25.5
Mobile	26.6	25.4	25.3	10.2	10.0	10.0	44.0	44.5	44.4
Montgomery	19.0	18.3	18.0	5.1	5.1	5.1	29.4	29.5	29.6
Tuscaloosa	10.0	10.2	10.1	2.0	2.0	2.0	12.5	12.8	12.8
Alaska	24.4	18.1	22.1	18.2	24.2	25.5	44.6	45.5	45.9
Arizona	191.0	189.6	189.5	72.0	73.1	72.8	343.0	359.4	356.3
Phoenix	139.1	139.1	139.1	50.0	51.0	50.6	232.6	242.5	240.0
Tucson	30.4	28.7	28.4	9.1	9.5	9.5	56.5	58.5	58.2
Arkansas	230.3	236.2	235.2	51.1	52.2	52.3	196.2	200.9	201.1
Fayetteville-Springdale	12.8	13.1	13.2	4.6	4.8	4.8	11.7	12.0	12.1
Fort Smith	28.5	26.8	26.7	4.2	4.3	4.3	16.0	15.5	15.4
Little Rock-North Little Rock	34.5	35.3	35.2	16.8	17.7	17.7	57.2	57.7	57.7
Pine Bluff	6.6	6.7	6.6	2.5	2.6	2.6	7.1	7.4	7.4
California	2,153.6	2,170.9	2,177.7	591.6	597.0	601.0	2,879.5	2,946.5	2,949.4
Anaheim-Santa Ana	258.0	258.9	257.9	34.0	34.5	34.2	282.7	290.8	292.9
Bakersfield	10.6	10.4	10.4	7.1	7.4	7.6	38.9	38.2	38.4
Fresno	22.5	22.4	22.8	11.5	11.4	11.6	53.6	54.1	54.2
Los Angeles-Long Beach	901.2	900.6	893.2	204.3	205.3	206.8	950.2	975.3	974.0
Modesto	24.6	25.5	30.7	4.6	4.8	5.0	28.5	29.6	29.5
Oakland	109.8	110.4	111.6	56.5	59.1	59.9	206.9	213.9	215.3
Oxnard-Ventura	30.6	30.4	30.1	11.2	11.7	11.8	53.1	55.7	55.5
Riverside-San Bernardino	81.5	82.4	82.5	30.7	30.5	30.7	156.7	158.0	157.0
Sacramento	42.9	42.3	43.2	25.2	26.4	27.0	137.7	141.4	142.5
San Diego	127.6	132.4	132.5	35.4	35.7	35.8	222.7	231.3	232.0
San Francisco	79.9	80.7	81.2	77.6	77.8	78.7	211.1	214.0	214.4
San Jose	276.4	274.7	278.4	21.7	21.9	22.0	160.7	160.3	160.9
Santa Barbara-Santa Maria-Lompoc	22.0	22.0	22.0	5.0	5.1	5.2	35.2	35.7	35.7
Santa Rosa-Petaluma	19.5	19.8	20.0	5.9	5.8	5.9	32.9	33.2	33.5
Stockton	24.8	23.6	25.0	9.2	9.3	9.5	34.4	34.8	34.6
Vallejo-Fairfield-Napa	13.3	12.3	13.5	4.7	4.7	4.8	32.1	33.2	33.5
Colorado	190.4	191.5	191.9	91.6	91.2	91.5	354.5	359.6	359.8
Boulder-Longmont	29.9	29.1	29.4	2.3	2.3	2.3	23.2	23.4	23.3
Denver	95.3	96.2	96.1	67.3	66.3	66.8	198.3	201.2	199.9
Connecticut	360.5	371.1	363.8	71.7	73.4	71.1	378.3	391.9	390.2
Bridgeport-Milford	53.0	56.1	54.5	7.9	8.5	8.2	47.1	47.3	46.7
Hartford	89.8	89.5	89.1	18.1	19.2	18.5	102.6	105.6	104.6
New Britain	18.4	18.8	17.8	3.0	3.1	3.2	13.5	14.2	13.9
New Haven-Meriden	46.5	48.3	47.2	17.6	18.4	18.1	60.3	62.0	61.9
Stamford	22.9	21.8	21.7	5.6	5.7	5.8	29.6	29.9	29.7
Waterbury	21.7	23.6	19.5	3.0	3.1	2.8	16.8	17.5	17.4
Delaware	70.2	72.8	66.5	13.8	14.1	13.8	74.2	75.9	76.8
Wilmington	59.2	61.9	55.3	14.9	15.4	15.2	59.6	60.7	61.2
District of Columbia	16.5	16.1	16.1	25.4	25.7	25.6	64.5	67.0	66.6
Washington MSA	88.3	86.9	86.6	107.2	113.0	113.7	430.3	442.5	443.6
Florida	536.5	544.4	540.0	259.4	259.6	259.5	1,370.5	1,437.4	1,429.2
Daytona Beach	11.7	11.9	11.9	3.6	3.7	3.7	34.8	36.5	36.4
Fort Lauderdale-Hollywood-Pompano Beach	45.5	46.9	45.9	22.9	23.0	23.0	141.7	148.4	146.3
Fort Myers-Cape Coral	5.8	6.6	6.6	5.2	5.2	5.3	33.4	36.3	35.9
Jacksonville	38.4	39.6	39.6	27.2	27.5	27.2	114.1	117.1	116.6
Melbourne-Titusville-Palm Bay	29.3	30.2	30.2	5.6	6.0	6.0	35.8	37.0	37.3
Miami-Hialeah	92.6	92.0	90.8	69.7	64.8	64.9	232.1	240.3	237.6
Orlando	57.3	56.6	56.7	25.9	26.0	26.0	130.3	134.6	134.6
Pensacola	11.1	11.3	11.3	6.7	6.6	6.5	32.0	32.3	32.4
Sarasota	8.5	8.9	8.8	3.4	3.4	3.4	31.3	34.1	33.7
Tallahassee	4.9	4.9	4.9	2.8	2.8	2.8	24.1	25.0	25.0
Tampa-St. Petersburg-Clearwater	96.1	98.0	97.5	39.2	39.8	39.9	225.5	238.1	238.5
West Palm Beach-Boca Raton-Delray Beach	34.6	33.9	33.6	12.5	13.0	13.0	86.9	98.4	96.0

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 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Alabama	71.1	71.6	71.8	286.6	295.1	297.0	309.9	309.8	312.6
Birmingham	28.9	27.7	27.9	94.7	96.9	97.2	60.6	62.2	62.3
Huntsville	3.7	3.9	3.9	30.5	31.7	31.8	29.0	30.5	29.9
Mobile	8.0	7.8	7.9	38.6	39.1	38.5	29.8	28.8	30.4
Montgomery	7.7	7.6	7.6	27.9	28.7	29.8	32.2	31.4	31.5
Tuscaloosa	2.1	2.2	2.1	8.5	8.9	8.9	18.5	19.1	19.0
Alaska	10.8	10.6	10.7	45.6	45.9	46.5	63.6	66.9	65.2
Arizona	93.2	92.0	92.0	359.1	368.1	366.4	210.5	227.0	214.4
Phoenix	74.3	73.4	73.4	242.9	246.4	244.4	111.5	119.6	113.7
Tucson	12.3	11.6	11.6	66.3	69.0	69.1	43.5	50.0	45.1
Arkansas	38.2	38.5	38.7	164.1	172.4	173.3	137.7	149.6	140.8
Fayetteville-Springdale	1.5	1.4	1.5	7.6	8.1	8.1	9.5	9.9	9.7
Fort Smith	2.7	2.6	2.6	16.9	16.8	17.3	6.9	7.6	7.2
Little Rock-North Little Rock	16.1	15.9	16.0	56.9	59.4	59.6	43.2	46.3	44.0
Pine Bluff	1.4	1.3	1.3	6.6	6.8	6.9	6.9	7.3	6.9
California	816.9	827.6	830.1	3,078.9	3,182.3	3,180.4	1,848.8	2,040.7	1,929.6
Anaheim-Santa Ana	92.6	91.7	91.7	286.0	294.9	296.1	108.6	124.0	111.6
Bakersfield	6.4	6.5	6.5	33.9	33.8	33.7	38.1	42.6	39.3
Fresno	12.2	11.8	11.8	50.5	51.6	52.8	42.8	48.7	44.1
Los Angeles-Long Beach	287.3	288.8	289.0	1,093.6	1,126.6	1,126.5	495.4	534.6	511.5
Modesto	4.4	4.3	4.3	22.8	23.6	23.6	16.6	19.7	18.1
Oakland	55.7	56.5	56.7	199.7	211.1	210.3	153.8	167.7	157.9
Oxnard-Ventura	11.2	11.3	11.3	51.3	54.0	54.3	40.7	42.3	41.9
Riverside-San Bernardino	27.7	28.3	28.3	146.8	152.5	150.0	120.1	133.4	126.7
Sacramento	35.9	37.3	37.7	124.8	131.6	132.2	164.0	181.8	172.8
San Diego	64.4	65.4	65.8	243.7	257.3	259.0	153.9	172.5	160.1
San Francisco	111.9	110.7	111.1	294.5	299.7	299.1	129.9	138.2	133.2
San Jose	32.7	33.2	33.3	211.6	213.9	213.7	84.0	88.2	83.1
Santa Barbara-Santa Maria-Lompoc	8.6	8.7	8.7	40.0	41.0	40.8	25.0	28.9	26.2
Santa Rosa-Petaluma	8.7	8.5	8.6	28.9	29.6	29.9	19.9	24.0	20.4
Stockton	8.7	8.6	8.6	30.6	31.1	30.8	30.5	32.6	31.1
Vallejo-Fairfield-Napa	4.6	4.6	4.7	28.9	30.8	30.5	36.8	38.7	37.7
Colorado	95.4	94.7	95.1	360.3	364.3	366.1	248.5	270.3	252.5
Boulder-Longmont	4.0	4.1	4.1	23.7	23.7	23.7	20.1	21.9	20.6
Denver	63.6	62.9	63.2	213.9	216.0	217.1	117.6	128.8	119.4
Connecticut	155.8	156.9	157.2	412.6	421.9	423.2	199.2	213.5	203.3
Bridgeport-Milford	13.1	13.5	13.5	48.8	51.0	50.8	17.8	20.0	17.6
Hartford	77.0	76.6	76.9	113.7	117.0	116.1	60.2	63.7	61.0
New Britain	4.3	4.6	4.6	14.1	14.6	14.6	6.2	6.8	6.2
New Haven-Meriden	16.4	17.1	17.2	71.4	74.3	74.3	31.0	32.2	30.7
Stamford	14.1	14.7	14.7	38.0	39.0	39.3	10.1	10.8	10.1
Waterbury	4.7	4.8	4.8	21.6	22.3	22.2	12.4	13.0	12.3
Delaware	29.7	33.3	33.4	77.0	81.1	81.1	47.2	49.3	48.9
Wilmington	26.4	28.9	29.0	68.0	69.8	69.4	36.8	39.0	37.5
District of Columbia	34.9	35.2	35.1	242.1	254.6	254.6	289.2	280.3	287.7
Washington MSA	129.3	132.9	134.2	708.7	743.3	746.1	573.3	590.9	584.7
Florida	366.7	375.3	376.5	1,397.4	1,472.6	1,467.0	731.4	813.2	764.4
Daytona Beach	6.4	6.3	6.3	33.2	34.1	34.2	18.1	20.6	18.8
Fort Lauderdale-Hollywood-Pompano Beach	39.7	39.8	40.1	130.6	134.2	133.8	57.4	65.4	60.2
Fort Myers-Cape Coral	8.0	8.9	8.8	32.4	34.7	34.5	16.0	18.4	16.8
Jacksonville	39.2	39.5	39.8	104.0	109.5	109.1	55.1	60.2	56.8
Melbourne-Titusville-Palm Bay	5.7	5.7	5.8	45.6	47.9	47.7	21.6	22.5	22.1
Miami-Hialeah	70.8	73.1	73.3	230.2	241.5	239.2	107.8	123.8	115.7
Orlando	33.4	34.1	34.3	164.0	174.1	174.5	52.5	59.9	54.8
Pensacola	5.6	5.6	5.6	32.2	32.8	32.6	28.0	29.6	28.2
Sarasota	8.4	8.5	8.6	33.3	34.4	34.3	12.9	14.1	13.4
Tallahassee	4.9	5.0	5.0	23.7	24.1	24.1	45.2	49.0	46.7
Tampa-St. Petersburg-Clearwater	66.0	66.6	66.7	239.6	253.1	252.8	97.6	107.2	100.8
West Palm Beach-Boca Raton-Delray Beach	27.9	28.8	28.7	97.6	109.0	107.1	39.0	46.7	41.3

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	Total			Mining			Construction		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Georgia	2,885.9	2,938.3	2,932.4	9.0	8.9	8.8	154.7	146.2	147.0
Athens	64.1	65.6	66.1	.1	.1	.1	2.6	2.4	2.4
Atlanta	1,424.0	1,438.6	1,443.1	1.5	1.4	1.4	73.2	68.5	69.2
Augusta	159.4	159.2	159.2	.5	.5	.5	10.4	10.6	10.8
Columbus	95.2	95.8	95.6	.1	.1	.1	5.2	5.1	5.2
Macon-Warner Robins	121.6	123.8	123.5	.1	.1	.1	5.4	5.3	5.3
Savannah	106.1	106.1	106.5	(^b)	(^b)	(^b)	6.6	6.4	6.7
Hawaii	478.6	493.2	493.2	(^b)	(^b)	(^b)	23.6	26.7	27.2
Honolulu	379.6	388.8	388.3	(^b)	(^b)	(^b)	18.8	20.5	21.0
Idaho	352.0	364.9	361.8	3.5	4.0	4.1	16.3	16.5	17.1
Boise City	93.0	98.1	98.4	(^c)	(^c)	(^c)	5.2	5.0	5.1
Illinois	5,092.1	5,175.1	5,160.3	21.4	20.9	20.9	220.3	217.4	220.4
Aurora-Elgin	142.5	149.5	147.0	(^b)	(^b)	(^b)	7.6	8.4	8.6
Bloomington-Normal	57.4	61.2	60.3	(^b)	(^b)	(^b)	1.9	2.5	2.6
Champaign-Urbana-Rantoul	83.6	87.3	86.0	(^b)	(^b)	(^b)	2.8	2.8	2.8
Chicago	3,133.1	3,178.4	3,172.2	2.4	2.3	2.3	138.3	139.4	143.0
Davenport-Rock Island-Moline	155.6	157.9	157.6	(^b)	(^b)	(^b)	5.0	5.1	5.2
Decatur	51.7	53.0	52.4	(^b)	(^b)	(^b)	2.7	2.7	2.7
Joliet	97.7	99.5	98.4	(^b)	(^b)	(^b)	5.8	5.7	6.1
Kankakee	33.0	34.7	34.2	(^b)	(^b)	(^b)	1.3	1.3	1.3
Lake County	199.6	206.5	206.2	(^b)	(^b)	(^b)	10.1	11.6	12.4
Peoria	140.4	144.4	143.3	(^b)	(^b)	(^b)	6.0	6.5	6.4
Rockford	127.7	132.0	127.7	(^b)	(^b)	(^b)	4.6	4.7	4.7
Springfield	100.6	101.6	101.1	(^b)	(^b)	(^b)	2.9	3.1	3.1
Indiana	2,400.5	2,475.8	2,450.3	8.7	8.4	7.8	120.9	123.2	128.5
Anderson	48.1	50.2	49.0	(^c)	(^c)	(^c)	1.6	1.7	1.8
Bloomington	51.9	55.6	54.0	(^c)	(^c)	(^c)	2.6	3.3	3.5
Elkhart-Goshen	103.5	106.9	105.4	(^c)	(^c)	(^c)	3.1	3.1	3.3
Evansville	130.0	133.7	133.0	2.2	1.9	1.7	7.8	7.8	8.2
Fort Wayne	190.9	198.3	197.3	(^c)	(^c)	(^c)	10.2	10.7	11.0
Gary-Hammond	231.7	241.3	240.5	(^c)	(^c)	(^c)	13.8	15.6	16.3
Indianapolis	628.7	649.5	644.6	.9	.9	.9	34.2	35.4	37.4
Lafayette-West Lafayette	62.3	63.8	63.3	(^c)	(^c)	(^c)	3.3	3.9	4.1
Muncie	49.9	51.1	50.3	(^c)	(^c)	(^c)	2.2	2.2	2.4
South Bend-Mishawaka	111.4	118.3	117.6	(^c)	(^c)	(^c)	5.9	7.3	7.6
Terre Haute	52.0	54.7	54.2	.4	.3	.2	2.3	2.6	2.7
Iowa	1,151.5	1,201.1	1,183.4	2.5	2.3	2.3	43.6	43.1	43.8
Cedar Rapids	88.0	91.3	89.9	.1	.1	.1	3.2	3.0	3.0
Des Moines	213.8	222.8	221.2	(^b)	(^b)	(^b)	7.7	7.2	7.4
Dubuque	40.8	41.8	41.7	(^b)	(^b)	(^b)	1.2	1.1	1.2
Sioux City	51.6	53.7	53.0	(^b)	(^b)	(^b)	1.9	1.9	1.8
Waterloo-Cedar Falls	61.3	64.4	63.5	(^b)	(^b)	(^b)	2.3	2.7	2.8
Kansas	1,024.2	1,059.9	1,042.0	10.5	9.9	10.0	46.8	44.0	45.3
Topeka	89.2	91.3	90.0	(^b)	(^b)	(^b)	3.6	3.0	3.2
Wichita	234.4	243.8	241.0	2.2	1.9	1.9	10.7	10.2	10.3
Kentucky	1,363.3	1,400.1	1,384.8	36.6	34.6	34.3	66.9	64.6	66.5
Lexington-Fayette	189.1	195.3	196.0	.3	.2	.2	12.1	12.2	12.7
Louisville	454.5	461.8	461.0	.9	1.2	1.2	22.7	21.5	21.8
Owensboro	33.5	34.1	33.8	.7	.6	.6	2.3	2.1	2.1
Louisiana	1,501.0	1,520.9	1,513.8	57.1	57.1	57.3	86.8	90.2	89.5
Alexandria	45.1	45.7	45.2	.2	.2	.2	2.4	2.2	2.2
Baton Rouge	217.7	218.7	219.3	1.0	1.0	1.0	24.3	24.0	24.4
Houma-Thibodaux	54.0	55.5	55.3	6.0	6.3	6.3	1.8	1.9	1.9
Lafayette	86.7	85.7	86.4	11.6	11.4	11.6	3.3	3.8	3.6
Monroe	54.6	54.7	54.7	.5	.4	.5	2.5	2.3	2.3
New Orleans	519.3	522.4	522.4	15.2	15.3	15.3	23.2	23.0	22.9
Shreveport	129.9	127.5	126.3	3.4	3.0	3.1	6.7	6.4	6.2
Maine	526.1	534.9	531.4	.2	.2	.2	38.0	35.3	36.1
Lewiston-Auburn	39.2	41.0	39.8	(^b)	(^b)	(^b)	2.6	2.3	2.5
Portland	130.3	136.7	136.6	(^b)	(^b)	(^b)	9.8	9.9	10.0

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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Georgia	575.1	564.5	564.4	183.7	182.8	184.4	739.3	761.4	762.6
Athens	14.8	15.0	15.2	1.8	2.0	2.0	14.2	14.3	14.4
Atlanta	184.9	172.7	175.7	121.0	117.1	118.6	401.2	411.3	413.4
Augusta	36.2	36.2	35.9	4.5	4.4	4.4	35.1	34.9	35.2
Columbus	20.3	21.1	21.0	3.6	3.7	3.8	21.4	20.9	20.9
Macon-Warner Robins	19.2	19.0	19.0	5.3	5.3	5.3	28.4	28.4	28.5
Savannah	17.5	17.6	17.7	9.9	10.1	10.1	26.4	25.9	26.0
Hawaii	22.9	22.3	22.0	37.9	39.8	40.2	129.3	130.0	131.5
Honolulu	17.1	16.5	16.5	31.2	32.8	33.1	100.8	101.4	102.1
Idaho	60.1	61.9	62.3	18.7	18.8	18.8	88.6	90.2	90.7
Boise City	13.3	14.6	14.8	5.2	5.3	5.3	23.6	24.7	25.3
Illinois	972.2	986.8	978.3	299.6	304.3	301.1	1,261.2	1,294.8	1,298.8
Aurora-Elgin	38.2	39.0	38.6	3.1	2.9	2.9	38.6	40.5	40.1
Bloomington-Normal	6.2	8.1	8.2	2.6	2.6	2.6	13.1	13.3	13.2
Champaign-Urbana-Rantoul	8.4	9.0	8.9	2.3	2.3	2.3	20.0	20.2	19.8
Chicago	561.7	568.9	562.2	188.6	190.3	189.8	778.8	787.3	784.7
Davenport-Rock Island-Moline	32.1	32.9	32.8	8.0	8.1	8.1	42.8	43.3	43.4
Decatur	13.6	13.8	13.9	5.0	5.1	5.1	11.4	11.7	11.6
Joliet	19.0	19.6	19.4	8.4	8.3	8.2	22.9	23.0	22.9
Kankakee	5.1	5.7	5.7	1.3	1.3	1.3	8.3	8.5	8.5
Lake County	43.6	44.6	44.5	7.0	7.2	7.1	55.3	59.0	59.2
Peoria	33.7	35.7	35.8	7.0	7.0	7.1	34.3	34.1	34.0
Rockford	42.0	45.9	42.8	5.1	5.1	5.1	28.8	28.8	28.7
Springfield	4.0	3.7	3.6	4.8	5.0	4.9	22.4	22.3	22.4
Indiana	633.7	638.6	634.9	125.6	130.1	130.1	578.5	592.1	590.4
Anderson	16.5	16.7	16.4	1.4	1.5	1.5	11.4	11.8	11.8
Bloomington	9.7	10.6	10.7	1.7	1.8	1.8	12.0	12.3	12.3
Elkhart-Goshen	57.1	57.9	56.9	2.8	3.0	2.9	19.0	19.7	19.7
Evansville	31.3	31.8	31.5	6.5	6.7	6.7	33.9	34.8	34.9
Fort Wayne	53.1	54.1	53.4	12.8	13.4	13.3	47.7	49.2	49.3
Gary-Hammond	56.5	57.8	58.6	15.6	15.9	16.0	55.4	58.1	58.7
Indianapolis	106.4	107.7	107.9	39.7	41.3	41.6	163.0	168.6	168.9
Lafayette-West Lafayette	12.3	12.4	12.5	1.9	1.9	2.0	13.2	13.1	13.4
Muncie	11.0	11.1	10.9	2.4	2.4	2.4	12.7	13.3	13.1
South Bend-Mishawaka	23.3	23.5	23.4	5.3	5.4	5.5	30.1	31.1	31.0
Terre Haute	10.2	10.3	10.3	3.0	3.3	3.3	15.0	15.0	15.1
Iowa	229.0	236.8	236.1	55.4	56.2	56.2	298.7	308.4	309.0
Cedar Rapids	23.3	24.0	24.0	5.4	5.6	5.7	21.2	22.0	21.8
Des Moines	25.8	26.5	26.3	12.6	12.6	12.7	55.7	58.1	58.1
Dubuque	12.2	12.6	12.6	1.8	1.8	1.8	9.9	10.2	10.2
Sioux City	9.8	10.5	10.5	3.1	3.5	3.4	13.6	13.8	13.7
Waterloo-Cedar Falls	14.7	15.5	15.6	1.8	1.9	1.9	14.9	15.6	15.4
Kansas	182.7	184.4	186.0	64.8	66.0	65.8	259.1	262.3	259.1
Topeka	9.2	9.5	9.4	6.8	6.7	6.7	21.5	22.2	22.2
Wichita	61.5	64.4	64.0	10.8	11.7	11.6	54.9	55.2	54.9
Kentucky	275.3	283.7	282.2	73.7	75.5	75.8	327.7	334.6	335.1
Lexington-Fayette	31.7	34.7	34.4	8.3	8.2	8.3	42.3	43.7	43.8
Louisville	88.1	87.9	87.5	28.5	29.3	29.2	113.0	111.5	111.3
Owensboro	5.9	6.4	6.2	2.2	2.1	2.1	8.7	8.7	8.7
Louisiana	170.4	173.7	172.2	107.4	108.7	109.8	360.1	364.1	364.3
Alexandria	3.3	3.5	3.5	2.1	2.1	2.1	11.0	10.7	10.6
Baton Rouge	19.2	19.8	19.8	10.5	10.4	10.4	52.7	53.2	53.3
Houma-Thibodaux	4.8	4.6	4.5	6.2	6.2	6.3	14.0	14.1	14.0
Lafayette	7.2	7.0	6.9	6.1	5.9	6.2	23.8	23.5	23.3
Monroe	6.9	7.2	7.1	2.9	2.9	2.9	14.2	13.7	13.7
New Orleans	43.4	43.9	43.7	44.6	44.6	44.4	134.6	135.0	135.1
Shreveport	18.1	17.9	17.8	8.1	8.1	8.2	32.1	31.5	31.7
Maine	103.3	107.7	104.5	21.6	22.0	22.1	133.2	132.5	135.6
Lewiston-Auburn	9.4	10.1	9.1	1.5	1.4	1.4	10.0	10.4	10.5
Portland	17.3	17.5	17.0	5.5	5.5	5.6	39.5	41.0	41.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Georgia	163.0	163.9	164.3	577.1	596.2	599.3	484.1	514.5	501.7
Athens	1.9	2.0	1.9	10.4	10.3	11.0	18.2	19.4	19.0
Atlanta	104.1	105.0	105.8	339.8	352.7	355.6	198.1	209.7	203.4
Augusta	5.9	5.5	5.5	33.2	33.4	33.4	33.6	33.7	33.5
Columbus	6.6	6.5	6.5	17.4	17.6	17.4	20.5	20.8	20.7
Macon-Warner Robins	7.6	8.1	8.0	23.3	23.3	23.4	32.3	34.3	33.8
Savannah	4.7	4.6	4.6	25.1	24.8	24.7	16.0	16.7	16.7
Hawaii	35.3	35.9	35.9	132.1	137.4	137.8	97.5	101.1	98.6
Honolulu	29.8	30.1	30.0	100.4	102.9	103.4	81.5	84.6	82.2
Idaho	19.6	19.3	19.4	73.3	76.5	76.6	71.9	77.7	72.7
Boise City	7.8	7.7	7.8	21.2	22.5	22.5	16.7	18.3	17.6
Illinois	373.5	375.4	377.1	1,245.0	1,251.9	1,264.0	698.9	723.6	699.7
Aurora-Elgin	8.6	8.9	8.7	32.2	33.8	34.0	14.1	16.0	14.1
Bloomington-Normal	10.0	10.1	10.0	13.4	13.6	13.5	10.2	11.0	10.2
Champaign-Urbana-Rantoul	3.4	3.5	3.5	16.8	17.2	17.4	29.9	32.3	31.3
Chicago	273.5	274.3	275.7	829.4	842.1	849.8	360.4	373.8	364.7
Davenport-Rock Island-Moline	8.2	8.3	8.3	32.8	33.1	33.1	26.7	27.1	26.7
Decatur	2.2	2.2	2.2	11.6	11.9	11.7	5.2	5.6	5.2
Joliet	3.8	3.8	3.8	22.1	22.2	22.1	15.4	16.9	15.9
Kankakee	1.6	1.6	1.6	8.9	9.7	9.5	6.5	6.6	6.3
Lake County	7.2	7.1	7.1	46.9	45.3	45.8	29.1	31.7	30.1
Peoria	7.4	7.6	7.6	37.0	37.4	37.4	15.0	16.1	15.0
Rockford	5.3	5.4	5.4	30.2	30.1	30.2	11.7	12.0	10.8
Springfield	8.1	8.2	8.4	25.8	26.2	26.1	32.5	33.1	32.6
Indiana	122.1	128.2	128.6	479.5	502.4	502.0	331.5	354.9	330.0
Anderson	1.7	1.7	1.7	9.9	10.2	10.2	5.7	6.5	5.7
Bloomington	2.0	2.3	2.2	8.6	9.6	9.8	15.2	15.9	13.7
Elkhart-Goshen	2.7	2.9	3.0	13.8	14.5	14.5	5.0	5.8	5.2
Evansville	5.3	5.4	5.4	31.1	32.3	32.3	11.9	13.0	12.3
Fort Wayne	12.7	13.2	13.4	39.7	41.8	41.9	14.7	15.9	15.0
Gary-Hammond	8.4	8.6	8.6	50.7	53.8	53.1	31.3	31.8	29.1
Indianapolis	49.5	49.9	50.1	145.2	151.4	151.3	89.9	94.3	86.5
Lafayette-West Lafayette	3.1	3.3	3.2	11.2	12.3	12.1	17.3	18.9	16.1
Muncie	1.7	1.7	1.7	11.0	11.4	11.3	8.9	9.0	8.5
South Bend-Mishawaka	6.2	6.4	6.5	30.4	33.5	33.2	10.3	11.0	10.6
Terre Haute	2.0	2.1	2.0	9.8	12.0	11.5	9.3	9.2	9.2
Iowa	86.9	88.7	89.1	259.3	269.7	267.9	198.1	215.9	199.0
Cedar Rapids	4.8	5.0	5.0	20.7	21.7	21.6	9.3	9.9	8.7
Des Moines	29.4	30.8	31.2	53.8	57.0	56.6	28.6	30.4	28.7
Dubuque	1.4	1.5	1.5	11.2	11.2	11.4	3.0	3.3	2.9
Sioux City	2.5	2.6	2.6	14.3	14.6	14.5	6.4	6.8	6.5
Waterloo-Cedar Falls	3.0	2.9	2.9	14.0	14.4	14.2	10.5	11.3	10.6
Kansas	58.9	59.0	59.0	212.6	222.1	221.9	188.8	212.2	194.9
Topeka	6.6	6.7	6.7	21.0	21.3	21.1	20.4	21.8	20.8
Wichita	11.1	10.9	10.8	56.4	59.6	59.5	26.8	29.9	28.0
Kentucky	59.9	59.0	59.1	293.0	305.0	302.6	230.2	243.1	229.2
Lexington-Fayette	9.2	9.3	9.3	42.4	42.5	42.1	42.8	44.5	45.2
Louisville	27.4	26.7	26.6	113.3	121.1	120.8	60.6	62.6	62.6
Owensboro	1.4	1.4	1.4	7.8	7.9	7.9	4.5	4.9	4.8
Louisiana	82.4	80.6	80.2	326.4	330.3	329.6	310.4	316.2	310.9
Alexandria	2.6	2.8	2.8	11.3	11.6	11.6	12.2	12.8	12.4
Baton Rouge	13.7	13.4	13.5	46.0	46.3	46.3	50.3	50.6	50.6
Houma-Thibodaux	2.2	2.2	2.2	9.2	9.6	9.7	9.8	10.6	10.4
Lafayette	3.6	3.5	3.5	18.7	18.7	18.5	12.4	11.9	12.8
Monroe	4.4	4.2	4.2	11.7	12.1	12.2	11.5	11.9	11.8
New Orleans	34.0	33.3	33.2	136.3	138.0	137.2	88.0	89.3	90.6
Shreveport	6.6	6.2	6.2	31.7	30.3	30.4	23.0	24.1	22.7
Maine	25.6	25.8	25.9	123.3	118.3	123.7	80.9	93.1	83.3
Lewiston-Auburn	2.2	2.3	2.2	10.2	10.6	10.6	3.3	3.9	3.5
Portland	12.3	12.1	12.1	31.7	34.5	35.2	14.2	16.2	15.1

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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Maryland	2,104.2	2,140.2	2,131.9	1.8	1.7	1.7	167.3	162.7	166.4
Baltimore MSA	1,122.3	1,136.8	1,135.0	.3	.3	.3	78.6	77.5	79.0
Baltimore City	472.6	475.4	477.8	(¹)	(¹)	(¹)	20.2	20.1	20.4
Suburban Maryland-D.C.	747.0	769.5	763.6	.6	.5	.5	69.4	68.9	69.6
Massachusetts	3,114.3	3,174.3	3,137.2	1.7	1.4	1.4	152.5	146.5	148.3
Boston	1,740.5	1,772.7	1,747.7	.9	1.0	1.0	76.6	76.3	77.4
Brockton	73.6	76.6	75.1	(¹)	(¹)	(¹)	4.4	4.6	4.8
Fall River	54.2	57.4	54.8	(¹)	(¹)	(¹)	3.4	3.8	3.8
Fitchburg-Leominster	39.9	42.8	41.6	(¹)	(¹)	(¹)	2.8	2.9	2.9
Lawrence-Haverhill	165.4	169.5	165.3	(¹)	(¹)	(¹)	8.5	8.2	8.3
Lowell	107.4	112.2	109.4	.2	.2	.1	6.3	6.7	6.7
New Bedford	67.2	70.3	68.2	(¹)	(¹)	(¹)	3.7	4.1	4.1
Pittsfield	43.2	44.3	44.3	.1	.1	.1	2.9	3.0	3.1
Springfield	239.2	246.2	241.2	.1	.1	.1	11.1	11.3	11.4
Worcester	205.3	217.7	213.4	.1	.1	.2	11.5	11.4	11.5
Michigan	3,773.2	3,886.3	3,834.3	11.1	11.2	11.2	147.3	140.6	145.9
Ann Arbor	168.5	170.4	169.6	(¹)	(¹)	(¹)	6.9	6.1	6.7
Battle Creek	58.2	59.9	58.6	(¹)	(¹)	(¹)	2.0	2.3	2.4
Benton Harbor	65.7	67.4	67.0	(¹)	(¹)	(¹)	1.8	1.7	1.8
Detroit	1,882.6	1,954.6	1,932.9	.8	.9	.8	68.5	67.1	70.4
Flint	160.9	169.1	167.3	(¹)	(¹)	(¹)	5.5	5.5	6.1
Grand Rapids	328.4	339.8	337.9	(¹)	(¹)	(¹)	18.0	18.0	18.4
Jackson	52.1	54.7	54.2	(¹)	(¹)	(¹)	1.6	1.7	1.8
Kalamazoo	105.6	110.0	108.0	(¹)	(¹)	(¹)	3.8	3.8	4.0
Lansing-East Lansing	204.6	216.7	208.1	(¹)	(¹)	(¹)	7.2	6.5	6.7
Muskegon	58.1	58.1	58.4	(¹)	(¹)	(¹)	2.6	2.7	2.7
Saginaw-Bay City-Midland	155.1	158.4	158.5	(¹)	(¹)	(¹)	8.5	7.6	8.1
Minnesota	2,029.5	2,105.1	2,084.3	7.5	7.7	7.9	89.4	87.3	90.5
Duluth	91.4	93.7	92.2	4.9	5.1	5.2	3.7	3.6	3.7
Minneapolis-St. Paul	1,323.5	1,371.8	1,359.8	(¹)	(¹)	(¹)	58.5	57.4	59.6
Rochester	60.1	63.0	62.8	(²)	(²)	(²)	2.3	2.3	2.3
St. Cloud	70.1	74.6	74.0	(²)	(²)	(²)	3.8	4.3	4.3
Mississippi	890.2	914.3	905.8	6.4	5.8	5.7	38.1	34.7	34.4
Jackson	179.3	184.7	183.4	1.0	.9	.9	8.9	8.4	8.4
Missouri	2,230.3	2,278.4	2,262.5	5.4	5.4	5.4	101.0	95.2	98.1
Kansas City	755.0	770.6	764.6	.6	.5	.5	35.5	33.6	34.7
St. Louis	1,141.0	1,158.2	1,157.4	3.3	3.2	3.3	58.4	55.5	57.5
Springfield	110.9	112.7	112.6	.1	.1	.1	4.9	4.7	4.8
Montana	276.6	288.9	282.0	6.3	6.4	6.6	9.5	9.6	10.2
Nebraska	686.2	716.7	708.0	1.8	1.9	1.9	26.6	28.2	28.7
Lincoln	115.8	121.1	120.2	(¹)	(¹)	(¹)	4.6	4.2	4.3
Omaha	308.9	322.1	319.7	.2	.2	.2	12.5	12.6	13.0
Nevada	541.4	575.9	579.6	11.6	13.2	13.4	38.1	44.1	44.7
Las Vegas	305.5	329.8	332.2	.2	.2	.2	23.0	28.3	28.7
Reno	138.5	144.4	144.7	1.4	1.5	1.5	8.1	8.7	8.7
New Hampshire	530.0	540.5	532.5	.8	.7	.7	40.5	35.1	36.0
Manchester	84.7	86.9	84.8	(²)	(²)	(²)	6.6	6.3	6.4
Nashua	94.7	96.6	92.7	.1	.1	.1	5.2	4.6	4.5
Portsmouth-Dover-Rochester	112.5	115.2	112.3	.2	.1	.1	6.9	5.8	6.0
New Jersey	3,685.2	3,728.7	3,721.1	2.3	2.5	2.5	183.8	182.3	184.8
Atlantic City	186.4	185.6	193.6	(¹)	(¹)	(¹)	10.9	12.1	12.1
Bergen-Passaic	671.4	689.6	685.1	.1	.2	.2	34.0	34.8	35.4
Camden	432.6	446.7	443.8	.1	.1	.1	25.1	25.5	26.2
Jersey City	245.1	249.5	248.7	(¹)	(¹)	(¹)	7.3	7.8	7.8
Middlesex-Somerset-Hunterdon	530.2	546.6	547.4	.7	.6	.7	25.2	25.4	26.0
Monmouth-Ocean	341.8	348.7	351.5	(¹)	(¹)	(¹)	22.3	23.7	24.2
Newark	955.0	971.2	968.7	.7	.7	.7	41.2	41.5	42.2
Trenton	197.3	200.2	197.6	(¹)	(¹)	(¹)	5.8	6.0	6.4
Vineland-Millville-Bridgeton	57.8	59.2	59.1	.4	.4	.4	2.6	2.4	2.4

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Maryland	210.6	207.1	206.8	96.8	95.9	96.3	538.8	544.7	546.8
Baltimore MSA	134.0	129.9	130.4	54.9	56.1	55.7	275.7	279.2	279.3
Baltimore City	45.3	45.2	45.3	27.6	28.2	27.9	96.5	96.9	96.6
Suburban Maryland-D.C.	36.0	36.6	36.8	28.4	28.3	28.1	199.9	204.7	205.0
Massachusetts	577.4	575.7	562.9	132.3	137.1	133.3	739.2	741.9	735.6
Boston	270.6	267.6	264.1	76.3	77.5	76.3	388.3	388.8	382.9
Brockton	10.8	11.0	10.5	5.0	5.1	4.9	22.7	23.1	22.9
Fall River	14.1	14.9	13.9	1.9	2.0	1.7	14.4	14.5	14.3
Fitchburg-Leominster	11.1	12.4	12.0	1.6	1.5	1.3	9.9	10.3	10.1
Lawrence-Haverhill	50.0	47.6	46.4	6.8	7.5	7.1	37.3	38.8	38.5
Lowell	36.3	35.9	35.3	4.8	5.6	5.5	23.0	24.0	23.5
New Bedford	18.4	18.1	17.0	2.8	3.0	2.8	16.4	17.0	16.7
Pittsfield	10.8	11.0	10.8	1.2	1.2	1.2	9.9	10.4	10.5
Springfield	50.3	50.4	49.2	9.4	10.6	10.0	57.0	59.1	58.2
Worcester	44.4	46.3	45.6	9.4	9.8	9.5	50.0	52.9	52.0
Michigan	939.7	952.0	931.3	158.1	156.2	156.0	896.1	923.4	924.8
Ann Arbor	38.3	33.9	33.7	4.5	4.0	4.0	31.3	33.4	34.0
Battle Creek	15.5	15.7	15.1	1.9	1.8	1.8	11.9	12.4	12.4
Benton Harbor	22.5	22.3	22.3	2.4	2.4	2.4	14.3	15.1	15.2
Detroit	449.0	471.0	461.4	89.3	88.2	88.2	447.7	466.8	467.0
Flint	47.5	50.6	48.4	4.2	4.2	4.2	43.8	46.2	46.0
Grand Rapids	98.7	100.6	99.8	11.6	12.2	12.2	85.8	90.1	90.1
Jackson	13.2	14.0	13.4	4.2	4.2	4.2	11.9	12.4	12.4
Kalamazoo	30.3	30.5	29.7	3.2	3.3	3.4	24.2	26.0	26.1
Lansing-East Lansing	33.5	32.7	32.2	5.5	5.5	5.6	44.7	47.7	46.7
Muskegon	16.9	16.5	16.4	2.4	2.3	2.3	13.8	13.8	14.1
Saginaw-Bay City-Midland	43.1	43.3	42.9	6.9	7.0	7.0	37.0	37.1	37.3
Minnesota	401.5	401.7	404.4	100.9	105.3	105.0	513.9	529.1	528.5
Duluth	8.0	8.2	8.2	5.9	6.0	6.0	23.1	23.0	23.2
Minneapolis-St. Paul	267.2	268.8	268.9	69.7	73.1	72.9	331.2	340.7	340.9
Rochester	11.4	11.6	12.0	1.7	1.8	1.8	12.4	12.9	13.0
St. Cloud	13.5	13.9	14.2	3.6	3.8	4.0	21.1	22.8	22.9
Mississippi	239.1	244.1	241.5	44.4	44.8	44.9	192.5	197.6	197.9
Jackson	20.9	21.3	21.0	13.4	13.4	13.4	42.9	44.2	44.2
Missouri	426.6	434.3	430.3	147.4	148.7	147.9	559.6	562.1	563.6
Kansas City	111.6	108.3	108.2	61.5	62.6	62.5	198.3	199.8	199.7
St. Louis	221.2	224.8	224.3	73.6	75.3	74.9	279.8	284.3	285.1
Springfield	21.7	21.2	21.2	7.0	7.2	7.3	31.8	32.2	32.3
Montana	20.7	21.7	21.9	19.5	19.9	19.6	74.2	75.1	75.3
Nebraska	95.3	98.6	99.2	45.5	47.6	47.6	177.7	184.1	163.6
Lincoln	14.5	15.2	15.0	6.3	6.7	6.8	26.6	27.4	27.4
Omaha	35.3	35.8	36.0	24.3	26.0	25.9	77.9	80.3	79.5
Nevada	25.1	26.3	26.3	29.1	30.8	31.1	109.7	116.4	117.7
Las Vegas	9.5	10.3	10.3	16.3	17.4	17.5	63.9	68.1	68.8
Reno	8.6	9.0	9.0	9.4	9.8	9.9	31.4	33.3	33.7
New Hampshire	114.9	118.8	112.7	17.8	18.2	17.9	138.8	140.6	141.0
Manchester	11.3	11.5	10.7	5.4	5.6	5.6	23.3	23.7	22.9
Nashua	36.2	36.5	34.9	2.7	2.8	2.8	22.4	21.8	21.3
Portsmouth-Dover-Rochester	19.8	20.9	19.2	3.2	3.3	3.3	31.0	31.3	31.7
New Jersey	663.8	665.0	658.8	243.5	244.4	242.7	883.9	887.4	889.8
Atlantic City	8.7	8.5	8.4	6.9	6.7	6.8	48.0	45.9	51.0
Bergen-Passaic	156.8	156.7	154.0	27.7	28.2	27.6	190.9	193.4	193.4
Camden	73.0	72.7	72.8	18.9	20.3	19.8	116.6	119.0	118.3
Jersey City	44.0	46.3	44.7	33.1	33.6	33.5	61.5	62.2	62.5
Middlesex-Somerset-Hunterdon	114.6	117.0	116.0	42.8	45.3	45.2	126.3	128.7	126.7
Monmouth-Ocean	29.6	29.7	29.4	17.6	18.8	18.8	94.5	92.6	94.7
Newark	174.0	173.2	171.1	78.8	78.7	78.2	194.6	197.5	197.1
Trenton	31.9	30.4	30.5	6.4	6.7	6.5	31.5	32.7	32.5
Vineland-Milville-Bridgeton	15.2	15.4	15.4	2.2	2.3	2.3	11.6	12.5	12.7

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	Finance, insurance, and real estate			Services			Government		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Maryland	131.9	133.4	134.5	572.8	585.0	586.8	384.2	409.7	392.6
Baltimore MSA	78.1	78.3	78.7	297.7	305.9	306.0	203.0	209.6	205.6
Baltimore City	46.1	46.1	46.3	143.2	146.9	147.1	93.7	92.0	94.2
Suburban Maryland-D.C.	44.3	45.7	46.3	223.2	224.6	226.2	145.2	160.2	151.1
Massachusetts	230.3	237.3	240.1	889.3	923.7	922.1	391.6	410.7	393.5
Boston	157.7	161.2	161.9	570.9	589.4	585.0	199.2	210.9	199.1
Brockton	3.4	3.5	3.5	15.7	16.8	16.5	11.6	12.5	12.0
Fall River	3.3	3.6	3.7	10.8	11.5	11.1	6.3	7.1	6.3
Fitchburg-Leominster	1.7	1.7	1.7	8.4	9.2	9.2	4.4	4.8	4.4
Lawrence-Haverhill	6.8	7.2	7.3	36.3	38.7	38.7	19.7	21.5	19.0
Lowell	4.0	4.2	4.2	21.0	22.0	22.0	11.8	13.6	12.1
New Bedford	2.6	2.6	2.6	14.1	14.7	15.0	9.2	10.8	10.0
Pittsfield	2.1	2.0	2.1	11.7	11.6	11.9	4.5	5.0	4.6
Springfield	16.1	15.9	16.1	58.2	60.4	59.5	37.0	38.4	36.7
Worcester	15.1	15.9	16.4	51.8	56.7	55.2	23.0	24.6	23.0
Michigan	187.7	189.9	190.2	860.5	887.8	895.5	572.7	625.3	579.5
Ann Arbor	4.7	5.1	5.0	36.0	38.7	38.9	46.6	49.1	47.1
Battle Creek	3.5	3.6	3.6	11.8	12.1	12.1	11.6	12.1	11.3
Benton Harbor	2.6	2.6	2.5	13.7	14.6	14.4	8.3	8.6	8.2
Detroit	111.6	110.6	110.5	485.2	499.0	501.8	230.4	251.0	232.8
Flint	5.9	6.0	6.1	32.1	33.4	33.2	21.9	23.1	23.4
Grand Rapids	15.3	15.7	15.9	68.4	70.8	70.4	30.4	32.2	30.9
Jackson	2.1	2.0	2.0	9.8	10.2	10.3	9.1	9.9	9.9
Kalamazoo	4.8	5.1	5.0	24.4	25.1	25.3	14.9	16.2	14.5
Lansing-East Lansing	12.5	13.1	13.1	40.1	42.2	42.1	60.8	68.5	61.4
Muskegon	1.4	1.4	1.4	12.2	12.3	12.4	8.8	9.0	9.1
Saginaw-Bay City-Midland	6.3	6.4	6.5	33.5	36.0	36.7	19.5	20.8	19.7
Minnesota	120.7	122.9	123.3	496.5	515.7	517.2	299.2	335.4	307.6
Duluth	3.1	3.2	3.2	22.9	22.9	22.9	19.8	21.7	19.8
Minneapolis-St. Paul	94.0	96.3	96.7	336.6	348.9	350.0	165.6	186.0	170.2
Rochester	1.5	1.5	1.6	25.4	26.3	26.7	5.3	6.6	5.5
St. Cloud	2.3	2.3	2.3	15.2	15.4	15.4	10.5	12.2	10.9
Mississippi	39.3	39.5	39.5	147.7	155.8	155.9	182.7	192.0	186.0
Jackson	14.7	14.8	14.8	40.1	41.8	42.7	37.5	39.9	37.8
Missouri	137.8	137.4	138.2	528.8	542.2	543.7	323.7	353.1	335.3
Kansas City	58.6	58.3	58.4	179.4	187.7	188.8	109.5	119.8	111.8
St. Louis	76.8	76.0	76.4	293.7	302.4	302.1	134.2	136.7	133.8
Springfield	5.1	5.3	5.3	27.7	28.5	28.7	12.6	13.5	12.9
Montana	13.5	13.6	13.6	68.8	69.5	70.0	64.1	73.1	64.8
Nebraska	48.1	49.5	49.3	159.5	166.7	165.3	131.7	140.1	132.4
Lincoln	8.4	8.4	8.4	26.0	28.2	28.1	29.4	31.0	30.2
Omaha	28.8	29.9	29.9	85.6	90.6	90.7	44.3	46.7	44.5
Nevada	24.8	26.4	26.6	240.0	249.1	251.9	63.0	69.6	67.8
Las Vegas	15.2	16.7	16.8	146.1	153.8	155.1	31.3	35.0	34.8
Reno	7.0	7.2	7.2	57.0	57.9	58.7	15.6	17.0	16.0
New Hampshire	33.2	33.6	33.8	122.2	124.4	127.2	61.8	69.1	63.2
Manchester	8.3	8.6	8.6	21.6	22.3	22.5	8.2	8.9	8.1
Nashua	3.8	3.7	3.7	18.8	19.7	19.4	5.5	7.4	6.0
Portsmouth-Dover-Rochester	7.2	7.1	7.4	22.7	22.5	23.0	21.5	24.2	21.6
New Jersey	241.5	244.8	246.9	921.1	939.7	945.5	545.3	562.6	550.1
Atlantic City	7.8	7.8	7.8	78.9	79.0	81.9	25.1	25.5	25.5
Bergen-Passaic	40.3	41.7	42.3	154.9	162.9	162.5	66.7	71.7	69.7
Camden	25.1	26.4	26.5	105.6	108.8	109.4	68.2	73.9	70.7
Jersey City	13.6	13.7	14.1	43.4	44.0	43.6	42.2	41.9	42.5
Middlesex-Somerset-Hunterdon	38.0	39.3	39.4	113.6	116.2	118.0	69.0	74.1	73.4
Monmouth-Ocean	19.2	19.1	19.4	97.8	99.4	102.0	60.7	65.3	62.9
Newark	80.0	81.1	81.5	251.6	257.7	259.1	134.1	140.8	138.8
Trenton	9.9	10.2	10.5	55.8	58.6	56.8	56.0	55.6	54.4
Vineland-Millville-Bridgeton	3.5	3.5	3.5	10.7	10.7	10.8	11.6	12.0	11.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
New Mexico	537.1	555.7	551.7	15.4	15.5	15.5	31.3	30.7	31.0
Albuquerque	234.1	239.5	239.7	.2	.1	.1	15.3	14.8	14.9
Las Cruces	38.8	41.1	39.5	.1	.1	.1	2.3	2.4	2.4
Santa Fe	56.8	57.4	57.9	.1	.1	.1	2.8	2.6	2.7
New York	8,192.2	8,352.1	8,273.7	6.3	6.2	6.2	359.9	360.1	369.4
Albany-Schenectady-Troy	414.1	429.8	426.9	.5	.6	.6	22.4	22.5	23.4
Binghamton	122.5	124.3	121.1	(¹)	(¹)	(¹)	6.2	6.1	6.3
Buffalo	445.5	457.0	452.1	.4	.3	.3	19.4	18.4	19.0
Elmira	40.0	42.5	42.0	(¹)	(¹)	(¹)	1.8	1.9	2.0
Nassau-Suffolk	1,144.3	1,168.1	1,153.6	.2	.2	.2	64.1	62.3	63.4
New York PMSA	4,135.3	4,173.9	4,139.2	1.1	1.0	1.0	157.3	157.6	158.9
New York City	3,594.3	3,634.6	3,601.7	.6	.5	.5	122.6	124.4	124.8
Niagara Falls	82.6	85.2	84.3	(¹)	(¹)	(¹)	3.6	3.7	3.8
Orange County	105.2	109.0	107.1	(¹)	(¹)	(¹)	6.0	6.2	6.4
Poughkeepsie	121.5	123.0	121.5	(²)	(²)	(²)	7.7	7.8	8.2
Rochester	477.6	492.0	485.2	.9	.8	.8	20.6	20.6	21.6
Rockland County	100.8	102.4	101.5	(²)	(²)	(²)	5.1	4.9	5.1
Syracuse	303.7	310.3	306.7	.2	.2	.2	16.1	16.3	16.7
Utica-Rome	125.3	128.6	127.2	.2	.2	.2	4.7	4.6	4.8
Westchester County	421.1	417.9	417.1	.2	.2	.2	27.8	26.5	27.4
North Carolina	2,932.9	3,038.1	2,986.9	4.9	5.0	5.0	170.1	163.6	164.9
Asheville	81.9	84.5	82.9	.1	.1	.1	4.4	4.7	4.6
Charlotte-Gastonia-Rock Hill	590.1	607.6	604.8	.4	.4	.4	37.7	37.7	37.8
Greensboro-Winston-Salem-High Point	474.6	484.2	474.9	.3	.3	.3	25.5	24.0	24.3
Raleigh-Durham	392.0	400.7	397.5	.4	.3	.3	22.7	21.8	22.0
North Dakota	257.9	263.0	259.7	4.5	4.2	4.1	12.3	11.6	12.0
Bismarck	37.7	39.1	38.9	.2	.2	.2	1.8	1.7	1.8
Fargo-Moorhead	70.8	74.9	73.7	(¹)	(¹)	(¹)	4.1	4.0	4.1
Grand Forks	29.4	30.0	29.7	(¹)	(¹)	(¹)	1.6	1.5	1.6
Ohio	4,678.8	4,831.8	4,795.2	19.8	19.8	17.5	199.5	206.5	215.1
Akron	270.6	279.8	278.9	.7	.7	.7	10.7	11.0	11.5
Canton	160.6	165.7	165.3	.9	1.0	1.0	6.9	7.3	7.7
Cincinnati	701.8	734.8	733.3	.5	.5	.5	33.1	35.8	37.0
Cleveland	911.2	934.5	934.9	.9	1.0	1.1	30.0	30.0	31.0
Columbus	675.0	705.7	699.1	1.0	.9	1.0	30.5	32.6	33.9
Dayton-Springfield	432.3	451.3	445.6	.4	.5	.5	19.3	20.9	21.8
Toledo	283.1	294.1	291.7	.3	.3	.3	11.5	12.7	13.3
Youngstown-Warren	192.6	201.2	195.1	.7	.7	.7	8.5	9.1	9.5
Oklahoma	1,137.1	1,144.1	1,137.0	45.3	43.3	44.4	36.8	34.6	35.5
Enid	21.6	21.2	21.2	1.2	1.0	1.0	.7	.7	.7
Lawton	33.4	34.6	34.3	.3	.3	.3	1.2	1.1	1.2
Oklahoma City	406.3	407.1	404.0	11.9	9.7	10.1	13.2	11.2	11.7
Tulsa	298.1	302.9	302.7	14.4	14.6	14.6	10.6	8.8	8.9
Oregon	1,149.1	1,209.0	1,192.1	1.4	1.6	1.7	41.6	45.0	45.8
Eugene-Springfield	107.7	115.5	111.6	.2	.2	.2	3.8	4.1	4.3
Portland	578.7	606.5	601.4	.5	.5	.5	22.2	23.8	24.6
Salem	100.1	104.4	103.7	.1	.1	.1	3.9	4.0	4.3
Pennsylvania	5,042.9	5,139.1	5,099.4	29.0	28.4	22.2	250.9	251.2	259.1
Allentown-Bethlehem	278.3	285.1	281.2	.7	.6	.6	14.6	14.6	14.8
Altoona	52.2	53.0	52.7	(²)	(²)	(²)	2.4	2.4	2.5
Beaver County	49.4	49.5	48.7	(²)	(²)	(²)	2.1	1.5	1.5
Erie	114.8	116.7	117.5	.2	.2	.2	4.0	3.7	4.1
Harrisburg-Lebanon-Carlisle	302.1	307.6	308.2	.3	.3	.3	13.9	13.8	14.1
Johnstown	79.8	81.3	79.8	3.1	3.1	2.1	3.2	3.0	3.1
Lancaster	185.2	189.9	188.3	.4	.4	.4	12.0	12.3	12.5
Philadelphia PMSA	2,165.9	2,196.9	2,179.7	1.1	1.0	1.0	112.8	110.0	111.8
Philadelphia City	781.5	781.8	780.0	(²)	(²)	(²)	18.1	18.0	18.1
Pittsburgh	878.5	891.5	887.5	4.7	4.6	3.4	43.1	40.2	42.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
New Mexico	39.7	41.4	40.9	28.1	27.8	27.8	131.6	135.9	135.7
Albuquerque	20.3	20.8	20.6	12.3	12.6	12.7	60.8	61.8	62.2
Las Cruces	3.7	3.6	3.6	1.3	1.2	1.2	8.7	9.2	9.0
Santa Fe	1.6	1.6	1.7	1.1	1.0	1.0	11.1	11.6	11.6
New York	1,200.5	1,199.1	1,185.3	406.7	417.9	409.5	1,720.1	1,754.0	1,740.0
Albany-Schenectady-Troy	47.1	48.3	48.1	16.2	17.0	16.8	86.3	93.0	92.4
Binghamton	38.8	37.0	35.9	4.4	4.4	4.4	26.0	27.0	26.8
Buffalo	77.3	77.7	77.1	21.4	21.8	21.4	109.7	114.4	113.2
Elmira	8.5	9.5	9.4	1.4	1.4	1.4	10.6	10.9	10.7
Nassau-Suffolk	167.3	164.0	162.1	46.7	49.9	47.1	309.4	313.4	311.7
New York PMSA	442.8	439.7	431.3	242.5	243.4	239.9	752.5	766.0	758.5
New York City	359.7	359.7	351.3	216.8	217.4	214.3	627.7	639.8	633.1
Niagara Falls	23.3	23.8	23.6	3.9	4.1	4.0	19.4	20.0	19.8
Orange County	15.5	15.3	15.1	5.8	6.2	5.9	28.3	29.5	29.3
Poughkeepsie	31.1	30.5	30.8	3.5	3.8	3.7	22.4	23.0	22.6
Rochester	137.5	139.1	138.8	14.2	14.9	14.5	102.2	104.7	104.2
Rockland County	15.3	15.4	15.3	4.6	4.4	4.4	23.6	24.5	24.4
Syracuse	53.6	54.2	53.4	18.6	18.9	19.0	73.2	74.3	73.7
Utica-Rome	24.8	25.2	24.9	4.2	4.4	4.3	27.3	27.7	27.5
Westchester County	66.0	62.9	83.0	20.3	20.9	20.5	96.7	97.0	96.4
North Carolina	861.9	870.4	866.4	147.8	150.5	149.9	680.8	693.7	695.3
Asheville	19.1	19.2	19.1	3.9	3.9	4.0	19.7	20.0	20.0
Charlotte-Gastonia-Rock Hill	154.8	155.4	155.2	48.8	47.7	48.1	144.7	150.4	150.7
Greensboro-Winston-Salem-High Point	154.2	151.0	149.8	26.7	26.7	28.8	110.1	110.6	111.0
Raleigh-Durham	59.1	62.4	62.7	17.7	17.4	17.3	84.0	84.4	84.4
North Dakota	16.5	16.3	16.2	16.8	17.3	17.3	69.3	70.1	69.9
Bismarck	2.2	2.3	2.3	2.7	2.7	2.7	10.0	10.4	10.4
Fargo-Moorhead	4.8	5.2	5.2	4.7	4.9	4.9	21.4	22.1	21.9
Grand Forks	1.7	1.6	1.3	1.6	1.6	1.6	8.5	8.9	8.9
Ohio	1,100.8	1,112.5	1,100.5	213.4	216.0	216.2	1,137.2	1,175.6	1,177.5
Akron	66.0	66.2	66.4	13.1	13.2	13.3	67.9	71.3	70.9
Canton	45.2	45.9	45.4	5.9	6.2	6.1	39.8	41.6	41.6
Cincinnati	144.3	147.4	147.2	38.0	40.8	40.8	180.5	188.9	190.1
Cleveland	200.8	205.0	203.9	41.7	41.9	41.7	221.9	227.3	227.9
Columbus	102.4	103.1	103.2	29.8	30.9	31.0	172.9	180.8	180.8
Dayton-Springfield	104.8	105.0	104.1	16.9	17.5	17.6	99.9	102.9	102.8
Toledo	63.1	62.0	61.6	13.3	13.1	13.3	70.6	74.0	74.0
Youngstown-Warren	48.9	50.2	44.8	7.6	7.9	7.8	50.3	52.5	52.4
Oklahoma	164.1	164.9	164.3	62.3	62.8	63.0	274.8	278.6	278.3
Enid	1.6	1.5	1.6	2.2	2.1	2.1	6.4	6.1	6.1
Lawton	3.5	3.7	3.7	1.3	1.4	1.4	8.5	8.5	8.4
Oklahoma City	49.3	49.3	49.6	19.3	20.1	20.1	100.5	101.2	101.0
Tulsa	49.3	49.7	49.7	23.4	24.3	24.5	70.6	71.7	71.8
Oregon	216.4	221.2	224.5	60.6	63.8	63.5	295.1	307.0	309.0
Eugene-Springfield	20.8	20.9	20.9	4.3	4.4	4.5	27.3	28.4	28.5
Portland	100.7	102.3	103.2	35.7	36.7	36.8	152.9	160.0	161.1
Salem	16.1	15.1	16.9	2.9	3.0	2.9	22.7	23.6	23.5
Pennsylvania	1,057.6	1,060.0	1,054.3	248.8	253.3	247.9	1,154.1	1,165.2	1,158.8
Allentown-Bethlehem	77.3	76.9	76.3	14.4	14.2	13.8	60.6	62.0	61.8
Alltoona	11.1	10.9	10.9	4.5	4.6	4.5	13.4	13.8	13.9
Beaver County	9.5	9.5	9.3	4.9	4.9	4.8	11.7	11.4	11.4
Erie	35.4	35.9	35.9	3.7	3.5	3.5	25.8	26.6	27.2
Harrisburg-Lebanon-Carlisle	52.6	51.6	52.1	18.3	19.1	18.8	67.6	68.1	68.3
Johnstown	13.5	13.9	13.6	4.6	4.9	4.8	17.5	17.8	18.2
Lancaster	60.6	59.8	59.2	7.2	7.6	7.4	45.0	46.3	46.8
Philadelphia PMSA	364.9	365.2	362.7	100.9	102.0	101.6	499.5	509.3	503.8
Philadelphia City	92.7	91.2	90.4	44.7	42.7	43.0	151.3	155.9	154.9
Pittsburgh	126.4	127.3	127.9	46.9	48.1	46.9	224.5	229.4	228.4

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	Finance, insurance, and real estate			Services			Government		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
New Mexico	27.4	27.8	27.8	130.0	134.9	135.9	133.6	141.7	137.1
Albuquerque	15.0	15.4	15.5	66.1	67.4	67.6	44.1	46.6	46.1
Las Cruces	1.7	1.8	1.8	6.3	6.7	6.6	14.7	16.1	14.8
Santa Fe	2.0	2.0	2.0	15.7	15.7	16.0	22.4	22.8	22.8
New York	805.4	804.7	811.7	2,285.5	2,338.7	2,336.3	1,407.8	1,471.5	1,415.2
Albany-Schenectady-Troy	24.7	25.6	25.7	105.4	107.6	107.9	109.6	115.3	111.9
Binghamton	4.3	4.5	4.5	23.9	24.1	24.2	18.8	21.1	18.9
Buffalo	28.1	29.1	29.3	115.1	119.3	117.6	74.1	76.0	74.2
Elmira	1.4	1.4	1.4	10.0	10.2	10.3	6.2	7.2	6.7
Nassau-Suffolk	79.8	80.5	81.0	304.5	309.1	311.1	172.3	188.6	177.0
New York PMSA	581.7	572.9	578.0	1,274.4	1,303.6	1,296.0	683.1	689.6	675.5
New York City	546.3	537.0	541.8	1,120.1	1,150.2	1,141.1	600.4	605.6	594.8
Niagara Falls	2.0	2.1	2.1	17.1	17.9	17.9	13.0	13.4	13.0
Orange County	4.7	4.8	4.9	23.0	23.0	23.3	21.7	24.0	22.1
Poughkeepsie	5.0	5.2	5.2	28.2	28.1	27.8	23.6	24.7	23.2
Rochester	23.3	23.4	23.6	117.5	119.8	118.6	61.4	68.8	63.1
Rockland County	5.4	5.5	5.5	26.6	26.1	26.7	20.2	21.6	20.0
Syracuse	20.5	20.5	20.5	71.6	72.5	72.9	50.0	53.4	50.3
Utica-Rome	7.3	7.6	7.6	27.4	28.4	28.3	29.4	30.5	29.7
Westchester County	29.3	29.8	29.9	122.2	122.2	122.8	58.6	58.3	56.9
North Carolina	132.5	133.8	134.4	529.1	551.2	555.0	405.8	469.9	416.0
Asheville	2.7	2.6	2.6	21.2	21.7	21.6	10.8	12.3	10.9
Charlotte-Gastonia-Rock Hill	37.5	37.9	38.1	107.2	112.5	112.7	59.0	65.6	61.8
Greensboro-Winston-Salem-High Point	24.5	24.8	24.8	90.7	92.0	91.5	42.6	54.8	46.4
Raleigh-Durham	23.5	23.4	23.3	99.0	101.8	101.4	85.6	89.2	86.1
North Dakota	12.5	12.3	12.2	64.0	65.9	65.7	62.0	65.3	62.3
Bismarck	1.6	1.5	1.5	10.8	11.6	11.5	8.4	8.7	8.5
Fargo-Moorhead	4.5	4.5	4.5	19.4	20.3	20.4	11.9	13.9	12.7
Grand Forks	1.1	1.1	1.1	6.7	6.9	6.9	8.2	8.4	8.3
Ohio	252.8	257.0	258.6	1,103.1	1,149.9	1,151.9	652.2	694.5	657.9
Akron	10.9	10.9	11.0	63.2	66.3	66.6	38.1	40.1	38.4
Canton	6.5	6.4	6.4	37.2	38.9	39.0	18.0	18.6	18.2
Cincinnati	42.7	43.8	44.0	180.3	188.6	189.7	82.4	89.0	84.0
Cleveland	57.8	59.2	59.7	241.0	252.0	251.8	117.2	118.1	117.7
Columbus	59.1	59.8	60.2	163.1	171.0	171.9	116.2	126.5	117.1
Dayton-Springfield	18.3	18.7	18.7	106.0	111.4	111.2	66.6	74.4	68.9
Toledo	12.3	12.7	12.7	74.6	78.1	78.3	37.5	41.2	38.1
Youngstown-Warren	8.5	8.4	8.4	46.2	48.6	49.1	21.8	23.8	22.2
Oklahoma	59.5	58.7	58.6	255.2	252.8	258.9	239.1	248.4	234.0
Enid	1.0	1.0	1.0	5.3	5.4	5.5	3.2	3.4	3.2
Lawton	1.5	1.5	1.5	6.1	6.4	6.4	11.0	11.7	11.4
Oklahoma City	24.3	23.9	23.9	96.1	94.6	94.6	91.7	97.1	93.0
Tulsa	17.5	17.6	17.5	76.0	78.9	79.6	36.3	37.3	36.1
Oregon	74.5	75.3	75.4	262.2	272.1	272.9	195.3	223.0	199.3
Eugene-Springfield	5.4	5.5	5.6	25.4	26.9	27.0	20.5	25.1	20.6
Portland	49.3	50.3	50.2	143.1	149.3	149.7	74.3	83.6	75.3
Salem	5.9	6.0	6.0	20.2	21.1	20.8	28.3	31.5	29.2
Pennsylvania	296.5	300.4	301.0	1,338.9	1,385.2	1,386.3	667.1	695.4	669.8
Allentown-Bethlehem	12.9	12.7	12.9	69.7	73.6	73.1	27.9	30.5	28.1
Altoona	2.0	2.1	2.1	11.3	11.6	11.5	7.5	7.6	7.3
Beaver County	1.7	1.7	1.7	11.7	12.4	12.3	7.8	8.1	7.7
Erie	5.4	5.6	5.6	27.6	27.9	28.1	12.7	13.3	12.9
Harrisburg-Lebanon-Carlisle	18.8	20.5	20.7	66.3	68.5	69.4	64.3	65.7	64.5
Johnstown	4.8	4.6	4.5	20.0	20.5	20.4	12.9	13.5	12.9
Lancaster	7.2	7.5	7.5	39.2	41.0	40.9	13.6	15.0	13.6
Philadelphia PMSA	164.9	164.2	164.7	624.9	643.0	639.1	296.9	302.2	295.0
Philadelphia City	72.4	71.2	71.2	254.7	261.1	258.7	147.6	141.7	143.7
Pittsburgh	53.0	53.9	54.0	276.3	281.1	281.3	103.6	106.9	103.5

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Pennsylvania—Continued									
Reading	148.6	154.7	153.3	(²)	(²)	(²)	7.7	7.9	8.2
Scranton-Wilkes-Barre	299.8	304.7	303.3	0.7	0.6	0.6	15.6	15.7	16.3
Williamsport	50.9	52.4	51.6	(²)	(²)	(²)	2.4	2.4	2.6
York	174.6	178.7	178.0	.5	.5	.5	9.7	10.1	10.5
Rhode Island	455.4	461.7	457.2	.2	.2	.2	22.4	22.8	23.4
Pawtucket-Woonsocket-Attleboro	131.0	133.5	132.3	.2	.2	.2	6.5	7.0	7.2
Providence	319.7	328.2	326.0	.1	.1	.1	16.9	16.9	17.5
South Carolina	1,440.4	1,517.7	1,496.4	1.8	1.9	1.9	94.9	96.0	95.6
Charleston	190.0	199.4	198.0	(¹)	(¹)	(¹)	13.5	13.8	13.8
Columbia	225.2	235.0	234.0	(¹)	(¹)	(¹)	14.6	14.6	14.8
Greenville-Spartanburg	310.1	327.3	321.2	(¹)	(¹)	(¹)	23.1	23.6	23.6
South Dakota	266.7	273.7	268.3	2.8	2.7	2.8	11.2	10.9	11.4
Rapid City	36.2	37.5	37.3	.3	.3	.3	2.1	2.1	2.1
Sioux Falls	68.4	70.7	68.9	(¹)	(¹)	(¹)	3.0	3.1	3.3
Tennessee	2,062.8	2,085.9	2,067.9	7.0	6.5	6.3	98.1	92.7	93.5
Chattanooga	195.8	199.7	199.0	.7	.7	.7	8.6	8.7	8.9
Johnson City-Kingsport-Bristol	162.3	166.5	165.8	.4	.5	.5	7.2	7.3	7.4
Knoxville	262.7	261.4	260.1	1.7	1.7	1.7	13.1	11.5	11.5
Memphis	435.2	440.2	440.2	.1	.1	.1	18.9	18.9	18.8
Nashville	482.2	481.8	476.4	.8	.7	.7	28.7	27.7	27.6
Texas	6,645.5	6,790.6	6,779.6	186.8	176.6	177.1	336.7	314.9	316.7
Abilene	48.2	49.0	48.4	2.1	1.9	1.8	2.1	1.9	1.9
Amarillo	77.7	77.6	76.7	1.4	1.4	1.3	4.0	3.9	4.0
Austin	344.1	351.3	346.1	.7	.7	.7	14.6	13.2	13.2
Beaumont-Port Arthur	132.2	134.1	134.0	1.7	1.9	1.9	8.8	9.0	9.2
Brazoria	58.6	61.5	60.8	2.1	1.9	2.0	6.8	7.8	7.4
Brownsville-Harlingen	68.2	70.1	70.2	.1	.1	.1	2.1	2.2	2.3
Bryan-College Station	47.5	49.3	49.3	.6	.6	.6	1.9	1.8	1.7
Corpus Christi	123.8	126.7	127.1	4.1	4.2	4.2	8.1	9.6	9.6
Dallas	1,344.3	1,351.8	1,348.3	18.9	17.4	17.3	56.2	51.2	51.9
El Paso	190.6	196.7	195.4	.1	.1	.1	9.4	8.8	8.6
Ft. Worth-Arlington	525.8	539.1	538.7	3.7	4.0	3.9	23.0	22.6	22.9
Galveston-Texas City	72.9	73.2	73.2	.5	.5	.5	4.3	4.9	5.0
Houston	1,435.2	1,477.3	1,474.2	66.3	66.2	66.1	90.0	91.0	91.3
Killeen-Temple	71.0	73.2	72.3	.1	.1	.1	3.5	3.8	3.4
Laredo	38.0	39.7	40.1	1.9	1.9	1.9	1.2	1.2	1.2
Longview-Marshall	66.7	66.6	66.6	3.8	3.6	3.6	3.6	3.3	3.3
Lubbock	92.8	93.4	94.4	.4	.4	.4	3.4	3.1	3.3
McAllen-Edinburg-Mission	91.0	98.7	96.8	.9	.9	.9	4.1	4.2	4.2
Midland	44.6	43.9	43.5	10.3	9.6	9.5	1.3	1.4	1.3
Odessa	42.8	41.9	41.5	6.1	5.5	5.6	2.0	1.7	1.7
San Angelo	35.9	36.3	36.0	.5	.5	.5	1.6	1.2	1.2
San Antonio	495.0	509.1	505.1	2.3	2.0	2.0	25.1	22.4	22.3
Sherman-Denison	37.7	36.6	36.7	.1	.1	.1	1.7	1.7	1.8
Texarkana	43.9	46.1	45.4	.1	.1	.1	1.6	1.6	1.6
Tyler	60.3	61.4	60.9	2.1	1.9	1.9	2.1	2.1	2.1
Victoria	27.5	28.3	27.8	1.9	1.2	1.2	1.6	1.5	1.6
Waco	77.9	79.2	78.7	.1	.1	.1	3.7	3.5	3.4
Wichita Falls	50.7	50.4	50.0	1.9	1.8	1.8	2.2	2.1	2.1
Utah	654.1	690.7	681.5	8.2	7.7	7.8	26.9	27.2	27.4
Provo-Orem	78.6	85.1	84.4	(¹)	(¹)	(¹)	3.1	3.1	3.1
Salt Lake City-Ogden	453.1	474.0	469.3	2.6	2.6	2.6	18.9	18.7	19.0
Vermont	251.3	256.8	254.7	.6	.7	.7	18.6	19.8	20.1
Barre-Montpelier	33.9	35.4	35.1	.2	.2	.2	2.2	1.9	1.9
Burlington	77.3	77.6	77.2	(¹)	(¹)	(¹)	4.4	4.7	4.8

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	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Pennsylvania—Continued									
Reading	47.2	49.0	48.8	6.5	6.9	6.6	33.4	34.4	34.3
Scranton-Wilkes-Barre	70.7	72.2	70.5	16.2	16.6	16.3	67.4	68.6	68.8
Williamsport	16.6	16.4	15.9	1.8	2.0	1.9	11.5	11.8	11.7
York	61.1	61.4	61.2	7.5	7.5	7.4	42.6	42.7	43.0
Rhode Island									
Pawtucket-Woonsocket-Attleboro	111.3	112.7	109.8	15.6	16.4	15.7	105.2	105.5	105.5
Providence	49.8	49.3	48.4	3.3	3.8	3.5	33.3	33.1	33.2
Providence	69.8	70.5	68.8	12.2	13.0	12.4	70.4	72.1	71.9
South Carolina									
Charleston	383.3	384.5	381.7	62.8	66.0	66.1	331.9	352.7	352.3
Columbia	21.0	21.6	21.8	11.4	11.3	11.3	46.2	46.4	46.3
Columbia	29.3	30.3	30.1	10.5	10.6	10.6	50.2	51.1	51.2
Greenville-Spartanburg	101.8	102.8	101.9	12.3	12.7	12.8	74.2	76.3	76.6
South Dakota									
Rapid City	31.3	30.5	30.3	13.8	13.7	13.7	70.7	71.7	71.8
Rapid City	3.2	3.2	3.2	2.0	2.0	2.0	11.1	11.5	11.9
Sioux Falls	8.6	8.3	8.2	5.4	5.4	5.4	18.6	19.0	19.0
Tennessee									
Chattanooga	506.4	514.0	507.4	109.8	110.8	110.8	491.8	492.4	493.3
Chattanooga	47.1	47.7	47.7	9.2	9.4	9.3	45.6	45.3	45.1
Johnson City-Kingsport-Bristol	53.2	55.2	55.2	6.4	6.3	6.3	37.0	36.6	36.5
Knoxville	53.9	52.4	52.4	10.3	10.3	10.2	66.6	66.9	67.0
Memphis	55.6	54.7	55.1	41.1	41.4	41.8	117.6	120.3	120.7
Nashville	89.8	91.1	89.5	24.2	24.1	24.0	118.1	115.9	116.4
Texas									
Abilene	959.9	974.6	972.9	393.8	400.3	402.1	1,664.7	1,673.6	1,670.0
Abilene	4.9	5.0	5.0	2.3	2.3	2.3	13.4	13.6	13.6
Amarillo	9.6	8.7	8.8	5.6	5.7	5.7	23.0	22.7	22.6
Austin	41.2	41.3	41.8	10.5	10.5	10.5	76.6	75.8	76.0
Beaumont-Port Arthur	25.9	25.6	25.6	9.6	9.5	9.4	32.3	32.6	32.7
Brazoria	15.6	16.2	16.3	2.7	2.7	2.9	11.0	11.3	11.2
Brownsville-Harlingen	10.0	10.1	10.2	3.1	3.0	3.2	18.0	18.4	18.2
Bryan-College Station	3.4	3.6	3.6	1.6	1.5	1.5	10.7	10.9	10.8
Corpus Christi	11.7	11.5	11.3	6.7	6.3	6.5	31.4	31.6	32.0
Dallas	224.0	222.1	222.4	92.1	94.6	95.1	347.7	350.8	349.4
El Paso	40.2	40.6	40.5	10.8	10.9	11.0	45.9	48.5	48.8
Ft. Worth-Arlington	120.1	121.1	121.3	30.1	31.7	31.9	136.5	139.5	139.4
Galveston-Texas City	8.1	8.5	8.5	4.8	4.7	4.7	14.9	14.7	14.7
Houston	154.1	159.1	158.7	101.1	100.3	100.7	357.8	366.6	367.5
Killeen-Temple	8.6	8.6	8.7	2.7	2.7	2.7	16.4	16.8	16.6
Laredo	1.9	1.9	1.8	4.9	5.2	5.4	11.2	12.4	12.6
Longview-Marshall	16.2	15.6	15.7	3.1	3.1	3.1	17.2	17.3	17.3
Lubbock	7.2	7.5	7.6	4.7	4.6	4.6	28.2	28.1	28.1
McAllen-Edinburg-Mission	12.3	14.9	14.3	2.9	3.2	3.3	28.7	29.7	29.1
Midland	2.7	2.4	2.5	2.3	2.3	2.3	10.0	10.0	10.0
Odessa	4.1	4.0	4.0	2.1	2.1	2.1	12.7	12.6	12.6
San Angelo	5.3	5.4	5.5	3.1	2.8	2.8	8.9	9.2	9.2
San Antonio	47.5	48.3	48.2	19.3	19.0	19.2	128.1	128.8	128.1
Sherman-Denison	11.6	11.1	11.2	2.0	1.8	1.7	7.9	7.8	7.9
Texarkana	7.2	7.7	7.7	1.9	2.0	2.0	10.4	10.7	10.6
Tyler	10.4	10.9	10.5	2.5	2.6	2.6	16.1	16.1	16.1
Victoria	3.1	3.1	3.1	1.4	1.4	1.4	7.3	7.8	7.8
Waco	14.6	15.2	15.3	3.3	3.4	3.4	18.9	19.0	18.9
Wichita Falls	8.2	8.1	8.1	2.6	2.5	2.5	11.9	12.1	12.1
Utah									
Provo-Orem	99.7	103.2	102.9	40.0	40.4	40.8	156.6	164.8	165.6
Provo-Orem	13.6	14.5	14.6	2.7	2.9	2.9	16.5	18.2	18.5
Salt Lake City-Ogden	64.7	67.2	66.7	30.6	31.2	31.6	112.6	117.9	118.2
Vermont									
Barre-Montpelier	49.7	49.7	49.1	10.3	10.6	10.5	60.8	60.6	60.8
Barre-Montpelier	4.3	5.0	4.8	.9	.9	.9	7.4	7.7	7.7
Burlington	17.1	16.3	16.4	3.2	3.5	3.5	19.0	19.0	19.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Pennsylvania—Continued									
Reading	8.3	8.6	8.7	30.5	31.5	31.6	15.0	16.4	15.1
Scranton-Wilkes-Barre	13.6	13.9	13.9	75.7	75.5	77.0	39.9	41.6	39.9
Williamsport	2.4	2.5	2.5	10.2	10.5	10.7	6.0	6.8	6.3
York	4.9	5.1	5.1	31.5	33.4	33.4	16.8	18.0	16.9
Rhode Island									
Pawtucket-Woonsocket-Attleboro	26.7	26.7	26.8	116.8	117.0	117.7	57.2	60.4	58.1
Providence	3.9	4.0	4.1	24.0	25.8	25.7	10.0	10.3	10.0
	22.5	23.2	23.8	85.6	87.2	87.8	42.2	45.2	43.7
South Carolina									
Charleston	66.4	68.6	69.1	259.9	278.7	277.6	239.4	269.3	252.1
Columbia	8.7	9.0	8.9	39.8	44.1	43.4	49.3	53.1	52.4
Greenville-Spartanburg	18.0	18.3	18.5	45.0	46.0	45.8	57.3	63.7	62.6
	12.0	12.0	12.0	54.6	57.7	57.4	31.8	41.9	36.6
South Dakota									
Rapid City	14.8	15.3	15.3	66.5	67.3	66.9	55.6	61.7	56.2
Sioux Falls	1.6	1.6	1.6	9.5	9.3	9.5	6.4	7.5	6.7
	6.7	6.9	6.8	19.6	20.0	19.4	6.5	7.9	6.7
Tennessee									
Chattanooga	105.2	107.0	106.8	436.2	445.6	444.3	308.4	316.9	305.5
Johnson City-Kingsport-Bristol	12.5	12.9	12.8	38.3	40.3	40.2	33.7	34.7	34.3
Knoxville	5.4	5.6	5.6	29.7	32.1	32.0	23.1	22.9	22.3
Memphis	9.7	10.1	10.0	58.1	59.7	59.7	49.3	48.8	47.7
Nashville	24.9	26.1	26.1	107.3	109.6	110.5	69.7	69.0	67.1
	34.8	34.3	34.0	122.1	119.9	119.4	63.7	68.1	64.8
Texas									
Abilene	442.2	441.5	442.6	1,536.0	1,598.3	1,606.8	1,125.4	1,210.8	1,191.4
Amarillo	2.4	2.5	2.5	12.8	12.8	12.8	8.2	9.0	8.5
Austin	4.4	4.1	4.1	17.2	17.6	17.6	12.5	13.5	12.6
Beaumont-Port Arthur	24.5	24.0	23.9	84.5	86.2	86.5	91.5	99.6	93.5
Brazoria	5.3	5.1	5.1	29.6	30.5	30.8	19.0	19.9	19.3
Brownsville-Harlingen	2.0	1.9	1.9	8.1	8.6	8.7	10.3	11.1	10.4
Bryan-College Station	3.7	3.6	3.6	16.0	16.1	16.2	15.3	16.7	16.5
Corpus Christi	1.6	1.6	1.6	8.7	9.3	9.5	19.0	20.0	20.0
Dallas	6.8	6.9	6.9	28.4	28.8	28.8	26.6	27.8	27.8
El Paso	130.8	126.8	127.2	330.9	339.4	340.9	143.7	149.5	144.1
Ft. Worth-Arlington	8.8	8.4	8.5	38.7	39.3	39.2	36.7	40.1	38.7
Galveston-Texas City	26.9	27.2	27.1	120.6	124.6	125.5	64.9	68.4	66.7
Houston	4.3	4.3	4.2	14.6	14.8	14.9	21.4	20.8	20.7
Killeen-Temple	102.3	99.6	99.3	383.8	401.4	403.0	179.8	193.1	187.6
Laredo	2.9	3.2	3.2	15.9	16.6	16.5	20.9	21.4	21.1
Longview-Marshall	1.7	1.5	1.5	6.1	6.3	6.3	9.1	9.3	9.4
Lubbock	2.6	2.7	2.7	12.2	12.5	12.7	8.0	8.5	8.2
McAllen-Edinburg-Mission	5.4	5.6	5.6	23.0	23.5	23.5	20.5	20.6	21.3
Midland	3.7	3.8	3.8	15.6	16.1	16.1	22.8	25.9	25.1
Odessa	2.3	2.2	2.2	9.8	9.7	9.7	5.9	6.3	6.0
San Angelo	1.7	1.6	1.6	7.2	7.3	7.3	6.9	7.1	6.6
San Antonio	1.8	1.8	1.8	8.2	8.2	8.2	6.5	7.2	6.8
Sherman-Denison	39.8	40.4	40.4	125.1	130.5	130.9	107.8	117.7	114.0
Texas City	1.8	1.7	1.7	8.4	8.1	8.2	4.2	4.3	4.1
Tyler	1.9	1.9	1.9	9.5	9.6	9.7	11.3	12.5	11.8
Victoria	3.4	3.3	3.4	14.8	14.8	15.0	8.9	9.7	9.3
Waco	1.6	1.6	1.6	5.9	6.1	6.0	4.7	5.6	5.1
Wichita Falls	4.9	4.8	4.8	20.6	20.9	20.9	11.8	12.3	11.9
	2.3	2.3	2.3	11.9	11.9	11.8	9.7	9.6	9.3
Utah									
Provo-Orem	33.4	33.3	33.4	155.9	166.8	167.4	133.4	147.3	136.2
Salt Lake City-Ogden	2.2	2.2	2.1	27.9	30.0	30.4	12.6	14.2	12.8
	27.4	27.1	27.2	107.1	113.2	113.1	89.2	96.1	90.9
Vermont									
Barre-Montpelier	12.8	13.4	13.5	62.3	61.3	62.9	36.2	40.7	37.1
Burlington	3.0	3.1	3.1	7.8	8.1	8.4	8.1	8.5	8.1
	3.7	3.6	3.7	19.9	18.8	19.3	10.0	11.6	10.3

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	Total			Mining			Construction		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Virginia	2,790.2	2,920.8	2,899.7	16.0	14.5	14.7	206.7	214.5	218.9
Bristol	31.6	33.1	32.6	.1	.1	.1	1.0	1.0	1.0
Charlottesville	64.6	67.2	65.8	.1	.1	.1	4.0	4.1	4.1
Danville	41.2	43.3	42.6	.1	.1	.1	2.4	2.7	2.8
Lynchburg	71.1	74.0	72.9	.1	.1	.1	3.8	3.6	3.6
Norfolk-Virginia Beach-Newport News	574.0	580.9	574.5	.1	.2	.2	39.3	40.0	40.7
Northern Virginia	751.3	799.6	800.7	.5	.6	.6	63.0	68.7	70.6
Richmond-Petersburg	452.3	466.7	464.3	1.0	1.1	1.2	31.4	33.0	33.0
Roanoke	122.8	125.0	124.2	.1	.1	.1	8.3	8.3	8.6
Washington	1,935.8	2,053.6	2,027.7	3.4	3.5	3.5	101.6	108.6	112.2
Seattle	989.9	1,048.1	1,047.6	.6	.7	.7	53.5	54.5	57.2
West Virginia	618.0	619.3	605.8	34.4	31.8	17.1	27.7	28.2	28.4
Charleston	108.2	109.1	108.8	2.0	1.9	1.0	4.5	4.2	4.3
Huntington-Ashland	104.8	106.2	105.7	1.4	1.5	1.5	3.9	3.5	3.6
Parkersburg-Marietta	60.5	60.9	61.0	.7	.6	.7	3.0	2.9	2.9
Wheeling	60.3	60.0	58.5	2.7	2.7	.8	2.1	1.9	1.9
Wisconsin	2,161.1	2,225.4	2,201.3	2.6	2.9	2.9	76.7	79.8	81.5
Appleton-Oshkosh-Neenah	151.0	155.7	154.1	(¹)	(¹)	(¹)	7.4	7.8	8.0
Eau Claire	56.2	58.4	57.2	(¹)	(¹)	(¹)	1.8	1.6	1.5
Green Bay	95.9	99.8	98.9	(¹)	(¹)	(¹)	3.4	3.5	3.8
Janesville-Beloit	56.8	56.9	56.4	(¹)	(¹)	(¹)	1.5	1.3	1.4
Kenosha	41.6	38.4	38.2	(¹)	(¹)	(¹)	1.4	1.6	1.6
La Crosse	53.8	57.8	57.5	(¹)	(¹)	(¹)	2.2	2.6	2.7
Madison	202.3	210.1	208.4	(¹)	(¹)	(¹)	7.0	6.3	6.4
Milwaukee	716.6	740.3	730.6	(¹)	(¹)	(¹)	23.5	23.9	24.4
Racine	73.0	75.9	75.5	(¹)	(¹)	(¹)	2.1	2.2	2.4
Wausau	48.4	50.7	50.7	(¹)	(¹)	(¹)	2.0	2.2	2.4
Wyoming	185.9	196.7	189.6	18.9	18.6	18.9	11.7	11.2	11.4
Puerto Rico	840.2	854.5	850.1	.8	.8	.8	42.5	42.0	41.9
Caguas	54.4	53.7	53.4	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Mayaguez	58.9	61.5	61.5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Ponce	53.8	58.7	58.6	.1	.1	.1	3.9	3.8	3.8
San Juan	510.6	519.6	516.1	.4	.4	.4	31.5	30.6	30.2
Virgin Islands	41.5	41.3	42.1	(¹)	(¹)	(¹)	2.2	2.0	2.0

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Virginia	426.3	427.3	425.3	146.3	149.2	149.5	638.4	665.0	667.5
Bristol	10.7	10.8	10.8	1.2	1.1	1.1	8.2	8.7	8.7
Charlottesville	8.7	8.8	8.8	2.3	2.4	2.3	13.0	13.6	13.8
Danville	16.7	16.6	16.7	1.0	.9	.9	9.2	10.1	10.1
Lynchburg	22.7	22.7	22.6	2.7	2.5	2.5	16.2	17.0	16.8
Norfolk-Virginia Beach-Newport News	69.0	67.5	67.1	26.8	26.5	26.6	143.5	143.5	144.3
Northern Virginia	35.8	34.1	33.9	53.3	59.0	59.7	166.0	170.8	171.9
Richmond-Petersburg	62.2	61.3	61.5	23.6	23.6	23.6	109.2	112.8	113.7
Roanoke	20.0	19.4	19.0	8.5	8.5	8.5	33.3	34.2	34.4
Washington	338.6	361.0	362.8	103.0	106.3	107.4	480.8	499.4	498.7
Seattle	199.1	215.7	217.8	61.6	65.5	66.2	242.0	246.8	248.5
West Virginia	87.9	87.3	86.4	37.4	37.6	37.2	144.5	147.4	148.4
Charleston	10.9	11.3	11.2	8.6	8.9	8.9	28.4	28.7	29.2
Huntington-Ashland	19.8	20.3	20.0	8.1	8.0	8.0	26.8	27.4	27.3
Parkersburg-Marietta	14.2	14.2	14.4	2.2	2.3	2.3	14.5	14.4	14.5
Wheeling	7.3	7.5	7.5	3.4	3.4	3.4	16.7	16.3	16.6
Wisconsin	562.1	560.6	562.9	95.6	101.5	98.1	514.7	526.3	526.4
Appleton-Oshkosh-Neenah	54.2	53.7	54.2	5.2	5.8	5.6	31.8	32.9	32.9
Eau Claire	11.5	12.0	11.9	3.0	3.3	3.1	15.4	15.3	15.0
Green Bay	25.7	26.3	27.3	7.0	7.5	7.4	24.4	24.8	24.5
Janesville-Beloit	18.1	16.7	17.0	2.0	2.2	2.1	14.3	14.7	14.5
Kenosha	14.2	9.7	9.9	1.5	1.5	1.5	9.9	10.1	10.3
La Crosse	11.4	11.0	11.1	2.2	2.3	2.3	15.1	16.6	16.5
Madison	24.7	25.4	25.4	6.9	7.3	7.1	45.2	47.1	46.6
Milwaukee	174.1	176.5	176.1	34.0	35.8	34.7	164.8	169.5	170.0
Racine	25.6	26.2	25.4	2.3	2.3	2.2	16.6	16.7	17.1
Wausau	14.3	14.6	14.6	2.8	2.8	2.8	11.9	12.7	12.5
Wyoming	9.1	9.5	9.5	13.5	14.0	14.1	43.2	43.3	43.3
Puerto Rico	153.3	158.8	158.4	18.3	16.8	16.9	143.7	147.5	146.6
Caguas	16.4	16.1	16.4	(¹)	(¹)	(¹)	10.9	10.9	10.9
Mayaguez	20.2	21.1	21.0	(¹)	(¹)	(¹)	7.7	7.8	7.7
Ponce	9.3	10.0	9.7	(¹)	(¹)	(¹)	8.5	9.0	9.0
San Juan	64.4	67.1	66.8	15.3	13.5	13.6	98.7	101.3	100.4
Virgin Islands	2.5	2.4	2.4	2.5	2.6	2.6	9.4	9.3	9.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1988	June 1989	July 1989 ^p	July 1988	June 1989	July 1989 ^p	July 1988	June 1989	July 1989 ^p
Virginia	153.7	157.4	159.2	681.5	725.9	725.4	521.3	567.0	539.2
Bristol	1.2	1.3	1.3	4.5	4.6	4.5	4.7	5.5	5.1
Charlottesville	3.4	3.3	3.4	13.1	13.2	13.4	20.0	21.7	19.9
Danville	1.3	1.3	1.3	6.0	6.2	6.0	4.5	5.4	4.7
Lynchburg	4.0	4.4	4.4	12.6	14.2	13.7	9.0	9.5	9.2
Norfolk-Virginia Beach-Newport News	27.8	27.1	27.5	141.3	144.4	145.3	126.2	131.7	122.8
Northern Virginia	50.1	52.0	52.8	243.6	264.0	265.4	139.0	150.4	145.8
Richmond-Petersburg	39.1	40.9	41.4	95.8	98.2	97.0	90.0	95.8	92.9
Roanoke	8.4	8.6	8.6	29.1	30.4	30.1	15.1	15.5	14.9
Washington	111.1	115.5	116.0	446.9	473.9	473.7	350.4	385.4	353.4
Seattle	70.7	73.1	73.5	232.8	249.5	250.6	129.6	142.3	133.1
West Virginia	24.4	24.2	24.2	132.6	139.3	139.4	129.1	123.5	124.7
Charleston	6.2	6.2	6.2	26.0	26.7	26.9	21.6	21.2	21.1
Huntington-Ashland	3.8	3.8	3.8	22.7	23.4	23.4	18.3	18.3	18.1
Parkersburg-Marietta	2.3	2.4	2.4	13.7	14.0	14.2	9.9	10.1	9.6
Wheeling	2.8	2.8	2.8	15.8	15.9	16.0	9.5	9.5	9.5
Wisconsin	116.6	120.6	121.2	487.5	499.1	498.2	305.3	334.6	310.1
Appleton-Oshkosh-Neenah	7.3	7.5	7.5	29.6	30.6	30.0	15.3	17.1	15.6
Eau Claire	1.8	1.9	1.9	12.9	13.5	13.6	9.8	10.8	10.2
Green Bay	3.3	3.6	3.6	21.8	22.3	22.2	10.2	11.7	10.0
Janesville-Beloit	1.6	1.6	1.7	12.5	12.8	12.7	6.7	7.5	6.9
Kenosha	1.2	1.3	1.3	8.4	8.6	8.6	5.0	5.6	5.0
La Crosse	1.6	1.6	1.7	14.8	16.0	15.9	6.5	7.7	7.3
Madison	18.7	18.8	19.1	45.0	47.1	46.2	54.6	57.9	57.4
Milwaukee	50.7	52.6	52.6	191.0	196.8	195.4	78.2	84.9	77.1
Racine	2.3	2.4	2.4	16.2	17.4	17.5	7.9	8.7	8.5
Wausau	3.5	3.8	3.8	8.5	8.8	8.9	5.4	5.8	5.7
Wyoming	7.2	7.3	7.3	37.2	37.4	37.6	45.1	55.4	47.5
Puerto Rico	36.2	36.4	36.2	117.6	121.5	120.8	327.8	330.6	328.6
Caguas	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	18.6	18.4	18.1
Mayaguez	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	21.2	21.6	21.5
Ponce	(¹)	(¹)	(¹)	9.6	10.3	10.1	18.9	22.1	22.4
San Juan	28.7	29.0	28.9	85.8	88.6	88.0	185.8	189.1	187.7
Virgin Islands	1.9	2.0	2.0	8.8	9.6	9.6	14.2	13.4	14.2

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 1988 benchmarks.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.46	525.81	37.4	12.48	466.75
1987	34.8	8.98	312.50	42.4	12.54	531.70	37.8	12.71	480.44
1988	34.7	9.29	322.36	42.3	12.75	539.33	37.9	13.01	493.08
Monthly data, not seasonally adjusted									
1988:									
August	35.0	\$9.24	\$323.40	42.0	\$12.69	\$532.98	38.6	\$12.99	\$501.41
September	34.8	9.40	327.12	42.2	12.82	541.00	38.4	13.16	505.34
October	34.9	9.45	329.81	42.6	12.79	544.85	39.1	13.17	514.95
November	34.7	9.46	328.26	41.9	12.89	540.09	37.8	13.08	494.42
December	34.9	9.46	330.15	42.8	13.03	557.68	37.3	13.19	491.99
1989:									
January	34.5	9.54	329.13	42.2	13.20	557.04	36.5	13.26	483.99
February	34.3	9.55	327.57	41.7	13.22	551.27	36.2	13.21	478.20
March	34.4	9.56	328.86	42.0	13.15	552.30	37.4	13.26	495.92
April	34.8	9.62	334.78	42.8	13.19	564.53	37.9	13.30	504.07
May	34.5	9.59	330.86	42.0	13.13	551.46	37.7	13.28	500.66
June	34.8	9.58	333.38	42.6	13.03	555.08	38.0	13.24	503.12
July ^p	35.1	9.63	338.01	42.8	12.97	555.12	38.9	13.33	518.54
August ^p	35.0	9.60	336.00	43.2	13.11	566.35	38.9	13.31	517.76

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	9.60	365.76
1988	41.1	10.18	9.72	418.40	39.3	12.32	484.18	38.1	9.94	378.71
Monthly data, not seasonally adjusted										
1988:										
August	40.9	\$10.13	\$9.67	\$414.32	39.7	\$12.35	\$490.30	38.0	\$9.91	\$376.58
September	41.3	10.25	9.75	423.33	39.5	12.40	489.80	38.1	10.04	382.52
October	41.3	10.25	9.76	423.33	39.5	12.42	490.59	38.2	10.10	385.82
November	41.5	10.31	9.82	427.87	39.3	12.46	489.68	38.0	10.07	382.66
December	41.7	10.37	9.88	432.43	39.5	12.42	490.59	38.2	10.14	387.35
1989:										
January	41.0	10.37	9.91	425.17	39.3	12.47	490.07	37.9	10.23	387.72
February	40.8	10.38	9.92	423.50	39.1	12.50	488.75	37.8	10.23	386.69
March	41.0	10.41	9.94	426.81	39.2	12.46	488.43	37.9	10.21	386.96
April	41.0	10.41	9.95	426.81	39.8	12.51	497.90	38.2	10.36	395.75
May	40.9	10.42	9.98	426.18	39.3	12.49	490.86	37.9	10.28	389.61
June	41.1	10.44	9.98	429.08	39.6	12.48	494.21	38.1	10.31	392.81
July ^p	40.5	10.48	10.02	424.44	39.8	12.57	500.29	38.3	10.40	398.32
August ^p	40.8	10.45	9.97	426.36	39.8	12.52	498.30	38.1	10.35	394.34

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	6.12	178.70	36.3	8.73	316.90	32.5	8.49	275.93
1988	29.1	6.31	183.62	35.9	9.09	326.33	32.6	8.91	290.47
Monthly data, not seasonally adjusted									
1988:									
August	29.8	\$6.26	\$186.55	35.7	\$9.03	\$322.37	32.8	\$8.81	\$288.97
September	29.1	6.38	185.66	35.8	9.14	327.21	32.5	9.00	292.50
October	29.1	6.39	185.95	36.0	9.29	334.44	32.7	9.09	297.24
November	28.8	6.43	185.18	35.7	9.27	330.94	32.5	9.11	296.08
December	29.6	6.43	190.33	35.8	9.32	333.66	32.6	9.16	298.62
1989:									
January	28.4	6.48	184.03	36.1	9.46	341.51	32.6	9.25	301.55
February	28.3	6.47	183.10	35.8	9.47	339.03	32.4	9.28	300.67
March	28.5	6.48	184.68	35.8	9.43	337.59	32.4	9.29	301.00
April	28.9	6.52	188.43	36.3	9.59	348.12	32.8	9.34	306.35
May	28.8	6.49	186.91	35.6	9.48	337.49	32.4	9.30	301.32
June	29.2	6.49	189.51	35.8	9.48	339.38	32.7	9.26	302.80
July ^p	29.9	6.49	194.05	36.3	9.58	347.75	33.1	9.33	308.82
August ^p	29.7	6.49	192.75	35.8	9.50	340.10	32.9	9.29	305.64

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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Total private		35.1	35.0	34.8	35.1	35.0					
Mining		42.4	42.0	42.6	42.8	43.2					
Metal mining	10	42.9	40.9	42.8	43.6						
Iron ores	101	41.6	41.4	43.0	43.2						
Copper ores	102	45.3	41.4	45.6	49.1						
Coal mining	11,12		42.5	41.4							
Bituminous coal and lignite mining	12		42.5	41.4							
Oil and gas extraction	13	41.7	40.4	41.8	41.5						
Crude petroleum, natural gas, and natural gas liquids	131,2	43.5	40.0	44.2	42.1						
Oil and gas field services	138	40.7	40.7	40.4	41.1						
Nonmetallic minerals, except fuels	14	46.5	46.7	46.2	47.1						
Crushed and broken stone	142	48.2	48.4	47.2	48.6						
Construction		38.6	38.6	38.0	38.9	38.9					
General building contractors	15	37.9	37.9	37.3	38.0						
Residential building construction	152	36.8	37.0	36.7	37.1						
Operative builders	153	39.1	38.7	37.9	38.9						
Nonresidential building construction	154	39.0	38.9	38.0	39.0						
Heavy construction contractors	16	42.9	43.0	41.5	43.5						
Highway and street construction	161	44.6	45.1	42.2	45.6						
Heavy construction, except highway	162	41.9	41.9	41.2	42.4						
Special trade contractors	17	37.7	37.7	37.2	38.0						
Plumbing, heating, and air conditioning	171	39.2	39.1	38.8	39.2						
Painting, paper hanging, and decorating	172	36.6	36.5	35.9	36.4						
Electrical work	173	39.2	38.6	38.9	39.2						
Masonry, stonework, and plastering	174	35.5	35.7	35.1	35.6						
Carpentering and flooring	175	35.5	35.4	35.3	35.2						
Roofing and sheet metal work	176	34.6	35.4	32.7	36.3						
Manufacturing		40.7	40.9	41.1	40.5	40.8	3.7	3.9	3.8	3.7	3.9
Durable goods		41.2	41.3	41.7	40.9	41.2	3.8	4.0	3.9	3.7	3.9
Lumber and wood products	24	40.3	40.3	40.4	39.5	40.3	3.8	3.9	3.6	3.5	
Logging camps and logging contractors	241	40.3	39.2	41.1	40.3	-	4.4	4.3	4.9	5.2	
Sawmills and planing mills	242	40.9	41.2	41.5	39.7		4.2	4.4	4.4	4.0	
Sawmills and planing mills, general	2421	41.3	41.4	41.8	40.1		4.5	4.6	4.6	4.4	
Hardwood dimension and flooring	2426	39.5	40.4	40.2	38.3		3.1	3.5	3.3	2.8	
Millwork, plywood, and structural members	243	40.3	40.6	40.0	39.2		3.6	3.8	3.2	3.0	
Millwork	2431	40.6	41.0	38.9	38.7		3.2	3.4	1.9	1.9	
Wood kitchen cabinets	2434	39.4	40.1	39.9	39.4		2.8	3.5	3.5	2.8	
Hardwood veneer and plywood	2435	40.1	40.5	40.6	38.4		3.4	3.6	3.7	2.9	
Softwood veneer and plywood	2436	41.1	40.4	42.2	40.6		5.4	4.8	4.8	5.5	
Wood containers	244	38.9	38.7	39.0	38.9		3.4	3.4	3.4	3.3	
Wood buildings and mobile homes	245	40.0	40.2	39.1	38.8		3.1	3.5	2.2	2.3	
Mobile homes	2451	39.5	40.2	39.1	38.4		2.9	3.6	1.8	1.9	
Miscellaneous wood products	249	39.8	39.7	40.2	39.7		3.1	3.0	3.0	2.9	
Furniture and fixtures	25	38.9	39.3	39.4	38.6	39.6	2.4	2.7	2.6	2.4	
Household furniture	251	38.3	38.9	39.0	37.8	-	1.9	2.4	2.4	1.9	
Wood household furniture	2511	38.9	39.2	40.0	38.4		2.0	2.6	2.8	2.2	
Upholstered household furniture	2512	36.9	37.7	37.4	36.3		1.3	1.6	1.6	1.2	
Metal household furniture	2514	39.4	39.2	39.4	38.5		2.0	2.4	2.7	1.9	
Mattresses and bedsprings	2515	38.6	40.7	39.8	39.7		3.1	3.8	3.0	2.9	
Office furniture	252	39.8	39.8	39.0	38.4		2.6	2.4	2.1	2.2	
Public building and related furniture	253	40.8	41.1	39.9	39.6		4.0	4.1	3.8	3.5	
Partitions and fixtures	254	39.4	40.0	40.9	41.3		3.2	3.6	3.6	4.4	
Miscellaneous furniture and fixtures	259	39.0	40.0	40.3	39.8		2.9	3.2	3.0	2.7	
Stone, clay, and glass products	32	42.4	42.5	42.6	42.6	43.0	5.2	5.3	5.1	5.3	
Flat glass	321	44.5	45.7	44.8	43.9	-	7.2	7.5	5.7	4.8	
Glass and glassware, pressed or blown	322	41.5	41.2	41.9	41.3		4.9	4.5	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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Total private		\$9.24	\$9.24	\$9.58	\$9.63	\$9.60	\$324.32	\$323.40	\$333.38	\$338.01	\$336.00
Mining		12.72	12.69	13.03	12.97	13.11	539.33	532.98	555.08	555.12	566.35
Metal mining	10	13.31	13.37	13.62	13.74		571.00	546.83	582.94	599.06	
Iron ores	101	14.76	14.53	14.28	14.37		614.02	601.54	614.04	620.78	
Copper ores	102	11.60	11.53	11.77	11.72		525.48	477.34	536.71	575.45	
Coal mining	11,12		15.97	15.81			643.92	678.73	654.53	659.60	
Bituminous coal and lignite mining	12		16.02	15.86			647.54	680.85	656.60	663.70	
Oil and gas extraction	13	11.92	11.70	12.47	12.44		497.06	472.68	521.25	516.26	
Crude petroleum, natural gas, and natural gas liquids	131,2	14.51	14.32	15.24	15.27		631.19	572.80	673.61	642.87	
Oil and gas field services	138	10.29	10.20	10.68	10.77		418.80	415.14	431.47	442.65	
Nonmetallic minerals, except fuels	14	10.97	10.99	11.28	11.32		510.11	513.23	521.14	533.17	
Crushed and broken stone	142	10.45	10.47	10.83	10.91		503.69	506.75	511.18	530.23	
Construction		12.96	12.99	13.24	13.33	13.31	500.26	501.41	503.12	518.54	517.76
General building contractors	15	12.05	12.16	12.47	12.49		456.70	460.86	465.13	474.62	
Residential building construction	152	11.38	11.45	11.91	11.98		418.78	423.65	437.10	444.46	
Operative builders	153	10.89	11.22	11.79	12.14		425.80	434.21	446.84	472.25	
Nonresidential building construction	154	12.83	12.98	13.14	13.09		500.37	504.92	499.32	510.51	
Heavy construction contractors	16	12.53	12.56	13.01	13.17		537.54	540.08	539.92	572.90	
Highway and street construction	161	12.42	12.50	12.72	13.02		553.93	563.75	536.78	593.71	
Heavy construction, except highway	162	12.59	12.60	13.15	13.25		527.52	527.94	541.78	561.80	
Special trade contractors	17	13.48	13.48	13.62	13.73		508.20	508.20	506.66	521.74	
Plumbing, heating, and air conditioning	171	13.83	13.77	14.06	14.12		542.14	538.41	545.53	553.50	
Painting, paper hanging, and decorating	172	12.69	12.80	12.84	13.04		464.45	467.20	460.96	474.66	
Electrical work	173	14.73	14.73	14.71	14.84		577.42	568.58	572.22	581.73	
Masonry, stonework, and plastering	174	13.62	13.67	13.84	13.94		483.51	488.02	485.78	496.26	
Carpentering and flooring	175	12.82	12.80	12.96	13.07		455.11	453.12	457.49	460.06	
Roofing and sheet metal work	176	12.05	12.01	11.93	12.14		416.93	425.15	390.11	440.68	
Manufacturing		10.17	10.13	10.44	10.48	10.45	413.92	414.32	429.08	424.44	426.36
Durable goods		10.67	10.65	10.98	11.00	10.99	439.60	439.85	457.87	449.90	452.79
Lumber and wood products	24	8.66	8.58	8.85	8.93	8.98	349.00	345.77	357.54	352.74	361.89
Logging camps and logging contractors	241	11.08	10.77	11.24	11.31	-	446.52	422.18	461.96	455.79	-
Sawmills and planing mills	242	8.77	8.69	8.99	9.15		358.69	358.03	373.09	363.26	
Sawmills and planing mills, general	2421	9.09	9.01	9.31	9.48		375.42	373.01	389.16	380.15	
Hardwood dimension and flooring	2426	7.09	7.04	7.38	7.36		280.06	284.42	296.68	281.89	
Millwork, plywood, and structural members	243	8.57	8.57	8.75	8.79		345.37	347.94	350.00	344.57	
Millwork	2431	8.76	8.80	8.92	8.99		355.66	360.80	346.99	347.91	
Wood kitchen cabinets	2434	7.89	7.96	8.17	8.01		310.87	319.20	325.98	315.59	
Hardwood veneer and plywood	2435	7.03	7.02	7.40	7.32		281.90	284.31	300.44	281.09	
Softwood veneer and plywood	2436	10.27	10.12	10.18	10.46		422.10	408.85	429.60	424.68	
Wood containers	244	6.39	6.37	6.43	6.42		248.57	246.52	250.77	249.74	
Wood buildings and mobile homes	245	8.01	8.09	8.28	8.26		320.40	325.22	323.75	320.49	
Mobile homes	2451	8.07	8.17	8.28	8.30		318.77	328.43	323.75	318.72	
Miscellaneous wood products	249	7.50	7.44	7.68	7.73		298.50	295.37	308.74	306.88	
Furniture and fixtures	25	7.99	8.02	8.23	8.25	8.30	310.81	315.19	324.26	318.45	328.68
Household furniture	251	7.35	7.37	7.59	7.57	-	281.51	286.69	296.01	286.15	-
Wood household furniture	2511	6.91	6.90	7.12	7.15		268.80	270.48	284.80	274.56	
Upholstered household furniture	2512	7.90	7.95	8.25	8.16		291.51	299.72	308.55	296.21	
Metal household furniture	2514	7.55	7.62	7.95	7.95		297.47	298.70	313.23	306.08	
Mattresses and bedsprings	2515	7.69	7.79	7.95	7.90		296.83	317.05	316.41	313.63	
Office furniture	252	9.16	9.11	9.35	9.37		364.57	362.58	364.65	359.81	
Public building and related furniture	253	8.37	8.37	8.73	8.67		341.50	344.01	348.33	343.33	
Partitions and fixtures	254	9.36	9.50	9.63	9.72		368.78	380.00	393.87	401.44	
Miscellaneous furniture and fixtures	259	8.21	8.28	8.50	8.50		320.19	331.20	342.55	338.30	
Stone, clay, and glass products	32	10.53	10.45	10.73	10.74	10.76	446.47	444.13	457.10	457.52	462.68
Flat glass	321	14.83	14.60	14.93	14.74	-	659.94	667.22	668.86	647.09	-
Glass and glassware, pressed or blown	322	11.89	11.73	12.06	12.14		493.44	483.28	505.31	501.38	

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	41.6	41.2	42.3	41.5		5.7	5.3	5.6	5.8	-
Pressed and blown glass, nec	3229	41.3	41.3	41.4	41.1		4.0	3.6	3.7	3.5	-
Products of purchased glass	323	41.7	41.2	41.5	41.5		3.4	3.1	3.3	3.6	
Cement, hydraulic	324	42.3	42.5	41.1	41.1		3.4	3.8	2.5	2.8	
Structural clay products	325	41.9	42.2	42.1	41.3		4.4	4.5	3.9	3.9	
Pottery and related products	326	39.5	40.3	39.9	39.6		2.9	3.0	3.0	2.9	
Concrete, gypsum, and plaster products	327	43.9	44.1	43.8	44.6		6.9	7.1	6.9	7.6	
Concrete block and brick	3271	45.5	45.9	43.4	44.3		7.0	7.4	6.9	7.3	
Concrete products, nec	3272	43.1	43.2	43.6	44.1		6.3	6.4	6.3	6.7	
Ready-mixed concrete	3273	43.5	43.8	43.3	44.7		7.1	7.4	7.1	8.1	
Misc. nonmetallic mineral products	329	41.8	41.9	42.7	42.0		4.5	4.5	4.7	4.5	
Abrasive products	3291	42.7	42.7	44.1	42.5		3.6	3.4	4.2	3.4	
Asbestos products	3292	40.7	41.2	41.3	40.8		2.9	4.1	3.6	3.6	
Primary metal industries											
Blast furnaces and basic steel products	331	44.0	43.6	43.9	43.2	42.1	5.4	5.6	5.4	5.0	
Blast furnaces and steel mills	3312	44.4	44.0	44.3	43.5	41.9	5.9	6.0	5.8	5.4	
Steel pipe and tubes	3317	41.7	41.9	41.9	41.0	-	6.2	6.3	6.1	5.6	
Iron and steel foundries	332	42.6	43.2	42.8	42.0		5.0	5.3	4.7	3.7	
Gray iron foundries	3321	42.3	43.5	43.3	42.1		5.2	5.7	5.2	4.5	
Malleable iron foundries	3322	42.2	41.3	41.9	40.4		5.3	6.2	5.6	4.6	
Steel foundries, nec	3325	42.2	43.1	42.2	41.2		5.1	4.3	3.8	2.9	
Primary nonferrous metals	333	43.1	42.3	42.2	41.2		5.1	4.8	4.8	4.2	
Primary aluminum	3334	43.6	43.6	42.7	42.8		5.1	5.0	4.7	5.0	
Nonferrous rolling and drawing	335	43.8	44.3	42.5	42.5		5.1	5.1	4.8	5.0	
Copper rolling and drawing	3351	43.1	43.3	43.8	43.4		6.0	6.2	6.2	6.0	
Aluminum sheet, plate, and foil	3353	42.3	43.2	43.9	43.3		6.2	7.0	5.7	5.7	
Nonferrous wire drawing and insulating	3357	45.2	45.3	44.8	45.1		8.2	7.9	7.6	8.0	
Nonferrous foundries	336	42.5	42.7	42.6	42.0		5.2	5.4	5.4	5.2	
Aluminum foundries	3361	40.5	41.0	41.8	40.5		3.2	3.7	3.8	3.2	
Fabricated metal products	34	40.8	41.4	42.3	40.6		3.3	3.9	3.9	3.0	
Metal cans and shipping containers	341	41.1	41.5	41.7	40.8	41.3	3.6	4.0	3.8	3.6	
Metal cans	3411	45.0	45.6	44.8	45.2	-	6.1	6.5	5.9	6.3	
Cutlery, hand tools, and hardware	342	45.5	46.1	45.2	45.5		6.3	6.7	5.9	6.2	
Hand and edge tools, and hand saws and blades	3423,5	40.5	40.7	41.0	39.6		3.1	3.1	2.8	2.6	
Hardware, nec	3429	40.4	40.3	41.4	39.8		2.8	2.7	2.7	2.4	
Plumbing and heating, except electric	343	40.2	40.7	40.5	39.2		3.2	3.2	2.7	2.7	
Plumbing fittings and brass goods	3432	40.6	41.2	40.7	39.7		3.2	4.2	3.2	2.9	
Heating equipment, except electric	3433	40.5	40.5	40.9	40.1		2.8	3.4	3.1	2.8	
Fabricated structural metal products	344	40.6	41.6	39.7	39.5		3.6	4.8	3.0	2.7	
Fabricated structural metal	3441	40.9	41.2	41.4	40.9		3.8	4.0	3.7	3.8	
Metal doors, sash, and trim	3442	42.2	42.5	42.2	41.6		5.1	5.4	4.3	4.5	
Fabricated plate work (boiler shops)	3443	40.2	40.5	40.5	39.7		3.3	3.2	2.9	2.8	
Sheet metal work	3444	42.0	42.3	42.3	41.5		4.2	4.6	3.9	4.1	
Architectural metal work	3446	39.6	39.9	40.4	40.5		3.1	3.2	3.3	3.4	
Screw machine products, bolts, etc	345	39.7	40.7	41.4	40.8		3.1	3.8	4.5	4.8	
Screw machine products	3451	42.7	42.6	42.7	41.6		4.9	5.2	4.9	4.4	
Bolts, nuts, rivets, and washers	3452	41.4	41.2	41.0	40.8		4.0	4.2	3.6	3.6	
Metal forgings and stampings	346	44.1	44.2	44.5	42.5		5.9	6.2	6.3	5.4	
Iron and steel forgings	3462	40.8	41.9	42.1	40.5		3.5	4.3	4.2	3.4	
Automotive stampings	3465	42.9	42.4	43.1	41.5		4.8	4.8	5.0	4.2	
Metal stampings, nec	3469	40.2	42.7	42.8	40.6		2.9	4.5	4.5	3.2	
Metal services, nec	347	40.4	40.7	40.4	39.7		3.5	3.8	3.4	3.0	
Plating and polishing	3471	40.3	40.3	41.3	40.0		3.2	3.3	3.6	3.1	
Metal coating and allied services	3479	40.1	40.2	41.1	39.4		3.1	3.3	3.4	2.8	
Ordnance and accessories, nec	348	40.6	40.4	41.8	41.0		3.5	3.3	4.1	3.7	
Ammunition, except for small arms, nec	3483	41.2	41.4	41.7	41.0		2.8	3.4	3.1	2.8	
Misc. fabricated metal products	349	40.7	40.7	41.6	41.0		2.4	2.8	2.8	2.9	
Valves and pipe fittings	3494	40.7	41.1	41.2	40.5		3.2	3.7	3.4	3.2	
Misc. fabricated wire products	3496	41.7	41.9	42.2	41.3		3.8	4.0	3.5	3.3	
Machinery, except electrical	35	40.0	40.2	39.7	39.1		3.0	3.5	3.2	2.8	
Engines and turbines	351	42.3	42.0	42.6	41.8	41.6	4.1	4.2	4.3	4.0	
Turbines and turbine generator sets	3511	45.3	42.7	42.6	43.1	-	3.9	4.7	3.8	3.6	
Internal combustion engines, nec	3519	43.3	42.8	43.0	41.1		5.1	5.3	5.3	5.3	
Farm and garden machinery	352	45.9	42.7	42.5	43.8		3.5	4.5	3.3	3.0	
Farm machinery and equipment	3523	41.7	41.3	41.9	40.5		3.8	3.8	4.0	3.7	
		43.4	42.4	43.3	41.4		4.7	4.6	4.8	4.3	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	\$12.38	\$12.21	\$12.63	\$12.73		\$515.01	\$503.05	\$534.25	\$528.30	
Pressed and blown glass, nec	3229	11.30	11.17	11.40	11.46		466.69	461.32	471.96	471.01	
Products of purchased glass	323	9.15	8.95	9.36	9.39		381.56	368.74	388.44	389.69	
Cement, hydraulic	324	13.17	13.17	13.41	13.56		557.09	559.73	551.15	557.32	
Structural clay products	325	8.96	8.91	9.14	9.17		375.42	376.00	384.79	378.72	
Pottery and related products	326	9.41	9.23	9.58	9.55		371.70	371.97	382.24	378.18	
Concrete, gypsum, and plaster products	327	10.28	10.25	10.55	10.57		451.29	452.03	462.09	471.42	
Concrete block and brick	3271	9.36	9.37	9.80	9.80		425.88	430.08	425.32	434.14	
Concrete products, nec	3272	9.22	9.21	9.50	9.58		397.38	397.87	414.20	422.48	
Ready-mixed concrete	3273	11.10	11.02	11.35	11.31		482.85	482.68	491.46	505.56	
Misc. nonmetallic mineral products	329	10.61	10.54	10.72	10.74		443.50	441.63	457.74	451.08	
Abrasive products	3291	9.99	9.90	10.15	10.18		426.57	422.73	447.62	432.65	
Asbestos products	3292	10.54	10.84	11.05	11.03		428.98	446.61	456.37	450.02	
Primary metal industries	33	12.22	12.10	12.32	12.41	\$12.32	526.68	521.51	533.46	528.67	\$518.67
Blast furnaces and basic steel products	331	14.09	13.96	14.18	14.34	14.27	619.96	608.66	622.50	619.49	597.91
Blast furnaces and steel mills	3312	14.88	14.71	14.91	15.14	-	660.67	647.24	660.51	658.59	-
Steel pipe and tubes	3317	10.82	10.76	11.03	10.96		451.19	450.84	462.16	449.36	
Iron and steel foundries	332	10.92	10.82	11.16	11.06		465.19	467.42	477.65	464.52	
Gray iron foundries	3321	11.44	11.37	11.69	11.63		483.91	494.60	506.18	489.62	
Malleable iron foundries	3322	12.22	11.56	12.04	12.02		515.68	477.43	504.48	485.61	
Steel foundries, nec	3325	10.15	10.04	10.43	10.34		437.47	424.69	440.15	426.01	
Primary nonferrous metals	333	13.33	13.32	13.66	13.75		581.19	580.75	583.28	588.50	
Primary aluminum	3334	13.60	13.51	13.96	14.00		595.68	598.49	593.30	595.00	
Nonferrous rolling and drawing	335	11.66	11.60	11.79	11.82		502.55	502.28	516.40	512.99	
Copper rolling and drawing	3351	10.92	10.90	11.08	11.28		461.92	470.88	486.41	488.42	
Aluminum sheet, plate, and foil	3353	14.00	14.07	14.22	14.37		632.80	637.37	637.06	648.09	
Nonferrous wire drawing and insulating	3357	11.78	11.66	11.95	11.91		500.65	497.88	509.07	500.22	
Nonferrous foundries	336	9.50	9.45	9.72	9.81		384.75	387.45	406.30	397.31	
Aluminum foundries	3361	9.62	9.60	9.95	10.07		392.50	397.44	420.89	408.84	
Fabricated metal products	34	10.20	10.21	10.51	10.51	10.50	419.22	423.72	438.27	428.81	433.65
Metal cans and shipping containers	341	13.42	13.38	13.86	13.91	-	603.90	610.13	620.93	628.73	-
Metal cans	3411	14.21	14.17	14.78	14.81		646.56	653.24	668.06	673.86	
Cutlery, hand tools, and hardware	342	10.03	10.01	10.39	10.42		406.22	407.41	425.99	412.63	
Hand and edge tools, and hand saws and blades	3423,5	9.19	9.18	9.66	9.54		371.28	369.95	399.92	379.69	
Hardware, nec	3429	10.41	10.39	10.74	10.84		418.48	422.87	434.97	424.93	
Plumbing and heating, except electric	343	9.38	9.31	9.48	9.51		380.83	383.57	385.84	377.55	
Plumbing fittings and brass goods	3432	9.01	9.01	9.04	9.07		364.91	364.91	369.74	363.71	
Heating equipment, except electric	3433	9.13	9.14	9.39	9.30		370.68	380.22	372.78	367.35	
Fabricated structural metal products	344	9.61	9.58	9.92	9.96		393.05	394.70	410.69	407.36	
Fabricated structural metal	3441	10.25	10.29	10.46	10.42		432.55	437.33	441.41	433.47	
Metal doors, sash, and trim	3442	8.10	8.04	8.26	8.34		325.62	325.62	334.53	331.10	
Fabricated plate work (boiler shops)	3443	10.34	10.21	10.58	10.59		434.28	431.88	447.53	439.49	
Sheet metal work	3444	9.92	9.91	10.35	10.44		392.83	395.41	418.14	422.82	
Architectural metal work	3446	8.86	8.84	9.33	9.36		351.74	359.79	386.26	381.89	
Screw machine products, bolts, etc	345	9.96	10.00	10.29	10.30		425.29	426.00	439.38	428.48	
Screw machine products	3451	9.31	9.29	9.64	9.69		385.43	382.75	395.24	395.35	
Bolts, nuts, rivets, and washers	3452	10.66	10.75	10.96	10.93		470.11	475.15	487.72	464.53	
Metal forgings and stampings	346	12.10	12.17	12.50	12.39		493.68	509.92	526.25	501.80	
Iron and steel forgings	3462	12.97	12.94	13.30	13.36		556.41	548.66	573.23	554.44	
Automotive stampings	3465	13.79	13.91	14.09	13.99		554.36	593.96	603.05	567.99	
Metal stampings, nec	3469	9.44	9.46	9.74	9.73		381.38	385.02	393.50	386.28	
Metal services, nec	347	8.26	8.25	8.50	8.53		332.88	332.48	351.05	341.20	
Plating and polishing	3471	8.23	8.21	8.47	8.50		330.02	330.04	348.12	334.90	
Metal coating and allied services	3479	8.32	8.33	8.56	8.58		337.79	336.53	357.81	351.78	
Ordnance and accessories, nec	348	11.30	11.35	11.57	11.60		465.56	469.89	482.47	475.60	
Ammunition, except for small arms, nec	3483	10.94	11.01	11.23	11.35		445.26	448.11	467.17	465.35	
Misc. fabricated metal products	349	9.50	9.53	9.78	9.84		386.65	391.68	402.94	398.52	
Valves and pipe fittings	3494	10.41	10.44	10.48	10.62		434.10	437.44	442.26	438.61	
Misc. fabricated wire products	3496	8.39	8.49	8.62	8.61		335.60	341.30	342.21	336.65	
Machinery, except electrical	35	10.98	10.97	11.32	11.36	11.33	464.45	460.74	482.23	474.85	471.33
Engines and turbines	351	13.71	13.65	14.01	14.10	-	621.06	582.86	596.83	607.71	-
Turbines and turbine generator sets	3511	13.90	13.88	14.13	14.29		601.87	594.06	607.59	587.32	
Internal combustion engines, nec	3519	13.66	13.58	13.97	14.04		626.99	579.87	593.73	614.95	
Farm and garden machinery	352	10.30	10.29	10.62	10.57		429.51	424.98	444.98	428.09	
Farm machinery and equipment	3523	10.91	10.79	11.39	11.29		473.49	457.50	493.19	467.41	

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	42.9	42.8	42.9	42.4		4.1	3.9	4.4	3.8	
Construction machinery	3531	44.2	43.6	43.3	43.0		3.9	3.6	4.5	3.9	
Mining machinery	3532	40.8	41.6	42.5	40.6		4.0	3.9	4.3	3.9	
Oil field machinery	3533	42.4	42.6	42.6	41.7		5.3	5.2	4.4	3.3	
Conveyors and conveying equipment	3535	43.9	43.2	44.0	44.0		5.1	4.7	5.6	5.3	
Industrial trucks and tractors	3537	41.3	41.3	41.1	40.4		3.4	3.2	3.5	2.9	
Metalworking machinery	354	42.9	42.9	43.6	42.9		5.0	5.0	5.4	5.0	
Machine tools, metal cutting types	3541	42.2	42.6	44.3	42.8		4.3	4.4	5.4	5.0	
Machine tools, metal forming types	3542	44.9	43.7	43.9	43.7		5.9	5.3	5.9	5.4	
Special dies, tools, jigs, and fixtures	3544	43.7	43.7	43.9	43.5		5.8	5.8	6.0	5.7	
Machine tool accessories	3545	41.6	41.2	42.6	41.5		4.1	3.8	4.7	4.3	
Power driven hand tools	3546	41.6	42.1	42.8	42.6		3.4	3.9	3.6	3.5	
Special industry machinery	355	41.7	41.5	42.5	41.5		4.5	4.3	4.5	4.3	
Food products machinery	3551	41.8	41.9	42.7	41.9		4.0	3.9	4.4	4.5	
Textile machinery	3552	41.8	41.7	42.6	42.1		3.2	3.4	3.5	3.8	
Printing trades machinery	3555	39.5	38.4	38.9	38.2		5.0	4.4	3.7	3.7	
General industrial machinery	356	42.5	42.3	42.6	41.7		4.5	4.4	4.5	4.3	
Pumps and pumping equipment	3561	43.7	42.8	42.9	40.9		4.5	4.3	4.3	3.5	
Ball and roller bearings	3562	43.0	43.1	43.6	42.7		5.4	5.7	6.0	5.7	
Air and gas compressors	3563	41.9	42.8	43.7	41.8		4.2	4.4	4.7	4.1	
Blowers and fans	3564	41.1	41.4	41.7	40.6		3.2	3.3	3.4	3.4	
Speed changers, drives, and gears	3566	42.1	42.9	42.4	42.0		5.3	5.3	4.9	4.7	
Power transmission equipment, nec	3568	42.0	40.1	42.0	42.1		4.8	4.6	4.7	4.9	
Office and computing machines	357	41.5	41.4	41.7	40.9		2.8	3.2	3.0	2.3	
Electronic computing equipment	3573	41.5	41.4	41.6	40.8		2.8	3.2	3.0	2.5	
Refrigeration and service machinery	358	41.5	41.3	42.3	41.8		3.5	3.3	3.8	4.0	
Refrigeration and heating equipment	3585	42.2	41.7	43.1	43.1		3.8	3.5	4.4	4.8	
Misc. machinery, except electrical	359	41.8	41.5	42.2	41.4		4.3	4.4	4.4	4.2	
Carburetors, pistons, rings, and valves	3592	42.7	42.7	42.2	40.5		4.9	4.9	4.3	4.2	
Machinery, except electrical, nec	3599	41.7	41.4	42.1	41.5		4.3	4.3	4.4	4.2	
Electrical and electronic equipment	36	40.4	40.6	40.8	40.1	40.6	2.9	3.2	3.0	2.9	
Electric distributing equipment	361	41.9	42.0	41.7	41.4	-	3.7	3.7	3.0	3.0	
Transformers	3612	41.8	42.1	42.3	41.0		3.2	3.5	3.2	2.9	
Switchgear and switchboard apparatus	3613	42.0	41.9	41.2	41.9		4.1	3.8	2.8	3.1	
Electrical industrial apparatus	362	41.8	41.6	42.1	41.4		3.8	3.5	3.7	3.7	
Motors and generators	3621	41.6	41.5	42.0	41.5		3.9	3.7	4.2	4.3	
Industrial controls	3622	41.0	40.5	41.7	40.8		2.6	2.3	2.9	2.5	
Household appliances	363	39.2	39.3	39.4	39.4		2.5	3.0	2.6	2.8	
Household refrigerators and freezers	3632	38.8	40.2	38.2	38.1		3.6	4.6	2.9	3.8	
Household laundry equipment	3633	40.3	38.3	41.3	40.9		2.2	1.9	2.9	2.4	
Electric housewares and fans	3634	39.7	40.9	40.4	39.7		2.7	3.7	2.8	2.8	
Electric lighting and wiring equipment	364	39.3	39.6	40.0	39.0		2.5	2.9	2.8	2.7	
Electric lamps	3641	40.2	39.7	40.2	38.6		2.9	2.5	2.8	2.4	
Current-carrying wiring devices	3643	38.9	38.2	40.0	39.7		2.6	2.5	2.9	3.4	
Noncurrent-carrying wiring devices	3644	39.6	40.9	40.4	39.0		2.4	3.0	2.5	2.5	
Residential lighting fixtures	3645	38.2	38.1	37.9	36.4		1.3	2.1	2.4	1.5	
Radio and TV receiving equipment	365	40.8	40.5	40.4	39.4		2.7	3.3	3.3	3.1	
Radio and TV receiving sets	3651	40.5	40.2	40.0	38.6		1.9	2.7	2.9	2.6	
Communication equipment	366	40.7	40.8	41.0	40.7		2.3	2.5	2.4	2.4	
Telephone and telegraph apparatus	3661	42.2	42.2	42.2	43.2		2.6	2.9	2.8	2.7	
Radio and TV communication equipment	3662	40.1	40.2	40.5	39.7		2.2	2.4	2.2	2.2	
Electronic components and accessories	367	39.9	40.2	40.2	39.5		3.0	3.2	3.2	3.0	
Electronic tubes	3671-3	41.1	42.0	41.0	41.3		2.9	3.6	3.2	3.0	
Semiconductors and related devices	3674	40.0	40.1	40.0	39.0		3.4	3.6	3.8	3.5	
Electronic components, nec	3679	39.9	40.4	40.6	39.9		3.0	3.2	3.1	3.1	
Misc. electrical equipment and supplies	369	41.2	41.7	42.2	40.6		3.2	3.8	3.4	2.7	
Storage batteries	3691	40.9	42.3	42.6	41.6		2.9	3.6	3.1	3.6	
Engine electrical equipment	3694	41.1	41.6	42.5	40.2		3.5	4.3	4.1	2.6	

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	\$11.02	\$10.98	\$11.39	\$11.35		\$472.76	\$469.94	\$488.63	\$481.24	
Construction machinery	3531	12.24	12.10	12.75	12.68		541.01	527.56	552.08	545.24	
Mining machinery	3532	11.43	11.47	11.23	11.20		466.34	477.15	477.28	454.72	
Oil field machinery	3533	10.69	10.70	11.04	11.02		453.26	455.82	470.30	459.53	
Conveyors and conveying equipment	3535	9.93	10.05	10.37	10.37		435.93	434.16	456.28	456.28	
Industrial trucks and tractors	3537	9.83	9.92	10.24	10.17		405.98	409.70	420.86	410.87	
Metalworking machinery	354	11.40	11.40	11.73	11.79		489.06	489.06	511.43	505.79	
Machine tools, metal cutting types	3541	11.37	11.28	11.58	11.69		479.81	480.53	512.99	500.33	
Machine tools, metal forming types	3542	11.80	11.72	12.16	12.02		529.82	512.16	533.82	525.27	
Special dies, tools, jigs, and fixtures	3544	12.21	12.22	12.57	12.63		533.58	534.01	551.82	549.41	
Machine tool accessories	3545	10.08	10.19	10.58	10.58		419.33	419.83	450.71	439.07	
Power driven hand tools	3546	9.10	9.06	9.37	9.38		378.56	381.43	401.04	399.59	
Special industry machinery	355	11.17	11.09	11.51	11.59		465.79	460.24	489.18	480.99	
Food products machinery	3551	10.99	10.99	11.49	11.60		459.38	460.48	490.62	486.04	
Textile machinery	3552	9.13	9.14	9.61	9.73		381.63	381.14	409.39	409.63	
Printing trades machinery	3555	12.31	12.09	12.39	12.60		486.25	464.26	481.97	481.32	
General industrial machinery	356	10.59	10.52	10.89	10.95		450.08	445.00	463.91	456.62	
Pumps and pumping equipment	3561	11.31	11.19	11.51	11.46		494.25	478.93	493.78	468.71	
Ball and roller bearings	3562	10.96	10.79	11.40	11.54		471.28	465.05	497.04	492.76	
Air and gas compressors	3563	10.46	10.46	10.64	10.65		438.27	447.69	464.97	445.17	
Blowers and fans	3564	9.38	9.40	9.61	9.67		385.52	389.16	400.74	392.60	
Speed changers, drives, and gears	3566	10.47	10.59	11.14	11.20		440.79	454.31	472.34	470.40	
Power transmission equipment, nec	3568	10.62	10.54	10.37	10.66		446.04	422.65	435.54	448.79	
Office and computing machines	357	10.70	10.75	11.13	11.15	-	444.05	445.05	464.12	456.04	
Electronic computing equipment	3573	10.67	10.70	11.12	11.15		442.81	442.98	462.59	454.92	
Refrigeration and service machinery	358	10.49	10.53	10.77	10.73		435.34	434.89	455.57	448.51	
Refrigeration and heating equipment	3585	10.70	10.70	10.95	10.87		451.54	446.19	471.95	468.50	
Misc. machinery, except electrical	359	10.55	10.61	10.97	11.03		440.99	440.32	462.93	456.64	
Carburetors, pistons, rings, and valves	3592	12.62	12.87	13.25	13.28		538.87	549.55	559.15	537.84	
Machinery, except electrical, nec	3599	10.26	10.30	10.67	10.75		427.84	426.42	449.21	446.13	
Electrical and electronic equipment	36	10.13	10.15	10.37	10.43	\$10.45	409.25	412.09	423.10	418.24	\$424.27
Electric distributing equipment	361	9.41	9.44	9.42	9.48	-	394.28	396.48	392.81	392.47	-
Transformers	3612	9.23	9.30	9.04	9.21		385.81	391.53	382.39	377.61	
Switchgear and switchboard apparatus	3613	9.58	9.58	9.81	9.73		402.36	401.40	404.17	407.69	
Electrical industrial apparatus	362	10.03	10.01	10.05	10.09		419.25	416.42	423.11	417.73	
Motors and generators	3621	9.90	9.93	10.03	10.04		411.84	412.10	421.26	416.66	
Industrial controls	3622	10.01	9.91	9.85	9.97		410.41	401.36	410.75	406.78	
Household appliances	363	10.14	10.07	10.16	10.31		397.49	395.75	400.30	406.21	
Household refrigerators and freezers	3632	11.77	11.77	11.78	11.82		456.68	473.15	450.00	450.34	
Household laundry equipment	3633	11.79	11.83	11.99	12.30		475.14	453.09	495.19	503.07	
Electric housewares and fans	3634	7.42	7.51	7.50	7.43		294.57	307.16	303.00	294.97	
Electric lighting and wiring equipment	364	9.49	9.58	9.85	9.90		372.96	379.37	394.00	386.10	-
Electric lamps	3641	10.72	10.84	10.92	11.35		430.94	430.35	438.98	438.11	
Current-carrying wiring devices	3643	9.43	9.42	9.74	9.88		366.83	359.84	389.60	392.24	
Noncurrent-carrying wiring devices	3644	9.23	9.19	9.42	9.44		365.51	375.87	380.57	368.16	
Residential lighting fixtures	3645	7.09	7.02	7.45	7.31		270.84	267.46	282.36	266.08	
Radio and TV receiving equipment	365	9.33	9.44	9.56	9.68		380.66	382.32	386.22	381.39	
Radio and TV receiving sets	3651	9.62	9.80	10.01	10.09		389.61	393.96	400.40	389.47	
Communication equipment	366	12.15	12.18	12.41	12.44		494.51	496.94	508.81	506.31	
Telephone and telegraph apparatus	3661	11.72	11.74	11.65	11.60		494.58	495.43	491.63	501.12	
Radio and TV communication equipment	3662	12.33	12.36	12.73	12.79		494.43	496.87	515.57	507.76	
Electronic components and accessories	367	9.21	9.22	9.63	9.71		367.48	370.64	387.13	383.55	
Electronic tubes	3671-3	11.53	11.40	12.15	12.21		473.88	478.80	498.15	504.27	
Semiconductors and related devices	3674	11.11	11.19	11.73	11.96		444.40	448.72	469.20	466.44	
Electronic components, nec	3679	8.21	8.20	8.55	8.55		327.58	331.28	347.13	341.15	
Misc. electrical equipment and supplies	369	10.54	10.66	11.02	10.95		434.25	444.52	465.04	444.57	
Storage batteries	3691	10.81	11.05	11.66	11.90		442.13	467.42	496.72	495.04	
Engine electrical equipment	3694	11.20	11.32	11.69	11.42		460.32	470.91	496.83	459.08	

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Durable goods—Continued											
Transportation equipment	37	41.7	41.8	42.6	41.6	41.6	4.2	4.4	4.5	4.1	-
Motor vehicles and equipment	371	41.7	42.2	43.0	41.4	41.3	4.4	4.8	4.7	3.8	-
Motor vehicles and car bodies	3711	40.8	41.3	43.0	40.9	-	4.4	4.6	4.7	4.2	-
Truck and bus bodies	3713	41.7	42.0	43.0	43.0	-	3.8	3.7	4.0	3.9	-
Motor vehicle parts and accessories	3714	42.2	43.0	43.4	41.8	-	4.5	5.2	5.0	3.8	-
Truck trailers	3715	39.5	39.9	40.2	38.7	-	2.6	2.7	2.7	2.1	-
Aircraft and parts	372	42.3	41.6	43.0	42.6	-	4.5	4.5	5.2	5.3	-
Aircraft	3721	41.8	41.2	43.0	42.9	-	3.9	4.1	5.2	5.4	-
Aircraft engines and engine parts	3724	42.7	41.7	42.2	42.1	-	4.8	4.7	4.9	5.2	-
Aircraft equipment, nec	3728	42.8	42.2	43.5	42.6	-	5.3	4.9	5.4	5.3	-
Ship and boat building and repairing	373	40.2	40.5	40.2	39.8	-	2.8	2.8	2.7	2.8	-
Ship building and repairing	3731	40.7	40.9	41.2	41.0	-	3.0	3.2	2.9	3.1	-
Boat building and repairing	3732	39.5	39.8	38.8	38.0	-	2.6	2.3	2.5	2.4	-
Railroad equipment	374	40.8	42.4	43.1	44.3	-	3.3	4.4	4.3	4.8	-
Guided missiles, space vehicles, and parts	376	42.9	43.0	42.7	42.3	-	4.5	4.6	3.9	4.1	-
Guided missiles and space vehicles	3761	42.9	42.8	42.9	42.3	-	4.7	4.7	4.2	4.3	-
Miscellaneous transportation equipment	379	40.5	39.5	39.5	39.5	-	3.1	2.7	2.3	2.4	-
Travel trailers and campers	3792	39.5	38.8	39.0	39.3	-	3.2	2.7	1.7	1.7	-
Instruments and related products	38	41.1	41.2	41.3	40.7	40.7	2.8	2.9	2.7	2.6	-
Engineering and scientific instruments	381	42.0	41.3	41.9	42.0	-	3.0	2.8	2.8	2.8	-
Measuring and controlling devices	382	40.9	41.0	41.2	40.1	-	2.6	2.6	2.6	2.4	-
Environmental controls	3822	38.5	39.4	40.5	38.5	-	2.1	2.4	2.3	2.2	-
Process control instruments	3823	43.4	43.4	43.0	41.2	-	3.7	3.8	3.6	3.0	-
Instruments to measure electricity	3825	40.4	40.3	40.5	40.6	-	2.0	2.0	2.2	2.0	-
Optical instruments and lenses	383	43.9	42.8	43.0	42.4	-	3.3	2.4	2.7	2.3	-
Medical instruments and supplies	384	40.2	40.5	40.4	39.7	-	2.6	2.8	2.6	2.6	-
Surgical and medical instruments	3841	39.5	39.8	40.8	40.0	-	2.3	2.6	2.9	2.7	-
Surgical appliances and supplies	3842	40.9	41.0	39.7	39.0	-	2.9	3.0	2.3	2.4	-
Ophthalmic goods	385	39.2	39.8	40.7	40.3	-	2.3	3.1	2.4	2.4	-
Photographic equipment and supplies	386	43.7	43.9	43.7	43.4	-	3.7	3.8	3.5	3.7	-
Watches, clocks, and watchcases	387	39.9	40.6	39.3	40.4	-	1.6	2.7	1.4	1.4	-
Miscellaneous manufacturing	39	38.6	39.0	39.4	38.6	39.6	2.1	2.4	2.4	2.2	-
Jewelry, silverware, and plated ware	391	37.7	37.4	37.5	36.5	-	.9	1.6	1.3	1.2	-
Jewelry, precious metal	3911	36.7	36.0	36.9	36.0	-	.3	1.0	1.1	1.1	-
Musical instruments	393	38.3	40.0	38.6	37.8	-	1.8	2.2	1.7	1.1	-
Toys and sporting goods	394	38.7	39.4	39.9	38.6	-	2.1	2.2	2.6	2.0	-
Dolls, games, toys, and children's vehicles	3942,4	37.0	38.2	38.7	37.7	-	1.2	1.7	1.7	1.1	-
Sporting and athletic goods, nec	3949	39.9	40.4	40.8	39.2	-	2.8	2.7	3.3	2.6	-
Pens, pencils, office, and art supplies	395	40.1	39.6	40.3	39.8	-	2.7	2.6	2.7	2.5	-
Costume jewelry and notions	396	36.2	36.9	38.6	37.8	-	1.3	1.8	2.8	2.7	-
Costume jewelry	3961	34.3	34.9	37.6	37.6	-	.7	.9	2.9	3.2	-
Miscellaneous manufactures	399	39.1	39.7	40.0	39.5	-	2.5	2.9	2.6	2.7	-
Signs and advertising displays	3993	39.2	39.5	39.9	39.5	-	2.8	2.9	2.9	2.5	-
Nondurable goods		39.9	40.2	40.3	40.0	40.2	3.6	3.8	3.6	3.7	3.9
Food and kindred products	20	40.3	40.8	40.7	41.0	41.2	4.5	4.8	4.4	4.9	-
Meat products	201	40.1	40.6	40.9	41.2	-	4.3	4.3	4.4	4.7	-
Meat packing plants	2011	41.5	41.9	41.9	41.5	-	5.6	5.4	5.3	5.5	-
Sausages and other prepared meats	2013	41.3	41.4	41.9	41.5	-	5.2	4.9	4.9	4.8	-
Poultry dressing plants	2016	38.5	39.2	40.0	40.8	-	3.1	3.1	3.7	4.0	-
Dairy products	202	41.7	40.8	41.3	41.3	-	4.7	4.2	4.4	4.6	-
Cheese, natural and processed	2022	39.8	39.2	40.2	39.5	-	3.6	3.5	4.1	3.5	-
Fluid milk	2026	42.5	41.9	41.7	42.2	-	5.2	4.9	4.5	5.0	-
Preserved fruits and vegetables	203	38.5	41.1	39.0	40.9	-	4.3	6.4	3.9	5.6	-
Canned specialties	2032	41.2	43.5	42.3	41.3	-	3.9	7.5	5.5	4.6	-
Canned fruits and vegetables	2033	38.8	41.8	37.8	42.5	-	5.4	7.9	4.1	7.1	-
Frozen fruits and vegetables	2037	36.4	39.9	37.7	38.8	-	3.4	5.4	3.5	4.6	-
Grain mill products	204	44.9	44.7	44.3	44.4	-	6.8	6.4	5.9	6.1	-
Flour and other grain mill products	2041	48.1	47.1	46.3	46.3	-	8.5	7.4	6.1	7.1	-
Prepared feeds, nec	2048	43.2	43.1	42.7	43.9	-	6.2	6.1	5.8	6.6	-
Bakery products	205	40.3	40.2	39.7	39.3	-	4.1	4.1	4.2	4.2	-
Bread, cake, and related products	2051	39.5	39.1	39.3	39.1	-	4.2	4.0	4.5	4.5	-
Cookies and crackers	2052	42.4	42.9	40.9	39.8	-	3.9	4.3	3.4	3.4	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Durable goods—Continued											
Transportation equipment	37	\$13.19	\$13.21	\$13.65	\$13.64	\$13.72	\$550.02	\$552.18	\$581.49	\$567.42	\$570.75
Motor vehicles and equipment	371	13.79	13.83	14.22	14.13	14.26	575.04	583.63	611.46	584.98	588.94
Motor vehicles and car bodies	3711	16.03	16.07	16.45	16.51	-	654.02	663.69	707.35	675.26	-
Truck and bus bodies	3713	11.66	11.65	11.79	11.84	-	486.22	489.30	506.97	509.12	-
Motor vehicle parts and accessories	3714	12.90	13.02	13.20	13.16	-	544.38	559.86	572.88	550.09	-
Truck trailers	3715	9.25	9.20	9.56	9.35	-	365.38	367.08	384.31	361.85	-
Aircraft and parts	372	13.63	13.63	14.12	14.28	-	576.55	567.01	607.16	608.33	-
Aircraft	3721	(^b)	(^b)	(^b)	(^b)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	\$14.04	\$13.87	\$14.30	\$14.62	-	\$599.51	\$578.38	\$603.46	\$615.50	-
Aircraft equipment, nec	3728	12.59	12.59	12.98	13.00	-	538.85	531.30	564.63	553.80	-
Ship and boat building and repairing	373	10.17	10.18	10.57	10.69	-	408.83	412.29	424.91	425.46	-
Ship building and repairing	3731	11.44	11.49	11.68	11.70	-	465.61	469.94	481.22	479.70	-
Boat building and repairing	3732	8.39	8.26	8.82	8.96	-	331.41	328.75	342.22	340.48	-
Railroad equipment	374	11.95	12.06	12.67	12.67	-	487.56	511.34	546.08	561.28	-
Guided missiles, space vehicles, and parts	376	13.15	13.20	13.65	13.75	-	564.14	567.60	582.86	581.63	-
Guided missiles and space vehicles	3761	(^b)	(^b)	(^b)	(^b)	-	-	-	-	-	-
Miscellaneous transportation equipment	379	\$10.19	\$10.05	\$10.30	\$10.32	-	\$412.70	\$396.98	\$406.85	\$407.64	-
Travel trailers and campers	3792	8.65	8.58	8.96	8.88	-	341.68	332.90	349.44	348.98	-
Instruments and related products	38	9.96	9.94	10.25	10.29	10.31	409.36	409.53	423.33	418.80	419.62
Engineering and scientific instruments	381	11.18	11.19	11.44	11.48	-	469.56	462.15	479.34	482.16	-
Measuring and controlling devices	382	9.69	9.67	10.02	10.03	-	396.32	396.47	412.82	402.20	-
Environmental controls	3822	9.30	9.30	9.35	9.34	-	358.05	366.42	378.68	359.59	-
Process control instruments	3823	9.37	9.33	9.62	9.67	-	406.66	404.92	413.66	398.40	-
Instruments to measure electricity	3825	9.79	9.77	10.30	10.28	-	395.52	393.73	417.15	417.37	-
Optical instruments and lenses	383	10.92	10.84	11.31	11.38	-	479.39	463.95	486.33	482.51	-
Medical instruments and supplies	384	8.94	8.97	9.28	9.28	-	359.39	363.29	374.91	368.42	-
Surgical and medical instruments	3841	9.15	9.23	9.46	9.37	-	361.43	367.35	385.97	374.80	-
Surgical appliances and supplies	3842	8.71	8.68	9.08	9.15	-	356.24	355.88	360.48	356.85	-
Ophthalmic goods	385	7.50	7.60	7.66	7.80	-	294.00	302.48	311.76	314.34	-
Photographic equipment and supplies	386	13.29	13.25	13.53	13.62	-	580.77	581.68	591.26	591.11	-
Watches, clocks, and watchcases	387	7.41	7.24	7.46	7.48	-	295.66	293.94	293.18	302.19	-
Miscellaneous manufacturing	39	7.98	7.95	8.24	8.30	8.16	308.03	310.05	324.66	320.38	323.14
Jewelry, silverware, and plated ware	391	8.54	8.53	8.84	9.00	-	321.96	319.02	331.50	328.50	-
Jewelry, precious metal	3911	8.63	8.62	8.82	9.05	-	316.72	310.32	325.46	325.80	-
Musical instruments	393	7.85	7.97	8.34	8.17	-	300.66	318.80	321.92	308.83	-
Toys and sporting goods	394	7.23	7.21	7.53	7.52	-	279.80	284.07	300.45	290.27	-
Dolls, games, toys, and children's vehicles	3942,4	6.97	6.96	7.40	7.41	-	257.89	265.87	286.38	279.36	-
Sporting and athletic goods, nec	3949	7.41	7.39	7.62	7.60	-	295.66	298.56	310.90	297.92	-
Pens, pencils, office, and art supplies	395	7.83	7.89	8.04	8.09	-	313.98	312.44	324.01	321.98	-
Costume jewelry and notions	396	6.76	6.77	7.08	7.04	-	244.71	249.81	273.29	266.11	-
Costume jewelry	3961	6.26	6.31	6.66	6.58	-	214.72	220.22	250.42	247.41	-
Miscellaneous manufactures	399	8.73	8.70	8.98	9.11	-	341.34	345.39	359.20	359.85	-
Signs and advertising displays	3993	9.08	9.03	9.32	9.39	-	355.94	356.69	371.87	370.91	-
Nondurable goods		9.46	9.41	9.70	9.76	9.72	377.45	378.28	390.91	390.40	390.74
Food and kindred products	20	9.12	9.02	9.37	9.35	9.26	367.54	368.02	381.36	383.35	381.51
Meat products	201	7.62	7.56	7.74	7.78	-	305.56	306.94	316.57	320.54	-
Meat packing plants	2011	8.50	8.47	8.63	8.72	-	352.75	354.89	361.60	361.88	-
Sausages and other prepared meats	2013	9.07	8.98	9.18	9.23	-	374.59	371.77	384.64	383.05	-
Poultry dressing plants	2016	6.36	6.31	6.57	6.58	-	244.86	247.35	262.80	268.46	-
Dairy products	202	9.82	9.81	10.13	10.19	-	409.49	400.25	418.37	420.85	-
Cheese, natural and processed	2022	9.12	9.17	9.48	9.47	-	362.98	359.46	381.10	374.07	-
Fluid milk	2026	10.31	10.25	10.60	10.68	-	438.18	429.48	442.02	450.70	-
Preserved fruits and vegetables	203	8.39	8.24	8.73	8.65	-	323.02	338.66	340.47	353.79	-
Canned specialties	2032	10.52	10.28	10.67	10.53	-	433.42	447.18	451.34	434.89	-
Canned fruits and vegetables	2033	8.48	8.41	8.94	8.82	-	329.02	351.54	337.93	374.85	-
Frozen fruits and vegetables	2037	7.63	7.31	7.75	7.73	-	277.73	291.67	292.18	299.92	-
Grain mill products	204	11.30	11.18	11.44	11.34	-	507.37	499.75	506.79	503.50	-
Flour and other grain mill products	2041	10.98	11.06	10.97	11.10	-	528.14	520.93	507.91	513.93	-
Prepared feeds, nec	2048	8.74	8.68	8.79	8.80	-	377.57	374.11	375.33	386.32	-
Bakery products	205	10.28	10.29	10.53	10.52	-	414.28	413.66	418.04	413.44	-
Bread, cake, and related products	2051	10.24	10.21	10.45	10.48	-	404.48	399.21	410.69	409.77	-
Cookies and crackers	2052	10.37	10.46	10.73	10.64	-	439.69	448.73	438.86	423.47	-

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	40.2	40.8	40.9	41.1	-	3.6	3.6	3.5	3.8	-
Cane and beet sugar	2061-3	41.5	41.5	43.6	43.9	-	6.0	5.3	5.0	5.9	-
Confectionery products	2065	39.0	40.0	39.5	39.8	-	3.0	3.0	2.9	3.1	-
Fats and oils	207	42.9	42.0	43.6	43.1	-	5.4	5.2	5.3	5.4	-
Beverages	208	42.2	41.0	42.2	42.3	-	5.1	4.2	4.6	4.8	-
Malt beverages	2082	44.8	43.0	44.4	44.7	-	7.2	5.7	6.8	7.2	-
Bottled and canned soft drinks	2086	41.7	41.3	41.6	42.1	-	4.9	4.3	4.3	4.6	-
Misc. food and kindred products	209	38.5	38.5	38.8	38.9	-	4.4	4.4	4.2	4.8	-
Tobacco manufactures	21	39.3	40.1	40.1	37.8	37.7	2.9	2.6	2.4	1.3	-
Cigarettes	211	39.5	41.3	40.3	38.2	-	3.0	2.9	2.5	1.3	-
Textile mill products	22	40.4	41.3	41.6	40.6	41.2	3.5	4.1	4.3	3.9	-
Weaving mills, cotton	221	39.9	41.1	41.9	41.6	-	3.6	4.2	4.8	4.9	-
Weaving mills, synthetics	222	41.2	42.4	41.6	40.5	-	3.9	4.8	4.3	3.9	-
Weaving and finishing mills, wool	223	40.3	42.4	41.3	41.5	-	2.9	4.0	3.4	3.4	-
Narrow fabric mills	224	40.6	41.1	42.5	40.5	-	3.0	3.9	4.0	2.9	-
Knitting mills	225	39.6	40.1	41.0	39.8	-	2.9	3.3	4.0	3.6	-
Women's hosiery, except socks	2251	37.4	38.6	39.3	38.1	-	1.9	2.7	2.8	2.3	-
Hosiery, nec	2252	39.0	39.6	40.8	39.7	-	2.6	2.8	4.0	3.6	-
Knit outerwear mills	2253	40.2	40.0	40.6	39.9	-	3.1	3.2	4.0	3.8	-
Knit underwear mills	2254	38.6	39.6	40.4	38.7	-	1.8	2.6	2.5	2.0	-
Circular knit fabric mills	2257	40.1	41.0	42.5	41.2	-	3.8	4.4	5.3	5.0	-
Textile finishing, except wool	226	40.8	42.2	43.1	41.3	-	3.8	5.0	5.4	4.4	-
Finishing plants, cotton	2261	42.2	43.1	43.3	42.2	-	4.0	5.0	5.3	4.9	-
Finishing plants, synthetics	2262	39.7	41.8	42.4	40.0	-	3.5	5.5	5.3	3.9	-
Floor covering mills	227	42.7	43.4	42.1	40.7	-	4.5	4.8	4.5	4.0	-
Yarn and thread mills	228	39.8	40.5	41.0	40.4	-	3.8	4.1	4.2	3.8	-
Yarn mills, except wool	2281	40.1	41.1	41.2	40.7	-	4.0	4.4	4.5	4.0	-
Throwing and winding mills	2282	38.5	37.8	39.3	37.4	-	2.5	2.4	2.7	2.3	-
Miscellaneous textile goods	229	41.7	42.2	42.3	41.6	-	3.8	4.3	4.1	3.7	-
Apparel and other textile products	23	36.7	37.0	37.4	36.7	37.0	1.5	1.8	1.9	1.6	-
Men's and boys' suits and coats	231	37.4	36.4	36.4	36.2	-	1.1	1.2	1.1	.9	-
Men's and boys' furnishings	232	36.6	36.5	37.8	37.2	-	1.3	1.4	1.8	1.5	-
Men's and boys' shirts and nightwear	2321	37.1	37.0	38.8	37.6	-	1.0	1.2	1.6	1.3	-
Men's and boys' separate trousers	2327	36.7	36.6	36.6	37.3	-	1.2	1.4	1.5	1.8	-
Men's and boys' work clothing	2328	36.4	35.2	37.1	36.9	-	1.6	1.3	2.0	1.5	-
Women's and misses' outerwear	233	35.6	35.8	35.7	35.1	-	1.5	1.6	1.6	1.3	-
Women's and misses' blouses and waists	2331	36.3	36.1	36.1	35.2	-	1.1	1.2	1.4	.8	-
Women's and misses' dresses	2335	34.9	35.3	34.8	34.5	-	1.1	1.5	1.6	1.4	-
Women's and misses' suits and coats	2337	36.0	36.9	36.4	36.7	-	2.1	2.4	2.2	2.1	-
Women's and misses' outerwear, nec	2339	35.5	35.6	35.8	35.0	-	1.6	1.5	1.6	1.3	-
Women's and children's undergarments	234	36.3	38.5	37.7	37.4	-	1.4	1.8	1.6	1.1	-
Women's and children's underwear	2341	36.7	39.4	38.3	38.1	-	1.4	1.9	1.7	1.3	-
Brassieres and allied garments	2342	33.9	33.9	34.8	33.3	-	1.7	1.1	1.1	-	-
Children's outerwear	236	37.2	36.7	37.3	37.4	-	1.8	1.7	1.9	1.9	-
Children's dresses and blouses	2361	35.3	35.7	36.0	36.6	-	1.2	1.4	1.6	1.8	-
Misc. apparel and accessories	238	37.6	38.2	38.1	38.1	-	1.9	2.3	2.2	1.7	-
Misc. fabricated textile products	239	38.1	39.1	39.4	38.1	-	2.0	2.8	2.9	2.3	-
Curtains and draperies	2391	36.4	37.0	38.0	35.3	-	.7	1.2	1.9	2.2	-
House furnishings, nec	2392	38.6	39.2	39.3	39.4	-	2.4	2.7	2.7	2.8	-
Automotive and apparel trimmings	2396	39.0	41.5	41.3	37.5	-	3.2	5.6	4.7	1.8	-
Paper and allied products	26	42.9	42.9	43.2	42.8	43.0	5.0	4.9	5.0	5.1	-
Paper and pulp mills	261,2,6	45.0	44.6	44.7	44.6	-	6.3	5.8	6.1	6.2	-
Paper mills, except building paper	262	45.0	44.6	45.0	44.9	-	6.4	5.8	6.3	6.4	-
Paperboard mills	263	43.8	43.6	44.7	44.5	-	7.4	7.2	7.0	7.6	-
Misc. converted paper products	264	41.4	41.5	41.8	41.4	-	3.8	3.9	3.8	3.9	-
Paper coating and glazing	2641	42.8	43.0	43.7	43.3	-	4.0	3.8	4.0	3.8	-
Envelopes	2642	41.2	41.0	41.0	39.5	-	2.8	3.3	2.5	2.4	-
Bags, except textile bags	2643	41.5	41.8	41.2	41.8	-	4.3	4.5	4.0	4.4	-
Paperboard containers and boxes	265	42.4	42.6	43.0	42.3	-	4.4	4.6	4.7	4.7	-
Folding paperboard boxes	2651	41.7	42.6	42.3	41.3	-	4.0	4.2	4.4	4.4	-
Corrugated and solid fiber boxes	2653	42.9	43.2	43.7	43.1	-	4.9	5.1	5.1	5.2	-
Sanitary food containers	2654	43.5	42.1	43.4	43.1	-	5.0	4.3	5.2	5.5	-

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	\$9.58	\$9.49	\$9.93	\$10.02		\$385.12	\$387.19	\$406.14	\$411.82	
Cane and beet sugar	2061-3	11.49	11.45	11.58	11.64		476.84	475.18	504.89	511.00	
Confectionery products	2065	8.37	8.27	8.82	8.93		326.43	330.80	348.39	355.41	
Fats and oils	207	9.56	9.55	9.80	10.04		410.12	401.10	427.28	432.72	
Beverages	208	12.25	12.22	12.91	12.94		516.95	501.02	544.80	547.36	
Malt beverages	2082	17.09	16.93	18.05	18.07		765.63	727.99	801.42	807.73	
Bottled and canned soft drinks	2086	9.72	9.78	10.35	10.35		405.32	403.91	430.56	435.74	
Misc. food and kindred products	209	8.39	8.41	8.73	8.83		323.02	323.79	338.72	343.49	
Tobacco manufactures	21	15.78	14.97	16.48	16.31	\$15.39	620.15	600.30	660.85	616.52	\$580.20
Cigarettes	211	17.59	17.39	18.64	18.34	-	694.81	718.21	751.19	700.59	-
Textile mill products	22	7.31	7.37	7.65	7.65	7.70	295.32	304.38	318.24	310.59	317.24
Weaving mills, cotton	221	7.62	7.66	8.00	8.00	-	304.04	314.83	335.20	332.80	-
Weaving mills, synthetics	222	7.87	7.92	8.24	8.26		324.24	335.81	342.78	334.53	
Weaving and finishing mills, wool	223	7.95	8.02	8.56	8.47		320.39	340.05	353.53	351.51	
Narrow fabric mills	224	6.80	6.84	7.18	7.13	-	276.08	281.12	305.15	288.77	
Knitting mills	225	6.62	6.68	6.90	6.91		262.15	267.87	282.90	275.02	
Women's hosiery, except socks	2251	6.52	6.57	6.78	6.73		243.85	253.60	266.45	256.41	
Hosiery, nec	2252	6.39	6.44	6.76	6.72		249.21	255.02	275.81	266.78	
Knit outerwear mills	2253	6.36	6.42	6.49	6.56		255.67	256.80	263.49	261.74	
Knit underwear mills	2254	6.40	6.49	6.86	6.87		247.04	257.00	277.14	265.87	
Circular knit fabric mills	2257	7.37	7.45	7.75	7.75		295.54	305.45	329.38	319.30	
Textile finishing, except wool	226	7.72	7.83	8.13	8.03		314.98	330.43	350.40	331.64	
Finishing plants, cotton	2261	7.71	7.88	8.16	8.09		325.36	339.63	353.33	341.40	
Finishing plants, synthetics	2262	7.99	8.12	8.43	8.34		317.20	339.42	357.43	333.60	
Floor covering mills	227	7.66	7.76	7.94	8.04		327.08	336.78	334.27	327.23	
Yarn and thread mills	228	7.01	7.05	7.37	7.36		279.00	285.53	302.17	297.34	
Yarn mills, except wool	2281	6.99	7.01	7.38	7.35		280.30	288.11	304.06	299.15	
Throwing and winding mills	2282	7.17	7.32	7.35	7.52		276.05	276.70	288.86	281.25	
Miscellaneous textile goods	229	8.31	8.35	8.57	8.54		346.53	352.37	362.51	355.26	
Apparel and other textile products	23	6.03	6.09	6.33	6.28	6.35	221.30	225.33	236.74	230.48	234.95
Men's and boys' suits and coats	231	6.81	6.74	7.07	7.19	-	254.69	245.34	257.35	260.28	-
Men's and boys' furnishings	232	5.57	5.58	5.77	5.76		203.86	203.67	218.11	214.27	
Men's and boys' shirts and nightwear	2321	5.40	5.40	5.61	5.58		200.34	199.80	217.67	209.81	
Men's and boys' separate trousers	2327	5.45	5.46	5.61	5.60		200.02	199.84	205.33	208.88	
Men's and boys' work clothing	2328	5.61	5.61	5.73	5.76		204.20	197.47	212.58	212.54	
Women's and misses' outerwear	233	5.82	5.89	6.10	6.10		207.19	210.86	217.77	214.11	
Women's and misses' blouses and waists	2331	5.04	5.11	5.29	5.24		182.95	184.47	190.97	184.45	
Women's and misses' dresses	2335	6.12	6.27	6.65	6.62		213.59	221.33	231.42	228.39	
Women's and misses' suits and coats	2337	6.54	6.52	6.45	6.57		235.44	240.59	234.78	241.12	
Women's and misses' outerwear, nec	2339	5.75	5.78	5.98	6.00	-	204.13	205.77	214.08	210.00	
Women's and children's undergarments	234	5.59	5.65	5.90	5.90		202.92	217.53	222.43	220.66	
Women's and children's underwear	2341	5.45	5.55	5.75	5.80		200.02	218.67	220.23	220.98	
Brassieres and allied garments	2342	6.45	6.27	6.74	6.57		218.66	212.55	234.55	218.78	
Children's outerwear	236	5.44	5.47	5.65	5.63		202.37	200.75	210.75	210.56	
Children's dresses and blouses	2361	5.45	5.49	5.60	5.68		192.39	195.99	201.60	207.89	
Misc. apparel and accessories	238	5.93	6.01	6.12	6.06		222.97	229.58	233.17	230.89	
Misc. fabricated textile products	239	7.16	7.26	7.62	7.40		272.80	283.87	300.23	281.94	
Curtains and draperies	2391	5.93	5.99	6.38	6.33		215.85	221.63	242.44	223.45	
House furnishings, nec	2392	6.25	6.24	6.40	6.48		241.25	244.61	251.52	255.31	
Automotive and apparel trimmings	2396	10.68	11.04	11.80	11.05		416.52	458.16	487.34	414.38	
Paper and allied products	26	11.72	11.65	11.91	12.05	11.92	502.79	499.79	514.51	515.74	512.56
Paper and pulp mills	261,2,6	14.40	14.31	14.66	14.91	-	648.00	638.23	655.30	664.99	-
Paper mills, except building paper	262	14.42	14.34	14.69	14.94		648.90	639.56	661.05	670.81	
Paperboard mills	263	14.51	14.48	14.60	14.83		635.54	631.33	652.62	659.94	
Misc. converted paper products	264	10.11	10.08	10.39	10.47		418.55	418.32	434.30	433.46	
Paper coating and glazing	2641	11.26	11.23	11.39	11.56	-	481.93	482.89	497.74	500.55	
Envelopes	2642	9.64	9.57	9.72	9.89		397.17	392.37	398.52	390.66	
Bags, except textile bags	2643	9.41	9.39	9.60	9.76		390.52	392.50	395.52	407.97	
Paperboard containers and boxes	265	10.03	9.99	10.16	10.19		425.27	425.57	436.88	431.04	
Folding paperboard boxes	2651	10.32	10.28	10.58	10.59		430.34	437.93	447.53	437.37	
Corrugated and solid fiber boxes	2653	10.21	10.21	10.35	10.38		438.01	441.07	452.30	447.38	
Sanitary food containers	2654	9.68	9.65	9.87	9.86		421.08	406.27	428.36	424.97	

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 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Nondurable goods—Continued											
Printing and publishing	27	37.8	38.1	37.4	37.4	37.9	2.9	3.2	2.5	2.6	
Newspapers	271	33.2	33.5	33.0	33.1	-	1.3	1.4	1.2	1.2	
Periodicals	272	38.1	38.3	37.0	37.3		3.0	3.3	2.2	2.4	-
Books	273	39.1	39.6	38.0	38.7		3.3	3.7	2.3	2.9	
Book publishing	2731	37.7	38.1	37.6	37.9		2.1	2.4	1.9	2.2	
Book printing	2732	41.4	41.9	38.6	40.0		5.1	5.7	2.9	4.0	
Miscellaneous publishing	274	36.2	36.3	36.2	36.1		1.9	2.0	1.7	1.8	
Commercial printing	275	39.1	39.6	38.8	38.6		3.2	3.7	3.0	3.1	
Commercial printing, letterpress	2751	38.9	39.6	38.5	38.7		2.9	3.4	2.7	2.8	
Commercial printing, lithographic	2752	38.9	39.4	38.8	38.6		3.3	3.8	3.0	3.1	
Manifold business forms	276	41.9	41.7	41.9	41.3		4.6	4.4	4.0	4.0	
Blankbooks and bookbinding	278	39.0	38.9	38.3	37.6		3.1	3.3	2.7	2.6	-
Printing trade services	279	39.3	39.0	38.2	38.6		4.8	4.7	3.6	3.9	
Chemicals and allied products	28	42.0	41.9	42.5	42.2	42.1	4.0	4.0	4.3	4.3	
Industrial inorganic chemicals	281	42.8	42.5	43.1	42.8	-	4.3	4.2	4.4	4.5	
Industrial inorganic chemicals, nec	2819	42.7	42.7	42.7	42.3		4.2	4.3	4.3	4.3	
Plastics materials and synthetics	282	43.5	43.0	43.2	43.4		5.0	4.7	5.1	5.2	
Plastics materials and resins	2821	43.6	43.6	43.8	43.7		5.0	5.2	5.3	5.3	
Organic fibers, noncellulosic	2824	43.6	42.9	43.5	43.6		5.0	4.3	4.8	5.2	
Drugs	283	40.4	40.3	42.1	40.7		2.8	2.9	3.7	3.3	
Pharmaceutical preparations	2834	40.0	40.2	41.8	40.2		2.8	2.9	3.6	3.2	-
Soap, cleaners, and toilet goods	284	39.7	40.3	40.2	39.4		3.2	3.4	2.9	2.8	
Soap and other detergents	2841	43.6	43.3	42.9	42.4		5.4	4.9	5.3	5.3	
Polishing, sanitation, and finishing preparations	2842,3	40.4	40.8	41.3	40.6		2.9	3.0	2.8	3.0	
Toilet preparations	2844	37.3	38.5	38.2	37.2		2.1	2.8	1.7	1.3	
Paints and allied products	285	42.2	41.5	42.4	41.5		4.0	3.7	4.0	3.9	-
Industrial organic chemicals	286	43.7	43.3	44.4	45.1		5.2	4.9	5.7	5.9	
Cyclic crudes and intermediates	2865	40.8	41.4	44.8	44.0		5.1	4.7	6.3	5.4	
Gum, wood, and industrial organic chemicals, nec	2861,9	44.5	43.8	44.3	45.4		5.2	5.0	5.5	6.1	
Agricultural chemicals	287	42.4	42.5	43.1	43.3		4.5	4.6	4.5	4.5	-
Miscellaneous chemical products	289	41.8	42.0	41.8	42.4		3.6	3.8	3.9	3.9	-
Petroleum and coal products	29	45.3	44.6	44.6	44.3	44.5	5.9	5.7	5.4	5.7	
Petroleum refining	291	45.2	44.3	44.9	44.1	-	5.2	5.1	5.0	5.0	
Paving and roofing materials	295	47.0	47.1	44.7	46.4		9.2	8.7	7.7	8.9	
Rubber and misc. plastics products	30	41.1	41.3	41.6	40.8	41.0	4.0	4.2	3.9	3.8	
Tires and inner tubes	301	44.8	45.1	44.1	42.7	-	6.8	7.0	5.2	4.8	
Rubber and plastics footwear	302	39.7	40.0	40.8	42.0		1.2	2.6	2.0	2.6	
Reclaimed rubber, and rubber and plastics hose and belting	303,4	45.4	44.5	43.0	41.7		5.2	4.7	3.9	4.0	-
Fabricated rubber products, nec	306	40.8	41.0	40.7	40.0		3.4	3.4	3.0	2.9	
Miscellaneous plastics products	307	40.4	40.8	41.3	40.6		3.8	4.0	3.9	3.8	
Leather and leather products	31	37.3	37.7	38.7	37.8	38.5	1.6	2.1	2.1	1.9	
Leather tanning and finishing	311	39.9	41.2	42.6	40.2	-	3.2	3.8	5.3	4.3	
Footwear, except rubber	314	37.6	37.3	38.6	37.6		1.4	1.9	1.7	1.5	
Men's footwear, except athletic	3143	37.7	37.3	38.5	37.5		.9	1.1	1.3	.9	
Women's footwear, except athletic	3144	38.2	37.1	38.1	37.8		2.2	2.8	2.1	2.2	
Luggage	316	36.8	39.8	39.8	39.1		3.3	3.6	3.3	3.7	
Handbags and personal leather goods	317	35.4	36.5	35.9	36.9		1.2	1.7	1.7	1.8	
Transportation and public utilities		39.8	39.7	39.6	39.8	39.8					
Railroad transportation:											
Class I railroads ^a	4011	46.3	45.1	45.0	44.5						
Local and interurban passenger transit	41	36.7	36.7	34.7	36.7						-
Local and suburban transportation	411	39.1	39.3	38.7	39.0						
Intercity highway transportation	413	40.8	40.9	39.5	40.0		-				
Trucking and warehousing	42	38.5	38.6	38.7	38.6						
Trucking and trucking terminals	421,3	38.5	38.6	38.7	38.6						
Public warehousing	422	39.1	39.3	38.9	39.0						
Pipe lines, except natural gas	46	43.5	40.0	42.0	41.5						

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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Nondurable goods—Continued											
Printing and publishing	27	\$10.48	\$10.54	\$10.75	\$10.82	\$10.87	\$396.14	\$401.57	\$402.05	\$404.67	\$411.97
Newspapers	271	10.44	10.46	10.76	10.82	-	346.61	350.41	355.08	358.14	-
Periodicals	272	10.91	11.13	11.36	11.43	-	415.67	426.28	420.32	426.34	-
Books	273	9.39	9.53	9.51	9.64	-	367.15	377.39	361.38	373.07	-
Book publishing	2731	9.01	9.12	9.08	9.23	-	339.68	347.47	341.41	349.82	-
Book printing	2732	9.93	10.10	10.15	10.26	-	411.10	423.19	391.79	410.40	-
Miscellaneous publishing	274	9.86	9.95	10.19	10.24	-	356.93	361.19	368.88	369.66	-
Commercial printing	275	10.75	10.79	10.98	11.06	-	420.33	427.28	426.02	426.92	-
Commercial printing, letterpress	2751	10.31	10.25	10.58	10.64	-	401.06	405.90	407.33	411.77	-
Commercial printing, lithographic	2752	10.88	10.98	11.12	11.22	-	423.23	432.61	431.46	433.09	-
Manifold business forms	276	11.04	11.09	11.28	11.37	-	462.58	462.45	472.63	469.58	-
Blankbooks and bookbinding	278	8.35	8.43	8.68	8.62	-	325.65	327.93	332.44	324.11	-
Printing trade services	279	12.95	12.96	13.34	13.41	-	508.94	505.44	509.59	517.63	-
Chemicals and allied products	28	12.70	12.62	12.98	13.11	13.14	533.40	528.78	551.65	553.24	553.19
Industrial inorganic chemicals	281	13.99	13.99	14.13	14.24	-	598.77	594.58	609.00	609.47	-
Industrial inorganic chemicals, nec	2819	14.07	14.06	14.21	14.27	-	600.79	600.36	606.77	603.62	-
Plastics materials and synthetics	282	13.08	13.01	13.30	13.42	-	568.98	559.43	574.56	582.43	-
Plastics materials and resins	2821	13.86	13.85	14.17	14.25	-	604.30	603.86	620.65	622.73	-
Organic fibers, noncellulosic	2824	12.46	12.30	12.61	12.83	-	543.26	527.67	548.54	559.39	-
Drugs	283	11.99	12.02	12.38	12.48	-	484.40	484.41	521.20	507.94	-
Pharmaceutical preparations	2834	11.79	11.76	12.30	12.40	-	471.60	472.75	514.14	498.48	-
Soap, cleaners, and toilet goods	284	11.04	10.90	11.18	11.31	-	438.29	439.27	449.44	445.61	-
Soap and other detergents	2841	14.44	14.47	15.02	15.19	-	629.58	626.55	644.36	644.06	-
Polishing, sanitation, and finishing preparations	2842,3	10.27	10.34	10.28	10.29	-	414.91	421.87	424.56	417.77	-
Toilet preparations	2844	9.29	9.07	9.34	9.45	-	346.52	349.20	356.79	351.54	-
Paints and allied products	285	11.15	11.13	11.63	11.54	-	470.53	461.90	493.11	478.91	-
Industrial organic chemicals	286	15.19	15.04	15.62	15.76	-	663.80	651.23	693.53	710.78	-
Cyclic crudes and intermediates	2865	14.89	14.68	15.61	15.58	-	607.51	607.75	699.33	685.52	-
Gum, wood, and industrial organic chemicals, nec	2861,9	15.27	15.14	15.62	15.81	-	679.52	663.13	691.97	717.77	-
Agricultural chemicals	287	12.48	12.39	12.44	12.76	-	529.15	526.58	536.16	552.51	-
Miscellaneous chemical products	289	11.54	11.54	11.90	11.98	-	482.37	484.68	497.42	507.95	-
Petroleum and coal products	29	14.93	14.84	15.23	15.31	15.18	676.33	661.86	679.26	678.23	675.51
Petroleum refining	291	16.20	16.11	16.43	16.55	-	732.24	713.67	737.71	729.86	-
Paving and roofing materials	295	11.56	11.58	12.17	12.21	-	543.32	545.42	544.00	566.54	-
Rubber and misc. plastics products	30	9.15	9.17	9.41	9.45	9.43	376.07	378.72	391.46	385.56	386.63
Tires and inner tubes	301	14.42	14.42	14.93	14.91	-	646.02	650.34	658.41	636.66	-
Rubber and plastics footwear	302	6.33	6.37	6.58	6.51	-	251.30	254.80	268.46	273.42	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	9.35	9.26	9.52	9.57	-	424.49	412.07	409.36	399.07	-
Fabricated rubber products, nec	306	8.78	8.74	8.87	8.94	-	358.22	358.34	361.01	357.60	-
Miscellaneous plastics products	307	8.49	8.55	8.76	8.80	-	343.00	348.84	361.79	357.28	-
Leather and leather products	31	6.19	6.22	6.59	6.53	6.57	230.89	234.49	255.03	246.83	252.95
Leather tanning and finishing	311	8.37	8.35	8.79	8.75	-	333.96	344.02	374.45	351.75	-
Footwear, except rubber	314	5.89	5.94	6.26	6.22	-	221.46	221.56	241.64	233.87	-
Men's footwear, except athletic	3143	6.20	6.26	6.70	6.68	-	233.74	233.50	257.95	250.50	-
Women's footwear, except athletic	3144	5.68	5.69	5.91	5.89	-	216.98	211.10	225.17	222.64	-
Luggage	316	6.24	6.27	6.68	6.60	-	229.63	249.55	265.86	258.06	-
Handbags and personal leather goods	317	5.82	5.84	6.00	5.90	-	206.03	213.16	215.40	217.71	-
Transportation and public utilities		12.32	12.35	12.48	12.57	12.52	490.34	490.30	494.21	500.29	498.30
Railroad transportation:											
Class I railroads ³	4011	15.04	14.87	15.35	15.35	-	696.35	670.64	690.75	683.08	-
Local and interurban passenger transit	41	8.55	8.62	8.83	9.08	-	313.79	316.35	306.40	333.24	-
Local and suburban transportation	411	9.15	9.15	9.56	9.76	-	357.77	359.60	369.97	380.64	-
Intercity highway transportation	413	11.35	11.23	11.52	11.57	-	463.08	459.31	455.04	462.80	-
Trucking and warehousing	42	10.90	10.93	11.29	11.33	-	419.65	421.90	436.92	437.34	-
Trucking and trucking terminals	421,3	11.04	11.09	11.44	11.48	-	425.04	428.07	442.73	443.13	-
Public warehousing	422	8.89	8.83	9.24	9.26	-	347.60	347.02	359.44	361.14	-
Pipe lines, except natural gas	46	15.47	15.42	15.91	15.85	-	672.95	616.80	668.22	657.78	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a	July 1988	Aug. 1988	June 1989	July 1989 ^a	Aug. 1989 ^a
Transportation and public utilities—Continued											
Communication	48	40.3	40.2	39.8	40.2						
Telephone communication	481	42.0	41.9	41.6	42.0						
Radio and television broadcasting	483	36.1	35.5	35.1	35.6						
Electric, gas, and sanitary services	49	41.7	41.4	41.9	42.0						
Electric services	491	42.0	41.7	42.2	42.4						
Gas production and distribution	492	41.3	40.6	41.4	41.3						-
Combination utility services	493	41.3	41.4	42.4	41.9						
Sanitary services	495	42.6	42.3	41.8	42.2						
Wholesale trade		38.3	38.0	38.1	38.3	38.1					
Durable goods	50	38.7	38.5	38.6	38.7						
Motor vehicles and automotive equipment	501	38.4	37.9	37.6	37.7						
Furniture and home furnishings	502	37.2	37.3	37.5	37.3						
Lumber and construction materials	503	39.7	39.6	39.6	39.8						-
Sporting goods, toys, and hobby goods	504	36.3	36.1	35.0	35.7						
Metals and minerals, except petroleum	505	39.8	40.0	40.2	40.1						
Electrical goods	506	38.2	37.8	38.2	38.3						
Hardware, plumbing, and heating equipment	507	38.9	38.6	38.9	39.3						
Machinery, equipment, and supplies	508	39.0	38.8	39.1	39.1						
Miscellaneous durable goods	509	38.1	38.1	38.3	37.8						
Nondurable goods	51	37.6	37.3	37.4	37.6						
Paper and paper products	511	37.0	36.9	37.2	37.2						
Drugs, proprietaries, and sundries	512	36.9	37.2	37.1	37.4						
Apparel, piece goods, and notions	513	36.6	36.4	36.2	36.0						
Groceries and related products	514	38.4	38.0	37.8	38.3						
Chemicals and allied products	516	40.1	40.0	40.3	39.9						
Petroleum and petroleum products	517	38.8	38.1	38.2	38.7						
Beer, wine, and distilled beverages	518	36.5	36.5	36.4	36.6						
Miscellaneous nondurable goods	519	36.7	36.5	36.8	36.9						
Retail trade		30.0	29.8	29.2	29.9	29.7					
Building materials and garden supplies	52	37.3	37.0	36.9	37.1						
Lumber and other building materials	521	39.0	38.7	38.6	38.9						
Hardware stores	525	33.8	33.6	33.2	33.4						
General merchandise stores	53	28.5	28.3	27.9	28.5						
Department stores	531	28.1	27.9	27.8	28.4						
Variety stores	533	30.1	29.8	27.6	28.1						
Misc. general merchandise stores	539	31.1	30.5	29.2	30.2						
Food stores	54	31.5	31.1	30.5	31.1						
Grocery stores	541	31.6	31.2	30.7	31.3						
Retail bakeries	546	29.4	29.6	29.8	29.8						
Automotive dealers and service stations	55	36.9	36.6	36.4	36.7						
New and used car dealers	551,2	37.3	37.2	37.1	37.2						
Auto and home supply stores	553	39.4	38.8	38.7	39.0						
Gasoline service stations	554	35.0	34.6	34.1	34.8						
Apparel and accessory stores	56	27.8	27.9	27.2	27.9						
Men's and boys' clothing and furnishings	561	30.2	29.5	29.1	29.5						
Women's ready-to-wear stores	562	26.1	26.2	25.0	25.7						
Family clothing stores	565	27.8	27.8	27.1	27.9						
Shoe stores	566	29.4	29.6	29.1	29.9						
Furniture and home furnishings stores	57	33.4	33.2	33.1	33.4						
Furniture and home furnishings stores	571	33.9	33.8	33.6	33.8						
Household appliance stores	572	33.9	33.8	33.9	33.7						
Radio, television, and music stores	573	32.4	32.0	31.9	32.7						
Eating and drinking places ⁴	58	26.8	26.7	25.7	26.6						

See footnotes at end of table.

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 1988	July 1988	June 1989	July 1989 ^P	June 1988	July 1988	June 1989	July 1989 ^P
Average hourly earnings, excluding lump-sum payments	\$13.93	\$14.09	\$14.73	\$14.86	\$13.51	\$13.56	\$14.16	\$14.20
Average hourly earnings, including lump-sum payments	14.38	14.54	15.18	15.31	13.79	13.84	14.62	14.67

^P = preliminary.

**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 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Retail trade—Continued											
Miscellaneous retail	59	\$6.56	\$6.54	\$6.76	\$6.78		\$200.08	\$198.82	\$202.12	\$206.11	
Drug stores and proprietary stores	591	6.28	6.22	6.39	6.48		178.35	174.78	176.36	182.74	
Miscellaneous shopping goods stores	594	6.10	6.08	6.35	6.32		182.39	180.58	182.25	187.70	
Nonstore retailers	596	7.54	7.50	7.76	7.81		239.77	243.00	255.30	255.39	
Fuel and ice dealers	598	9.04	9.10	9.24	9.24		348.04	348.53	345.58	350.20	
Retail stores, nec	599	6.74	6.73	6.95	7.02		215.68	211.32	219.62	221.13	
Finance, insurance, and real estate⁵		9.03	9.03	9.48	9.58	\$9.50	325.98	322.37	339.38	347.75	\$340.10
Banking	60	7.85	7.84	8.21	8.28		284.96	278.32	293.10	301.39	
Commercial and stock savings banks	602	7.54	7.52	7.80	7.89		272.95	266.96	278.46	287.20	
Credit agencies other than banks	61	8.24	8.27	8.61	8.72		301.58	299.37	313.40	322.64	
Savings and loan associations	612	7.74	7.73	8.05	8.15		279.41	276.73	290.61	297.48	
Personal credit institutions	614	7.73	7.80	8.14	8.22		283.69	281.58	295.48	302.50	
Insurance carriers	63	10.18	10.23	10.67	10.68		378.70	377.49	396.92	400.50	
Life insurance	631	9.66	9.71	9.99	9.95		355.49	354.42	369.63	372.13	
Medical service and health insurance	632	9.75	9.81	10.25	10.41		372.45	368.86	388.48	393.50	
Fire, marine, and casualty insurance	633	10.71	10.77	11.39	11.40		395.20	394.18	421.43	424.08	
Services		8.80	8.81	9.26	9.33	9.29	290.40	288.97	302.80	308.82	305.64
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	6.32	6.23	6.58	6.53		203.50	200.61	205.30	210.27	
Personal services:											
Laundry, cleaning, and garment services	721	6.36	6.35	6.57	6.62		218.15	217.17	226.67	227.07	
Beauty shops ⁴	723	6.84	6.79	6.88	6.94		205.20	203.02	206.40	206.12	
Business services	73	9.10	9.09	9.53	9.69		308.49	308.15	322.11	326.55	
Advertising	731	12.28	12.39	12.79	13.28		456.82	453.47	470.67	495.34	
Services to buildings	734	6.95	6.90	7.19	7.23		206.42	203.55	214.98	215.45	
Computer and data processing services	737	13.15	13.10	13.97	14.21		498.39	495.18	526.67	538.56	
Auto repair, services, and garages	75	8.13	8.19	8.38	8.39		300.00	301.39	309.22	312.95	
Automotive repair shops	753	8.82	8.92	9.25	9.25		336.04	338.96	355.20	355.20	
Miscellaneous repair services	76	9.49	9.55	9.86	9.92		365.37	367.68	375.67	377.95	
Motion pictures	78	10.59	10.86	11.88	11.08		312.41	314.94	356.40	341.26	
Motion picture production and services	781	14.87	15.13	15.70	15.10		562.09	550.73	590.32	557.19	
Amusement and recreation services	79	6.74	6.62	7.25	7.08		204.90	199.26	209.53	216.65	
Health services	80	9.23	9.25	9.73	9.84		301.82	299.70	315.25	323.74	
Offices of physicians	801	8.80	8.79	9.23	9.35		274.56	275.13	289.82	296.40	
Offices of dentists	802	8.90	8.95	9.40	9.44		251.87	252.39	269.78	269.04	
Nursing and personal care facilities	805	6.37	6.39	6.73	6.80		205.11	201.29	213.34	223.04	
Hospitals	806	10.53	10.54	11.07	11.24		361.18	359.41	376.38	385.53	
Legal services	81	12.75	12.70	13.39	13.65		446.25	436.88	468.65	483.21	
Miscellaneous services	89	12.60	12.57	13.10	13.42		480.06	475.15	495.18	507.28	
Engineering and architectural services	891	13.30	13.21	13.81	14.06		521.36	517.83	539.97	549.75	
Accounting, auditing, and bookkeeping	893	11.11	11.07	11.41	11.88		409.96	399.63	414.18	427.68	

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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Retail trade—Continued											
Miscellaneous retail	59	30.5	30.4	29.9	30.4						
Drug stores and proprietary stores	591	28.4	28.1	27.6	28.2			-	-	-	
Miscellaneous shopping goods stores	594	29.9	29.7	28.7	29.7			-	-	-	
Nonstore retailers	596	31.8	32.4	32.9	32.7			-	-	-	
Fuel and ice dealers	598	38.5	38.3	37.4	37.9						
Retail stores, nec	599	32.0	31.4	31.6	31.5			-			
Finance, insurance, and real estate⁵		36.1	35.7	35.8	36.3	35.8					
Banking	60	36.3	35.5	35.7	36.4	-	-				
Commercial and stock savings banks	602	36.2	35.5	35.7	36.4						
Credit agencies other than banks	61	36.6	36.2	36.4	37.0						
Savings and loan associations	612	36.1	35.8	36.1	36.5						
Personal credit institutions	614	36.7	36.1	36.3	36.8						
Insurance carriers	63	37.2	36.9	37.2	37.5						
Life insurance	631	36.8	36.5	37.0	37.4						
Medical service and health insurance	632	38.2	37.6	37.9	37.8			-	-		
Fire, marine, and casualty insurance	633	36.9	36.6	37.0	37.2			-	-		
Services		33.0	32.8	32.7	33.1	32.9					
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	32.2	32.2	31.2	32.2			-	-	-	
Personal services:											
Laundry, cleaning, and garment services	721	34.3	34.2	34.5	34.3						
Beauty shops ⁴	723	30.0	29.9	30.0	29.7			-	-		
Business services	73	33.9	33.9	33.8	33.7						
Advertising	731	37.2	36.6	36.8	37.3			-	-		
Services to buildings	734	29.7	29.5	29.9	29.8						
Computer and data processing services	737	37.9	37.8	37.7	37.9						
Auto repair, services, and garages	75	36.9	36.8	36.9	37.3						
Automotive repair shops	753	38.1	38.0	38.4	38.4					-	
Miscellaneous repair services	76	38.5	38.5	38.1	38.1						
Motion pictures	78	29.5	29.0	30.0	30.8						
Motion picture production and services	781	37.8	36.4	37.6	36.9						
Amusement and recreation services	79	30.4	30.1	28.9	30.6						
Health services	80	32.7	32.4	32.4	32.9						
Offices of physicians	801	31.2	31.3	31.4	31.7						
Offices of dentists	802	28.3	28.2	28.7	28.5					-	
Nursing and personal care facilities	805	32.2	31.5	31.7	32.8			-	-		
Hospitals	806	34.3	34.1	34.0	34.3						
Legal services	81	35.0	34.4	35.0	35.4						
Miscellaneous services	89	38.1	37.8	37.8	37.8						
Engineering and architectural services	891	39.2	39.2	39.1	39.1						
Accounting, auditing, and bookkeeping	893	36.9	36.1	36.3	36.0			-			

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 1988	Aug. 1988	June 1989	July 1989 ^P	Aug. 1989 ^P	July 1988	Aug. 1988	June 1989	July 1989 ^P	Aug. 1989 ^P
Transportation and public utilities—Continued											
Communication	48	\$12.73	\$12.91	\$13.04	\$13.04	-	\$513.02	\$518.98	\$518.99	\$524.21	-
Telephone communication	481	13.42	13.65	13.70	13.71	-	563.64	571.94	569.92	575.82	-
Radio and television broadcasting	483	11.35	11.41	12.03	12.00	-	409.74	405.06	422.25	427.20	-
Electric, gas, and sanitary services	49	14.16	14.19	14.59	14.84	-	590.47	587.47	611.32	623.28	-
Electric services	491	14.32	14.42	14.88	15.17	-	601.44	601.31	627.94	643.21	-
Gas production and distribution	492	13.14	13.15	13.43	13.83	-	542.68	533.89	556.00	571.18	-
Combination utility services	493	16.77	16.63	17.13	17.37	-	692.60	688.48	726.31	727.80	-
Sanitary services	495	11.00	11.02	11.17	11.25	-	468.60	466.15	466.91	474.75	-
Wholesale trade		9.95	9.91	10.31	10.40	\$10.35	381.09	376.58	392.81	398.32	\$394.34
Durable goods	50	10.16	10.12	10.54	10.65	-	393.19	389.62	406.84	412.16	-
Motor vehicles and automotive equipment	501	9.20	9.19	9.61	9.69	-	353.28	348.30	361.34	365.31	-
Furniture and home furnishings	502	9.49	9.34	9.74	9.76	-	353.03	348.38	365.25	364.05	-
Lumber and construction materials	503	9.59	9.66	10.02	10.08	-	380.72	382.54	396.79	401.18	-
Sporting goods, toys, and hobby goods	504	9.69	9.56	9.68	9.84	-	351.75	345.12	338.80	351.29	-
Metals and minerals, except petroleum	505	10.56	10.52	10.95	10.96	-	420.29	420.80	440.19	439.50	-
Electrical goods	506	10.58	10.57	11.02	11.03	-	404.16	399.55	420.96	422.45	-
Hardware, plumbing, and heating equipment	507	9.50	9.42	9.85	10.11	-	369.55	363.61	383.17	397.32	-
Machinery, equipment, and supplies	508	10.86	10.83	11.28	11.42	-	423.54	420.20	441.05	446.52	-
Miscellaneous durable goods	509	8.02	7.99	8.36	8.40	-	305.56	304.42	320.19	317.52	-
Nondurable goods	51	9.65	9.60	9.95	10.04	-	362.84	358.08	372.13	377.50	-
Paper and paper products	511	10.44	10.34	10.84	10.94	-	386.28	381.55	403.25	406.97	-
Drugs, proprietaries, and sundries	512	11.12	10.92	11.32	11.50	-	410.33	406.22	419.97	430.10	-
Apparel, piece goods, and notions	513	9.44	9.36	9.86	9.92	-	345.50	340.70	356.93	357.12	-
Groceries and related products	514	9.79	9.74	10.10	10.18	-	375.94	370.12	381.78	389.89	-
Chemicals and allied products	516	12.28	12.12	12.36	12.47	-	492.43	484.80	498.11	497.55	-
Petroleum and petroleum products	517	9.62	9.62	9.87	9.89	-	373.26	366.52	377.03	382.74	-
Beer, wine, and distilled beverages	518	11.20	11.19	11.66	11.79	-	408.80	408.44	424.42	431.51	-
Miscellaneous nondurable goods	519	7.84	7.90	8.14	8.20	-	287.73	288.35	299.55	302.58	-
Retail trade		6.28	6.26	6.49	6.49	6.49	188.40	186.55	189.51	194.05	192.75
Building materials and garden supplies	52	7.36	7.39	7.62	7.67	-	274.53	273.43	281.18	284.56	-
Lumber and other building materials	521	7.69	7.74	7.99	8.03	-	299.91	299.54	308.41	312.37	-
Hardware stores	525	6.19	6.18	6.33	6.39	-	209.22	207.65	210.16	213.43	-
General merchandise stores	53	6.52	6.52	6.70	6.69	-	185.82	184.52	186.93	190.67	-
Department stores	531	6.83	6.83	6.97	6.96	-	191.92	190.56	193.77	197.66	-
Variety stores	533	4.92	4.95	5.24	5.22	-	148.09	147.51	144.62	146.68	-
Misc. general merchandise stores	539	5.29	5.25	5.56	5.58	-	164.52	160.13	162.35	168.52	-
Food stores	54	6.91	6.91	7.07	7.05	-	217.67	214.90	215.64	219.26	-
Grocery stores	541	7.01	7.01	7.17	7.14	-	221.52	218.71	220.12	223.48	-
Retail bakeries	546	5.97	5.99	6.09	6.07	-	175.52	177.30	181.48	180.89	-
Automotive dealers and service stations	55	8.36	8.29	8.55	8.66	-	308.48	303.41	311.22	317.82	-
New and used car dealers	551,2	10.37	10.22	10.47	10.66	-	386.80	380.18	388.44	396.55	-
Auto and home supply stores	553	7.01	7.01	7.42	7.59	-	276.19	271.99	287.15	296.01	-
Gasoline service stations	554	5.74	5.75	5.95	5.94	-	200.90	198.95	202.90	206.71	-
Apparel and accessory stores	56	5.75	5.70	5.97	5.93	-	159.85	159.03	162.38	165.45	-
Men's and boys' clothing and furnishings	561	6.94	6.83	7.44	7.32	-	209.59	201.49	216.50	215.94	-
Women's ready-to-wear stores	562	5.39	5.40	5.57	5.57	-	140.68	141.48	139.25	143.15	-
Family clothing stores	565	5.68	5.53	5.88	5.88	-	157.90	153.73	159.35	164.05	-
Shoe stores	566	5.91	5.87	6.07	5.97	-	173.75	173.75	176.64	178.50	-
Furniture and home furnishings stores	57	7.90	7.85	8.19	8.26	-	263.86	260.62	271.09	275.88	-
Furniture and home furnishings stores	571	8.01	7.99	8.14	8.20	-	271.54	270.06	273.50	277.16	-
Household appliance stores	572	7.85	7.80	8.39	8.64	-	266.12	263.64	284.42	291.17	-
Radio, television, and music stores	573	7.72	7.61	8.22	8.26	-	250.13	243.52	262.22	270.10	-
Eating and drinking places ⁴	58	4.55	4.56	4.73	4.71	-	121.94	121.75	121.56	125.29	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Manufacturing	\$9.73	\$9.67	\$9.98	\$10.02	\$9.97
Durable goods	10.21	10.16	10.49	10.53	10.49
Lumber and wood products	8.27	8.19	8.47	8.55	(?)
Furniture and fixtures	7.76	7.75	7.96	8.00	(?)
Stone, clay, and glass products	9.92	9.84	10.12	10.11	(?)
Primary metal industries	11.50	11.36	11.60	11.72	(?)
Fabricated metal products	9.77	9.74	10.05	10.07	(?)
Machinery, except electrical	10.47	10.45	10.77	10.84	(?)
Electrical and electronic equipment	9.78	9.77	10.00	10.07	(?)
Transportation equipment	12.55	12.55	12.97	13.00	(?)
Instruments and related products	9.64	9.61	9.93	9.97	(?)
Miscellaneous manufacturing	7.77	7.72	7.99	8.07	(?)
Nondurable goods	9.05	8.98	9.28	9.34	\$9.27
Food and kindred products	8.63	8.52	8.89	8.83	(?)
Tobacco manufactures	15.23	14.50	16.00	16.03	(?)
Textile mill products	7.00	7.02	7.27	7.29	(?)
Apparel and other textile products	5.91	5.94	6.17	6.15	(?)
Paper and allied products	11.08	11.02	11.26	11.37	(?)
Printing and publishing	10.10	10.12	10.40	10.45	(?)
Chemicals and allied products	12.11	12.04	12.35	12.49	(?)
Petroleum and coal products	14.02	13.94	14.36	14.39	(?)
Rubber and misc. plastics products	8.72	8.73	8.98	9.03	(?)
Leather and leather products	6.06	6.05	6.41	6.37	(?)

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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

INDUSTRY	Average hourly earnings					Average weekly earnings				
	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p	July 1988	Aug. 1988	June 1989	July 1989 ^p	Aug. 1989 ^p
Total private:										
Current dollars	\$9.24	\$9.24	\$9.58	\$9.63	\$9.60	\$324.32	\$323.40	\$333.38	\$338.01	\$336.00
Constant (1977) dollars	4.80	4.78	4.75	4.76	(²)	168.57	167.30	165.37	167.08	(²)
Mining:										
Current dollars	12.72	12.69	13.03	12.97	\$13.11	539.33	532.98	555.08	555.12	\$566.35
Constant (1977) dollars	6.61	6.56	6.46	6.41	(²)	280.32	275.73	275.34	274.40	(²)
Construction:										
Current dollars	12.96	12.99	13.24	13.33	\$13.31	500.26	501.41	503.12	518.54	\$517.76
Constant (1977) dollars	6.74	6.72	6.57	6.59	(²)	260.01	259.39	249.56	256.32	(²)
Manufacturing:										
Current dollars	10.17	10.13	10.44	10.48	\$10.45	413.92	414.32	429.08	424.44	\$426.36
Constant (1977) dollars	5.29	5.24	5.18	5.18	(²)	215.14	214.34	212.84	209.81	(²)
Transportation and public utilities:										
Current dollars	12.32	12.35	12.48	12.57	\$12.52	490.34	490.30	494.21	500.29	\$498.30
Constant (1977) dollars	6.40	6.39	6.19	6.21	(²)	254.85	253.65	245.14	247.30	(²)
Wholesale trade:										
Current dollars	9.95	9.91	10.31	10.40	\$10.35	381.09	376.58	392.81	398.32	\$394.34
Constant (1977) dollars	5.17	5.13	5.11	5.14	(²)	198.07	194.82	194.85	196.90	(²)
Retail trade:										
Current dollars	6.28	6.26	6.49	6.49	\$6.49	188.40	186.55	189.51	194.05	\$192.75
Constant (1977) dollars	3.26	3.24	3.22	3.21	(²)	97.92	96.51	94.00	95.92	(²)
Finance, insurance, and real estate:										
Current dollars	9.03	9.03	9.48	9.58	\$9.50	325.98	322.37	339.38	347.75	\$340.10
Constant (1977) dollars	4.69	4.67	4.70	4.74	(²)	169.43	166.77	168.34	171.90	(²)
Services:										
Current dollars	8.80	8.81	9.26	9.33	\$9.29	290.40	288.97	302.80	308.82	\$305.64
Constant (1977) dollars	4.57	4.56	4.59	4.61	(²)	150.94	149.49	150.20	152.65	(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 1988 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1988 forward are subject to revision.

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

Industry	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	34.6	34.7	34.8	34.7	34.7	34.8	34.6	34.7	34.9	34.6	34.6	34.8	34.6
Mining	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Construction	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Manufacturing	41.0	41.1	41.2	41.2	41.0	41.1	41.1	41.0	41.3	41.0	41.0	41.0	40.9
<i>Overtime hours</i>	3.9	3.9	4.0	3.9	3.9	3.9	3.9	4.0	3.9	3.8	3.8	3.9	3.8
Durable goods	41.7	41.9	41.9	41.9	41.7	41.8	41.8	41.7	41.9	41.5	41.5	41.5	41.5
<i>Overtime hours</i>	4.1	4.1	4.2	4.2	4.1	4.1	4.1	4.1	4.1	3.9	3.9	4.0	4.0
Lumber and wood products	40.1	40.1	40.7	40.3	40.3	40.3	39.6	40.0	40.5	39.7	39.8	39.6	40.1
Furniture and fixtures	39.2	39.6	39.4	39.5	39.4	39.8	39.7	39.8	39.9	39.4	39.4	39.3	39.4
Stone, clay, and glass products	42.2	42.3	42.5	42.6	42.4	42.5	42.2	42.2	42.5	41.9	42.2	42.4	42.7
Primary metal industries	43.5	43.9	43.7	43.7	43.5	43.6	43.4	43.5	43.3	43.2	43.3	43.0	42.5
Blast furnaces and basic steel products ..	44.1	44.5	44.2	44.0	43.8	44.0	43.8	44.1	43.5	43.6	43.7	43.2	42.3
Fabricated metal products	41.8	42.0	41.9	42.1	41.8	41.9	41.9	41.8	41.9	41.7	41.5	41.6	41.6
Machinery, except electrical	42.5	42.7	42.7	42.5	42.5	42.5	42.6	42.5	42.7	42.5	42.5	42.3	42.1
Electrical and electronic equipment	40.9	40.9	41.0	41.0	40.8	40.9	40.9	40.6	41.0	40.7	40.7	40.7	40.8
Transportation equipment	42.7	43.0	43.1	43.1	42.8	42.8	43.1	43.1	42.8	42.5	42.5	42.6	42.5
Motor vehicles and equipment	43.6	44.1	43.9	44.1	43.7	43.6	43.9	43.9	43.3	42.8	42.7	42.6	42.7
Instruments and related products	41.5	41.6	41.8	41.6	41.1	41.5	41.5	41.1	41.5	41.1	41.3	41.3	41.0
Miscellaneous manufacturing	39.3	39.2	39.1	39.3	39.0	39.4	39.5	39.5	39.8	39.6	39.4	39.3	39.8
Nondurable goods	40.1	40.2	40.2	40.2	40.0	40.1	40.2	40.1	40.4	40.2	40.3	40.2	40.2
<i>Overtime hours</i>	3.6	3.7	3.7	3.6	3.6	3.6	3.7	3.8	3.8	3.7	3.6	3.8	3.7
Food and kindred products	40.3	40.3	40.4	40.6	40.2	40.1	40.3	40.4	40.7	40.5	40.7	41.1	40.8
Tobacco manufactures	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Textile mill products	41.0	41.0	41.0	41.0	40.5	40.9	40.8	41.1	41.7	41.4	41.4	41.2	40.9
Apparel and other textile products	36.9	37.1	36.9	37.0	36.8	37.0	37.1	36.9	37.6	37.1	37.1	37.0	36.9
Paper and allied products	43.2	43.2	43.2	43.1	43.2	43.1	43.2	43.3	43.4	43.3	43.3	43.1	43.3
Printing and publishing	38.0	38.1	38.0	37.9	37.8	38.0	38.0	37.9	37.9	37.7	37.8	37.6	37.8
Chemicals and allied products	42.2	42.3	42.5	42.3	42.3	42.3	42.3	42.3	42.6	42.1	42.5	42.5	42.4
Petroleum and coal products	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Rubber and misc. plastics products	41.6	41.7	41.6	41.7	41.4	41.7	41.7	41.6	41.6	41.5	41.5	41.4	41.3
Leather and leather products	37.5	37.5	37.8	37.3	37.7	38.0	38.6	38.0	38.3	37.4	37.9	37.7	38.2
Transportation and public utilities	39.3	39.4	39.4	39.3	39.4	39.6	39.4	39.4	40.1	39.5	39.4	39.4	39.4
Wholesale trade	37.9	38.1	38.1	38.0	38.1	38.1	38.1	38.1	38.3	37.9	38.0	38.1	38.0
Retail trade	29.0	29.1	29.2	29.0	29.1	29.1	28.9	28.9	29.1	28.9	28.9	29.2	28.9
Finance, insurance, and real estate	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Services	32.5	32.6	32.7	32.5	32.7	32.7	32.5	32.6	32.8	32.5	32.5	32.8	32.6

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

**ESTABLISHMENT DATA
HOURS
SEASONALLY ADJUSTED**

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

(1977 = 100)

Industry	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	125.1	125.6	126.3	126.3	126.8	127.4	127.2	127.6	128.7	127.6	128.1	129.2	128.5
Goods-producing	101.5	101.8	102.4	102.8	102.3	103.0	102.9	102.9	103.5	102.4	102.5	103.0	103.2
Mining	81.6	81.1	81.2	80.0	80.2	79.9	80.1	81.1	83.4	81.8	81.2	81.0	84.2
Construction	137.8	138.1	139.4	141.1	139.4	141.2	140.5	140.3	141.0	138.2	139.3	142.8	143.2
Manufacturing	95.5	95.7	96.2	96.5	96.2	96.7	96.7	96.7	97.2	96.4	96.4	96.4	96.4
Durable goods	93.7	94.1	94.6	94.9	94.6	95.2	95.0	94.9	95.2	94.3	94.0	93.8	94.0
Lumber and wood products	103.6	103.7	106.3	105.9	106.2	107.0	104.5	105.3	105.9	103.7	103.4	102.7	103.7
Furniture and fixtures	111.0	112.6	112.3	112.9	112.6	113.8	113.7	114.3	114.6	112.9	112.6	112.3	111.8
Stone, clay, and glass products	89.8	89.6	90.6	91.0	91.0	91.4	90.9	90.5	91.0	89.3	89.8	90.0	91.0
Primary metal industries	68.0	68.9	68.9	69.0	68.8	69.1	68.7	68.9	68.6	68.2	68.5	68.0	67.1
Blast furnaces and basic steel products	54.0	54.2	54.1	54.0	53.1	53.8	53.4	53.6	52.4	52.3	52.6	51.8	51.7
Fabricated metal products	91.1	91.5	91.8	92.5	92.1	93.0	92.8	92.5	92.2	91.7	90.8	90.9	90.6
Machinery, except electrical	90.7	91.2	91.9	92.1	92.5	93.0	93.7	93.4	93.9	93.7	93.8	93.8	93.4
Electrical and electronic equipment	100.6	100.6	101.0	101.4	100.2	100.2	99.9	98.8	99.7	98.4	97.8	97.7	97.6
Transportation equipment	99.9	100.0	100.8	100.8	100.3	101.0	101.0	101.5	101.2	100.5	99.5	99.0	100.3
Motor vehicles and equipment	91.5	92.3	92.7	93.6	89.9	91.8	91.1	91.7	91.1	90.2	88.1	86.2	89.3
Instruments and related products	113.1	113.7	114.8	114.8	114.5	115.3	115.6	115.0	116.4	115.8	116.1	116.6	116.1
Miscellaneous manufacturing	85.4	84.8	84.0	84.8	84.7	85.9	86.4	86.1	87.1	86.6	86.2	85.4	87.4
Nondurable goods	98.0	98.2	98.6	98.8	98.4	98.9	99.3	99.5	100.1	99.5	99.9	100.2	99.9
Food and kindred products	100.5	100.4	101.7	102.6	101.5	101.5	102.2	102.9	103.8	103.3	104.3	106.5	105.2
Tobacco manufactures	77.5	74.3	75.1	76.5	76.7	73.4	74.1	69.6	73.0	69.6	69.0	70.3	67.6
Textile mill products	80.2	80.6	80.6	80.5	79.5	80.6	80.4	81.0	82.1	81.5	81.5	81.4	80.4
Apparel and other textile products	83.8	84.2	83.8	84.4	84.2	84.9	85.5	85.4	86.8	85.4	85.2	85.0	85.0
Paper and allied products	102.1	101.7	101.9	101.9	102.1	101.7	101.9	102.3	102.4	102.3	102.3	102.4	102.9
Printing and publishing	136.7	137.2	137.3	137.3	137.4	138.3	138.4	138.5	138.2	137.8	138.3	137.9	138.9
Chemicals and allied products	98.5	98.7	99.5	99.0	99.4	99.9	100.0	100.4	100.9	100.5	101.8	101.8	101.3
Petroleum and coal products	84.1	84.1	84.1	83.5	82.7	81.2	83.3	82.2	82.9	83.5	84.3	83.2	84.9
Rubber and misc. plastics products	117.9	117.8	118.5	119.3	118.6	119.5	120.0	119.9	119.9	119.6	118.9	118.8	119.2
Leather and leather products	54.9	55.4	55.3	54.6	55.2	56.1	57.0	56.1	56.0	54.7	55.5	54.7	55.4
Service-producing	138.1	138.8	139.6	139.2	140.3	140.9	140.6	141.2	142.6	141.5	142.2	143.6	142.5
Transportation and public utilities	113.7	114.1	114.6	114.7	115.5	116.4	116.2	116.2	118.6	117.3	117.3	117.5	114.3
Wholesale trade	122.8	123.8	124.2	124.2	124.9	125.3	125.9	126.4	127.2	126.1	126.7	127.2	127.1
Retail trade	125.5	125.9	126.5	126.0	126.7	127.2	126.7	126.9	127.7	127.2	127.4	128.9	127.8
Finance, insurance, and real estate	140.1	140.9	141.6	140.6	141.2	142.1	140.8	141.8	143.8	141.9	142.7	145.0	143.4
Services	162.1	163.2	164.3	164.0	165.8	166.4	166.1	167.3	168.9	167.5	169.0	170.8	170.2

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.

^p = preliminary.

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

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

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

Industry	1988					1989							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Average hourly earnings													
Total private (in current dollars)	\$9.32	\$9.37	\$9.43	\$9.42	\$9.45	\$9.49	\$9.52	\$9.54	\$9.61	\$9.60	\$9.62	\$9.70	\$9.69
Mining	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Construction	\$13.03	\$13.07	\$13.08	\$13.10	\$13.15	\$13.18	\$13.22	\$13.26	\$13.33	\$13.32	\$13.32	\$13.42	\$13.35
Manufacturing	10.21	10.25	10.29	10.30	10.31	10.33	10.37	10.40	10.40	10.42	10.45	10.49	10.53
Excluding overtime³	9.75	9.78	9.80	9.83	9.85	9.87	9.89	9.92	9.92	9.97	9.99	10.01	10.05
Transportation and public utilities	12.37	12.37	12.41	12.39	12.36	12.45	12.48	12.50	12.52	12.54	12.54	12.60	12.53
Wholesale trade	9.95	10.03	10.14	10.06	10.11	10.19	10.18	10.21	10.36	10.28	10.33	10.44	10.39
Retail trade	6.33	6.36	6.38	6.40	6.43	6.44	6.45	6.47	6.51	6.49	6.52	6.54	6.56
Finance, insurance, and real estate	9.09	9.18	9.35	9.26	9.35	9.40	9.35	9.36	9.54	9.45	9.53	9.67	9.57
Services	8.95	9.00	9.07	9.05	9.10	9.15	9.19	9.24	9.32	9.33	9.34	9.46	9.43
Total private (in constant dollars) ⁴	4.82	4.83	4.84	4.82	4.82	4.81	4.81	4.80	4.80	4.77	4.77	4.80	(⁵)
Average weekly earnings													
Total private:													
In current dollars	322.47	325.14	328.16	326.87	327.92	330.25	329.39	331.04	335.39	332.16	332.85	337.56	335.27
In constant (1977) dollars ⁴	166.82	167.68	168.55	167.28	167.39	167.55	166.44	166.44	167.53	165.01	165.10	167.03	(⁵)

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

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

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

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

⁵ Not available.

^p = preliminary.

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

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Alabama	41.0	41.2	40.6	\$9.01	\$9.09	\$9.07	\$369.41	\$374.51	\$368.24
Birmingham	41.0	40.9	39.7	9.12	9.24	9.25	373.92	377.92	367.23
Mobile	39.9	41.3	41.8	10.77	10.72	10.91	429.72	442.74	456.04
Alaska	45.8	38.2	46.5	10.37	12.65	11.07	474.95	483.23	514.76
Arizona	40.9	40.7	40.4	9.96	9.97	10.09	407.36	405.78	407.64
Arkansas	40.9	40.3	40.7	8.06	8.22	8.31	329.65	331.27	338.22
Fayetteville-Springdale	40.7	41.8	41.1	7.07	7.41	7.38	287.75	309.74	303.32
Fort Smith	40.7	41.1	40.5	8.68	8.83	8.85	353.28	362.91	358.43
Little Rock-North Little Rock	41.5	41.1	41.8	8.53	8.84	8.90	354.00	363.32	372.02
Pine Bluff	43.4	43.5	42.4	10.28	10.47	10.73	446.15	455.45	454.95
California	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Colorado	39.7	40.1	40.3	10.40	10.54	10.66	412.88	422.65	429.60
Denver	40.7	40.7	39.8	10.95	10.91	11.07	445.67	444.04	440.59
Connecticut	41.4	42.1	41.3	10.85	11.21	11.28	449.19	471.94	456.86
Bridgeport-Milford	41.2	42.7	41.1	11.17	11.53	11.61	460.20	492.33	477.17
Hartford	41.9	42.4	42.0	11.39	11.91	11.91	477.24	504.98	500.22
New Britain	41.4	42.1	41.5	11.13	11.46	11.80	460.78	482.47	489.70
New Haven-Meriden	40.5	40.5	40.4	10.38	10.65	10.85	420.39	431.33	438.34
Stamford	40.1	42.9	41.7	12.56	12.18	12.22	503.66	522.52	509.57
Waterbury	40.3	42.9	41.0	9.95	10.15	10.43	400.98	435.44	427.63
Delaware	37.6	40.9	40.2	10.55	10.95	10.16	396.68	447.86	408.43
Wilmington	39.6	42.2	42.0	13.70	13.27	12.80	542.52	559.99	537.60
District of Columbia:									
Washington MSA	38.7	39.7	39.4	11.27	12.10	12.12	436.15	480.37	477.53
Florida	40.1	40.7	40.0	8.43	8.67	8.76	338.04	352.87	350.40
Fort Lauderdale-Hollywood-Pompano Beach	41.4	41.5	40.1	8.38	8.62	8.74	346.93	357.73	350.47
Jacksonville	40.4	41.5	41.2	9.20	9.37	9.41	371.68	388.86	387.69
Miami-Hialeah	39.1	39.2	38.7	7.26	7.32	7.37	283.87	286.94	285.22
Orlando	39.3	41.3	41.2	8.99	9.68	9.82	353.31	399.78	404.58
Pensacola	41.7	42.5	41.5	10.74	10.92	10.74	447.86	464.10	445.71
Tampa-St. Petersburg-Clearwater	39.8	40.2	39.9	8.18	8.65	8.73	325.56	347.73	348.33
West Palm Beach-Boca Raton-Delray Beach	40.8	41.1	41.3	9.13	9.37	9.29	372.50	385.11	383.68
Georgia	41.5	41.0	40.9	8.71	8.72	8.78	361.47	357.52	359.10
Atlanta	41.3	41.3	41.8	10.38	10.19	10.30	428.69	420.85	430.54
Savannah	48.4	47.9	48.2	11.55	11.58	11.56	559.02	554.68	557.19
Hawaii	40.6	39.1	39.4	9.92	10.32	10.42	402.75	403.51	410.55
Honolulu	40.6	39.4	39.0	10.11	10.54	10.60	410.47	415.28	413.40
Idaho	39.3	38.5	39.9	9.91	10.23	10.01	389.46	393.86	399.40
Illinois	41.6	41.8	40.8	11.04	11.25	11.22	459.26	470.25	457.78
Aurora-Elgin	41.2	41.5	41.8	10.46	10.47	10.58	430.95	434.51	442.24
Bloomington-Normal	38.8	39.0	40.1	11.58	12.21	11.75	449.30	476.19	471.18
Champaign-Urbana-Rantoul	40.0	39.9	38.7	9.25	9.57	9.83	370.00	381.84	380.42
Chicago	41.5	41.7	41.2	10.66	10.88	10.96	442.39	453.70	451.55
Davenport-Rock Island-Moline	38.7	41.2	40.9	12.92	12.71	12.99	500.00	523.65	531.29
Decatur	42.1	43.0	42.8	14.31	14.76	14.66	602.45	634.68	627.45
Joliet	41.3	43.7	43.5	12.21	12.36	12.61	504.27	540.13	548.54
Kankakee	43.0	40.3	38.8	10.86	11.15	11.26	466.98	449.35	436.89
Lake County	40.5	42.0	39.2	11.52	11.80	11.66	466.56	495.60	457.07
Peoria	47.2	44.7	46.5	13.43	14.00	14.08	633.90	625.80	654.72
Rockford	42.5	42.1	42.2	10.96	11.81	11.56	465.80	497.20	487.83
Springfield	42.5	40.0	40.5	11.88	11.66	11.79	504.90	466.40	477.50
Indiana	41.4	41.2	40.4	11.36	11.58	11.71	470.30	477.10	473.08

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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
Iowa	41.3	41.1	39.7	\$10.64	\$10.95	\$11.00	\$439.43	\$450.05	\$436.70
Cedar Rapids	39.9	39.0	39.2	12.21	12.66	12.81	487.18	493.74	502.15
Des Moines	41.0	41.0	39.9	11.90	11.98	11.85	487.90	491.18	472.82
Dubuque	40.9	41.8	40.6	11.84	11.98	12.28	484.26	500.76	498.57
Sioux City	33.7	37.7	36.5	8.44	8.42	8.65	284.43	317.43	315.73
Kansas	40.0	40.2	39.9	10.12	10.29	10.49	404.80	413.66	418.55
Topeka	43.3	42.3	43.2	11.14	11.46	11.53	482.36	484.76	498.10
Wichita	40.3	40.9	41.0	10.71	11.31	11.34	431.61	462.58	464.94
Kentucky	40.1	40.6	39.4	10.17	10.31	10.33	407.82	418.59	407.00
Lexington-Fayette	38.4	39.8	39.2	10.29	10.77	10.68	395.14	428.65	418.66
Louisville	41.7	41.1	39.8	11.84	11.82	11.95	493.73	485.80	475.61
Louisiana	42.3	42.1	41.5	11.04	10.92	11.09	466.99	459.73	460.24
Baton Rouge	43.3	43.0	44.0	13.28	12.93	13.08	575.02	555.99	575.52
New Orleans	41.6	40.7	40.3	10.67	10.70	10.72	443.87	435.49	432.02
Shreveport	41.1	42.5	41.4	11.53	11.22	11.19	473.88	476.85	463.27
Maine	40.3	41.0	39.8	9.63	9.90	10.03	388.09	405.90	399.19
Lewiston-Auburn	35.0	42.5	38.5	8.34	8.86	8.54	291.90	376.55	328.79
Portland	40.5	40.3	37.2	9.59	10.25	10.45	388.40	413.08	388.74
Maryland	41.7	41.1	41.4	10.48	10.84	10.89	437.02	445.52	450.85
Baltimore MSA	41.0	41.5	41.3	11.17	11.45	11.54	457.97	475.18	476.60
Massachusetts	41.4	41.1	40.9	10.32	10.75	10.86	427.25	441.83	444.17
Boston	41.8	40.8	40.6	11.05	11.44	11.52	461.89	466.75	467.71
Springfield	43.0	42.4	40.8	9.79	9.89	9.98	420.97	419.34	407.18
Worcester	40.6	41.7	41.5	10.51	10.99	11.09	426.71	458.28	460.24
Michigan	41.5	42.9	41.4	13.29	13.63	13.46	551.53	584.73	557.24
Ann Arbor	43.4	44.0	42.6	14.35	13.96	13.40	622.79	614.24	570.84
Battle Creek	42.2	41.4	41.8	14.63	14.77	14.69	617.39	611.48	614.04
Detroit	42.1	43.5	41.3	14.28	14.62	14.39	601.19	635.97	594.31
Flint	41.8	45.5	43.4	16.65	17.35	17.45	695.97	789.42	757.33
Grand Rapids	40.3	41.4	40.3	11.28	11.64	11.66	454.58	481.90	469.90
Jackson	41.4	40.7	40.3	9.70	10.83	11.39	401.58	440.78	459.02
Kalamazoo	41.5	42.0	41.7	12.68	13.01	12.95	526.22	546.42	540.01
Lansing-East Lansing	37.7	40.4	39.4	15.02	14.77	14.67	566.25	596.71	578.00
Muskegon	40.8	40.8	40.3	11.88	12.33	12.34	484.70	503.06	497.30
Saginaw-Bay City-Midland	42.5	43.9	42.3	15.10	15.30	15.11	641.75	671.67	639.15
Minnesota	40.9	40.2	40.3	10.50	10.85	10.86	429.45	436.17	437.66
Duluth	37.0	40.2	35.5	11.07	11.12	11.15	409.59	447.02	395.83
Minneapolis-St. Paul	41.4	40.6	40.0	11.19	11.56	11.67	463.27	469.34	466.80
St. Cloud	39.6	39.1	38.8	9.97	10.12	10.03	394.81	395.69	389.16
Mississippi	40.0	40.2	39.1	7.75	8.00	7.97	310.00	321.60	311.63
Jackson	39.6	40.0	39.2	8.68	9.06	9.03	343.73	362.40	353.98
Missouri	40.2	41.3	40.2	10.08	10.41	10.34	405.22	429.93	415.67
Kansas City	40.1	40.2	40.2	11.12	11.27	11.15	445.91	453.05	448.23
St. Louis	40.3	41.8	40.1	11.80	12.19	12.08	475.54	509.54	484.41
Springfield	40.8	40.7	40.8	8.54	8.71	8.74	348.43	354.50	356.59
Montana	38.9	39.7	39.7	10.64	10.76	11.09	413.90	427.17	440.27
Nebraska	40.2	41.2	40.7	9.51	9.65	9.56	382.30	397.58	389.09
Lincoln	39.8	39.6	39.2	10.06	10.03	10.00	400.39	397.19	392.00
Omaha	41.7	42.1	41.3	10.32	10.38	10.29	430.34	437.00	424.98
Nevada	39.8	41.4	40.1	10.06	10.32	10.26	400.39	427.25	411.43
Las Vegas	40.0	42.6	41.3	12.59	12.93	13.29	503.60	550.82	548.88
New Hampshire	39.7	40.8	40.3	9.83	10.10	10.24	390.25	412.08	412.67
Manchester	38.7	41.3	38.6	10.23	10.18	10.31	395.90	420.43	397.97
Nashua	39.3	41.5	40.0	11.82	11.74	12.07	464.53	487.21	482.80
Portsmouth-Dover-Rochester	40.0	42.3	41.4	9.49	9.74	9.78	379.60	412.00	404.89

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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
New Jersey	40.3	41.1	40.5	\$10.88	\$11.31	\$11.37	\$438.46	\$464.84	\$460.49
New Mexico	40.4	39.8	39.0	8.85	8.66	8.95	357.54	344.67	349.05
Albuquerque	40.4	40.4	39.8	9.39	9.37	9.57	379.36	378.55	380.89
New York	39.6	40.1	39.7	10.43	10.68	10.71	413.03	428.27	425.19
Albany-Schenectady-Troy	40.8	40.4	38.7	11.06	10.94	11.03	451.25	441.98	426.86
Binghamton	39.8	39.8	40.6	9.70	9.97	10.24	386.06	396.81	415.74
Buffalo	43.1	42.5	42.0	12.38	12.60	12.67	533.58	535.50	532.14
Elmira	39.6	41.9	39.3	9.60	9.69	9.71	380.16	406.01	381.60
Nassau-Suffolk	38.8	40.1	38.9	11.09	11.75	11.80	430.29	471.18	470.82
New York PMSA	37.1	37.7	37.5	9.73	9.89	9.95	360.98	372.85	373.13
New York City	36.8	37.3	37.0	9.44	9.80	9.83	347.39	365.54	363.71
Niagara Falls	40.8	42.0	41.3	13.36	13.88	14.08	545.09	582.96	581.50
Orange County	39.7	37.6	37.4	8.14	8.79	8.76	323.16	330.50	327.62
Poughkeepsie	41.6	40.4	40.1	10.00	10.72	10.70	416.00	433.09	429.07
Rochester	43.2	42.9	43.0	12.11	12.59	12.61	523.15	540.11	542.23
Rockland County	35.3	40.4	41.4	11.05	9.13	9.21	390.07	368.85	381.29
Syracuse	41.1	41.0	40.5	12.13	12.44	12.39	498.54	510.04	501.80
Utica-Rome	40.9	40.9	40.1	9.83	9.74	9.80	402.05	398.37	392.98
Westchester County	40.5	40.3	40.0	11.58	11.02	11.26	468.99	444.11	450.40
North Carolina	40.0	40.7	40.2	8.13	8.41	8.42	325.20	342.29	338.48
Asheville	41.1	41.9	41.7	8.12	8.38	8.40	333.73	351.12	350.28
Charlotte-Gastonia-Rock Hill	40.0	40.9	40.2	8.43	8.79	8.82	337.20	359.51	354.56
Greensboro-Winston-Salem-High Point	39.8	39.5	38.5	9.09	9.26	9.28	361.78	365.77	357.28
Raleigh-Durham	41.5	40.9	41.2	9.28	9.40	9.43	385.12	384.46	388.52
North Dakota	39.3	40.0	40.1	8.42	8.90	8.93	330.91	356.00	358.09
Fargo-Moorhead	38.3	38.1	39.9	8.40	8.79	8.93	330.12	343.69	356.31
Ohio	42.3	42.9	42.1	11.88	12.29	12.22	502.52	527.24	514.46
Akron	43.1	42.3	42.1	11.46	11.28	11.33	493.93	477.14	476.99
Canton	42.3	42.2	41.8	11.25	11.86	11.87	475.88	500.49	496.17
Cincinnati	41.6	43.1	42.4	11.10	11.51	11.40	461.76	496.08	483.36
Cleveland	42.7	43.3	42.2	11.69	11.95	11.90	499.16	517.44	502.18
Columbus	41.2	41.1	41.2	11.54	11.96	12.04	475.45	491.56	496.05
Dayton-Springfield	42.4	43.1	42.4	12.39	12.87	12.79	525.34	554.70	542.30
Toledo	42.1	43.2	43.1	12.92	13.26	13.27	543.93	572.83	571.94
Youngstown-Warren	42.3	42.3	42.0	13.43	13.91	13.67	568.09	588.39	574.14
Oklahoma	40.1	41.8	41.2	10.17	10.56	10.59	407.82	441.41	436.31
Oklahoma City	39.8	42.4	42.9	11.18	11.55	11.38	444.96	489.72	488.20
Tulsa	40.9	41.4	40.1	10.73	10.77	10.85	438.86	445.88	435.09
Oregon	39.0	39.7	38.7	10.69	10.81	10.98	416.91	429.16	424.93
Eugene-Springfield	39.2	39.6	37.4	10.83	10.82	10.87	424.54	428.47	406.54
Portland	39.3	39.7	39.5	10.73	10.93	11.17	421.69	433.92	441.22
Salem	37.4	39.3	38.2	8.96	9.45	8.95	335.10	371.39	341.89
Pennsylvania	40.7	40.8	40.5	10.27	10.57	10.57	417.99	431.26	428.09
Allentown-Bethlehem	40.3	39.4	39.8	10.59	10.59	10.68	426.78	417.25	425.06
Altoona	40.9	40.6	40.7	8.82	9.50	9.41	360.74	385.70	382.99
Beaver County	41.2	43.8	44.7	10.71	10.82	10.74	441.25	473.92	480.08
Erie	42.6	42.7	43.1	10.51	10.75	10.78	447.73	459.03	464.62
Harrisburg-Lebanon-Carlisle	39.6	40.0	39.2	9.49	9.85	9.86	375.80	394.00	386.51
Johnstown	38.8	39.1	38.8	8.52	8.30	8.33	330.58	324.53	323.20
Lancaster	39.5	40.4	40.1	10.08	10.59	10.56	398.16	427.84	423.46
Philadelphia PMSA	39.9	40.7	40.5	11.31	11.72	11.76	451.27	477.00	476.28
Pittsburgh	41.7	41.9	41.5	11.33	11.33	11.24	472.46	474.73	466.46

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 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Pennsylvania—Continued									
Reading	39.9	40.8	40.5	\$10.76	\$11.02	\$11.05	\$429.32	\$449.62	\$447.53
Scranton-Wilkes-Barre	39.1	38.9	39.0	9.02	9.24	9.33	352.68	359.44	363.87
Williamsport	41.7	39.7	39.8	9.00	9.36	9.54	375.30	371.59	379.69
York	42.0	41.3	41.6	9.79	10.21	10.19	411.18	421.67	423.90
Rhode Island									
Pawtucket-Woonsocket-Attleboro	39.0	39.4	38.9	8.56	9.05	9.11	333.84	356.57	354.38
Providence	39.8	40.2	39.6	8.17	8.70	8.71	325.17	349.74	344.92
Providence	38.9	38.8	38.3	8.60	8.70	8.74	334.54	337.56	334.74
South Carolina									
Charleston	41.1	41.2	40.9	8.31	8.61	8.67	341.54	354.73	354.60
Charleston	41.1	40.9	40.6	9.22	9.37	9.41	378.94	383.23	382.05
Columbia	41.4	41.7	41.3	8.43	8.81	8.83	349.00	367.38	364.68
Greenville-Spartanburg	41.3	41.2	41.0	8.26	8.61	8.66	341.14	354.73	355.06
South Dakota									
Sioux Falls	40.8	41.8	40.2	7.91	8.03	8.17	322.73	335.65	328.43
Sioux Falls	43.9	42.7	44.2	8.12	8.46	8.56	356.47	361.24	378.35
Tennessee									
Chattanooga	41.0	41.4	40.9	8.96	9.19	9.18	367.36	380.47	375.46
Chattanooga	42.8	41.3	41.4	8.21	8.29	8.46	351.39	342.38	350.24
Johnson City-Kingsport-Bristol	44.1	42.4	43.7	9.55	9.64	9.93	421.16	408.74	433.94
Knoxville	41.4	39.4	38.3	9.04	8.98	8.98	374.26	353.81	343.93
Memphis	41.6	42.9	43.1	9.05	9.40	9.70	376.48	403.26	418.07
Nashville	40.5	42.2	41.3	10.45	10.71	10.09	423.23	451.96	416.72
Texas									
Dallas	41.7	41.7	41.2	10.00	10.21	10.28	417.00	425.76	423.54
Dallas	41.5	41.9	41.1	9.83	10.18	10.27	407.95	426.54	422.10
Ft. Worth-Arlington	41.8	41.3	40.7	10.65	11.00	11.02	445.17	454.30	448.51
Houston	43.5	44.0	44.0	11.51	11.80	11.85	500.69	519.20	521.40
San Antonio	39.8	40.7	39.7	7.44	7.52	7.51	296.11	306.06	298.15
Utah									
Salt Lake City-Ogden	40.5	39.6	39.7	9.85	10.04	10.11	398.93	397.58	401.37
Salt Lake City-Ogden	41.4	41.0	40.7	9.88	10.07	10.13	409.03	412.87	412.29
Vermont									
Burlington	40.3	41.3	40.3	9.32	9.92	10.04	375.60	409.70	404.61
Burlington	41.1	40.2	40.1	9.44	10.47	10.30	387.98	420.89	413.03
Virginia									
Bristol	40.7	41.1	40.5	9.30	9.56	9.59	378.51	392.92	388.40
Bristol	45.1	42.1	43.0	7.83	7.83	7.79	353.13	329.64	334.97
Charlottesville	41.4	41.9	42.1	7.65	8.09	8.14	316.71	338.97	342.69
Danville	42.2	40.6	40.2	8.62	8.55	8.58	363.76	347.13	344.92
Lynchburg	41.3	41.4	41.2	8.79	9.19	9.10	363.03	380.47	374.92
Northern Virginia	39.4	40.4	40.2	10.41	11.07	11.13	410.15	447.23	447.43
Richmond-Petersburg	40.2	42.3	41.1	11.91	12.54	12.50	478.78	530.44	513.75
Roanoke	40.6	41.3	41.0	9.38	9.62	9.88	380.83	397.31	405.08
Washington									
.....	39.4	40.8	40.2	11.99	12.16	12.46	472.41	496.13	500.89
West Virginia									
Charleston	40.3	41.5	40.5	10.90	11.22	11.25	439.27	465.63	455.63
Charleston	42.0	44.3	43.2	13.73	14.40	14.61	576.66	637.92	631.15
Huntington-Ashland	40.5	41.3	38.8	12.31	12.65	12.57	498.56	522.45	487.72
Parkersburg-Marietta	42.1	44.4	42.6	12.38	13.28	13.42	521.20	589.63	571.69
Wheeling	40.3	41.0	40.0	11.83	12.44	12.71	476.75	510.04	508.40
Wisconsin									
Appleton-Oshkosh	41.5	41.2	41.3	10.56	10.68	10.62	438.24	440.02	438.61
Appleton-Oshkosh	42.8	44.2	43.9	11.14	11.69	11.63	476.79	516.70	510.56
Eau Claire	41.2	42.9	44.2	10.70	10.58	10.48	440.84	453.88	463.22
Green Bay	42.0	39.8	42.0	11.37	11.56	11.27	477.54	460.09	473.34
Janesville-Beloit	40.4	39.8	38.8	12.55	12.72	12.94	507.02	506.26	502.07
Kenosha	38.6	42.1	42.2	12.38	12.04	11.39	477.87	506.88	480.66
La Crosse	39.4	40.0	40.0	9.11	9.71	9.80	358.93	388.40	392.00
Madison	41.9	40.1	39.7	9.99	10.11	10.42	418.58	405.41	413.67
Milwaukee	41.5	41.1	40.6	11.62	11.42	11.44	482.23	469.36	464.46
Racine	41.3	39.8	38.5	11.11	11.22	10.71	458.84	446.56	412.34
Wausau	42.3	41.8	42.4	9.99	10.31	10.55	422.58	430.96	447.32
Wyoming									
.....	38.5	39.4	38.8	10.15	10.13	10.58	390.78	399.12	410.50
Puerto Rico									
.....	39.3	39.5	39.1	5.55	5.67	5.72	218.11	223.97	223.65
Virgin Islands									
.....	40.5	42.2	41.7	9.69	10.55	10.79	392.44	445.21	449.94

¹ Not available.

^P = preliminary.

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

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

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

Industry	Millions of hours (annual rate) ¹			Percent change		
	June 1989 ^r	July 1989 ^r	Aug. 1989 ^p	Aug. 1988 to Aug. 1989 ^p	June 1989 to July 1989 ^r	July 1989 to Aug. 1989 ^p
Total	201,370	202,654	201,987	2.7	0.6	-0.3
Private sector	165,963	167,273	166,582	2.9	.8	-.4
Mining	1,567	1,561	1,629	3.4	-.4	4.4
Construction	10,318	10,539	10,545	4.2	2.1	.1
Manufacturing	41,910	41,880	41,888	1.1	-.1	.0
Durable goods	24,926	24,856	24,899	.6	-.3	.2
Nondurable goods	16,985	17,024	16,989	1.8	.2	-.2
Transportation and public utilities	11,767	11,824	11,529	1.0	.5	-2.5
Wholesale trade	12,305	12,391	12,337	3.5	.7	-.4
Retail trade	29,348	29,728	29,462	1.8	1.3	-.9
Finance, insurance, and real estate	12,707	12,903	12,754	2.6	1.5	-1.2
Services	46,041	46,448	46,437	5.4	.9	.0
Government	35,407	35,381	35,405	1.5	-.1	.1

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).

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

(1977 = 100)

Item	Annual average		Quarterly index										
	1987	1988	1986	1987				1988				1989	
			IV	I	II	III	IV	I	II	III	IV	I	II
Business sector													
Output per hour of all persons	111.1	113.1	109.8	109.9	110.7	111.7	112.5	113.3	112.7	113.6	113.6	113.9	114.3
Output	133.4	140.0	128.9	130.4	132.2	134.4	136.7	138.2	139.3	140.7	141.9	143.6	144.2
Hours	120.1	123.8	117.4	118.6	119.5	120.3	121.5	122.0	123.6	123.9	124.9	126.0	126.2
Compensation per hour	191.0	200.4	187.4	188.2	189.5	191.8	195.2	196.5	199.3	202.2	204.8	207.2	210.6
Real compensation per hour	101.9	102.7	102.8	101.9	101.4	101.7	102.6	102.3	102.7	102.9	103.1	103.0	103.1
Unit labor costs	171.9	177.2	170.6	171.2	171.3	171.6	173.5	173.5	176.9	178.1	180.2	181.9	184.3
Unit nonlabor payments	166.3	170.8	160.7	162.6	166.5	168.9	167.2	168.9	168.8	171.7	173.6	174.7	175.9
Implicit price deflator	170.0	174.9	167.1	168.2	169.6	170.7	171.3	171.9	174.1	175.8	177.9	179.4	181.4
Nonfarm business sector													
Output per hour of all persons	108.9	111.2	107.6	107.7	108.6	109.5	110.3	111.1	110.7	111.6	112.1	111.8	112.0
Output	133.1	140.3	128.4	130.0	132.0	134.1	136.4	138.0	139.5	141.1	142.8	143.6	144.5
Hours	122.2	126.2	119.3	120.7	121.6	122.4	123.7	124.3	126.1	126.4	127.3	128.5	129.0
Compensation per hour	189.8	198.9	186.4	187.0	188.3	190.5	193.9	195.1	197.8	200.5	203.3	205.7	208.6
Real compensation per hour	101.2	101.9	102.2	101.3	100.7	101.0	101.9	101.6	101.9	102.1	102.4	102.3	102.1
Unit labor costs	174.2	178.8	173.2	173.6	173.4	173.9	175.8	175.7	178.7	179.6	181.3	184.1	186.3
Unit nonlabor payments	167.7	172.2	161.6	164.1	167.6	170.3	168.7	170.2	169.8	172.0	176.2	174.6	176.2
Implicit price deflator	172.0	176.5	169.2	170.3	171.4	172.6	173.4	173.8	175.6	177.0	179.6	180.8	182.8
Manufacturing													
Output per hour of all persons	132.9	137.7	130.1	131.3	133.1	134.3	135.1	136.3	137.5	139.2	140.0	140.7	141.7
Output	130.1	138.1	125.9	127.2	128.7	131.1	133.5	135.0	136.9	139.3	141.1	142.2	143.2
Hours	97.9	100.3	96.8	96.8	96.7	97.6	98.9	99.1	99.6	100.0	100.7	101.0	101.0
Compensation per hour	189.2	197.8	187.8	188.5	188.7	190.4	192.2	195.5	197.1	199.5	202.3	203.9	205.1
Real compensation per hour	100.9	101.3	103.0	102.0	101.0	100.9	101.0	101.8	101.5	101.5	101.9	101.3	100.4
Unit labor costs	142.3	143.6	144.3	143.5	141.8	141.8	142.3	143.5	143.3	143.2	144.5	144.8	144.7
Durable goods													
Output per hour of all persons	139.5	144.8	136.6	138.4	140.0	141.2	142.4	143.8	145.2	146.7	147.2	147.8	149.5
Output	136.0	145.0	131.8	133.3	134.2	136.5	139.9	141.3	144.0	146.4	148.3	149.1	150.0
Hours	97.5	100.2	96.5	96.4	95.9	96.7	98.2	98.3	99.2	99.8	100.7	100.9	100.4
Compensation per hour	187.4	195.3	186.9	187.9	187.4	189.0	190.6	194.5	195.0	197.0	200.2	201.8	202.4
Real compensation per hour	100.0	100.1	102.5	101.7	100.3	100.2	100.1	101.3	100.4	100.3	100.8	100.3	99.0
Unit labor costs	134.3	134.9	136.8	135.8	133.9	133.9	133.9	135.2	134.3	134.4	135.9	136.6	135.4
Nondurable goods													
Output per hour of all persons	123.2	127.3	120.5	121.0	123.1	124.3	124.4	125.3	126.1	128.3	129.3	130.3	130.4
Output	121.4	127.8	117.0	118.0	120.5	123.1	124.0	125.6	126.4	128.8	130.3	131.8	133.0
Hours	98.6	100.4	97.1	97.6	97.9	99.0	99.7	100.2	100.2	100.4	100.8	101.1	102.0
Compensation per hour	192.5	202.2	189.4	189.8	191.5	193.3	195.3	197.8	200.9	203.8	206.1	207.6	210.1
Real compensation per hour	102.7	103.6	103.9	102.8	102.4	102.5	102.6	103.0	103.5	103.8	103.8	103.2	102.8
Unit labor costs	156.2	158.9	157.1	156.9	155.6	155.5	157.0	157.8	159.3	158.9	159.4	159.3	161.1
Nonfinancial corporations													
Output per all-employee hour	112.1	114.9	110.6	110.4	111.6	113.0	113.6	114.8	115.0	115.4	115.3	114.7	114.7
Output	135.3	143.5	130.3	131.5	133.9	136.9	138.9	141.2	142.8	144.3	145.4	145.8	146.4
Hours	120.8	124.8	117.8	119.2	120.0	121.1	122.3	123.0	124.2	125.1	126.2	127.1	127.7
Compensation per hour	186.1	194.5	183.0	183.6	184.7	186.9	189.7	191.2	193.6	196.0	198.3	200.7	203.3
Real compensation per hour	99.3	99.7	100.4	99.4	98.8	99.1	99.6	99.6	99.7	99.8	99.9	99.7	99.5
Total unit costs	171.2	174.6	170.1	171.0	170.8	170.8	172.1	171.9	173.6	175.2	177.5	180.4	183.5
Unit labor costs	166.1	169.3	165.4	166.3	165.5	165.3	167.0	166.6	168.4	169.9	172.1	174.9	177.3
Unit nonlabor costs	186.4	190.3	183.7	185.0	186.3	186.9	187.2	187.8	188.9	191.0	193.3	196.9	202.1
Unit profits	123.0	128.8	120.4	118.1	122.5	129.3	122.0	127.0	129.1	127.5	131.6	119.6	112.0
Implicit price deflator	165.4	169.1	164.1	164.7	165.0	165.8	166.1	166.5	168.2	169.5	172.0	173.1	175.0

= 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 1988	II 1988	III 1988	IV 1988	I 1989	II 1989'	I 1988	II 1988	III 1988	IV 1988	I 1989	II 1989'
Business sector												
Output per hour of all persons	2.7	-2.0	3.1	0.2	1.0	1.3	3.0	1.8	1.6	1.0	0.6	1.4
Output	4.4	3.3	4.0	3.4	4.8	1.9	5.9	5.4	4.7	3.8	3.9	3.5
Hours	1.7	5.4	.9	3.2	3.8	.6	2.8	3.5	3.0	2.8	3.3	2.1
Compensation per hour	2.8	5.9	5.8	5.2	4.8	6.8	4.4	5.2	5.4	4.9	5.4	5.7
Real compensation per hour	-8	1.3	1.0	.7	-6	.4	.4	1.3	1.2	.5	.6	.4
Unit labor costs .....	.1	8.1	2.6	5.0	3.7	5.5	1.3	3.3	3.7	3.9	4.8	4.2
Unit nonlabor payments	4.2	-3	7.1	4.6	2.4	2.8	3.9	1.4	1.7	3.9	3.4	4.2
Implicit price deflator	1.5	5.1	4.1	4.8	3.3	4.6	2.2	2.6	3.0	3.9	4.3	4.2
Nonfarm business sector												
Output per hour of all persons	3.0	-1.5	3.4	1.9	-1.3	.7	3.1	1.9	1.9	1.7	.6	1.2
Output	4.8	4.4	4.6	4.8	2.4	2.4	6.1	5.7	5.2	4.7	4.1	3.6
Hours	1.8	5.9	1.2	2.8	3.8	1.7	2.9	3.7	3.3	2.9	3.4	2.4
Compensation per hour	2.7	5.5	5.5	5.9	4.8	5.6	4.3	5.1	5.2	4.9	5.4	5.5
Real compensation per hour	-9	.9	.8	1.4	-6	-7	.4	1.1	1.0	.5	.6	.2
Unit labor costs	-3	7.1	2.0	3.9	6.2	4.9	1.2	3.1	3.3	3.1	4.8	4.2
Unit nonlabor payments	3.6	-1.0	5.4	10.1	-3.7	3.7	3.7	1.3	1.0	4.4	2.6	3.8
Implicit price deflator	1.0	4.3	3.2	5.9	2.8	4.5	2.0	2.5	2.5	3.6	4.0	4.1
Manufacturing												
Output per hour of all persons	3.7	3.6	5.2	2.3	2.1	2.9	3.8	3.3	3.7	3.7	3.3	3.1
Output	4.6	5.8	7.1	5.1	3.1	2.9	6.2	6.4	6.2	5.6	5.3	4.6
Hours .....	.9	2.2	1.8	2.8	1.1	.0	2.3	3.0	2.5	1.9	2.0	1.4
Compensation per hour	7.1	3.2	4.9	5.9	3.1	2.4	3.7	4.4	4.8	5.3	4.3	4.1
Real compensation per hour	3.4	-1.3	.2	1.4	-2.2	-3.7	-2	.5	.6	.9	-5	-1.1
Unit labor costs	3.3	-3	-3	3.5	1.0	-4	-1	1.1	1.0	1.5	1.0	.9
Durable goods												
Output per hour of all persons	4.1	3.8	4.1	1.6	1.4	4.8	4.0	3.7	3.9	3.4	2.7	3.0
Output	4.3	7.7	6.8	5.3	2.2	2.5	6.0	7.3	7.2	6.0	5.5	4.2
Hours .....	.1	3.7	2.6	3.6	.8	-2.2	2.0	3.4	3.2	2.5	2.7	1.2
Compensation per hour	8.4	1.1	4.2	6.5	3.3	1.3	3.5	4.0	4.3	5.0	3.8	3.8
Real compensation per hour	4.6	-3.3	-5	1.9	-2.1	-4.8	-4	.2	.1	.7	-1.0	-1.4
Unit labor costs	4.1	-2.6	.1	4.8	1.8	-3.4	-4	.3	.4	1.6	1.0	.8
Nondurable goods												
Output per hour of all persons	3.0	2.7	7.0	3.2	3.2	.2	3.6	2.5	3.2	4.0	4.0	3.4
Output	5.1	2.7	7.7	4.8	4.7	3.6	6.4	4.9	4.6	5.0	5.0	5.2
Hours	2.0	.0	.7	1.5	1.4	3.3	2.7	2.4	1.4	1.0	.9	1.7
Compensation per hour	5.2	6.4	6.0	4.6	2.9	4.9	4.2	4.9	5.4	5.5	5.0	4.6
Real compensation per hour	1.5	1.8	1.2	.2	-2.4	-1.4	.2	1.0	1.2	1.2	.2	-6
Unit labor costs	2.1	3.7	-1.0	1.4	-4	4.7	.6	2.4	2.2	1.5	.9	1.2
Nonfinancial corporations												
Output per all-employee hour	4.3	.6	1.4	-4	-1.8	-.2	4.0	3.0	2.1	1.5	.0	-3
Output	6.8	4.6	4.3	3.2	1.0	1.7	7.4	6.6	5.4	4.7	3.2	2.5
Hours	2.3	4.0	2.8	3.6	2.8	1.9	3.2	3.5	3.3	3.2	3.3	2.8
Compensation per hour	3.3	5.2	5.1	4.8	4.8	5.3	4.1	4.8	4.9	4.6	5.0	5.0
Real compensation per hour	-3	.6	.3	.4	-6	-1.0	.2	.9	.7	.2	.2	-2
Total unit costs	-4	3.9	3.9	5.2	6.9	7.1	.5	1.6	2.6	3.1	5.0	5.7
Unit labor costs	-1.0	4.5	3.6	5.3	6.6	5.6	.1	1.7	2.8	3.1	5.0	5.3
Unit nonlabor costs	1.1	2.5	4.6	4.9	7.5	11.1	1.5	1.4	2.2	3.3	4.9	7.0
Unit profits	17.6	6.8	-4.7	13.3	-31.7	-23.1	7.5	5.4	-1.3	7.9	-5.8	-13.2
Implicit price deflator	1.1	4.2	3.1	5.9	2.8	4.3	1.1	2.0	2.2	3.5	4.0	4.0

' = 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 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Alabama	1,902.1	1,931.7	1,951.6	142.5	144.3	151.4	7.5	7.5	7.8
Birmingham	441.0	449.9	452.6	27.1	26.8	27.7	6.1	5.9	6.1
Huntsville	134.2	139.2	139.0	7.5	7.6	7.5	5.6	5.4	5.4
Mobile	211.8	212.1	214.5	18.6	19.0	19.1	8.8	8.9	8.9
Montgomery	138.5	138.4	140.7	8.9	9.6	10.1	6.4	7.0	7.1
Tuscaloosa	69.0	71.2	71.9	3.9	4.1	4.1	5.7	5.7	5.8
Alaska	246.9	246.4	250.7	18.9	17.3	15.3	7.6	7.0	6.1
Arizona	1,657.1	1,729.9	1,722.1	117.7	98.4	104.8	7.1	5.7	6.1
Phoenix	1,037.7	1,076.5	1,074.4	55.4	48.5	51.3	5.3	4.5	4.8
Tucson	307.9	326.8	322.5	17.0	15.6	15.7	5.5	4.8	4.9
Arkansas	1,128.7	1,195.9	1,184.0	83.1	100.3	89.0	7.4	8.4	7.5
Fayetteville-Springdale	60.9	64.1	64.2	2.6	2.9	2.6	4.3	4.5	4.1
Fort Smith	94.9	96.0	95.9	5.8	7.7	7.1	6.1	8.0	7.4
Little Rock-North Little Rock	265.6	282.7	279.4	16.8	21.8	19.6	6.3	7.7	7.0
Pine Bluff	37.6	40.3	39.5	3.2	3.8	3.3	8.5	9.6	8.2
California¹	14,191.5	14,355.9	14,602.7	832.1	785.9	851.2	5.9	5.5	5.8
Anaheim-Santa Ana	1,367.0	1,383.4	1,404.0	47.3	46.3	50.5	3.5	3.3	3.6
Bakersfield	230.2	238.7	235.4	22.8	26.4	23.9	9.9	11.1	10.1
Fresno	312.8	316.1	319.2	32.5	29.5	30.6	10.4	9.3	9.6
Los Angeles-Long Beach	4,147.9	4,152.3	4,230.9	233.1	209.6	233.7	5.6	5.0	5.5
Modesto	163.2	167.0	173.7	20.2	21.2	18.9	12.4	12.7	10.9
Oakland	1,081.8	1,105.8	1,127.9	56.8	53.2	56.8	5.2	4.8	5.0
Oxnard-Ventura	363.8	366.3	378.2	23.8	18.9	25.4	6.5	5.2	6.7
Riverside-San Bernardino	952.2	975.7	983.5	67.1	64.6	73.8	7.0	6.6	7.5
Sacramento	711.8	732.2	746.1	40.7	38.7	40.4	5.7	5.3	5.4
San Diego	1,133.3	1,168.6	1,191.3	55.3	50.6	56.6	4.9	4.3	4.8
San Francisco	893.9	891.5	912.0	37.2	33.0	36.4	4.2	3.7	4.0
San Jose	853.9	842.9	862.3	37.2	36.5	38.1	4.4	4.3	4.4
Santa Barbara-Santa Maria-Lompoc	180.0	181.5	183.4	8.2	7.3	8.2	4.5	4.0	4.5
Santa Rosa-Petaluma	194.1	196.5	199.2	10.0	9.4	10.0	5.1	4.8	5.0
Stockton	198.0	202.1	199.4	19.9	20.7	19.1	10.1	10.2	9.6
Vallejo-Fairfield-Napa	197.3	200.6	207.4	12.0	11.6	12.7	6.1	5.8	6.1
Colorado	1,707.0	1,651.5	1,687.7	89.9	110.6	81.6	5.3	6.7	4.8
Boulder-Longmont	131.8	126.3	129.3	5.4	6.8	5.0	4.1	5.4	3.9
Denver	883.5	851.1	866.2	44.8	54.1	40.3	5.1	6.4	4.7
Connecticut	1,797.7	1,819.3	1,842.0	58.5	61.1	63.4	3.3	3.4	3.4
Bridgeport-Milford	236.9	239.0	241.6	10.5	9.7	11.4	4.4	4.1	4.7
Hartford	436.4	439.6	447.0	12.2	13.4	13.2	2.8	3.0	2.9
New Britain	73.9	74.8	75.2	2.9	2.7	2.9	3.9	3.6	3.8
New Haven-Meriden	284.3	289.4	295.3	9.1	9.4	9.8	3.2	3.2	3.3
Stamford	120.0	119.0	122.2	2.5	2.8	2.8	2.1	2.3	2.3
Waterbury	102.0	104.6	102.6	4.7	4.4	5.2	4.6	4.2	5.1
Delaware	354.6	363.1	362.9	9.0	13.9	14.9	2.5	3.8	4.1
Wilmington	304.2	307.1	303.0	10.9	13.1	16.2	3.6	4.3	5.4
District of Columbia	350.7	333.3	330.6	14.8	17.6	16.1	4.2	5.3	4.9
Washington	2,263.2	2,297.9	2,331.7	65.4	68.9	60.6	2.9	3.0	2.6
Florida¹	6,209.8	6,380.5	6,382.6	313.7	386.7	385.9	5.1	6.1	6.0
Daytona Beach	156.1	158.5	160.0	6.2	8.9	9.5	4.0	5.6	5.9
Fort Lauderdale-Hollywood-Pompano Beach	646.0	654.2	652.5	25.7	35.8	33.6	4.0	5.5	5.1
Fort Myers-Cape Coral	142.2	149.3	149.6	5.1	6.0	6.3	3.6	4.0	4.2
Jacksonville	470.7	474.5	477.7	24.4	28.8	28.6	5.2	6.1	6.0
Melbourne-Titusville-Palm Bay	191.1	193.3	195.7	8.6	10.7	10.3	4.5	5.6	5.2
Miami-Hialeah	961.0	979.8	976.5	50.7	67.4	63.6	5.3	6.9	6.5
Orlando	597.4	607.1	617.0	27.2	31.7	35.2	4.6	5.2	5.7
Pensacola	152.5	151.2	151.2	8.5	10.3	9.4	5.6	6.8	6.2
Sarasota	124.5	126.8	127.3	4.0	4.9	4.9	3.2	3.8	3.9
Tallahassee	131.8	136.1	135.0	5.0	6.6	6.7	3.8	4.9	4.9
Tampa-St. Petersburg-Clearwater	1,012.3	1,030.3	1,035.0	44.8	53.3	54.6	4.4	5.2	5.3
West Palm Beach-Boca Raton-Delray Beach	407.3	437.7	432.9	24.4	31.3	29.9	6.0	7.2	6.9

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 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Georgia	3,213.5	3,254.5	3,282.3	185.9	195.6	177.7	5.8	6.0	5.4
Athens	74.8	76.2	78.1	3.5	3.5	3.3	4.7	4.6	4.2
Atlanta	1,518.5	1,536.6	1,543.3	73.5	87.8	72.0	4.8	5.7	4.7
Augusta	184.4	184.4	184.4	10.6	10.8	9.3	5.8	5.9	5.0
Columbus	103.1	103.0	103.6	6.6	6.0	5.5	6.4	5.8	5.3
Macon-Warner Robins	132.4	134.3	135.7	6.5	6.8	6.2	4.9	5.0	4.6
Savannah	115.8	114.4	115.0	7.1	6.8	5.7	6.1	5.9	4.9
Hawaii	519.2	528.3	532.2	19.0	15.8	12.9	3.7	3.0	2.4
Honolulu	384.9	389.3	391.8	12.3	10.4	8.3	3.2	2.7	2.1
Idaho	487.9	494.5	489.3	24.4	24.1	22.3	5.0	4.9	4.6
Boise City	104.8	110.2	108.9	3.7	3.7	3.2	3.5	3.4	2.9
Illinois ¹	5,827.1	6,004.0	5,964.0	359.0	346.0	314.5	6.2	5.8	5.3
Aurora-Elgin	180.3	192.1	189.7	8.7	9.5	8.5	4.8	4.9	4.5
Bloomington-Normal	67.3	73.4	71.6	2.9	3.1	3.2	4.3	4.2	4.4
Champaign-Urbana-Rantoul	86.5	91.5	89.6	3.3	3.5	3.1	3.8	3.8	3.4
Chicago	3,221.1	3,303.7	3,296.1	181.6	178.2	162.8	5.6	5.4	4.9
Davenport-Rock Island-Moline	183.8	182.6	182.0	13.7	11.6	10.7	7.5	6.3	5.9
Decatur	58.9	60.3	59.3	5.0	4.4	3.9	8.5	7.2	6.6
Joliet	193.9	199.1	195.7	13.4	12.8	11.6	6.9	6.4	5.9
Kankakee	44.5	46.5	44.8	3.7	3.6	3.1	8.4	7.8	7.0
Lake County	281.8	294.9	293.2	10.9	11.5	9.4	3.9	3.9	3.2
Peoria	157.7	163.2	161.0	10.2	9.2	8.5	6.5	5.7	5.3
Rockford	149.8	152.1	149.9	13.1	8.8	10.8	8.8	5.8	7.2
Springfield	110.1	112.9	111.9	4.9	5.1	4.4	4.5	4.5	3.9
Indiana	2,844.5	2,992.0	2,962.0	130.3	99.3	115.3	4.6	3.3	3.9
Anderson	60.4	62.9	61.9	4.3	2.5	3.8	7.2	4.0	6.1
Bloomington	60.2	65.8	64.4	1.8	1.4	1.4	3.0	2.1	2.1
Elkhart-Goshen	99.1	105.4	101.2	3.6	4.4	4.1	3.6	4.1	4.0
Evansville	145.7	151.7	151.6	7.4	5.5	5.6	5.1	3.6	3.7
Fort Wayne	200.7	212.0	207.9	8.4	6.3	6.8	4.2	3.0	3.3
Gary-Hammond	260.2	275.1	273.3	12.9	9.9	10.3	4.9	3.6	3.8
Indianapolis	686.2	721.0	714.1	27.1	19.9	23.3	3.9	2.8	3.3
Lafayette-West Lafayette	66.4	68.7	68.4	1.6	1.7	1.5	2.5	2.4	2.3
Muncie	59.2	61.5	61.0	2.9	2.1	2.4	4.9	3.4	3.9
South Bend-Mishawaka	129.1	138.9	138.9	6.3	4.6	6.9	4.9	3.3	4.9
Terre Haute	58.1	61.9	60.2	3.0	2.0	2.2	5.2	3.3	3.6
Iowa	1,537.0	1,528.9	1,532.0	59.8	66.9	58.2	3.9	4.4	3.8
Cedar Rapids	96.9	96.5	95.9	3.2	3.7	3.0	3.3	3.8	3.1
Des Moines	235.1	237.0	238.5	7.6	9.8	7.9	3.2	4.1	3.3
Dubuque	43.9	43.6	43.5	2.0	2.5	2.1	4.6	5.8	4.7
Sioux City	62.0	60.8	61.0	2.8	2.8	2.4	4.6	4.5	3.9
Waterloo-Cedar Falls	69.9	70.2	70.3	3.6	3.7	3.2	5.2	5.3	4.5
Kansas	1,285.3	1,316.7	1,303.6	57.4	64.4	50.9	4.5	4.9	3.9
Topeka	92.6	94.6	94.1	3.9	4.7	4.0	4.2	5.0	4.3
Wichita	256.6	265.0	265.7	12.0	12.8	11.0	4.7	4.8	4.2
Kentucky	1,764.5	1,763.1	1,774.2	142.4	128.9	108.4	8.1	7.3	6.1
Lexington-Fayette	198.9	203.4	208.3	9.9	9.0	7.7	5.0	4.4	3.7
Louisville	516.9	534.2	529.2	31.1	38.5	23.9	6.0	7.2	4.5
Owensboro	44.2	44.5	45.3	3.8	3.2	3.0	8.6	7.2	6.6
Louisiana	1,975.0	1,940.3	1,964.8	206.1	185.2	191.1	10.4	9.5	9.7
Alexandria	61.9	61.4	62.2	6.2	5.7	6.6	10.0	9.2	10.7
Baton Rouge	276.1	270.2	274.9	25.7	23.0	24.1	9.3	8.5	8.8
Houma-Thibodaux	71.5	71.5	72.3	7.3	5.9	6.1	10.1	8.3	8.4
Lafayette	103.3	100.4	102.5	9.2	8.0	8.5	8.9	8.0	8.3
Monroe	70.9	69.3	70.0	7.3	6.2	6.4	10.3	8.9	9.2
New Orleans	615.5	607.0	615.5	56.4	52.0	53.8	9.2	8.6	8.7
Shreveport	167.1	160.0	160.4	16.8	15.5	15.9	10.1	9.7	9.9
Maine	620.8	619.9	630.9	18.1	23.5	21.5	2.9	3.8	3.4
Lewiston-Auburn	41.6	41.3	42.3	2.2	2.0	2.5	5.3	4.8	5.9
Portland	131.9	133.4	135.6	1.7	3.1	2.2	1.3	2.3	1.6

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 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P	July 1988	June 1989	July 1989 ^P
Maryland	2,528.3	2,566.8	2,614.1	117.0	111.1	102.5	4.6	4.3	3.9
Baltimore	1,211.3	1,223.0	1,246.6	59.7	58.2	53.6	4.9	4.8	4.3
Massachusetts ¹	3,195.5	3,223.1	3,245.0	115.4	126.5	148.4	3.6	3.9	4.6
Boston	1,570.9	1,572.8	1,582.7	48.8	53.8	62.6	3.1	3.4	4.0
Brockton	100.1	102.3	102.9	4.4	4.9	5.7	4.4	4.8	5.6
Fall River	76.2	77.8	78.3	4.6	4.3	6.6	6.1	5.5	8.4
Fitchburg-Leominster	46.8	48.7	48.4	2.5	2.7	3.1	5.3	5.6	6.3
Lawrence-Haverhill	190.3	193.5	192.1	8.4	10.3	11.1	4.4	5.3	5.8
Lowell	152.7	157.6	158.1	5.9	7.1	8.3	3.8	4.5	5.2
New Bedford	86.6	89.4	90.2	4.7	4.8	6.5	5.5	5.3	7.2
Pittsfield	41.7	41.6	42.4	2.0	1.8	1.9	4.8	4.4	4.5
Springfield	253.8	255.5	256.5	9.3	10.4	12.5	3.7	4.1	4.9
Worcester	223.4	233.2	233.0	7.7	9.2	9.9	3.4	4.0	4.3
Michigan ¹	4,677.9	4,678.4	4,728.0	363.7	351.0	345.2	7.8	7.5	7.3
Ann Arbor	163.4	162.2	163.2	6.4	8.1	7.1	3.9	5.0	4.4
Battle Creek	65.8	66.1	66.0	4.5	5.5	4.9	6.9	8.3	7.5
Benton Harbor	81.1	80.9	81.3	5.4	6.3	5.7	6.6	7.8	7.0
Detroit	2,246.2	2,247.6	2,260.1	191.0	171.4	170.3	8.5	7.6	7.5
Flint	196.4	189.0	195.9	30.0	18.9	24.6	15.3	10.0	12.6
Grand Rapids	365.7	368.7	373.4	20.1	21.0	21.0	5.5	5.7	5.6
Jackson	65.8	67.1	66.9	4.8	5.0	4.3	7.4	7.4	6.4
Kalamazoo	118.9	119.6	120.2	6.2	6.8	6.2	5.2	5.7	5.2
Lansing-East Lansing	243.0	249.6	245.0	14.4	15.4	14.5	5.9	6.2	5.9
Muskegon	69.8	69.0	69.4	5.8	6.7	5.7	8.3	9.7	8.3
Saginaw-Bay City-Midland	186.9	186.4	189.3	13.6	14.2	13.7	7.3	7.6	7.2
Minnesota	2,345.1	2,368.3	2,362.9	86.5	115.1	94.8	3.7	4.9	4.0
Duluth	106.7	108.7	107.6	5.8	6.7	5.5	5.4	6.2	5.1
Minneapolis-St.Paul	1,401.9	1,409.8	1,419.0	45.6	62.1	51.7	3.3	4.4	3.6
Rochester	61.7	62.0	62.7	1.6	2.3	1.8	2.6	3.7	2.9
St. Cloud	94.3	95.3	95.7	3.8	4.9	4.0	4.0	5.1	4.1
Mississippi	1,164.2	1,203.4	1,196.9	104.9	118.3	99.5	9.0	9.8	8.3
Jackson	201.9	208.9	208.5	12.9	13.9	11.9	6.4	6.6	5.7
Missouri	2,627.9	2,649.4	2,673.1	147.3	140.6	137.8	5.6	5.3	5.2
Kansas City	865.1	864.7	866.1	49.2	47.5	38.0	5.7	5.5	4.4
St. Louis LMA	1,277.2	1,276.0	1,293.2	72.9	70.1	66.4	5.7	5.5	5.1
Springfield	124.0	124.4	127.4	4.7	5.4	5.4	3.8	4.4	4.2
Montana	409.8	409.5	410.4	26.8	24.5	21.4	6.5	6.0	5.2
Nebraska	830.9	820.3	824.0	28.5	29.4	27.7	3.4	3.6	3.4
Lincoln	126.9	125.1	126.4	3.4	3.8	4.1	2.7	3.1	3.2
Omaha	332.1	326.8	327.2	13.0	13.7	12.3	3.9	4.2	3.7
Nevada	593.0	605.5	607.5	28.6	31.9	32.0	4.8	5.3	5.3
Las Vegas	343.6	355.2	356.3	18.5	19.7	19.8	5.4	5.5	5.6
Reno	142.3	141.8	141.6	5.7	6.6	6.6	4.0	4.7	4.7
New Hampshire	616.4	634.5	638.9	16.7	21.3	20.5	2.7	3.4	3.2
Manchester	84.6	87.9	86.2	2.1	2.9	2.7	2.5	3.3	3.1
Nashua	99.5	102.8	98.8	2.9	3.7	3.1	2.9	3.6	3.1
Portsmouth-Dover-Rochester	136.4	138.4	137.4	3.1	3.5	3.7	2.3	2.5	2.7
New Jersey ¹	4,050.8	4,037.7	4,045.4	168.3	166.2	181.6	4.2	4.1	4.5
Atlantic City	194.3	191.4	199.6	8.4	9.4	9.3	4.3	4.9	4.6
Bergen-Passaic	724.7	727.0	723.9	27.5	27.1	30.4	3.8	3.7	4.2
Jersey City	273.3	271.0	271.2	19.6	17.7	19.3	7.2	6.5	7.1
Middlesex-Somerset-Hunterdon	570.5	573.4	576.2	17.7	16.7	19.2	3.1	2.9	3.3
Monmouth-Ocean	500.6	498.3	504.1	17.6	17.9	20.1	3.5	3.6	4.0
Newark	963.5	957.7	957.7	42.0	42.5	46.1	4.4	4.4	4.8
Trenton	173.9	172.6	171.1	5.5	5.4	6.5	3.1	3.1	3.8
Vineland-Millville-Bridgeton	59.3	58.7	59.3	4.4	3.9	4.4	7.4	6.6	7.4
New Mexico	696.5	698.7	694.0	56.1	51.6	44.9	8.1	7.4	6.5
Albuquerque	266.0	267.5	265.9	17.0	16.0	13.5	6.4	6.0	5.1
Las Cruces	55.2	56.7	55.3	4.3	4.4	3.9	7.8	7.8	7.1
Santa Fe	69.5	68.4	69.3	3.5	2.9	2.8	5.0	4.2	4.1

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 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a	July 1988	June 1989	July 1989 ^a
New York¹	8,727.9	8,771.5	8,863.9	365.1	411.1	410.4	4.2	4.7	4.6
Albany-Schenectady-Troy	431.1	440.5	445.9	14.7	17.2	16.4	3.4	3.9	3.7
Binghamton	129.1	129.9	129.3	4.3	5.6	5.6	3.3	4.3	4.3
Buffalo	457.9	464.4	470.5	22.1	25.3	27.0	4.8	5.4	5.7
Elmira	43.1	45.1	45.3	1.7	1.9	1.7	4.0	4.2	3.7
Nassau-Suffolk	1,465.4	1,473.9	1,488.3	49.2	58.7	61.8	3.4	4.0	4.1
New York	4,014.9	3,988.6	4,035.0	183.5	199.1	200.2	4.6	5.0	5.0
New York City	3,306.9	3,292.7	3,327.5	162.9	174.0	175.4	4.9	5.3	5.3
Orange County	136.5	140.8	141.0	4.8	6.7	6.4	3.5	4.8	4.6
Poughkeepsie	132.5	132.9	134.1	2.9	4.2	4.0	2.2	3.2	3.0
Rochester	512.1	519.5	522.1	19.3	20.3	19.4	3.8	3.9	3.7
Syracuse	321.2	323.2	324.4	13.1	14.5	12.8	4.1	4.5	4.0
Utica-Rome	138.9	140.6	141.8	6.0	6.3	5.9	4.3	4.5	4.2
North Carolina¹	3,430.2	3,489.2	3,527.7	109.3	130.8	118.9	3.2	3.7	3.4
Asheville	92.3	93.7	93.7	2.2	2.8	2.2	2.4	2.9	2.3
Charlotte-Gastonia-Rock Hill	649.9	666.4	676.5	18.7	24.3	20.9	2.9	3.6	3.1
Greensboro-Winston-Salem-High Point	533.6	538.5	540.8	13.8	19.2	18.2	2.6	3.6	3.4
Raleigh-Durham	410.5	416.4	425.5	9.3	11.8	11.2	2.3	2.8	2.6
North Dakota	342.2	340.7	341.4	15.0	15.5	13.0	4.4	4.6	3.8
Bismarck	47.1	47.7	47.7	2.1	2.3	1.7	4.5	4.8	3.6
Fargo-Moorhead	85.1	86.5	86.9	2.4	2.4	2.2	2.9	2.8	2.5
Grand Forks	35.5	35.3	35.4	1.5	1.5	1.5	4.2	4.3	4.3
Ohio¹	5,365.9	5,536.9	5,525.6	273.5	321.0	277.1	5.1	5.8	5.0
Akron	324.5	335.7	335.5	15.5	18.7	15.3	4.8	5.6	4.6
Canton	191.9	198.4	199.5	10.2	12.4	11.7	5.3	6.3	5.8
Cincinnati	772.5	803.5	806.9	36.8	39.8	34.2	4.8	5.0	4.2
Cleveland	945.7	964.9	968.6	44.6	48.6	41.3	4.7	5.0	4.3
Columbus	713.7	745.7	742.4	30.5	37.6	32.0	4.3	5.0	4.3
Dayton-Springfield	467.4	489.0	485.1	20.8	26.5	22.6	4.5	5.4	4.7
Toledo	310.3	323.3	322.2	15.8	19.9	17.4	5.1	6.2	5.4
Youngstown-Warren	221.7	230.2	224.7	14.3	15.3	13.6	6.5	6.7	6.1
Oklahoma	1,551.5	1,546.6	1,568.3	106.9	87.4	86.9	6.9	5.6	5.5
Enid	29.2	28.6	29.2	1.6	1.4	1.2	5.5	4.7	4.2
Lawton	50.3	50.0	51.4	3.1	2.3	2.4	6.1	4.6	4.6
Oklahoma City	509.5	497.4	508.0	29.0	23.2	23.1	5.7	4.7	4.5
Tulsa	351.2	348.2	358.3	25.9	20.5	19.8	7.4	5.9	5.5
Oregon	1,437.0	1,475.4	1,480.9	84.9	77.8	77.3	5.9	5.3	5.2
Eugene-Springfield	140.3	147.9	145.6	7.9	7.8	7.8	5.6	5.3	5.3
Portland	651.0	669.3	671.6	33.2	29.3	29.1	5.1	4.4	4.3
Salem	137.5	140.6	138.2	8.0	7.0	6.2	5.8	5.0	4.5
Pennsylvania¹	5,912.3	5,981.0	5,960.5	316.2	272.2	276.8	5.3	4.6	4.6
Allentown-Bethlehem	332.4	339.5	336.7	16.3	14.6	15.6	4.9	4.3	4.6
Altoona	61.6	61.7	61.7	4.4	3.5	3.6	7.1	5.6	5.9
Beaver County	61.7	60.9	60.2	5.8	4.4	4.6	9.4	7.2	7.6
Erie	133.9	134.8	135.5	8.3	6.9	6.5	6.2	5.1	4.8
Harrisburg-Lebanon-Carlisle	329.6	333.9	336.1	13.9	11.6	13.0	4.2	3.5	3.9
Johnstown	97.3	99.0	99.8	7.2	6.9	8.0	7.4	7.0	8.0
Lancaster	225.2	229.7	228.6	8.9	7.6	7.8	4.0	3.3	3.4
Philadelphia	2,457.2	2,477.0	2,458.7	109.6	99.1	99.7	4.5	4.0	4.1
Pittsburgh	991.6	997.5	993.0	57.9	46.9	45.4	5.8	4.7	4.6
Reading	175.2	181.5	181.1	7.9	7.0	6.9	4.5	3.9	3.8
Scranton-Wilkes-Barre	368.9	370.7	371.9	25.3	20.5	22.2	6.9	5.5	6.0
Williamsport	60.3	62.3	61.8	3.1	3.5	3.4	5.2	5.6	5.6
York	220.4	225.6	224.9	9.6	9.2	9.2	4.4	4.1	4.1
Rhode Island	532.7	532.2	537.7	16.2	20.1	21.1	3.0	3.8	3.9
Pawtucket-Woonsocket-Attleboro	168.4	168.3	169.3	6.9	8.0	8.0	4.1	4.7	4.7
Providence	345.5	346.1	349.7	10.2	12.8	13.3	3.0	3.7	3.8
South Carolina	1,690.6	1,759.4	1,736.2	74.6	87.7	78.4	4.4	5.0	4.5
Charleston	232.4	244.5	239.8	9.0	11.0	9.2	3.9	4.5	3.8
Columbia	237.5	247.2	243.2	7.5	9.3	7.9	3.2	3.8	3.3
Greenville-Spartanburg	334.6	355.5	347.0	11.6	13.6	13.1	3.5	3.8	3.8
South Dakota	366.8	373.8	371.5	13.0	15.8	14.9	3.5	4.2	4.0
Rapid City	40.8	40.9	41.3	1.4	1.6	1.5	3.5	3.8	3.6
Sioux Falls	74.2	74.4	73.9	2.2	2.5	2.7	3.0	3.4	3.7

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 1988	June 1989	July 1989 ^p	July 1988	June 1989	July 1989 ^p	July 1988	June 1989	July 1989 ^p
Tennessee	2,416.5	2,364.7	2,385.5	152.6	130.9	113.5	6.3	5.5	4.8
Chattanooga	215.3	215.8	216.2	12.0	12.3	9.7	5.6	5.7	4.5
Johnson City-Kingsport-Bristol	220.7	215.9	219.0	13.9	10.7	9.9	6.3	5.0	4.5
Knoxville	294.1	285.8	287.3	15.2	16.4	13.6	5.2	5.7	4.7
Memphis LMA	454.4	449.7	453.5	23.6	24.1	18.3	5.2	5.4	4.0
Nashville	537.5	516.7	518.3	26.1	21.8	17.5	4.9	4.2	3.4
Texas¹	8,448.3	8,332.9	8,427.7	559.3	587.7	614.5	6.6	7.1	7.3
Abilene	53.5	53.2	53.4	3.0	3.7	3.8	5.7	7.0	7.1
Amarillo	102.0	98.8	99.4	5.5	5.5	5.8	5.4	5.6	5.8
Austin	426.8	421.1	421.7	24.3	25.0	26.3	5.7	5.9	6.2
Beaumont-Port Arthur	165.1	162.7	164.8	15.4	15.9	16.2	9.3	9.8	9.8
Brazoria	83.9	84.9	84.9	6.2	6.5	6.5	7.4	7.6	7.7
Brownsville-Harlingen	99.8	100.4	102.1	12.0	12.8	13.1	12.0	12.7	12.9
Bryan-College Station	57.9	58.5	59.3	2.5	2.8	3.0	4.3	4.8	5.0
Corpus Christi	160.7	159.1	160.7	14.2	14.5	14.2	8.8	9.1	8.9
Dallas	1,493.7	1,447.8	1,472.4	79.3	83.6	91.6	5.3	5.8	6.2
El Paso	242.5	244.0	245.7	23.4	26.8	27.1	9.7	11.0	11.0
Fort Worth-Arlington	702.4	691.7	702.5	40.1	40.9	42.4	5.7	5.9	6.0
Galveston-Texas City	112.8	107.7	110.1	9.0	8.3	8.8	8.0	7.7	8.0
Houston	1,656.6	1,648.9	1,672.1	104.0	104.7	108.9	6.3	6.4	6.5
Killeen-Temple	97.5	97.4	98.0	6.8	7.6	7.6	7.0	7.8	7.8
Laredo	47.5	48.6	49.5	5.3	5.8	5.9	11.2	11.9	11.9
Longview-Marshall	81.6	79.9	81.2	6.3	7.2	7.5	7.8	9.1	9.2
Lubbock	116.2	113.3	116.6	5.8	6.4	7.2	5.0	5.6	6.2
McAllen-Edinburg-Mission	147.0	157.2	154.9	21.5	23.1	25.2	14.6	14.7	16.2
Midland	50.4	49.1	49.3	2.7	3.2	3.4	5.3	6.5	7.0
Odessa	54.4	52.0	52.4	3.7	4.7	4.9	6.8	9.1	9.3
San Angelo	45.8	45.0	44.9	2.6	2.7	2.7	5.6	6.0	6.0
San Antonio	617.1	611.8	616.6	46.1	48.5	49.6	7.5	7.9	8.0
Sherman-Denison	50.3	47.5	48.0	2.9	3.0	3.0	5.7	6.2	6.2
Texarkana	58.2	58.9	58.5	4.4	4.7	4.4	7.6	8.0	7.5
Tyler	76.0	75.1	75.8	5.2	5.4	5.8	6.9	7.2	7.7
Victoria	36.9	36.7	36.7	2.3	2.3	2.4	6.2	6.3	6.6
Waco	93.7	92.1	92.7	6.1	5.7	5.8	6.5	6.2	6.3
Wichita Falls	58.8	56.9	57.5	3.1	3.5	3.7	5.3	6.2	6.5
Utah	761.0	779.9	788.6	37.6	31.3	31.0	4.9	4.0	3.9
Provo-Orem	103.5	107.6	109.0	4.3	3.9	4.2	4.1	3.6	3.8
Salt Lake City-Ogden	498.3	510.7	516.0	23.5	19.8	19.0	4.7	3.9	3.7
Vermont	298.8	312.6	311.9	6.2	11.9	11.6	2.1	3.8	3.7
Burlington	76.1	77.4	77.8	1.2	2.3	2.3	1.6	3.0	2.9
Virginia	3,152.5	3,176.4	3,215.9	110.2	115.0	101.5	3.5	3.6	3.2
Charlottesville	66.9	67.1	67.2	1.9	1.5	1.4	2.8	2.2	2.0
Danville	52.6	53.8	54.1	3.0	3.2	2.9	5.8	6.0	5.4
Lynchburg	71.0	71.8	72.3	3.1	2.8	2.6	4.3	3.9	3.6
Norfolk-Virginia Beach-Newport News	628.9	625.4	631.5	25.1	26.8	22.8	4.0	4.3	3.6
Richmond-Petersburg	451.6	458.6	465.8	13.9	16.3	14.0	3.1	3.6	3.0
Roanoke	124.0	123.3	125.4	4.3	4.4	4.1	3.5	3.6	3.3
Washington	2,341.9	2,441.3	2,431.4	145.1	136.5	138.8	6.2	5.6	5.7
Seattle	1,036.0	1,089.5	1,092.4	52.4	49.1	49.3	5.1	4.5	4.5
West Virginia	752.2	775.5	776.5	75.9	62.6	56.4	10.1	8.1	7.3
Charleston	115.5	122.0	120.8	9.5	8.0	6.0	8.3	6.6	5.0
Huntington-Ashland	126.7	129.6	129.6	10.3	8.9	7.9	8.1	6.8	6.1
Parkersburg-Marietta	71.3	74.1	73.2	4.6	4.9	3.8	6.5	6.6	5.1
Wheeling	72.1	73.9	74.0	4.8	4.9	3.9	6.7	6.6	5.3
Wisconsin	2,632.0	2,683.7	2,665.2	94.9	121.2	107.5	3.6	4.5	4.0
Appleton-Oshkosh-Neenah	174.8	178.9	177.2	5.2	7.8	6.7	3.0	4.4	3.8
Eau Claire	73.7	75.4	74.2	2.4	3.0	2.7	3.2	4.0	3.6
Green Bay	108.3	112.0	111.7	3.4	4.5	4.2	3.2	4.0	3.8
Janesville-Beloit	75.1	76.0	74.8	3.2	5.2	4.2	4.2	6.9	5.6
Kenosha	58.2	54.1	54.4	3.9	4.8	4.8	6.7	8.8	8.8
La Crosse	57.7	61.3	60.8	2.1	2.7	2.2	3.7	4.3	3.6
Madison	224.2	229.9	228.8	4.7	6.0	5.6	2.1	2.6	2.4
Milwaukee	776.5	796.6	783.2	27.0	35.2	28.9	3.5	4.4	3.7
Racine	92.1	95.0	94.6	4.2	5.1	4.7	4.6	5.3	5.0
Wausau	63.3	65.1	65.3	2.1	2.8	2.5	3.4	4.4	3.9
Wyoming	240.1	230.4	228.4	13.0	12.7	14.0	5.4	5.5	6.1

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

² Not available.

^p = preliminary.

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

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

Explanatory Notes

Introduction

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

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

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

RELATION BETWEEN THE HOUSEHOLD AND ESTABLISHMENT SERIES

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

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

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

Employment

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

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

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

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

Hours of work

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

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

Earnings

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

COMPARABILITY OF HOUSEHOLD DATA WITH OTHER SERIES

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

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

unemployed in the household survey.

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

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

COMPARABILITY OF PAYROLL EMPLOYMENT DATA WITH OTHER SERIES

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

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

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

Household Data (A tables)

COLLECTION AND COVERAGE

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

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

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

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

CONCEPTS AND DEFINITIONS

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

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

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

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

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

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

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

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

Jobseekers are all unemployed persons who made

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

HISTORICAL COMPARABILITY

Change in lower age limit

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

Report on the Labor Force, February 1967.

Noncomparability of labor force levels

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

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

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

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

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

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

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

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

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

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

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

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

Changes in the occupational and industrial classification system

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

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

The 1980 census occupational classification system evolved

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

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

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

Changes in the sample design

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

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

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

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

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

ESTIMATING METHODS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Rounding of estimates

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

Reliability of the estimates

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

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

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

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

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

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

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

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

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

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

2. Approximately 90 percent of the intervals from 1.6

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

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

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

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

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

Table B. Standard errors for major employment status categories

(in thousands)

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

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

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

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

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

Table C. Standard errors for unemployment rates by major characteristics

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

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

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

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

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

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

Table D. Standard errors for estimates of monthly level

(in thousands)

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

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

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

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

(in thousands)

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

¹ See footnote 1, table D.

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

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

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

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

Standard error of year-to-year change =

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

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

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

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

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

or about 259,000.

Table F. Standard errors for unemployment rates

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

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

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

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

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

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

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

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

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

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

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

(In thousands)

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

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

COLLECTION

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

Federal-State cooperation

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

Shuttle schedules

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

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

CONCEPTS

Industrial classification

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

industry indicated by the principal product or activity.

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

Industry employment

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

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

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

Indexes of diffusion of employment change (table B-7). These indexes measure the dispersion among industries of the change in employment over the specified time span. The overall indexes are calculated from 349 seasonally adjusted employment series (three-digit industries) covering all nonagricultural payroll employment in the private sector. The manufacturing diffusion indexes are based on 141 three-digit industries.

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

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

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

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

Industry hours and earnings

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Railroad hours and earnings. The figures for Class I railroads (excluding switching and terminal companies) are based on monthly data summarized in the M-300 report of the Interstate Commerce Commission and relate to all employees except executives, officials, and staff assistants (ICC 136

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

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

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

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

ESTIMATING METHODS

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

The "link relative" technique

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

Size and regional stratification

A number of industries are stratified by size of establish-

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

Benchmark adjustments

Employment estimates are compared periodically with

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

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

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

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

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

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

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

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

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

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

THE SAMPLE

Design

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

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

(In thousands)

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

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

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

Coverage

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

Table N. Employment benchmarks and approximate coverage of BLS employment and payrolls sample, March 1988

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

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 The Interstate Commerce Commission provides a complete count of employment for Class I railroads.

³ Total Federal employment counts for use in national estimates are provided to BLS by the Office of Personnel Management. Detailed industry estimates for the Executive Branch, as well as State and area estimates of Federal employment, are based on a sample of 5,000 reports covering about 56 percent of employment in Federal establishments.

Reliability

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

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

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

(In percent)

Industry	Average benchmark revision in estimates of employment ¹	Relative error ²	
		Average weekly hours	Average hourly earnings
Total	0.2		
Total private . . . . .	.3	0.1	0.2
Mining	2.2	1.0	1.3
Construction	1.8	.2	.5
Manufacturing . . . . .	.7	.1	.2
Durable goods . . . . .	.7	.1	.3
Nondurable goods . . . . .	.9	.1	.2
Transportation and public utilities . . . . .	.4	.7	.6
Wholesale trade	1.0	.2	.4
Retail trade . . . . .	.7	.2	.4
Finance, insurance, and real estate . . . . .	.3	.2	.4
Services . . . . .	.3	.4	.6
Government ³ . . . . .	.3	—	—

¹ The average percent revision in employment for the 1984-88 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	88,900	89,500	Nondurable goods—Continued		
Total private	61,300	58,900	Chemicals and allied products	2,600	2,800
Goods-producing industries	21,200	19,800	Petroleum and coal products	1,200	1,200
Mining	4,400	4,200	Rubber and misc. plastics products	1,600	1,600
Oil and gas extraction	3,800	3,300	Leather and leather products	1,700	1,600
Construction	14,400	15,100	Service-producing industries	85,400	85,700
General building contractors	4,900	5,100	Transportation and public utilities	14,600	13,000
Manufacturing	18,200	18,300	Transportation	16,600	16,000
Durable goods	13,700	12,300	Communication and public utilities	6,500	6,100
Lumber and wood products	2,200	2,000	Wholesale trade	8,700	7,700
Furniture and fixtures	1,700	1,600	Durable goods	5,800	5,300
Stone, clay, and glass products	1,600	1,500	Nondurable goods	5,000	4,400
Primary metal industries	4,300	4,300	Retail trade	38,600	34,400
Blast furnaces and basic steel products	3,300	3,100	General merchandise stores	22,800	20,400
Fabricated metal products	2,400	2,200	Food stores	6,800	6,000
Machinery, except electrical	5,700	6,800	Automotive dealers and service stations	4,200	5,100
Electrical and electronic equipment	4,900	4,900	Eating and drinking places	10,100	9,500
Transportation equipment	7,700	7,000	Finance, insurance, and real estate	8,700	7,600
Motor vehicles and equipment	6,500	6,600	Finance	4,100	3,900
Instruments and related products	2,100	2,200	Insurance	3,700	3,100
Miscellaneous manufacturing	1,800	1,800	Real estate	5,000	4,000
Nondurable goods	8,500	8,400	Services	36,600	34,900
Food and kindred products	5,600	5,600	Business services	11,700	10,700
Tobacco manufactures	1,500	1,400	Health services	10,200	10,000
Textile mill products	1,800	1,700	Government	59,700	53,500
Apparel and other textile products	4,500	4,000	Federal	15,900	11,300
Paper and allied products	1,600	1,400	State	22,000	20,000
Printing and publishing	2,100	2,000	Local	34,600	34,500

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

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

COLLECTION

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

CONCEPTS

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

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

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

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

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

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

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

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

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

NOTES ON THE DATA

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

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

State and Area Labor Force Data (D table)

FEDERAL-STATE COOPERATIVE PROGRAM

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

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

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

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

ESTIMATING METHODS

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

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

Estimates for States

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

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

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

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

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

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

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

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

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

Estimates for sub-State areas

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

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

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

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

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

Seasonal Adjustment

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

Since January 1980, national labor force data have been seasonally adjusted with a procedure called *X-11 ARIMA* (Auto-Regressive Integrated Moving Average), which was developed at Statistics Canada as an extension of the standard X-11 method. A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method* by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, January 1983.

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

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

total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force. Because of the independent seasonal adjustment of various series, components will not necessarily add to totals.

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

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

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

All series are seasonally adjusted using the multiplicative models under X-11 ARIMA. Seasonal adjustment factors are directly applied to the component levels. Seasonally adjusted totals for most of these series are then obtained by taking a weighted average of the seasonally adjusted data for the component series.

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and seasonally adjusted average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing average weekly earnings, seasonally adjusted, by the seasonally adjusted Consumer Price Index for Urban

Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours, seasonally adjusted, by production or nonsupervisory workers, seasonally adjusted, and dividing by the 1977 base. For total private, total goods-producing, total private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours, seasonally adjusted, for the appropriate component industries and dividing by the 1977 base.

Seasonally adjusted data are not published for a number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These

failed or unsatisfactory seasonally adjusted series, however, are used in the aggregation to broader level seasonally adjusted series.

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

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

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

Regional Office	Cooperating State Agencies	
	Current Employment Statistics (CES) and State and Local Area Unemployment Statistics (LAUS) Programs	
	BLS Region	BLS Region
REGION I—BOSTON Suite 1603 John Fitzgerald Kennedy Federal Building Boston, MA 02203 Phone: (617) 565-2327	IV ALABAMA Department of Industrial Relations, Room 427, Industrial Relations Bldg., Montgomery 36130	VIII MONTANA Department of Labor and Industry, P.O. Box 1728, Helena 59624
REGION II—NEW YORK Room 808 201 Varick Street New York, NY 10014 Phone: (212) 337-2400	X ALASKA Department of Labor, Research and Analysis Section, 1111 West 8th St., Juneau 99802-5501	VII NEBRASKA Department of Labor, P.O. Box 94600, Lincoln 68509-4600
REGION III—PHILADELPHIA 3535 Market Street P.O. Box 13309 Philadelphia, PA 19101 Phone: (215) 596-1154	IX ARIZONA Department of Economic Security, 1300 West Washington St., Phoenix 85005	IX NEVADA Employment Security Department, 500 East 3rd St., Carson City 89713
REGION IV—ATLANTA Suite 540 1371 Peachtree Street, NE. Atlanta, GA 30367 Phone: (404) 347-4416	VI ARKANSAS Department of Labor, Research and Statistics Section, Capitol Mall, Little Rock 72203-2981	I NEW HAMPSHIRE Department of Employment Security, 32 South Main St., Concord 03301
REGION V—CHICAGO 9th Floor 230 South Dearborn Street Chicago, IL 60604 Phone: (312) 353-1880	IX CALIFORNIA Employment Development Department, Employ- ment Data and Research Division, 7000 Franklin Blvd., Bldg. 1100, Sacramento 95823	II NEW JERSEY Department of Labor, Division of Planning and Research, P.O. Box 2765, Trenton 08625
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REGIONS VII and VIII— KANSAS CITY 15th Floor 911 Walnut Street Kansas City, MO 64106 Phone: (816) 426-2481	I CONNECTICUT Labor Department, Employment Security Division, 200 Folly Brook Blvd., Wethersfield 06109	II NEW YORK Department of Labor, Division of Research and Statistics, State Campus, Room 400, Bldg. 12, Albany 12240-0020
REGIONS IX and X— SAN FRANCISCO 71 Stevenson Street P.O. Box 3766 San Francisco, CA 94119 Phone: (415) 995-5605	III DELAWARE Department of Labor, Office of Occupational and Labor Market Information, P.O. Box 9029, Newark 19714-9029	IV NORTH CAROLINA Employment Security Commission, Labor Market Information Division, P.O. Box 25903, Raleigh 27611
	III DIST. OF COL. Department of Employment Services, Division of Labor Market Information and Analysis, Room 201, 500 C St., NW., Washington, DC 20001	VIII NORTH DAKOTA Job Service, P.O. Box 1537, Bismarck 58502
	IV FLORIDA Florida Department of Labor and Employment Security, Bureau of Labor Market Information, Suite 203, 2574 Seagate Dr., Tallahassee 32399-0674	V OHIO Bureau of Employment Services, Labor Market Information Division, 1160 Dublin Rd., Columbus 43215
	IV GEORGIA Department of Labor, Labor Information Systems, 148 International Blvd., NE., Atlanta 30303	VI OKLAHOMA Employment Security Commission, Research and Planning Division, 2401 North Lincoln, Oklahoma City 73105
	IX HAWAII Department of Labor and Industrial Relations, Research and Statistics Office, Room 304, 830 Punchbowl St., Honolulu 96813	X OREGON Employment Division, 875 Union St., NE., Salem 97311
	X IDAHO Department of Employment, 317 Main St., Boise 83735	III PENNSYLVANIA Department of Labor and Industry, Research and Statistics Division, Room 1216, 7th and Forster Sts., Harrisburg 17121
	V ILLINOIS Department of Employment Security, (2 South), 401 South State St., Chicago 60605	II PUERTO RICO Department of Labor and Human Resources, Bureau of Labor Statistics, 17th Fl., 505 Munoz Rivera Avenue, Hato Rey 00918 (CES), Bureau of Employment Security, Research and Analysis Section, 15th Fl., 505 Munoz Rivera Avenue, Hato Rey 00918 (LAUS)
	V INDIANA Department of Employment and Training Services, Statistical Services Division, 10 North Senate Avenue, Indianapolis 46204	I RHODE ISLAND Department of Employment Security, 24 Mason St., Providence 02903
	VII IOWA Department of Employment Services, 1000 East Grand Avenue, Des Moines 50319	IV SOUTH CAROLINA Employment Security Commission, Labor Market Information Division, P.O. Box 995, Columbia 29202
	VII KANSAS Department of Human Resources, 401 Topeka Avenue, Topeka 66603	VIII SOUTH DAKOTA Department of Labor, Labor Market Information Center, P.O. Box 4730, Aberdeen 57401
	IV KENTUCKY Department for Employment Services, Labor Market Research and Analysis Branch, 275 East Main St., Frankfort 40621	IV TENNESSEE Department of Employment Security, Research and Statistics Division, 519 Cordell Hull Office Bldg., Nashville 37219
	VI LOUISIANA Department of Labor, Research and Statistics Section, 1001 North 23rd St., Baton Rouge 70804-9094	VI TEXAS Employment Commission, Room 208-T, 1117 Trinity St., Austin 78778
	I MAINE Department of Labor, Division of Economic Analysis and Research, 20 Union St., Augusta 04330	VIII UTAH Department of Employment Security, Labor Market Information Services, P.O. Box 11249, Salt Lake City 84147
	III MARYLAND Department of Employment and Training, Research and Analysis Division, 1100 North Eutaw St., Baltimore 21201	I VERMONT Department of Employment and Training, Office of Policy and Public Information, P.O. Box 488, Montpelier 05602
	I MASSACHUSETTS Department of Employment and Training, Government Center, Charles F. Hurley Bldg., Boston 02114	III VIRGINIA Employment Commission, Economic Information Services, P.O. Box 1358, Richmond 23211
	V MICHIGAN Employment Security Commission, Research and Statistics Division, Room 516, 7310 Woodward Avenue, Detroit 48202	II VIRGIN ISLANDS Department of Labor, Bureau of Labor Statistics, 53-A, 54-A&B Kronprindsens Gade Charlotte Amalie, St. Thomas 00801-3359 (CES)
	V MINNESOTA Department of Jobs and Training, Research and Statistics Division, 5th Fl., 390 North Robert St., St. Paul 55101	X WASHINGTON Employment Security Department, Labor Market and Economic Analysis Branch, 605 Woodview Dr., Olympia 98503
	IV MISSISSIPPI Employment Security Commission, Labor Market Information Division, P.O. Box 1699, Jackson 39215-1699	III WEST VIRGINIA Department of Employment Security, Division of Labor and Economic Security, 112 California Avenue, Charleston 25305
	VII MISSOURI Division of Employment Security, P.O. Box 59, Jefferson City 65104	V WISCONSIN Department of Industry, Labor, and Human Relations, Labor Market Information Bureau, 201 East Washington Avenue, Madison 53707
		VIII WYOMING Employment Security Commission, Research and Analysis Section, P.O. Box 2760, Casper 82602