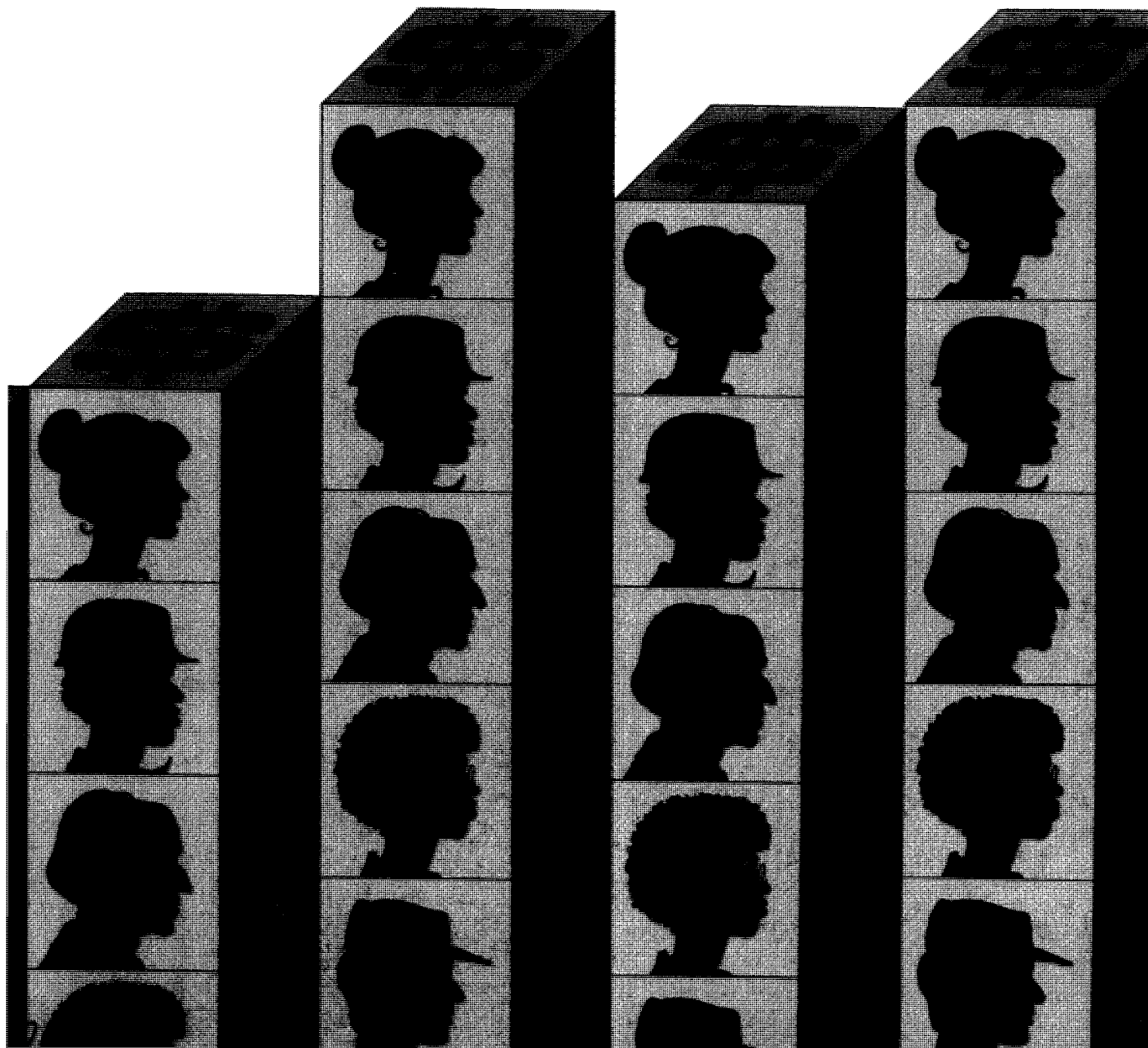




EMPLOYMENT AND EARNINGS

November 1987

U.S. Department of Labor
Bureau of Labor Statistics





U.S. DEPARTMENT OF LABOR

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.

Establishment data

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

State and area labor force data

Annual averages	May
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¹ The latest supplement was published in July 1987.

Employment and Earnings

Vol. 34 No. 11 November 1987

Editors: Gloria Peterson Green, Rosalie K. Epstein

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Employment and Unemployment Developments, October 1987

Employment was up sharply in October while unemployment was essentially unchanged. The overall unemployment rate, 5.9 percent, and the rate for civilian workers, 6.0 percent, were about the same as in September.

The number of nonagricultural payroll jobs, as measured by the survey of business establishments, rose by 550,000, following moderate increases in the previous 2 months. Total civilian employment, as measured by the survey of households, posted a gain of more than 400,000. (The reference period for both surveys was the week of October 11-17.)

Unemployment

Both the number of unemployed persons, at 7.2 million in October, and the civilian unemployment rate, at 6.0 percent, were about unchanged from September, as the increase in employment was matched by a large gain in the labor force.

Jobless rates for adult men (5.1 percent), adult women (5.2 percent), whites (5.2 percent), blacks (12.0 percent), and Hispanics (8.3 percent) showed little or no movement over the month, but have declined considerably over the year. In contrast, the teenage rate has risen 2 percentage points since midsummer and, at 17.4 percent in October, was about the same as a year earlier. (See tables A-33 and A-34.)

The average (mean) duration of unemployment, at 14.0 weeks, was about unchanged in October. At 6.2 weeks, median duration was up slightly over the month, but was still below the levels registered prior to September. (See table A-40.)

Civilian employment and the labor force

Civilian employment, which had declined in September, rose by 415,000 in October to 113.2 million, after seasonal adjustment. Over the past 12 months, employment has grown by 3.0 million, with adult women accounting for 1.5 million of the gain, adult men 1.4 million, and teenagers 120,000. (See table A-33.)

The civilian labor force rebounded by 500,000 in October, reaching a seasonally adjusted level of 120.4 million. The proportion of the population in the labor force edged up slightly to 65.7 percent, matching the peak ratio reached in May and August. Since October 1986, increases in the labor force have totaled 2.0 million.

Industry payroll employment

Total nonagricultural employment rose by 550,000 in October, seasonally adjusted, to a level of 102.9 million. For the second month in a row, increases occurred in more than three-fifths of the 185 industries in the BLS index of diffusion. Over the past 12 months, payroll employment has grown by 2.8 million. (See tables B-4 and B-7.)

In the goods-producing sector, employment rose by 110,000 in October, with factory jobs increasing by 65,000 and reaching 19.2 million. Since June, factory employment has expanded by 220,000. Most of the October improvement occurred in durable goods industries, with sizable gains in electrical equipment, machinery, and fabricated metal products. The number of construction jobs rose by 40,000, following a 30,000 decline in September, and mining employment continued to edge upward.

In the service-producing sector, employment rose sharply in October, after showing only moderate increases in September. The largest increases were in the services industry (150,000) and in local government (165,000), the latter due partly to the return to the payroll of about 65,000 teachers and other school personnel after labor disputes. Retail trade employment increased by about 70,000, following a 60,000 advance in September. In contrast, employment in wholesale trade; in finance, insurance, and real estate; and in transportation and public utilities was essentially unchanged in October. Altogether, jobs in the service sector increased by 440,000.

Weekly hours

Reversing the Labor Day-related curtailment in hours in September, the average workweek of production or non-supervisory workers on private nonagricultural payrolls rose 0.2 hour in October, after seasonal adjustment, reaching 34.8 hours. The manufacturing workweek, at 41.1 hours, also rebounded, and factory overtime rose to 4.0 hours, the highest level in 14 years. (See table C-5.)

Reflecting increases in both employment and the average workweek, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls rose 1.1 percent to 121.5 (1977=100) seasonally adjusted. The manufacturing index rose 2.0 percent to 94.7. (See table C-6.)

Hourly and weekly earnings

Average hourly earnings rose by 0.7 percent in October, while average weekly earnings increased by 1.2 percent, seasonally adjusted. Before seasonal adjustment, average hourly earnings rose by 3 cents to \$9.08, and average weekly earnings were up \$2.85 to \$316.89. Over the past 12 months, hourly earnings have risen 26 cents and weekly earnings have increased \$10.84. (See tables C-1 and C-7.)

The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 174.6 (1977=100) in October, seasonally adjusted, an increase of 0.1 percent from September. For the 12 months ended in October, the increase was 2.6 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements—fluctuations in manufacturing overtime and interindustry employment shifts. In dollars of constant purchasing power, the HEI decreased 1.5 percent during the 12-month period ending in September. (See table C-7.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
November	December 4	February	March 4
December	January 8	March	April 1
January	February 5	April	May 6

**HOUSEHOLD DATA
HISTORICAL**

A-1. Employment status of the noninstitutional population 16 years and over, 1953 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												
1953 ¹	109,287	65,246	59.7	63,410	2,231	61,179	6,260	54,919	1,834	2.8	44,041	
1954	110,463	65,785	59.6	62,251	2,142	60,109	6,205	53,904	3,532	5.4	44,678	
1955	111,747	67,087	60.0	64,234	2,064	62,170	6,450	55,722	2,852	4.3	44,660	
1956	112,919	68,517	60.7	65,764	1,965	63,799	6,283	57,514	2,750	4.0	44,402	
1957	114,213	68,877	60.3	66,019	1,948	64,071	5,947	58,123	2,859	4.2	45,336	
1958	115,574	69,486	60.1	64,883	1,847	63,036	5,586	57,450	4,602	6.6	46,088	
1959	117,117	70,157	59.9	66,418	1,788	64,630	5,565	59,065	3,740	5.3	46,960	
1960 ¹	119,106	71,489	60.0	67,639	1,861	65,778	5,458	60,318	3,852	5.4	47,617	
1961	120,671	72,359	60.0	67,646	1,900	65,746	5,200	60,546	4,714	6.5	48,312	
1962 ²	122,214	72,675	59.5	68,763	2,061	66,702	4,944	61,759	3,911	5.4	49,539	
1963	124,422	73,839	59.3	69,768	2,006	67,762	4,687	63,076	4,070	5.5	50,583	
1964	126,503	75,109	59.4	71,323	2,018	69,305	4,523	64,782	3,786	5.0	51,394	
1965	128,459	76,401	59.5	73,034	1,946	71,088	4,361	66,726	3,366	4.4	52,058	
1966	130,180	77,892	59.8	75,017	2,122	72,895	3,979	68,915	2,875	3.7	52,288	
1967	132,092	79,565	60.2	76,590	2,218	74,372	3,844	70,527	2,975	3.7	52,527	
1968	134,281	80,990	60.3	78,173	2,253	75,920	3,817	72,103	2,817	3.5	53,291	
1969	136,573	82,972	60.8	80,140	2,238	77,902	3,606	74,296	2,832	3.4	53,602	
1970	139,203	84,889	61.0	80,796	2,118	78,678	3,463	75,215	4,093	4.8	54,315	
1971	142,189	86,355	60.7	81,340	1,973	79,367	3,394	75,972	5,016	5.8	55,834	
1972 ²	145,939	88,847	60.9	83,966	1,813	82,153	3,484	78,669	4,882	5.5	57,091	
1973 ¹	148,870	91,203	61.3	86,838	1,774	85,064	3,470	81,594	4,365	4.8	57,667	
1974	151,841	93,670	61.7	88,515	1,721	86,794	3,515	83,279	5,156	5.5	58,171	
1975	154,831	95,453	61.6	87,524	1,678	85,846	3,408	82,438	7,929	8.3	59,377	
1976	157,818	97,826	62.0	90,420	1,668	88,752	3,331	85,421	7,406	7.6	59,991	
1977	160,689	100,665	62.6	93,673	1,656	92,017	3,283	88,734	6,991	6.9	60,025	
1978 ¹	163,541	103,882	63.5	97,679	1,631	96,048	3,387	92,661	6,202	6.0	59,659	
1979	166,460	106,559	64.0	100,421	1,597	98,824	3,347	95,477	6,137	5.8	59,900	
1980	169,349	108,544	64.1	100,907	1,604	99,303	3,364	95,938	7,637	7.0	60,806	
1981	171,775	110,315	64.2	102,042	1,645	100,397	3,368	97,030	8,273	7.5	61,460	
1982	173,939	111,872	64.3	101,194	1,668	99,526	3,401	96,125	10,678	9.5	62,067	
1983	175,891	113,226	64.4	102,510	1,676	100,834	3,383	97,450	10,717	9.5	62,665	
1984	178,080	115,241	64.7	106,702	1,697	105,005	3,321	101,685	8,539	7.4	62,839	
1985	179,912	117,167	65.1	108,856	1,706	107,150	3,179	103,971	8,312	7.1	62,744	
1986 ¹	182,293	119,540	65.6	111,303	1,706	109,597	3,163	106,434	8,237	6.9	62,752	
Monthly data, seasonally adjusted ²												
1986:												
October	182,935	120,163	65.7	111,941	1,749	110,192	3,162	107,030	8,222	6.8	62,772	
November	183,114	120,426	65.8	112,183	1,751	110,432	3,215	107,217	8,243	6.8	62,688	
December	183,297	120,336	65.7	112,387	1,750	110,637	3,161	107,476	7,949	6.6	62,961	
1987:												
January	183,575	120,782	65.8	112,759	1,748	111,011	3,145	107,866	8,023	6.6	62,793	
February	183,738	121,089	65.9	113,122	1,740	111,382	3,236	108,146	7,967	6.6	62,649	
March	183,915	120,958	65.8	113,104	1,736	111,368	3,284	108,084	7,854	6.5	62,957	
April	184,079	121,070	65.8	113,570	1,735	111,835	3,290	108,545	7,500	6.2	63,009	
May	184,259	121,719	66.1	114,173	1,726	112,447	3,335	109,112	7,546	6.2	62,540	
June	184,421	121,235	65.7	113,975	1,718	112,257	3,178	109,079	7,260	6.0	63,187	
July	184,605	121,672	65.9	114,447	1,720	112,727	3,219	109,508	7,224	5.9	62,933	
August	184,738	122,038	66.1	114,817	1,736	113,081	3,092	109,989	7,221	5.9	62,700	
September	184,904	121,604	65.8	114,515	1,743	112,772	3,170	109,602	7,089	5.8	63,300	
October	185,052	122,102	66.0	114,928	1,741	113,187	3,283	109,903	7,174	5.9	62,950	

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.

**HOUSEHOLD DATA
HISTORICAL**

A-2. Employment status of the noninstitutional population 16 years and over by sex, 1976 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												
1976 ..	75,341	58,756	78.0	54,720	1,582	53,138	2,744	50,394	4,036	6.9	16,585	
1977 ..	76,756	59,959	78.1	56,291	1,563	54,728	2,671	52,057	3,667	6.1	16,797	
1978 ¹ ..	78,107	61,151	78.3	58,010	1,531	56,479	2,718	53,761	3,142	5.1	16,956	
1979 ..	79,509	62,215	78.2	59,096	1,489	57,607	2,686	54,921	3,120	5.0	17,293	
1980 ..	80,877	62,932	77.8	58,665	1,479	57,186	2,709	54,477	4,267	6.8	17,945	
1981 ..	82,023	63,486	77.4	58,909	1,512	57,397	2,700	54,697	4,577	7.2	18,537	
1982 ..	83,052	63,979	77.0	57,800	1,529	56,271	2,736	53,534	6,179	9.7	19,073	
1983 ..	84,064	64,580	76.8	58,320	1,533	56,787	2,704	54,083	6,260	9.7	19,484	
1984 ..	85,156	65,386	76.8	60,642	1,551	59,091	2,668	56,423	4,744	7.3	19,771	
1985 ..	86,025	65,967	76.7	61,447	1,556	59,891	2,535	57,356	4,521	6.9	20,058	
1986 ¹ ..	87,349	66,973	76.7	62,443	1,551	60,892	2,511	58,381	4,530	6.8	20,376	
Monthly data, seasonally adjusted²												
1986:												
October ..	87,682	67,130	76.6	62,565	1,590	60,975	2,513	58,462	4,565	6.8	20,552	
November ..	87,773	67,407	76.8	62,833	1,592	61,241	2,506	58,735	4,574	6.8	20,366	
December ..	87,868	67,425	76.7	62,986	1,593	61,393	2,489	58,904	4,439	6.6	20,443	
1987:												
January ..	88,020	67,672	76.9	63,187	1,591	61,596	2,474	59,123	4,484	6.6	20,348	
February ..	88,099	67,764	76.9	63,335	1,584	61,751	2,544	59,207	4,429	6.5	20,335	
March ..	88,186	67,644	76.7	63,282	1,575	61,707	2,639	59,068	4,362	6.4	20,542	
April ..	88,271	67,603	76.6	63,417	1,575	61,842	2,664	59,178	4,186	6.2	20,668	
May ..	88,361	67,816	76.7	63,562	1,566	61,996	2,653	59,343	4,254	6.3	20,545	
June ..	88,442	67,556	76.4	63,471	1,559	61,912	2,521	59,391	4,085	6.0	20,886	
July ..	88,534	67,656	76.4	63,715	1,561	62,154	2,556	59,597	3,941	5.8	20,878	
August ..	88,598	67,925	76.7	63,918	1,575	62,343	2,445	59,898	4,007	5.9	20,673	
September ..	88,683	67,736	76.4	63,939	1,581	62,358	2,550	59,807	3,798	5.6	20,947	
October ..	88,756	67,916	76.5	64,024	1,580	62,444	2,591	59,852	3,893	5.7	20,840	
Annual averages												
WOMEN												
1976 ..	82,476	39,069	47.4	35,701	86	35,615	588	35,027	3,369	8.6	43,406	
1977 ..	83,932	40,705	48.5	37,381	92	37,289	612	36,677	3,324	8.2	43,227	
1978 ¹ ..	85,434	42,731	50.0	39,669	100	39,569	669	38,900	3,061	7.2	42,703	
1979 ..	86,951	44,343	51.0	41,325	108	41,217	661	40,556	3,018	6.8	42,608	
1980 ..	88,472	45,611	51.6	42,241	124	42,117	656	41,461	3,370	7.4	42,861	
1981 ..	89,751	46,829	52.2	43,133	133	43,000	667	42,333	3,696	7.9	42,922	
1982 ..	90,887	47,894	52.7	43,395	139	43,256	665	42,591	4,499	9.4	42,993	
1983 ..	91,827	48,646	53.0	44,190	143	44,047	680	43,367	4,457	9.2	43,181	
1984 ..	92,924	49,855	53.7	46,061	146	45,915	653	45,262	3,794	7.6	43,068	
1985 ..	93,886	51,200	54.5	47,409	150	47,259	644	46,615	3,791	7.4	42,686	
1986 ¹ ..	94,944	52,568	55.4	48,861	155	48,706	652	48,054	3,707	7.1	42,376	
Monthly data, seasonally adjusted²												
1986:												
October ..	95,253	53,033	55.7	49,376	159	49,217	649	48,568	3,657	6.9	42,220	
November ..	95,341	53,019	55.6	49,350	159	49,191	709	48,482	3,669	6.9	42,322	
December ..	95,429	52,911	55.4	49,401	157	49,244	672	48,572	3,510	6.6	42,518	
1987:												
January ..	95,556	53,110	55.6	49,572	157	49,415	671	48,744	3,538	6.7	42,446	
February ..	95,639	53,325	55.8	49,787	156	49,631	692	48,939	3,538	6.6	42,314	
March ..	95,729	53,314	55.7	49,822	161	49,661	645	49,016	3,492	6.6	42,415	
April ..	95,808	53,467	55.8	50,153	160	49,993	626	49,367	3,314	6.2	42,341	
May ..	95,898	53,903	56.2	50,611	160	50,451	681	49,769	3,292	6.1	41,995	
June ..	95,979	53,679	55.9	50,504	159	50,345	657	49,688	3,175	5.9	42,300	
July ..	96,071	54,016	56.2	50,733	159	50,574	663	49,911	3,283	6.1	42,055	
August ..	96,140	54,113	56.3	50,899	161	50,738	647	50,091	3,213	5.9	42,027	
September ..	96,221	53,868	56.0	50,576	162	50,414	620	49,794	3,291	6.1	42,353	
October ..	96,295	54,185	56.3	50,904	161	50,743	692	50,051	3,281	6.1	42,110	

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, 1953 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								
1953 ¹	107,056	63,015	58.9	61,179	1,834	2.9	2.8	3.3
1954	108,321	63,643	58.8	60,109	3,532	5.5	5.3	6.0
1955	109,683	65,023	59.3	62,170	2,852	4.4	4.2	4.9
1956	110,954	66,552	60.0	63,799	2,750	4.1	3.8	4.8
1957	112,265	66,929	59.6	64,071	2,859	4.3	4.1	4.7
1958	113,727	67,639	59.5	63,036	4,602	6.8	6.8	6.8
1959	115,329	68,369	59.3	64,630	3,740	5.5	5.2	5.9
1960 ¹	117,245	69,628	59.4	65,778	3,852	5.5	5.4	5.9
1961	118,771	70,459	59.3	65,746	4,714	6.7	6.4	7.2
1962 ¹	120,153	70,614	58.8	66,702	3,911	5.5	5.2	6.2
1963	122,416	71,833	58.7	67,762	4,070	5.7	5.2	6.5
1964	124,485	73,091	58.7	69,305	3,786	5.2	4.6	6.2
1965	126,513	74,455	58.9	71,088	3,366	4.5	4.0	5.5
1966	128,058	75,770	59.2	72,895	2,875	3.8	3.2	4.8
1967	129,874	77,347	59.6	74,372	2,975	3.8	3.1	5.2
1968	132,028	78,737	59.6	75,920	2,817	3.6	2.9	4.8
1969	134,335	80,734	60.1	77,902	2,832	3.5	2.8	4.7
1970	137,085	82,771	60.4	78,678	4,093	4.9	4.4	5.9
1971	140,216	84,382	60.2	79,367	5,016	5.9	5.3	6.9
1972 ¹	144,126	87,034	60.4	82,153	4,882	5.6	5.0	6.6
1973 ¹	147,096	89,429	60.8	85,064	4,365	4.9	4.2	6.0
1974	150,120	91,949	61.3	86,794	5,156	5.6	4.9	6.7
1975	153,153	93,775	61.2	85,846	7,929	8.5	7.9	9.3
1976	156,150	96,158	61.6	88,752	7,406	7.7	7.1	8.6
1977	159,033	99,009	62.3	92,017	6,991	7.1	6.3	8.2
1978 ¹	161,910	102,251	63.2	96,048	6,202	6.1	5.3	7.2
1979	164,863	104,962	63.7	98,824	6,137	5.8	5.1	6.8
1980	167,745	106,940	63.8	99,303	7,637	7.1	6.9	7.4
1981	170,130	108,670	63.9	100,397	8,273	7.6	7.4	7.9
1982	172,271	110,204	64.0	99,526	10,678	9.7	9.9	9.4
1983	174,215	111,550	64.0	100,834	10,717	9.6	9.9	9.2
1984	176,383	113,544	64.4	105,005	8,539	7.5	7.4	7.6
1985	178,206	115,461	64.8	107,150	8,312	7.2	7.0	7.4
1986 ¹	180,587	117,834	65.3	109,597	8,237	7.0	6.9	7.1
Monthly data, seasonally adjusted ²								
1986:								
October	181,186	118,414	65.4	110,192	8,222	6.9	7.0	6.9
November	181,363	118,675	65.4	110,432	8,243	6.9	6.9	6.9
December	181,547	118,586	65.3	110,637	7,949	6.7	6.7	6.7
1987:								
January	181,827	119,034	65.5	111,011	8,023	6.7	6.8	6.7
February	181,998	119,349	65.6	111,382	7,967	6.7	6.7	6.7
March	182,179	119,222	65.4	111,368	7,854	6.6	6.6	6.6
April	182,344	119,335	65.4	111,835	7,500	6.3	6.3	6.2
May	182,533	119,993	65.7	112,447	7,546	6.3	6.4	6.1
June	182,703	119,517	65.4	112,257	7,260	6.1	6.2	5.9
July	182,885	119,952	65.6	112,727	7,224	6.0	6.0	6.1
August	183,002	120,302	65.7	113,081	7,221	6.0	6.0	6.0
September	183,161	119,861	65.4	112,772	7,089	5.9	5.7	6.1
October	183,311	120,361	65.7	113,187	7,174	6.0	5.9	6.1

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	October 1987										
	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	183,311	120,744	65.9	113,898	6,845	5.7	62,567	27,907	9,138	2,955	22,567
16 to 19 years	14,661	7,706	52.6	6,379	1,327	17.2	6,955	413	6,069	27	446
16 to 17 years	7,501	3,247	43.3	2,601	647	19.9	4,254	87	4,003	7	157
18 to 19 years	7,159	4,459	62.3	3,779	680	15.2	2,701	326	2,066	20	289
20 to 24 years	18,789	14,683	78.1	13,467	1,216	8.3	4,106	1,501	1,960	98	546
25 to 54 years	99,823	83,031	83.2	79,198	3,832	4.6	16,793	11,798	1,059	1,104	2,831
25 to 34 years	42,376	35,560	83.9	33,692	1,868	5.3	6,816	4,873	738	274	931
25 to 29 years	21,355	17,931	84.0	16,989	941	5.2	3,424	2,330	482	108	505
30 to 34 years	21,020	17,629	83.9	16,703	926	5.3	3,391	2,543	255	167	426
35 to 44 years	34,067	29,026	85.2	27,772	1,254	4.3	5,041	3,651	237	321	832
35 to 39 years	18,550	15,741	84.9	15,046	695	4.4	2,809	2,070	141	163	432
40 to 44 years	15,517	13,285	85.6	12,725	560	4.2	2,232	1,580	95	157	399
45 to 54 years	23,380	18,444	78.9	17,735	710	3.8	4,936	3,275	84	508	1,068
45 to 49 years	12,431	10,187	81.9	9,781	406	4.0	2,244	1,528	65	213	439
50 to 54 years	10,949	8,257	75.4	7,954	303	3.7	2,691	1,747	19	295	630
55 to 64 years	21,781	12,065	55.4	11,675	390	3.2	9,716	4,893	32	637	4,154
55 to 59 years	10,967	7,299	66.6	7,062	238	3.3	3,668	2,085	24	337	1,221
60 to 64 years	10,814	4,766	44.1	4,614	152	3.2	6,048	2,808	8	300	2,933
65 years and over	28,257	3,259	11.5	3,178	80	2.5	24,998	9,301	18	1,089	14,590
65 to 69 years	9,792	2,015	20.6	1,968	46	2.3	7,777	3,034	9	237	4,497
70 to 74 years	7,584	785	10.4	766	21	2.7	6,799	2,549	4	189	4,058
75 years and over	10,882	460	4.2	444	14	3.0	10,422	3,718	5	664	6,035
Men											
16 years and over	87,176	66,240	76.0	62,692	3,549	5.4	20,936	530	4,659	1,683	14,063
16 to 19 years	7,369	3,923	53.2	3,249	674	17.2	3,446	18	3,166	10	251
16 to 17 years	3,833	1,620	42.3	1,286	334	20.6	2,213	3	2,122	2	86
18 to 19 years	3,537	2,304	65.1	1,964	340	14.8	1,233	15	1,044	8	165
20 to 24 years	9,089	7,604	83.7	6,990	614	8.1	1,485	27	1,070	71	317
25 to 54 years	48,768	45,777	93.9	43,790	1,987	4.3	2,991	195	407	763	1,627
25 to 34 years	20,821	19,771	95.0	18,780	991	5.0	1,050	69	296	207	478
25 to 29 years	10,488	9,900	94.4	9,417	483	4.9	588	31	209	95	253
30 to 34 years	10,333	9,871	95.5	9,363	508	5.1	462	38	86	112	226
35 to 44 years	16,642	15,798	94.9	15,174	624	4.0	845	68	89	202	486
35 to 39 years	9,092	8,647	95.1	8,309	338	3.9	445	40	49	104	252
40 to 44 years	7,550	7,151	94.7	6,864	287	4.0	399	29	39	97	234
45 to 54 years	11,305	10,208	90.3	9,836	372	3.6	1,097	59	23	354	662
45 to 49 years	6,035	5,592	92.7	5,384	208	3.7	443	18	17	149	260
50 to 54 years	5,270	4,616	87.6	4,453	163	3.5	654	41	6	205	402
55 to 64 years	10,252	6,961	67.9	6,732	229	3.3	3,291	116	14	401	2,761
55 to 59 years	5,224	4,173	79.9	4,038	135	3.2	1,051	46	10	219	775
60 to 64 years	5,028	2,787	55.4	2,694	94	3.4	2,240	70	4	181	1,985
65 years and over	11,698	1,976	16.9	1,931	45	2.3	9,723	174	2	439	9,108
65 to 69 years	4,441	1,233	27.8	1,207	26	2.1	3,208	64	1	117	3,025
70 to 74 years	3,256	455	14.0	442	14	3.1	2,801	37	1	100	2,663
75 years and over	4,002	288	7.2	282	5	1.8	3,714	72		222	3,420
Women											
16 years and over	96,134	54,503	56.7	51,206	3,297	6.0	41,631	27,377	4,479	1,271	8,504
16 to 19 years	7,292	3,782	51.9	3,130	653	17.3	3,509	395	2,903	17	195
16 to 17 years	3,669	1,628	44.4	1,315	313	19.2	2,041	84	1,881	5	71
18 to 19 years	3,623	2,155	59.5	1,815	340	15.8	1,468	311	1,022	12	124
20 to 24 years	9,700	7,079	73.0	6,477	603	8.5	2,621	1,475	890	27	230
25 to 54 years	51,055	37,254	73.0	35,408	1,845	5.0	13,802	11,603	652	341	1,204
25 to 34 years	21,555	15,789	73.3	14,912	877	5.6	5,766	4,804	442	68	452
25 to 29 years	10,867	8,031	73.9	7,572	458	5.7	2,836	2,299	273	13	252
30 to 34 years	10,687	7,758	72.6	7,340	418	5.4	2,929	2,505	169	55	200
35 to 44 years	17,425	13,228	75.9	12,598	630	4.8	4,197	3,583	149	119	346
35 to 39 years	9,458	7,094	75.0	6,737	357	5.0	2,364	2,032	92	59	180
40 to 44 years	7,967	6,134	77.0	5,861	273	4.4	1,833	1,551	56	60	165
45 to 54 years	12,075	8,236	68.2	7,898	338	4.1	3,839	3,216	61	154	407
45 to 49 years	6,396	4,595	71.8	4,397	198	4.3	1,801	1,510	48	64	179
50 to 54 years	5,679	3,641	64.1	3,501	140	3.9	2,037	1,706	13	90	228
55 to 64 years	11,530	5,105	44.3	4,943	161	3.2	6,425	4,777	18	236	1,393
55 to 59 years	5,743	3,126	54.4	3,024	102	3.3	2,617	2,040	14	118	446
60 to 64 years	5,786	1,978	34.2	1,920	59	3.0	3,808	2,738	4	118	948
65 years and over	16,558	1,283	7.7	1,247	36	2.8	15,275	9,127	16	650	5,481
65 to 69 years	5,351	782	14.6	761	20	2.6	4,569	2,970	8	120	1,472
70 to 74 years	4,328	330	7.6	324	7	2.1	3,998	2,512	3	89	1,395
75 years and over	6,880	172	2.5	162	9	5.3	6,708	3,646	5	442	2,615

**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	October 1987										
	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	157,342	103,934	66.1	98,882	5,053	4.9	53,408	24,422	7,048	2,291	19,646
16 to 19 years	11,943	6,592	55.2	5,626	967	14.7	5,351	339	4,676	26	310
16 to 17 years	6,088	2,862	47.0	2,380	482	16.8	3,226	81	3,017	8	120
18 to 19 years	5,855	3,730	63.7	3,245	484	13.0	2,125	258	1,659	18	190
20 to 24 years	15,639	12,468	79.7	11,635	833	6.7	3,171	1,179	1,573	49	369
25 to 54 years	85,155	71,325	83.8	68,468	2,858	4.0	13,829	10,064	763	828	2,176
25 to 34 years	35,744	30,271	84.7	28,964	1,307	4.3	5,473	4,104	517	201	651
25 to 29 years	17,973	15,282	85.0	14,644	638	4.2	2,691	1,937	333	75	345
30 to 34 years	17,771	14,989	84.3	14,320	669	4.5	2,783	2,167	184	126	307
35 to 44 years	29,282	25,069	85.6	24,092	977	3.9	4,213	3,145	180	246	641
35 to 39 years	15,814	13,455	85.1	12,939	516	6.2	2,359	1,798	108	124	334
40 to 44 years	13,468	11,615	86.2	11,153	462	4.0	1,854	1,360	72	122	307
45 to 54 years	20,129	15,985	79.4	15,412	573	3.6	4,144	2,815	66	380	883
45 to 49 years	10,708	8,818	82.3	8,502	317	3.6	1,891	1,323	52	168	357
50 to 54 years	9,420	7,167	76.1	6,911	256	4.4	2,253	1,510	14	212	525
55 to 64 years	19,167	10,620	55.4	10,296	324	3.0	8,547	4,364	22	496	3,666
55 to 59 years	9,604	6,414	66.8	6,214	201	3.1	3,190	1,872	14	264	1,039
60 to 64 years	9,563	4,206	44.0	4,083	123	2.9	5,357	2,492	8	231	2,627
65 years and over	25,438	2,928	11.5	2,856	72	2.4	22,510	8,477	14	894	13,126
65 to 69 years	8,721	1,777	20.4	1,731	45	2.5	6,945	2,729	9	182	4,025
70 to 74 years	6,844	728	10.6	710	19	2.6	6,115	2,323	3	155	3,635
75 years and over	9,872	423	4.3	415	8	1.9	9,450	3,425	2	556	5,466
Men											
16 years and over	75,385	57,768	76.6	55,038	2,729	4.7	17,618	411	3,633	1,290	12,283
16 to 19 years	6,021	3,369	55.9	2,871	497	14.8	2,653	15	2,455	10	173
16 to 17 years	3,114	1,442	46.3	1,190	252	17.5	1,671	3	1,602	3	63
18 to 19 years	2,907	1,926	66.2	1,681	245	12.7	981	11	853	7	110
20 to 24 years	7,642	6,511	85.2	6,071	439	6.7	1,131	12	877	37	205
25 to 54 years	42,110	39,882	94.7	38,318	1,565	3.9	2,227	138	290	578	1,222
25 to 34 years	17,793	17,074	96.0	16,328	746	4.4	719	48	206	154	311
25 to 29 years	8,924	8,533	95.6	8,175	358	4.2	391	20	147	68	156
30 to 34 years	8,869	8,541	96.3	8,153	388	4.5	328	29	59	86	155
35 to 44 years	14,464	13,835	95.7	13,333	502	3.6	629	44	70	156	359
35 to 39 years	7,836	7,498	95.7	7,236	262	3.5	338	29	37	80	191
40 to 44 years	6,628	6,337	95.6	6,097	240	3.8	291	14	33	76	167
45 to 54 years	9,853	8,973	91.1	8,657	317	3.5	880	46	14	268	552
45 to 49 years	5,258	4,902	93.2	4,726	177	3.6	356	13	8	121	213
50 to 54 years	4,595	4,071	88.6	3,931	140	3.4	524	33	6	146	339
55 to 64 years	9,069	6,195	68.3	6,009	186	3.0	2,874	99	10	313	2,452
55 to 59 years	4,604	3,725	80.9	3,610	114	3.1	879	36	6	172	665
60 to 64 years	4,465	2,471	55.3	2,399	72	2.9	1,995	63	4	141	1,787
65 years and over	10,544	1,811	17.2	1,768	42	2.3	8,733	148	2	353	8,231
65 to 69 years	3,976	1,115	28.0	1,088	26	2.4	2,862	56	1	88	2,716
70 to 74 years	2,945	429	14.6	415	14	3.3	2,516	31	1	76	2,409
75 years and over	3,622	267	7.4	265	2	.9	3,355	60		188	3,106
Women											
16 years and over	81,957	46,166	56.3	43,843	2,323	5.0	35,790	24,011	3,414	1,002	7,363
16 to 19 years	5,922	3,224	54.4	2,754	469	14.6	2,698	324	2,221	16	137
16 to 17 years	2,974	1,420	47.7	1,190	230	16.2	1,554	77	1,415	5	57
18 to 19 years	2,947	1,804	61.2	1,564	239	13.3	1,144	247	806	11	80
20 to 24 years	7,997	5,958	74.5	5,564	394	6.6	2,040	1,167	696	12	164
25 to 54 years	43,045	31,443	73.0	30,150	1,293	4.1	11,602	9,926	473	250	954
25 to 34 years	17,951	13,197	73.5	12,636	561	4.3	4,754	4,055	311	47	340
25 to 29 years	9,049	6,749	74.6	6,469	280	4.1	2,300	1,917	186	7	189
30 to 34 years	8,902	6,448	72.4	6,167	281	4.4	2,455	2,138	125	40	152
35 to 44 years	14,818	11,234	75.8	10,759	475	4.2	3,584	3,101	110	90	283
35 to 39 years	7,978	5,957	74.7	5,703	254	4.3	2,021	1,763	71	44	143
40 to 44 years	6,840	5,278	77.2	5,056	222	4.2	1,563	1,338	39	46	140
45 to 54 years	10,276	7,012	68.2	6,755	257	3.7	3,264	2,769	52	112	330
45 to 49 years	5,450	3,916	71.8	3,776	140	3.6	1,535	1,300	44	47	144
50 to 54 years	4,825	3,096	64.2	2,980	116	3.8	1,729	1,470	8	66	186
55 to 64 years	10,098	4,425	43.8	4,287	138	3.1	5,673	4,265	12	183	1,214
55 to 59 years	5,001	2,690	53.8	2,604	86	3.2	2,311	1,836	8	92	374
60 to 64 years	5,098	1,735	34.0	1,683	52	3.0	3,363	2,428	4	91	840
65 years and over	14,895	1,117	7.5	1,088	29	2.6	13,777	8,329	12	541	4,895
65 to 69 years	4,745	662	13.9	643	19	2.8	4,083	2,673	8	94	1,309
70 to 74 years	3,899	299	7.7	295	5	1.7	3,599	2,292	2	79	1,226
75 years and over	6,250	156	2.5	150	6	3.7	6,095	3,365	2	368	2,360

**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	October 1987										
	Civilian noninstitutional population	Civilian labor force					Not in labor force				
		Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
					Number	Percent of labor force					
BLACK											
16 years and over	20,453	13,160	64.3	11,582	1,578	12.0	7,292	2,650	1,559	602	2,483
16 to 19 years	2,173	900	41.4	597	302	33.6	1,273	64	1,083	1	125
16 to 17 years	1,130	296	26.2	167	129	43.5	834	6	793		35
18 to 19 years	1,042	604	57.9	430	174	28.8	439	57	290	2	90
20 to 24 years	2,561	1,790	69.9	1,442	347	19.4	771	289	277	44	161
25 to 54 years	11,251	9,072	80.6	8,202	870	9.6	2,178	1,180	192	239	568
25 to 34 years	5,168	4,181	80.9	3,667	513	12.3	987	531	149	58	249
25 to 29 years	2,659	2,106	79.2	1,828	277	13.2	554	282	103	24	145
30 to 34 years	2,508	2,075	82.7	1,839	236	11.4	433	249	45	34	104
35 to 44 years	3,606	3,015	83.6	2,778	237	7.9	591	326	34	66	165
35 to 39 years	2,068	1,761	85.2	1,607	154	8.7	307	167	23	33	85
40 to 44 years	1,537	1,254	81.6	1,170	84	6.7	283	159	11	33	80
45 to 54 years	2,477	1,876	75.7	1,756	120	6.4	601	323	9	115	154
45 to 49 years	1,315	1,048	79.7	971	78	7.4	267	153	7	39	69
50 to 54 years	1,161	828	71.3	786	42	5.1	334	169	2	76	86
55 to 64 years	2,101	1,144	54.5	1,094	50	4.3	957	416	6	132	403
55 to 59 years	1,099	718	65.3	690	28	3.9	381	156	6	67	152
60 to 64 years	1,002	426	42.5	404	21	5.0	576	260		65	251
65 years and over	2,367	254	10.7	245	9	3.4	2,113	701	1	186	1,226
65 to 69 years	866	174	20.1	173	2	1.1	691	239		51	402
70 years and over	1,502	80	5.3	73	8	10.0	1,422	462	1	135	824
Men											
16 years and over	9,174	6,461	70.4	5,749	712	11.0	2,712	92	760	353	1,510
16 to 19 years	1,071	442	41.3	298	144	32.5	629	1	559	-	70
16 to 17 years	569	133	23.3	79	54	40.5	437	-1	417		21
18 to 19 years	501	309	61.7	219	90	29.1	192	1	142	1	49
20 to 24 years	1,165	883	75.8	724	159	18.0	282	15	134	33	99
25 to 54 years	5,040	4,413	87.6	4,033	380	8.6	625	40	67	160	360
25 to 34 years	2,334	2,078	89.1	1,848	231	11.1	255	10	54	40	152
25 to 29 years	1,201	1,049	87.3	929	119	11.4	152	6	37	19	90
30 to 34 years	1,132	1,029	90.9	918	111	10.8	103	3	16	21	62
35 to 44 years	1,606	1,427	88.9	1,326	101	7.0	179	17	7	42	113
35 to 39 years	921	833	90.4	773	60	7.2	88	7	7	21	54
40 to 44 years	684	594	86.8	553	41	6.9	90	10		21	59
45 to 54 years	1,100	908	82.6	859	49	5.4	191	13	6	78	95
45 to 49 years	584	512	87.7	486	27	5.2	72	5	6	23	39
50 to 54 years	515	396	76.8	374	22	5.6	119	8		55	56
55 to 64 years	946	602	63.6	574	28	4.6	344	14	79	251	
55 to 59 years	497	361	72.7	349	13	3.5	136	7	42	87	
60 to 64 years	449	241	53.6	226	15	6.3	208	7	37	164	
65 years and over	953	121	12.7	119	2	1.7	832	22	81	730	
65 to 69 years	377	83	22.2	84	-	-	293	6	26	261	
70 years and over	577	37	6.5	35	3	(¹)	539	16	55	468	
Women											
16 years and over	11,278	6,699	59.4	5,833	866	12.9	4,580	2,557	799	249	974
16 to 19 years	1,102	458	41.6	299	159	34.7	644	63	524	1	55
16 to 17 years	561	164	29.2	88	75	45.9	397	7	376		14
18 to 19 years	541	294	54.4	211	84	28.5	247	56	148	1	41
20 to 24 years	1,396	907	64.9	718	188	20.8	489	274	143	11	62
25 to 54 years	6,211	4,659	75.0	4,169	490	10.5	1,553	1,140	125	79	208
25 to 34 years	2,834	2,102	74.2	1,820	283	13.4	731	521	95	18	97
25 to 29 years	1,458	1,057	72.5	899	158	14.9	402	276	66	5	55
30 to 34 years	1,376	1,046	76.0	921	125	12.0	330	246	29	13	42
35 to 44 years	2,000	1,588	79.4	1,452	137	8.6	412	309	27	24	52
35 to 39 years	1,147	928	80.9	834	94	10.1	219	160	16	12	31
40 to 44 years	853	660	77.4	617	43	6.5	193	149	11	12	21
45 to 54 years	1,377	968	70.3	897	71	7.3	409	310	3	37	59
45 to 49 years	731	536	73.3	485	51	9.5	195	148	1	16	30
50 to 54 years	646	432	66.8	412	20	4.6	215	161	2	21	30
55 to 64 years	1,155	542	46.9	520	22	4.0	613	402	6	53	152
55 to 59 years	602	357	59.3	341	16	4.4	245	149	6	25	65
60 to 64 years	553	185	33.5	179	6	3.4	368	253		28	87
65 years and over	1,414	133	9.4	127	7	5.0	1,281	679	1	105	496
65 to 69 years	489	91	18.6	89	2	1.8	398	233		25	141
70 years and over	925	43	4.6	38	5	(¹)	883	446	1	80	356

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	October 1987								
	Civilian noninstitutional population	Civilian labor force							Not in labor force
		Total	Percent of population	Employed			Unemployed		
				Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
TOTAL									
16 years and over	25,969	16,809	64.7	15,017	221	14,795	1,793	10.7	9,159
16 to 19 years	2,718	1,114	41.0	754	7	747	360	32.3	1,604
16 to 17 years	1,413	385	27.2	220	4	217	165	42.7	1,028
18 to 19 years	1,305	729	55.9	533	3	530	196	26.8	576
20 to 24 years	3,150	2,215	70.3	1,832	21	1,811	383	17.3	935
25 to 54 years	14,669	11,705	79.8	10,730	147	10,583	975	8.3	2,964
25 to 34 years	6,632	5,289	79.7	4,728	69	4,659	561	10.6	1,343
25 to 29 years	3,382	2,649	78.3	2,345	34	2,311	304	11.5	734
30 to 34 years	3,249	1,402	43.2	2,383	35	2,348	257	18.3	610
35 to 44 years	4,785	3,957	82.7	3,680	42	3,638	277	7.0	828
35 to 39 years	2,737	2,286	83.5	2,107	25	2,082	179	7.8	450
40 to 44 years	2,049	1,671	81.6	1,572	16	1,556	97	5.8	378
45 to 54 years	3,251	2,459	75.6	2,323	36	2,287	137	5.6	792
45 to 49 years	1,723	1,369	79.5	1,280	24	1,255	90	6.6	354
50 to 54 years	1,528	1,090	71.3	1,043	12	1,031	47	4.3	438
55 to 64 years	2,614	1,445	55.3	1,379	33	1,346	66	4.6	1,169
55 to 59 years	1,363	885	64.9	848	18	830	37	4.2	478
60 to 64 years	1,251	560	44.8	531	15	516	29	5.2	691
65 years and over	2,819	331	11.7	322	14	308	9	2.6	2,488
65 to 69 years	1,069	239	22.4	237	9	228	2	.8	832
70 to 74 years	740	56	7.6	54	4	50	2	(¹)	683
75 years and over	1,009	37	3.7	31	1	30	6	(¹)	973
Men									
16 years and over	11,791	8,473	71.9	7,654	201	7,453	819	9.7	3,318
16 to 19 years	1,348	555	41.2	378	7	372	177	31.8	793
16 to 17 years	719	177	24.7	95	3	92	82	46.1	542
18 to 19 years	629	378	60.0	283	3	279	95	25.1	251
20 to 24 years	1,447	1,093	75.6	919	21	897	175	16.0	354
25 to 54 years	6,659	5,894	88.5	5,471	132	5,339	423	7.2	765
25 to 34 years	3,028	2,697	89.1	2,451	60	2,391	245	9.1	332
25 to 29 years	1,564	1,367	87.4	1,242	28	1,214	126	9.2	197
30 to 34 years	1,464	1,329	90.8	1,210	32	1,178	120	9.0	135
35 to 44 years	2,179	1,963	90.1	1,841	37	1,804	122	6.2	216
35 to 39 years	1,257	1,149	91.5	1,073	22	1,051	76	6.6	107
40 to 44 years	922	814	88.2	767	15	752	46	5.7	108
45 to 54 years	1,452	1,235	85.0	1,180	35	1,144	55	4.5	217
45 to 49 years	777	690	88.8	658	24	634	32	4.6	87
50 to 54 years	675	545	80.7	522	12	510	23	4.2	130
55 to 64 years	1,183	766	64.7	722	27	695	43	5.7	417
55 to 59 years	620	449	72.4	428	12	416	21	4.7	171
60 to 64 years	563	317	56.3	295	15	280	22	7.0	246
65 years and over	1,155	165	14.3	163	14	149	2	1.3	990
65 to 69 years	464	119	25.5	119	9	110	-	-	346
70 to 74 years	311	26	8.4	26	4	22	-	(¹)	284
75 years and over	380	21	5.5	18	1	17	3	(¹)	360
Women									
16 years and over	14,177	8,337	58.8	7,363	20	7,343	974	11.7	5,841
16 to 19 years	1,370	559	40.8	375	-	375	183	32.8	811
16 to 17 years	694	208	29.9	125	-	125	83	39.9	487
18 to 19 years	676	351	52.0	251	-	251	101	28.7	324
20 to 24 years	1,703	1,122	65.9	913	-	914	209	18.6	581
25 to 54 years	8,010	5,811	72.5	5,259	15	5,244	552	9.5	2,199
25 to 34 years	3,604	2,592	71.9	2,276	9	2,267	316	12.2	1,012
25 to 29 years	1,818	1,282	70.5	1,103	6	1,097	178	13.9	537
30 to 34 years	1,785	1,310	73.4	1,173	3	1,170	137	10.5	475
35 to 44 years	2,607	1,994	76.5	1,839	5	1,835	154	7.7	613
35 to 39 years	1,480	1,137	76.9	1,034	3	1,031	103	9.1	343
40 to 44 years	1,127	857	76.0	805	1	804	51	6.0	270
45 to 54 years	1,799	1,225	68.1	1,143	1	1,142	82	6.7	575
45 to 49 years	946	679	71.8	622	-	621	58	8.5	267
50 to 54 years	853	545	63.9	521	-	521	24	4.4	308
55 to 64 years	1,431	680	47.5	656	6	650	23	3.4	752
55 to 59 years	743	436	58.7	420	6	414	16	3.7	307
60 to 64 years	688	243	35.4	236	-	236	7	2.9	445
65 years and over	1,664	166	10.0	159	-	159	7	4.0	1,498
65 to 69 years	605	120	19.8	118	-	118	2	1.4	486
70 to 74 years	429	30	7.0	28	-	28	2	(¹)	399
75 years and over	629	16	2.5	13	-	13	3	(¹)	613

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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
TOTAL								
Civilian noninstitutional population	181,186	183,311	78,802	79,807	87,856	88,843	14,527	14,661
Civilian labor force	118,699	120,744	61,471	62,317	49,629	50,721	7,598	7,706
Percent of population ..	65.5	65.9	78.0	78.1	56.5	57.1	52.3	52.6
Employed	110,857	113,898	58,015	59,442	46,585	48,076	6,257	6,379
Agriculture	3,190	3,297	2,357	2,403	628	670	205	225
Nonagricultural industries ..	107,666	110,601	55,658	57,040	45,957	47,407	6,052	6,155
Unemployed	7,842	6,845	3,456	2,875	3,044	2,644	1,341	1,327
Unemployment rate ..	6.6	5.7	5.6	4.6	6.1	5.2	17.7	17.2
Not in labor force ..	62,487	62,567	17,331	17,490	38,227	38,122	6,929	6,955
White								
Civilian noninstitutional population ..	155,856	157,342	68,612	69,364	75,347	76,035	11,896	11,943
Civilian labor force	102,504	103,934	53,741	54,399	42,157	42,943	6,607	6,592
Percent of population ..	65.8	66.1	78.3	78.4	56.0	56.5	55.5	55.2
Employed	96,702	98,882	51,157	52,167	39,958	41,089	5,588	5,626
Agriculture	2,979	3,076	2,187	2,209	596	649	197	218
Nonagricultural industries ..	93,723	95,806	48,970	49,958	39,362	40,439	5,391	5,408
Unemployed	5,802	5,053	2,584	2,232	2,199	1,854	1,019	967
Unemployment rate ..	5.7	4.9	4.8	4.1	5.2	4.3	15.4	14.7
Not in labor force ..	53,351	53,408	14,872	14,965	33,190	33,092	5,289	5,351
Black								
Civilian noninstitutional population ..	20,089	20,453	7,949	8,103	9,999	10,177	2,141	2,173
Civilian labor force	12,720	13,160	5,940	6,019	5,962	6,241	818	900
Percent of population ..	63.3	64.3	74.7	74.3	59.6	61.3	38.2	41.4
Employed	10,902	11,582	5,177	5,451	5,199	5,533	525	597
Agriculture	177	167	145	145	25	15	8	6
Nonagricultural industries ..	10,725	11,415	5,033	5,305	5,174	5,519	518	591
Unemployed	1,819	1,578	763	569	763	707	293	302
Unemployment rate ..	14.3	12.0	12.8	9.5	12.8	11.3	35.8	33.6
Not in labor force ..	7,369	7,292	2,008	2,084	4,037	3,936	1,323	1,273

**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	October 1987									
	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	15,657	7,737	49.4	6,786	1,349	5,438	951	89	862	12.3
16 to 19 years	10,864	4,839	44.5	4,058	371	3,687	781	49	731	16.1
20 to 24 years	4,793	2,899	60.5	2,728	978	1,750	170	39	131	5.9
High school	7,811	3,329	42.6	2,691	162	2,529	638	38	600	19.2
College	7,846	4,409	56.2	4,096	1,187	2,909	313	51	262	7.1
Full-time students	6,474	3,135	48.4	2,871	352	2,520	263	24	239	8.4
Part-time students	1,372	1,274	92.9	1,224	835	389	50	27	23	3.9
Men, 16 to 24 years	8,062	3,864	47.9	3,389	680	2,709	475	49	426	12.3
16 to 19 years	5,594	2,454	43.9	2,056	222	1,834	398	32	366	16.2
20 to 24 years	2,468	1,411	57.1	1,334	459	875	77	17	59	5.4
High school	4,124	1,720	41.7	1,387	104	1,283	334	22	312	19.4
College	3,938	2,144	54.5	2,003	577	1,426	141	28	114	6.6
Full-time students	3,319	1,560	47.0	1,446	208	1,238	114	12	102	7.3
Part-time students	619	585	94.4	557	369	188	28	16	11	4.7
Women, 16 to 24 years	7,595	3,873	51.0	3,397	668	2,729	476	39	437	12.3
16 to 19 years	5,271	2,385	45.2	2,002	149	1,853	382	17	365	16.0
20 to 24 years	2,324	1,488	64.0	1,395	519	875	94	22	72	6.3
High school	3,687	1,609	43.6	1,304	58	1,246	304	16	288	18.9
College	3,908	2,264	57.9	2,093	610	1,483	172	23	149	7.6
Full-time students	3,155	1,575	49.9	1,426	144	1,282	150	13	137	9.5
Part-time students	753	689	91.6	667	466	201	22	10	12	3.2
White										
Total, 16 to 24 years	12,839	6,665	51.9	5,970	1,157	4,814	694	59	635	10.4
16 to 19 years	8,817	4,166	47.2	3,592	323	3,269	574	35	539	13.8
20 to 24 years	4,022	2,499	62.1	2,378	834	1,545	121	25	96	4.8
Men	6,646	3,346	50.4	3,001	603	2,398	346	32	314	10.3
Women	6,193	3,319	53.6	2,970	554	2,416	349	27	321	10.5
High school	6,222	2,879	46.3	2,413	136	2,277	466	25	441	16.2
College	6,617	3,786	57.2	3,557	1,021	2,537	229	35	194	6.0
Full-time students	5,459	2,703	49.5	2,512	299	2,213	191	13	178	7.1
Part-time students	1,158	1,083	93.5	1,046	722	324	38	22	16	3.5
Black										
Total, 16 to 24 years	2,109	775	36.8	566	131	435	209	21	188	27.0
16 to 19 years	1,597	527	33.0	355	39	316	171	10	161	32.5
20 to 24 years	513	249	48.5	211	92	119	38	11	27	15.2
Men	1,056	372	35.3	271	42	228	102	13	89	27.3
Women	1,053	403	38.3	295	89	207	107	8	99	26.7
High school	1,281	366	28.5	224	23	201	142	8	134	38.8
College	828	410	49.5	342	108	234	67	13	55	16.4
Full-time students	685	284	41.5	228	35	194	56	7	49	19.7
Part-time students	143	126	87.6	114	74	41	11	5	6	9.0
Hispanic origin										
Total, 16 to 24 years	1,166	498	42.7	443	141	302	55	6	50	11.1
16 to 19 years	834	282	33.8	231	38	193	51	5	46	18.1
20 to 24 years	332	216	65.0	212	103	109	4		4	2.0
Men	643	278	43.2	258	80	177	20	5	15	7.2
Women	524	220	42.1	185	60	125	35	1	34	16.0
High school	694	198	28.6	150	21	129	48	5	43	24.4
College	473	300	63.4	293	119	173	7		6	2.3
Full-time students	335	180	53.8	173	28	145	7		7	4.0
Part-time students	137	119	86.7	119	91	28				-

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	October 1987									
	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	17,793	14,652	82.3	13,060	11,159	1,901	1,592	1,438	154	10.9
16 to 19 years	3,797	2,867	75.5	2,321	1,711	611	546	492	55	19.0
20 to 24 years	13,996	11,784	84.2	10,738	9,448	1,290	1,046	947	99	8.9
Less than 4 years of high school	4,203	2,745	65.3	2,197	1,727	470	547	497	51	19.9
4 years of high school	9,352	7,975	85.3	7,148	6,079	1,069	827	742	85	10.4
1 to 3 years of college	2,745	2,483	90.4	2,329	2,045	284	154	135	19	6.2
4 years of college or more	1,492	1,449	97.1	1,386	1,308	78	64	64	-	4.4
Men, 16 to 24 years	8,396	7,663	91.3	6,850	6,193	656	813	773	40	10.6
16 to 19 years	1,776	1,469	82.8	1,194	964	230	276	253	23	18.8
20 to 24 years	6,620	6,193	93.5	5,656	5,229	427	537	520	17	8.7
Less than 4 years of high school	2,160	1,751	81.0	1,429	1,234	196	321	310	11	18.3
4 years of high school	4,436	4,168	93.9	3,766	3,408	358	401	376	25	9.6
1 to 3 years of college	1,125	1,080	95.9	1,014	936	78	66	62	4	6.1
4 years of college or more	674	665	98.6	640	615	25	25	24	-	3.7
Women, 16 to 24 years	9,397	6,989	74.4	6,210	4,966	1,244	779	665	114	11.2
16 to 19 years	2,021	1,398	69.2	1,127	746	381	270	238	32	19.3
20 to 24 years	7,376	5,591	75.8	5,082	4,219	863	509	427	82	9.1
Less than 4 years of high school	2,043	994	48.7	768	493	275	226	186	40	22.8
4 years of high school	4,916	3,807	77.4	3,382	2,671	711	425	365	60	11.2
1 to 3 years of college	1,620	1,403	86.6	1,315	1,109	206	88	73	15	6.3
4 years of college or more	818	785	95.9	745	693	53	39	40	-	5.0
White										
Total, 16 to 24 years	14,743	12,395	84.1	11,290	9,712	1,578	1,105	991	114	8.9
16 to 19 years	3,126	2,426	77.6	2,033	1,501	532	393	348	45	16.2
20 to 24 years	11,617	9,969	85.8	9,257	8,211	1,045	713	643	69	7.1
Men	7,017	6,533	93.1	5,942	5,432	510	591	560	31	9.0
Women	7,725	5,863	75.9	5,348	4,281	1,068	514	432	83	8.8
Less than 4 years of high school	3,412	2,310	67.7	1,911	1,525	386	399	360	39	17.3
4 years of high school	7,732	6,697	86.6	6,141	5,245	896	555	489	66	8.3
1 to 3 years of college	2,249	2,072	92.1	1,976	1,754	222	96	87	9	4.6
4 years of college or more	1,350	1,317	97.6	1,262	1,188	74	55	55	-	4.2
Black										
Total, 16 to 24 years	2,625	1,914	72.9	1,474	1,183	290	441	403	37	23.0
16 to 19 years	576	373	64.8	242	170	72	131	123	8	35.1
20 to 24 years	2,048	1,541	75.2	1,232	1,013	219	310	280	29	20.1
Men	1,179	952	80.8	752	625	126	201	192	8	21.1
Women	1,445	962	66.6	722	558	164	240	211	29	24.9
Less than 4 years of high school	673	361	53.6	232	160	72	128	117	12	35.6
4 years of high school	1,434	1,122	78.2	868	710	157	255	238	17	22.7
1 to 3 years of college	416	339	81.6	289	231	59	50	41	9	14.7
4 years of college or more	102	92	90.4	84	82	2	8	8	-	8.3
Hispanic origin										
Total, 16 to 24 years	2,063	1,501	72.8	1,311	1,138	173	190	169	21	12.7
16 to 19 years	507	343	67.6	261	198	63	81	67	15	23.8
20 to 24 years	1,557	1,158	74.4	1,050	940	110	109	102	6	9.4
Men	1,032	912	88.4	813	743	70	99	94	5	10.9
Women	1,032	589	57.1	498	395	103	91	75	16	15.4
Less than 4 years of high school	929	594	64.0	486	431	54	109	100	9	18.3
4 years of high school	885	688	77.7	614	510	105	73	61	12	10.7
1 to 3 years of college	203	176	86.6	168	155	13	8	8	-	4.6
4 years of college or more	46	43	(²)	43	42	1	-	-	-	(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							
	Oct. 1986	Oct. 1987	Total		Employed		Unemployed			
			Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Number		Percent of labor force	
							Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,778	7,853	7,253	7,277	6,918	6,983	335	294	4.6	4.0
30 to 34 years	6,349	6,128	6,089	5,843	5,784	5,594	305	249	5.0	4.3
30 to 34 years	1,084	856	1,037	817	947	749	90	68	8.7	8.3
35 to 39 years	2,932	2,478	2,819	2,344	2,684	2,259	135	85	4.8	3.6
40 to 44 years	2,333	2,794	2,233	2,682	2,153	2,586	80	96	3.6	3.6
45 years and over	1,429	1,725	1,164	1,434	1,134	1,389	30	45	2.6	3.1
NONVETERANS										
Total, 30 to 44 years	18,691	19,741	17,711	18,785	16,790	17,974	921	811	5.2	4.3
30 to 34 years	8,629	8,920	8,169	8,541	7,734	8,147	435	394	5.3	4.6
35 to 39 years	5,853	6,379	5,559	6,074	5,257	5,838	302	236	5.4	3.9
40 to 44 years	4,209	4,442	3,983	4,170	3,799	3,989	184	181	4.6	4.3

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

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

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

(In thousands)

Sex, age, and race	October 1987							
	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	93,706	92,187	1,519	20,192	16,582	3,610	5,237	1,608
16 to 19 years	2,082	1,990	92	4,298	3,882	416	541	786
16 to 17 years	241	224	17	2,360	2,269	91	123	524
18 to 19 years	1,841	1,766	75	1,938	1,613	325	418	262
20 years and over	91,625	90,198	1,427	15,894	12,699	3,195	4,696	823
20 to 24 years	10,427	10,203	224	3,041	2,425	616	986	230
25 years and over	81,198	79,994	1,204	12,854	10,275	2,579	3,710	592
25 to 54 years	69,922	68,873	1,049	9,276	7,148	2,128	3,379	452
55 years and over	11,276	11,121	155	3,578	3,127	451	330	140
Men, 16 years and over	56,156	55,265	891	6,535	5,151	1,384	2,939	610
16 to 19 years	1,186	1,138	48	2,063	1,896	167	285	389
20 years and over	54,971	54,128	843	4,471	3,254	1,217	2,654	221
20 to 24 years	5,688	5,533	155	1,302	1,030	272	537	76
25 years and over	49,283	48,595	688	3,171	2,225	946	2,117	145
25 to 54 years	42,070	41,476	594	1,720	962	758	1,891	96
55 years and over	7,213	7,119	94	1,450	1,263	187	226	49
Women, 16 years and over	37,549	36,922	627	13,657	11,431	2,226	2,298	999
16 to 19 years	896	852	44	2,234	1,986	248	256	397
20 years and over	36,654	36,070	584	11,423	9,445	1,978	2,042	602
20 to 24 years	4,738	4,670	68	1,739	1,395	344	449	154
25 years and over	31,916	31,401	515	9,685	8,050	1,635	1,594	448
25 to 54 years	27,853	27,398	455	7,556	6,186	1,370	1,489	356
55 years and over	4,063	4,003	60	2,128	1,864	264	105	92
White								
Men, 16 years and over	49,400	48,657	743	5,638	4,565	1,073	2,269	460
16 to 19 years	1,057	1,015	42	1,815	1,676	139	209	288
20 years and over	48,344	47,642	702	3,823	2,889	934	2,060	172
20 to 24 years	4,978	4,849	129	1,094	900	194	382	57
25 years and over	43,366	42,793	573	2,730	1,989	741	1,677	115
25 to 54 years	36,902	36,406	496	1,417	829	588	1,488	77
55 years and over	6,464	6,387	77	1,314	1,161	153	189	39
Women, 16 years and over	31,608	31,092	516	12,235	10,433	1,802	1,543	780
16 to 19 years	767	730	37	1,987	1,774	213	173	296
20 years and over	30,841	30,362	479	10,248	8,659	1,589	1,369	484
20 to 24 years	4,068	4,014	54	1,496	1,229	267	286	108
25 years and over	26,775	26,349	426	8,752	7,429	1,323	1,083	376
25 to 54 years	23,279	22,901	378	6,872	5,757	1,115	996	297
55 years and over	3,496	3,448	48	1,880	1,672	208	87	80
Black								
Men, 16 years and over	5,074	4,953	121	675	412	263	588	124
16 to 19 years	97	91	6	200	179	21	62	82
20 years and over	4,977	4,862	115	474	232	242	526	42
20 to 24 years	570	553	17	154	83	71	143	16
25 years and over	4,406	4,309	97	320	149	171	383	27
25 to 54 years	3,813	3,732	81	220	79	141	360	19
55 years and over	593	577	16	100	70	30	23	8
Women, 16 years and over	4,746	4,656	90	1,087	718	369	675	191
16 to 19 years	112	105	7	187	153	34	72	87
20 years and over	4,634	4,551	83	900	565	335	603	104
20 to 24 years	534	521	13	183	115	68	148	41
25 years and over	4,099	4,029	70	716	449	267	457	62
25 to 54 years	3,650	3,591	59	518	300	218	440	51
55 years and over	449	438	11	198	149	49	17	11

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	October 1987									
	Civilian labor force					Not in labor force				
	Total	Percent of population	Employed	Unemployed		Total	Keeping house	Going to school	Unable to work	Other reasons
				Number	Percent of labor force					
Total, 16 years and over ¹	97,994	66.3	92,454	5,540	5.7	49,779	22,661	8,326	2,114	16,678
Husbands	39,934	78.7	38,667	1,267	3.2	10,838	214	196	838	9,589
With employed wife	25,610	92.0	24,890	720	2.8	2,218	78	117	294	1,728
With unemployed wife	1,051	93.4	932	119	11.3	74	5	2	14	53
With wife not in labor force	13,272	60.8	12,844	428	3.2	8,545	131	77	530	7,808
Wives	28,953	57.0	27,828	1,125	3.9	21,818	17,851	362	311	3,294
With employed husband	25,823	66.8	24,890	932	3.6	12,844	11,467	294	107	976
With unemployed husband	839	66.2	720	119	14.1	428	378	17	2	31
With husband not in labor force	2,292	21.1	2,218	74	3.2	8,545	6,006	51	201	2,288
Relatives in married-couple families	12,956	61.6	11,568	1,388	10.7	8,068	774	5,685	338	1,270
16 to 19 years	4,906	50.9	4,201	705	14.4	4,730	91	4,378	14	247
20 to 24 years	4,558	74.6	4,162	396	8.7	1,555	147	1,178	40	190
25 years and over	3,492	66.2	3,205	287	8.2	1,783	536	129	284	833
Women who maintain families	6,766	63.4	6,142	624	9.2	3,907	2,716	201	189	801
Relatives in families maintained by women	5,722	61.5	4,904	818	14.3	3,582	715	1,592	290	984
16 to 19 years	1,477	50.0	1,123	354	24.0	1,475	78	1,267	5	125
20 to 24 years	1,637	74.7	1,456	182	11.1	553	127	263	25	138
25 years and over	2,607	62.7	2,325	282	10.8	1,554	510	62	260	721
Men who maintain families	1,985	75.2	1,864	121	6.1	654	54	34	84	481
Relatives in families maintained by men	1,678	64.7	1,480	197	11.8	914	337	256	64	257
16 to 19 years	309	58.8	227	82	26.4	216	15	182		20
20 to 24 years	485	79.3	431	53	10.9	126	33	60		32
25 years and over	884	60.7	822	62	7.0	572	289	14	62	205

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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over	4,159	3,549	6.4	5.4	3,683	3,297	6.9	6.0
Married, spouse present	1,694	1,406	4.1	3.3	1,466	1,236	5.0	4.1
Widowed, divorced, or separated	554	447	8.6	6.8	767	777	7.4	7.2
Single (never married)	1,911	1,696	11.1	9.8	1,450	1,283	10.8	9.3
White, 16 years and over	3,109	2,729	5.4	4.7	2,693	2,323	5.9	5.0
Married, spouse present	1,399	1,180	3.7	3.1	1,228	999	4.7	3.8
Widowed, divorced, or separated	413	348	7.7	6.3	573	546	6.9	6.3
Single (never married)	1,297	1,201	9.0	8.3	892	778	8.2	7.0
Black, 16 years and over	922	712	14.5	11.0	897	866	14.1	12.9
Married, spouse present	231	189	7.3	5.8	189	192	8.1	7.7
Widowed, divorced, or separated	132	91	14.1	9.8	176	209	9.7	10.9
Single (never married)	558	433	25.0	19.1	533	465	23.9	20.2
Total, 25 years and over	2,693	2,261	5.0	4.1	2,271	2,042	5.4	4.7
Married, spouse present	1,536	1,276	3.9	3.2	1,204	1,008	4.5	3.7
Widowed, divorced, or separated	521	428	8.4	6.7	661	677	6.7	6.5
Single (never married)	635	557	8.3	6.9	406	357	7.3	6.1
White, 25 years and over	2,056	1,793	4.4	3.7	1,709	1,460	4.7	3.9
Married, spouse present	1,266	1,063	3.6	3.0	1,018	820	4.3	3.4
Widowed, divorced, or separated	386	333	7.5	6.3	492	477	6.2	5.8
Single (never married)	403	397	6.4	5.9	199	163	4.7	3.6
Black, 25 years and over	546	410	10.9	8.0	501	519	9.9	9.7
Married, spouse present	214	177	7.1	5.7	148	159	6.9	6.9
Widowed, divorced, or separated	126	86	13.8	9.5	154	182	8.7	9.9
Single (never married)	205	147	19.1	13.2	199	178	17.6	14.8

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-12. Unemployed persons by occupation and sex

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over	7,842	6,845	6.6	5.7	6.4	5.4	6.9	6.0
Managerial and professional specialty	698	630	2.5	2.2	2.2	2.0	3.0	2.4
Executive, administrative, and managerial ..	366	378	2.8	2.7	2.2	2.5	3.7	2.9
Professional specialty ..	332	252	2.3	1.7	2.2	1.5	2.5	1.9
Technical, sales, and administrative support ..	1,669	1,575	4.6	4.2	3.6	3.3	5.1	4.7
Technicians and related support ..	112	104	3.1	2.9	3.5	2.4	2.7	3.3
Sales occupations ..	651	652	4.6	4.5	2.9	3.3	6.4	5.8
Administrative support, including clerical ..	906	820	4.8	4.2	4.9	3.8	4.8	4.4
Service occupations ..	1,440	1,176	8.9	7.3	8.6	7.1	9.1	7.4
Private household ..	65	42	6.3	4.2	(¹)	(¹)	5.8	4.2
Protective service ..	83	86	4.7	4.5	3.2	4.2	14.6	5.7
Service, except private household and protective ..	1,292	1,048	9.7	8.0	10.3	8.2	9.3	7.9
Precision production, craft, and repair ..	889	704	6.1	4.9	6.0	4.8	7.5	5.6
Mechanics and repairers ..	177	163	3.9	3.5	3.8	3.5	5.1	2.9
Construction trades ..	450	361	8.2	6.6	8.1	6.3	13.3	18.8
Other precision production, craft, and repair ..	262	180	5.9	4.2	5.5	4.1	7.4	4.6
Operators, fabricators, and laborers ..	1,965	1,602	10.3	8.3	10.0	8.0	11.2	9.2
Machine operators, assemblers, and inspectors ..	884	711	10.1	8.1	9.0	6.8	11.6	9.9
Transportation and material moving occupations ..	352	318	7.1	6.1	7.0	6.2	7.8	5.0
Handlers, equipment cleaners, helpers, and laborers ..	729	573	13.5	10.8	14.0	11.3	11.1	8.4
Construction laborers ..	198	165	20.5	17.3	19.9	17.4	(¹)	(¹)
Other handlers, equipment cleaners, helpers, and laborers ..	531	409	12.0	9.4	12.4	9.7	10.1	8.1
Farming, forestry, and fishing ..	263	260	7.0	6.8	6.4	6.7	10.2	7.7
No previous work experience ..	874	864						
16 to 19 years ..	576	573						
20 to 24 years ..	168	147						
25 years and over ..	130	143						

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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over	7,842	6,845	6.6	5.7	6.4	5.4	6.9	6.0
Nonagricultural private wage and salary workers	5,945	5,015	6.7	5.6	6.6	5.4	6.8	5.8
Mining	124	67	13.2	7.6	13.3	8.0	12.7	5.1
Construction	698	575	11.1	9.3	11.4	9.5	8.3	7.5
Manufacturing	1,525	1,187	7.0	5.5	6.2	4.9	8.5	6.7
Durable goods	927	635	7.0	4.9	6.5	4.7	8.4	5.7
Lumber and wood products	76	70	10.6	9.0	11.4	9.6	4.8	4.7
Furniture and fixtures	58	24	7.7	3.7	8.0	3.7	7.0	3.6
Stone, clay, and glass products	50	44	7.4	6.5	5.5	6.2	14.0	7.5
Primary metal industries	77	41	9.0	4.9	8.9	5.1	9.7	3.9
Fabricated metal products	132	70	10.0	5.2	9.9	5.1	10.3	5.5
Machinery, except electrical	174	106	6.5	4.1	6.2	3.3	7.5	6.8
Electrical machinery, equipment, and supplies	125	89	5.3	4.1	4.4	3.0	6.7	5.5
Transportation equipment	147	141	5.4	5.3	4.4	4.9	9.3	6.7
Automobiles	103	94	7.8	7.5	5.8	6.7	14.5	11.2
Other transportation equipment	44	48	3.1	3.4	3.1	3.4	3.2	3.2
Professional and photographic equipment	25	24	3.8	3.4	2.8	3.7	5.3	3.0
Other durable goods industries	63	27	11.7	5.6	9.3	4.3	14.5	6.9
Nondurable goods	598	552	7.0	6.2	5.8	5.2	8.6	7.6
Food and kindred products	126	171	7.0	9.3	6.3	9.1	8.5	9.8
Textile mill products	64	50	8.4	6.6	7.7	4.3	9.3	8.7
Apparel and other textile products	133	107	10.6	8.7	10.1	3.5	10.7	10.2
Paper and allied products	26	27	3.7	3.7	3.1	4.4	5.9	1.5
Printing and publishing	95	72	5.6	4.1	4.2	3.9	7.3	4.3
Chemicals and allied products	67	45	5.3	3.5	5.7	2.5	4.6	6.1
Rubber and miscellaneous plastics products	49	48	6.5	5.8	6.3	5.9	7.1	5.6
Other nondurable goods industries	40	31	10.7	7.8	6.6	5.7	17.4	11.4
Transportation and public utilities	303	248	4.8	4.1	4.4	3.6	5.8	5.3
Transportation	200	188	5.6	5.4	5.7	4.9	5.3	7.2
Communications and other public utilities	104	60	3.8	2.3	2.5	1.6	6.2	3.5
Wholesale and retail trade	1,644	1,460	7.3	6.4	6.5	5.7	8.3	7.1
Wholesale trade	250	184	5.8	4.1	5.2	3.6	7.4	5.3
Retail trade	1,394	1,276	7.7	7.0	7.0	6.5	8.4	7.4
Finance, insurance, and real estate	259	250	3.6	3.3	3.1	3.5	3.9	3.2
Service industries	1,392	1,229	5.8	5.0	6.0	4.9	5.7	5.1
Professional services	535	459	4.0	3.4	3.2	2.5	4.3	3.8
Other service industries	857	770	8.2	7.1	8.2	6.8	8.1	7.3
Agricultural wage and salary workers	188	186	10.9	10.0	9.6	9.5	15.8	11.9
Government, self-employed, and unpaid family workers	835	780	3.1	2.7	2.7	2.6	3.4	2.9
No previous work experience	874	864	-	-	-	-	-	-

**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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
NUMBER OF UNEMPLOYED												
Total unemployed	7,842	6,845	3,456	2,875	3,044	2,644	1,341	1,327	5,802	5,053	1,819	1,578
Job losers	3,597	3,082	2,269	1,929	1,132	954	195	199	2,652	2,344	846	667
On layoff	860	768	566	495	254	214	40	59	729	621	117	128
Other job losers	2,737	2,314	1,703	1,434	878	740	155	140	1,923	1,723	730	539
Job leavers	1,090	1,030	448	419	460	417	182	194	903	842	160	161
Reentrants	2,281	1,873	629	444	1,264	1,065	388	364	1,662	1,317	546	482
New entrants	874	861	110	83	188	207	576	570	585	550	267	269
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	45.9	45.0	65.7	67.1	37.2	36.1	14.6	15.0	45.7	46.4	46.5	42.3
On layoff	11.0	11.2	16.4	17.2	8.3	8.1	3.0	4.4	12.6	12.3	6.4	8.1
Other job losers ..	34.9	33.8	49.3	49.9	28.9	28.0	11.6	10.6	33.1	34.1	40.1	34.1
Job leavers	13.9	15.0	13.0	14.6	15.1	15.8	13.6	14.6	15.6	16.7	8.8	10.2
Reentrants	29.1	27.4	18.2	15.4	41.5	40.3	28.9	27.4	28.6	26.1	30.0	30.5
New entrants	11.1	12.6	3.2	2.9	6.2	7.8	42.9	43.0	10.1	10.9	14.7	17.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers	3.0	2.5	3.7	3.1	2.3	1.9	2.5	2.6	2.6	2.3	6.7	5.1
Job leavers .....	.9	.9	.7	.7	.9	.8	2.4	2.5	.9	.8	1.3	1.2
Reentrants	1.9	1.6	1.0	.7	2.5	2.1	5.1	4.7	1.6	1.3	4.3	3.7
New entrants .....	.7	.7	.2	.1	.4	.4	7.6	7.4	.6	.5	2.1	2.0

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

(Percent distribution)

Reason, sex, and age	October 1987						
	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	6,845	100.0	46.9	29.7	23.4	10.4	13.0
Job losers	3,082	100.0	40.2	28.6	31.2	13.0	18.2
On layoff	768	100.0	58.0	25.4	16.5	8.6	7.9
Other job losers	2,314	100.0	34.2	29.6	36.1	14.5	21.6
Job leavers	1,030	100.0	51.8	30.6	17.6	7.3	10.3
Reentrants	1,873	100.0	52.2	31.7	16.1	7.1	9.0
New entrants	861	100.0	53.7	28.2	18.1	12.0	6.1
Men, 20 years and over	2,875	100.0	40.6	28.2	31.2	11.8	19.4
Job losers	1,929	100.0	38.4	27.5	34.2	13.3	20.9
On layoff	495	100.0	58.4	23.7	17.9	8.6	9.3
Other job losers	1,434	100.0	31.5	28.8	39.8	14.9	24.9
Job leavers	419	100.0	46.6	30.6	22.8	8.4	14.4
Reentrants	444	100.0	44.4	29.2	26.4	8.8	17.6
New entrants	83	100.0	42.8	27.6	29.6	9.4	20.1
Women, 20 years and over	2,644	100.0	47.4	31.2	21.4	10.1	11.3
Job losers	954	100.0	40.0	29.8	30.3	14.0	16.3
On layoff	214	100.0	50.6	33.1	16.3	9.4	7.0
Other job losers	740	100.0	36.9	28.8	34.3	15.3	19.0
Job leavers	417	100.0	50.9	30.7	18.4	7.9	10.5
Reentrants	1,065	100.0	52.1	32.4	15.5	7.4	8.1
New entrants	207	100.0	50.5	32.5	17.0	9.9	7.1
Both sexes, 16 to 19 years	1,327	100.0	59.6	29.8	10.5	8.1	2.5
Job losers	199	100.0	58.6	33.9	7.5	5.7	1.7
On layoff	59	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Other job losers	140	100.0	48.6	43.0	8.5	6.0	2.5
Job leavers	194	100.0	65.1	30.3	4.6	3.3	1.3
Reentrants	364	100.0	62.1	32.4	5.4	4.0	1.5
New entrants	570	100.0	56.5	26.6	16.9	13.1	3.8

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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over	7,842	6,845	100.0	100.0	6,141	5,237	100.0	100.0
Less than 5 weeks	3,411	3,211	43.5	46.9	2,440	2,250	39.7	43.0
5 to 14 weeks	2,463	2,032	31.4	29.7	1,927	1,546	31.4	29.5
5 to 10 weeks	1,929	1,539	24.6	22.5	1,454	1,129	23.7	21.6
11 to 14 weeks	534	494	6.8	7.2	473	416	7.7	7.9
15 weeks and over	1,968	1,602	25.1	23.4	1,774	1,442	28.9	27.5
15 to 26 weeks	840	712	10.7	10.4	736	629	12.0	12.0
27 weeks and over	1,128	891	14.4	13.0	1,038	812	16.9	15.5
27 to 51 weeks	411	364	5.2	5.3	371	331	6.0	6.3
52 weeks and over	717	527	9.1	7.7	667	482	10.9	9.2
Average (mean) duration, in weeks	14.8	13.7			16.7	15.6		
Median duration, in weeks	6.4	5.7			7.2	6.6		

**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	
								Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
	October 1987										
Total, 16 years and over	6,845	3,211	2,032	712	891	13.7	5.7	43.5	46.9	25.1	23.4
16 to 19 years	1,327	791	396	107	33	6.9	4.2	52.3	59.6	12.3	10.5
20 to 24 years	1,216	635	393	104	84	9.5	4.8	47.3	52.2	21.1	15.5
25 to 34 years	1,868	816	591	217	244	13.9	6.3	40.9	43.7	27.0	24.7
35 to 44 years	1,254	531	363	111	249	18.6	6.8	40.0	42.3	28.2	28.7
45 to 54 years	710	271	184	98	156	19.1	8.5	38.2	38.2	33.4	35.9
55 to 64 years	390	148	75	60	107	23.2	9.9	35.2	38.0	44.3	42.8
65 years and over	80	20	30	14	16	18.8	9.8	53.7	24.3	20.6	38.2
Men, 16 years and over	3,549	1,558	1,026	382	582	16.0	6.3	40.7	43.9	29.7	27.2
16 to 19 years	674	390	215	44	25	7.1	4.3	51.5	57.9	15.0	10.2
20 to 24 years	614	333	173	54	54	10.0	4.6	44.8	54.2	24.4	17.5
25 to 34 years	991	404	312	126	149	15.7	7.0	38.6	40.8	31.1	27.8
35 to 44 years	624	206	190	66	162	24.2	9.6	37.1	33.0	33.4	36.6
45 to 54 years	372	128	81	53	109	23.4	10.3	29.1	34.5	42.3	43.6
55 to 64 years	229	84	41	32	72	25.1	9.7	35.3	36.6	48.5	45.4
65 years and over	45	13	13	8	11	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,297	1,654	1,006	329	308	11.3	5.0	46.7	50.2	19.9	19.3
16 to 19 years	653	401	181	63	8	6.7	4.1	53.1	61.4	9.2	10.9
20 to 24 years	603	302	220	51	30	8.9	5.0	49.7	50.0	18.0	13.4
25 to 34 years	877	412	278	91	95	11.9	5.6	43.4	47.0	22.3	21.2
35 to 44 years	630	325	174	45	87	13.0	4.8	43.4	51.6	22.0	20.9
45 to 54 years	338	143	103	45	47	14.5	7.2	48.0	42.2	23.8	27.5
55 to 64 years	161	65	33	28	35	20.6	10.1	35.1	40.1	37.2	39.3
65 years and over	36	7	17	6	6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,053	2,472	1,435	495	650	13.5	5.2	44.5	48.9	24.2	22.7
Men	2,729	1,260	762	264	444	15.7	5.8	41.6	46.2	29.1	25.9
Women	2,323	1,212	673	232	206	10.9	4.8	47.9	52.2	18.5	18.9
Black, 16 years and over	1,578	629	522	201	227	15.1	7.0	39.1	39.8	27.8	27.1
Men	712	238	237	109	128	18.0	8.8	36.0	33.4	32.3	33.3
Women	866	391	285	92	98	12.7	5.9	42.4	45.1	23.2	22.0
Men, 16 years and over:											
Married, spouse present	1,406	532	377	196	300	19.5	8.3	37.7	37.9	34.1	35.3
Widowed, divorced, or separated	447	165	129	53	100	20.6	8.0	36.5	36.9	33.0	34.2
Single (never married)	1,696	860	520	133	182	12.0	4.9	44.6	50.7	25.0	18.6
Women, 16 years and over:											
Married, spouse present	1,236	644	348	109	135	11.8	4.8	49.4	52.1	20.2	19.8
Widowed, divorced, or separated	777	329	249	94	105	14.0	6.4	39.8	42.3	25.0	25.6
Single (never married)	1,283	681	409	126	68	9.2	4.7	47.5	53.1	16.8	15.1

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	
								Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
	October 1987										
OCCUPATION											
Managerial and professional specialty	630	224	211	89	106	17.3	7.9	39.3	35.6	28.0	30.9
Technical, sales, and administrative support	1,575	730	483	161	201	13.2	5.8	43.5	46.3	22.7	23.0
Service occupations	1,176	598	364	97	118	11.9	4.9	46.7	50.8	23.3	18.2
Precision production, craft, and repair	704	326	192	70	117	15.3	6.0	40.7	46.2	32.1	26.5
Operators, fabricators, and laborers	1,602	724	444	164	271	15.7	6.1	42.7	45.2	26.7	27.1
Farming, forestry, and fishing	260	135	87	17	21	10.5	4.8	55.1	52.0	19.4	14.6
INDUSTRY¹											
Agriculture	186	107	57	10	12	9.6	4.4	53.8	57.3	19.9	12.0
Construction	595	314	154	45	82	12.0	4.7	44.9	52.7	21.1	21.5
Manufacturing	1,187	450	346	149	242	18.5	7.7	39.6	37.9	32.4	32.9
Durable goods	635	206	195	91	143	19.7	9.4	35.9	32.4	38.2	36.9
Nondurable goods	552	244	151	58	98	17.1	6.3	45.3	44.2	23.4	28.4
Transportation and public utilities	292	147	70	38	38	12.9	5.0	50.6	50.1	23.8	26.0
Wholesale and retail trade	1,467	723	442	121	180	12.5	5.2	46.2	49.3	23.0	20.6
Finance and service industries	1,795	808	595	195	199	13.1	6.0	43.9	45.0	24.2	21.9
Public administration	230	100	59	38	34	15.7	6.5	38.8	43.4	19.0	30.9
No previous work experience	864	465	242	103	53	10.6	4.6	43.4	53.9	21.6	18.1

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	October 1987								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers						
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	6,845	5,954	22.5	7.2	73.5	37.1	17.7	4.9	1.63
16 to 19 years	1,327	1,248	13.2	2.6	83.3	23.6	14.3	2.5	1.40
20 to 24 years	1,216	1,065	23.4	8.6	73.4	36.7	19.1	4.7	1.66
25 to 34 years	1,868	1,624	28.1	8.4	72.8	40.7	17.9	4.9	1.73
35 to 44 years	1,254	1,040	25.8	8.5	68.8	42.1	19.3	6.2	1.71
45 to 54 years	710	579	23.5	8.1	69.1	43.0	19.0	5.4	1.68
55 to 64 years	390	328	19.8	7.3	67.1	45.4	18.9	8.8	1.67
65 years and over	80	69	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Men, 16 years and over	3,549	2,952	23.7	7.5	74.2	36.0	21.2	5.2	1.68
16 to 19 years	674	619	11.8	2.4	83.8	20.2	17.3	1.8	1.37
20 to 24 years	614	517	26.9	8.1	75.6	34.8	24.0	4.4	1.74
25 to 34 years	991	815	31.4	9.3	74.4	42.8	22.1	4.4	1.84
35 to 44 years	624	491	27.5	9.2	66.6	42.6	23.6	7.9	1.77
45 to 54 years	372	288	23.3	9.7	66.7	37.8	22.6	7.6	1.68
55 to 64 years	229	182	16.5	6.6	70.3	44.0	16.5	11.5	1.65
65 years and over	45	40	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,297	3,002	21.4	6.9	72.9	38.1	14.2	4.5	1.58
16 to 19 years	653	629	14.5	2.9	82.7	27.0	11.4	3.3	1.42
20 to 24 years	603	548	20.3	8.9	71.4	38.5	14.4	4.9	1.58
25 to 34 years	877	809	24.7	7.5	71.2	38.7	13.7	5.3	1.61
35 to 44 years	630	550	24.2	8.0	70.7	41.6	15.3	4.7	1.65
45 to 54 years	338	291	23.7	6.5	71.5	48.1	15.8	3.1	1.69
55 to 64 years	161	146	23.3	7.5	63.7	47.3	21.9	4.8	1.68
65 years and over	36	29	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,053	4,325	20.7	7.2	73.6	39.1	17.6	5.2	1.63
Men	2,729	2,225	21.4	7.4	74.0	37.7	20.6	5.8	1.67
Women	2,323	2,099	20.0	7.1	73.2	40.6	14.4	4.7	1.60
Black, 16 years and over	1,578	1,434	28.1	7.6	74.1	31.7	17.2	3.3	1.62
Men	712	631	31.7	8.4	76.4	30.3	21.7	2.2	1.71
Women	866	804	25.2	7.0	72.3	32.8	13.6	4.2	1.55

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	October 1987								Average number of methods used
	Thousands of persons		Methods used as a percent of total jobseekers						
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	6,845	5,954	22.5	7.2	73.5	37.1	17.7	4.9	1.63
Job losers ¹	3,082	2,294	28.9	8.3	72.8	40.3	22.1	5.3	1.78
Job leavers	1,030	1,049	22.5	9.6	73.7	45.7	17.3	3.2	1.72
Reentrants	1,873	1,762	18.7	6.5	72.2	34.2	13.2	6.7	1.52
New entrants	861	848	13.2	2.8	78.1	23.7	15.4	2.0	1.35
Men, 16 years and over	3,549	2,952	23.7	7.5	74.2	36.0	21.2	5.2	1.68
Job losers ¹	2,058	1,504	27.9	8.6	72.7	39.4	24.9	5.7	1.79
Job leavers	533	537	21.4	8.6	75.2	41.3	17.7	2.6	1.67
Reentrants	628	589	20.2	6.3	73.5	31.1	16.1	8.8	1.56
New entrants	329	321	14.0	2.2	80.1	19.6	19.3	6	1.36
Women, 16 years and over	3,297	3,002	21.4	6.9	72.9	38.1	14.2	4.5	1.58
Job losers ¹	1,024	790	30.6	7.5	72.9	41.9	17.0	4.4	1.74
Job leavers	497	512	23.6	10.7	72.1	50.0	16.8	3.7	1.77
Reentrants	1,245	1,175	18.0	6.6	71.4	35.7	11.8	5.6	1.49
New entrants	531	526	12.7	3.2	77.0	26.2	13.1	2.9	1.35

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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
All industries	110,857	113,898	61,200	62,692	49,657	51,206
16 to 19 years	6,257	6,379	3,184	3,249	3,072	3,130
16 to 17 years	2,539	2,601	1,265	1,286	1,273	1,315
18 to 19 years	3,718	3,779	1,919	1,964	1,799	1,815
20 to 24 years	13,733	13,467	7,234	6,990	6,499	6,477
25 to 54 years	76,438	79,198	42,364	43,790	34,074	35,408
25 to 34 years	32,696	33,692	18,211	18,780	14,486	14,912
35 to 44 years	26,531	27,772	14,542	15,174	11,989	12,598
45 to 54 years	17,211	17,735	9,611	9,836	7,600	7,898
55 to 64 years	11,506	11,675	6,702	6,732	4,804	4,943
55 to 59 years	6,939	7,062	4,015	4,038	2,924	3,024
60 to 64 years	4,567	4,614	2,687	2,694	1,880	1,920
65 years and over	2,923	3,178	1,715	1,931	1,208	1,247
Agriculture	3,190	3,297	2,533	2,593	658	704
16 to 19 years	205	225	176	190	30	35
16 to 17 years	104	105	80	90	24	15
18 to 19 years	102	119	96	100	6	20
20 to 24 years	394	352	338	311	56	41
25 to 54 years	1,833	1,924	1,390	1,443	442	481
25 to 34 years	761	851	598	660	164	190
35 to 44 years	581	604	440	444	142	160
45 to 54 years	489	469	353	339	137	130
55 to 64 years	489	488	399	390	90	98
55 to 59 years	272	261	218	201	55	60
60 to 64 years	217	228	181	189	36	38
65 years and over	269	308	230	258	40	49
Nonagricultural industries	107,666	110,601	58,667	60,099	48,999	50,502
16 to 19 years	6,052	6,155	3,009	3,060	3,043	3,095
16 to 17 years	2,435	2,496	1,186	1,196	1,249	1,300
18 to 19 years	3,617	3,659	1,823	1,864	1,793	1,795
20 to 24 years	13,339	13,114	6,896	6,679	6,443	6,436
25 to 54 years	74,605	77,274	40,974	42,347	33,632	34,928
25 to 34 years	31,935	32,841	17,613	18,119	14,322	14,722
35 to 44 years	25,949	27,168	14,103	14,729	11,847	12,438
45 to 54 years	16,721	17,265	9,258	9,497	7,463	7,768
55 to 64 years	11,017	11,187	6,303	6,342	4,714	4,845
55 to 59 years	6,667	6,801	3,797	3,837	2,869	2,964
60 to 64 years	4,350	4,386	2,506	2,505	1,844	1,881
65 years and over	2,653	2,871	1,485	1,673	1,168	1,198

**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	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total	110,857	113,898	61,200	62,692	58,015	59,442	49,657	51,206	46,585	48,076
Managerial and professional specialty	26,975	28,309	15,206	15,730	15,112	15,622	11,769	12,579	11,658	12,463
Executive, administrative, and managerial	12,892	13,729	8,052	8,449	8,013	8,421	4,841	5,280	4,804	5,221
Officials and administrators, public administration	563	564	341	339	341	340	222	225	222	225
Other executive, administrative, and managerial	8,886	9,591	5,910	6,310	5,879	6,287	2,976	3,281	2,952	3,244
Management-related occupations	3,444	3,574	1,801	1,800	1,793	1,794	1,643	1,774	1,630	1,752
Professional specialty	14,082	14,580	7,154	7,281	7,099	7,201	6,928	7,299	6,853	7,242
Engineers	1,807	1,729	1,699	1,633	1,696	1,634	107	96	108	96
Mathematical and computer scientists	593	641	405	435	404	433	188	206	184	206
Natural scientists	362	393	292	304	292	303	70	90	70	90
Health diagnosing occupations	750	800	643	651	643	651	108	149	108	149
Health assessment and treating occupations	2,028	2,135	282	299	281	296	1,746	1,836	1,742	1,836
Teachers, college and university	715	731	448	446	447	441	267	285	265	277
Teachers, except college and university	3,588	3,676	913	979	901	965	2,676	2,697	2,643	2,670
Lawyers and judges	648	696	540	564	541	564	108	132	108	132
Other professional specialty occupations	3,591	3,778	1,932	1,969	1,895	1,916	1,659	1,809	1,626	1,785
Technical, sales, and administrative support	34,936	35,667	12,227	12,582	11,638	11,963	22,708	23,085	21,041	21,407
Technicians and related support	3,489	3,507	1,819	1,796	1,781	1,768	1,671	1,711	1,652	1,689
Health technologists and technicians	1,211	1,211	194	207	194	205	1,017	1,004	1,008	993
Engineering and science technicians	1,126	1,132	902	895	876	878	225	236	219	229
Technicians, except health, engineering, and science	1,152	1,164	722	693	711	685	429	471	425	467
Sales occupations	13,489	13,680	6,973	7,045	6,589	6,702	6,516	6,635	5,527	5,635
Supervisors and proprietors	3,547	3,634	2,415	2,479	2,391	2,450	1,131	1,155	1,114	1,142
Sales representatives, finance and business services	2,328	2,344	1,399	1,406	1,386	1,397	929	938	905	913
Sales representatives, commodities, except retail	1,472	1,563	1,226	1,297	1,222	1,289	246	266	241	259
Sales workers, retail and personal services	6,086	6,059	1,917	1,838	1,574	1,542	4,169	4,221	3,230	3,270
Sales-related occupations	57	80	17	25	16	24	40	55	37	50
Administrative support, including clerical	17,958	18,480	3,436	3,742	3,268	3,494	14,522	14,738	13,862	14,083
Supervisors	757	832	268	375	266	375	490	457	486	454
Computer equipment operators	863	926	300	318	286	304	562	608	536	577
Secretaries, stenographers, and typists	4,992	5,052	78	106	76	93	4,914	4,945	4,712	4,763
Financial records processing	2,428	2,394	233	208	225	201	2,195	2,186	2,135	2,139
Mail and message distributing	957	962	624	628	596	601	334	334	327	322
Other administrative support, including clerical	7,961	8,314	1,933	2,106	1,819	1,919	6,027	6,208	5,666	5,828
Service occupations	14,725	14,908	5,674	5,734	4,769	4,826	9,052	9,174	8,009	8,121
Private household	963	953	36	39	29	27	927	914	795	733
Protective service	1,688	1,851	1,497	1,579	1,456	1,532	191	273	176	251
Service, except private household and protective	12,074	12,104	4,141	4,117	3,284	3,268	7,933	7,987	7,038	7,137
Food service	5,096	5,138	1,897	1,886	1,253	1,262	3,199	3,252	2,543	2,640
Health service	1,895	1,842	178	181	172	158	1,716	1,661	1,637	1,581
Cleaning and building service	2,890	2,801	1,632	1,660	1,468	1,506	1,257	1,141	1,197	1,088
Personal service	2,194	2,322	434	389	391	341	1,760	1,933	1,660	1,828
Precision production, craft, and repair	13,567	13,722	12,373	12,543	12,019	12,250	1,194	1,179	1,168	1,142
Mechanics and repairers	4,396	4,464	4,242	4,303	4,120	4,218	153	162	153	159
Construction trades	5,011	5,132	4,931	5,043	4,756	4,894	80	89	78	85
Other precision production, craft, and repair	4,160	4,126	3,200	3,197	3,144	3,139	961	929	937	898
Operators, fabricators, and laborers	17,178	17,738	12,791	13,096	11,788	12,024	4,386	4,642	4,203	4,436
Machine operators, assemblers, and inspectors	7,872	8,099	4,689	4,757	4,541	4,590	3,183	3,341	3,108	3,264
Manufacturing industries	6,599	6,696	3,880	3,920	3,788	3,797	2,718	2,775	2,660	2,707
Durable goods	3,733	3,727	2,578	2,622	2,529	2,535	1,155	1,105	1,138	1,088
Nondurable goods	2,866	2,968	1,302	1,298	1,259	1,262	1,564	1,670	1,522	1,619
Nonmanufacturing industries	1,273	1,403	808	837	754	793	464	566	448	556
Transportation and material moving occupations	4,631	4,896	4,213	4,503	4,081	4,345	418	393	397	379
Motor vehicle operators	3,434	3,608	3,073	3,255	2,957	3,141	362	353	341	338
Other transportation and material moving occupations	1,197	1,288	1,141	1,248	1,125	1,204	56	40	55	40
Handlers, equipment cleaners, helpers, and laborers	4,675	4,743	3,889	3,836	3,166	3,089	786	907	699	793
Construction laborers	770	791	744	755	668	689	25	36	24	37
Other handlers, equipment cleaners, helpers, and laborers	3,906	3,951	3,144	3,081	2,498	2,400	760	871	675	756
Farming, forestry, and fishing	3,477	3,554	2,929	3,006	2,688	2,757	548	548	506	508
Farm operators and managers	1,372	1,392	1,173	1,154	1,173	1,144	199	238	200	236
Other farming, forestry, and fishing occupations	2,104	2,163	1,756	1,852	1,515	1,613	349	311	306	272

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
TOTAL						
Total, 16 years and over (thousands) ..	110,857	113,898	61,200	62,692	49,657	51,206
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.3	24.9	24.8	25.1	23.7	24.6
Executive, administrative, and managerial	11.6	12.1	13.2	13.5	9.7	10.3
Professional specialty	12.7	12.8	11.7	11.6	14.0	14.3
Technical, sales, and administrative support ..	31.5	31.3	20.0	20.1	45.7	45.1
Technicians and related support ..	3.1	3.1	3.0	2.9	3.4	3.3
Sales occupations	12.2	12.0	11.4	11.2	13.1	13.0
Administrative support, including clerical ..	16.2	16.2	5.6	6.0	29.2	28.8
Service occupations ..	13.3	13.1	9.3	9.1	18.2	17.9
Private household ..	.9	.8	.1	.1	1.9	1.8
Protective service	1.5	1.6	2.4	2.5	.4	.5
Service, except private household and protective ..	10.9	10.6	6.8	6.6	16.0	15.6
Precision production, craft, and repair ..	12.2	12.0	20.2	20.0	2.4	2.3
Operators, fabricators, and laborers	15.5	15.6	20.9	20.9	8.8	9.1
Machine operators, assemblers, and inspectors ..	7.1	7.1	7.7	7.6	6.4	6.5
Transportation and material moving occupations ..	4.2	4.3	6.9	7.2	.8	.8
Handlers, equipment cleaners, helpers, and laborers ..	4.2	4.2	6.4	6.1	1.6	1.8
Farming, forestry, and fishing ..	3.1	3.1	4.8	4.8	1.1	1.1
White						
Total, 16 years and over (thousands) ..	96,702	98,882	54,010	55,038	42,692	43,843
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	25.4	25.8	26.0	26.2	24.6	25.4
Executive, administrative, and managerial ..	12.3	12.7	14.0	14.2	10.2	10.7
Professional specialty	13.1	13.2	12.0	11.9	14.4	14.7
Technical, sales, and administrative support ..	32.1	31.8	20.3	20.4	47.0	46.2
Technicians and related support ..	3.2	3.1	3.0	2.9	3.4	3.3
Sales occupations	12.8	12.6	12.1	11.9	13.8	13.4
Administrative support, including clerical ..	16.1	16.1	5.3	5.5	29.8	29.4
Service occupations ..	12.1	11.9	8.3	8.1	16.8	16.6
Private household ..	.7	.7	.1	.1	1.6	1.5
Protective service	1.4	1.5	2.3	2.4	.3	.5
Service, except private household and protective ..	9.9	9.6	6.0	5.7	14.9	14.6
Precision production, craft, and repair ..	12.6	12.5	20.7	20.7	2.3	2.3
Operators, fabricators, and laborers	14.6	14.7	19.7	19.7	8.1	8.4
Machine operators, assemblers, and inspectors ..	6.6	6.7	7.3	7.2	5.7	5.9
Transportation and material moving occupations ..	4.0	4.1	6.5	6.8	.9	.7
Handlers, equipment cleaners, helpers, and laborers ..	3.9	3.9	5.9	5.7	1.5	1.7
Farming, forestry, and fishing ..	3.3	3.3	4.9	5.0	1.2	1.2
Black						
Total, 16 years and over (thousands) ..	10,902	11,582	5,428	5,749	5,474	5,833
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	14.3	15.7	12.2	13.2	16.5	18.3
Executive, administrative, and managerial ..	5.9	7.1	5.5	6.8	6.3	7.3
Professional specialty	8.4	8.7	6.7	6.4	10.2	10.9
Technical, sales, and administrative support ..	26.5	27.2	16.0	16.7	36.8	37.5
Technicians and related support ..	2.4	2.6	2.1	1.8	2.8	3.5
Sales occupations	6.8	7.3	5.4	5.1	8.2	9.3
Administrative support, including clerical ..	17.2	17.3	8.6	9.8	25.8	24.6
Service occupations ..	23.5	23.1	17.4	17.8	29.6	28.4
Private household ..	2.1	2.0	.1	.1	4.2	3.8
Protective service	2.5	2.5	4.2	3.9	.8	1.1
Service, except private household and protective ..	18.9	18.7	13.1	13.9	24.6	23.4
Precision production, craft, and repair ..	9.6	8.8	16.9	15.7	2.3	1.9
Operators, fabricators, and laborers	24.0	23.4	33.6	33.1	14.5	13.8
Machine operators, assemblers, and inspectors ..	10.8	10.4	10.7	10.6	10.9	10.3
Transportation and material moving occupations ..	6.1	6.5	11.3	12.0	.9	1.0
Handlers, equipment cleaners, helpers, and laborers ..	7.1	6.5	11.6	10.6	2.6	2.5
Farming, forestry, and fishing ..	2.1	1.8	3.9	3.4	.4	.2

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	October 1987								
	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	101,883	1,257	17,288	83,338	8,478	240	1,673	1,487	136
16 to 19 years	6,070	246	298	5,525	71	13	177	17	30
16 to 17 years	2,464	169	79	2,216	27	5	78	9	18
18 to 19 years	3,606	78	219	3,309	45	8	99	8	13
20 to 24 years	12,713	130	1,138	11,445	379	23	280	67	5
25 to 34 years	30,786	218	4,554	26,014	2,010	45	564	272	15
35 to 44 years	24,613	206	5,446	18,962	2,495	60	280	301	24
45 to 54 years	15,518	173	3,385	11,961	1,693	55	181	262	26
55 to 64 years	9,898	155	2,069	7,674	1,255	34	141	328	19
55 to 59 years	6,052	86	1,329	4,637	733	17	94	159	8
60 to 64 years	3,847	69	740	3,038	522	17	47	169	11
65 years and over	2,285	129	399	1,757	576	10	52	239	17
Men, 16 years and over	54,529	201	8,125	46,203	5,534	37	1,315	1,222	56
16 to 19 years	3,010	56	144	2,810	39	10	148	13	28
16 to 17 years	1,177	36	40	1,101	17	2	65	7	18
18 to 19 years	1,834	20	105	1,709	23	8	83	6	11
20 to 24 years	6,416	30	501	5,885	248	15	249	57	4
25 to 34 years	16,867	41	2,089	14,737	1,253	-	433	220	7
35 to 44 years	13,097	28	2,565	10,504	1,632	-	194	246	4
45 to 54 years	8,370	15	1,597	6,757	1,125	2	135	203	2
55 to 64 years	5,490	12	1,036	4,442	846	6	111	276	3
55 to 59 years	3,347	8	656	2,683	488	3	70	131	-
60 to 64 years	2,143	4	381	1,758	358	3	41	145	3
65 years and over	1,279	19	191	1,069	390	4	45	206	8
Women, 16 years and over	47,354	1,056	9,164	37,135	2,945	203	359	266	80
16 to 19 years	3,060	191	154	2,715	32	4	29	4	2
16 to 17 years	1,287	133	39	1,115	10	3	13	2	-
18 to 19 years	1,773	58	115	1,600	22	1	16	2	2
20 to 24 years	6,298	100	637	5,561	130	8	30	10	1
25 to 34 years	13,919	177	2,465	11,277	758	45	130	53	8
35 to 44 years	11,516	178	2,880	8,458	862	60	86	55	19
45 to 54 years	7,148	157	1,787	5,203	568	52	46	59	24
55 to 64 years	4,408	143	1,033	3,232	409	28	30	52	16
55 to 59 years	2,705	78	673	1,953	245	14	24	29	8
60 to 64 years	1,703	65	360	1,279	164	14	7	24	8
65 years and over	1,006	110	208	688	186	6	7	33	10

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-25. Employed civilians by industry and occupation

(In thousands)

Industry	October 1987												
	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	3,297	94	82	18	14	114		22	24	12	59	14	2,845
Mining	834	131	104	26	29	74		13	238	13	159	46	-
Construction	7,679	941	139	63	66	490		40	4,377	111	522	913	16
Manufacturing	21,089	2,355	1,654	717	671	2,440		374	4,110	6,696	842	1,147	83
Durable goods	12,608	1,423	1,147	507	262	1,381		199	2,861	3,727	460	563	79
Nondurable goods	8,480	932	507	210	410	1,059		175	1,250	2,968	382	584	5
Transportation and public utilities	7,839	899	449	238	285	2,161		239	1,267	103	1,774	413	10
Wholesale and retail trade	23,557	2,041	412	126	9,823	2,334		4,226	1,513	287	967	1,765	64
Wholesale trade	4,740	528	79	52	1,848	818		43	335	135	499	370	33
Retail trade	18,817	1,513	332	74	7,975	1,517		4,183	1,177	152	468	1,395	30
Finance, insurance, and real estate	8,059	2,021	178	140	1,968	3,248		-	246	137	16	7	79
Services	36,188	4,131	10,825	1,937	807	6,113	953	7,509	1,825	812	498	378	398
Private households	1,264	4	9	14	-	7	953	104	17	2	11	37	107
Other service industries	34,924	4,127	10,816	1,923	807	6,106		7,406	1,809	810	487	342	291
Professional services	23,318	2,315	9,694	1,556	141	4,444		4,167	352	202	284	82	82
Public administration	5,357	1,116	737	241	16	1,506		1,285	231	50	68	48	59

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					
	Oct. 1986	Oct. 1987	Total		Wage and salary workers ¹			
			Oct. 1986	Oct. 1987	Paid absences		Unpaid absences	
					Oct. 1986	Oct. 1987	Oct. 1986	Oct. 1987
Total, 16 years and over	4,363	4,713	4,284	4,602	2,171	2,375	1,658	1,745
Vacation	2,130	2,284	2,100	2,234	1,523	1,636	415	418
Illness	1,193	1,401	1,170	1,369	443	508	604	746
Bad weather	24	18	22	14	(²)	(²)	(²)	(²)
Industrial dispute	82	39	82	39	(²)	(²)	(²)	(²)
All other reasons	936	970	909	945	205	231	640	582
Men, 16 years and over	2,283	2,470	2,229	2,374	1,226	1,285	726	800
Vacation	1,189	1,287	1,167	1,242	918	960	153	182
Illness	632	773	618	744	239	270	308	401
All other reasons ³	462	410	445	388	69	55	266	217
Women, 16 years and over	2,081	2,243	2,056	2,228	945	1,091	932	945
Vacation	941	997	934	993	605	676	262	236
Illness	561	629	552	625	203	238	296	344
All other reasons ³	579	617	570	610	136	177	374	364

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	October 1987					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	109,185	3,186	105,999	100.0	100.0	100.0
1 to 34 hours	29,595	824	28,770	27.1	25.9	27.1
1 to 4 hours	772	42	730	.7	1.3	.7
5 to 14 hours	4,816	192	4,624	4.4	6.0	4.4
15 to 29 hours	13,339	380	12,958	12.2	11.9	12.2
30 to 34 hours	10,668	210	10,458	9.8	6.6	9.9
35 hours and over	79,589	2,361	77,229	72.9	74.1	72.9
35 to 39 hours	6,766	161	6,605	6.2	5.1	6.2
40 hours	40,359	608	39,752	37.0	19.1	37.5
41 hours and over	32,464	1,592	30,872	29.7	50.0	29.1
41 to 48 hours	11,468	217	11,252	10.5	6.8	10.6
49 to 59 hours	11,773	402	11,371	10.8	12.6	10.7
60 hours and over	9,223	973	8,249	8.4	30.5	7.8
Average hours, total at work	39.1	46.5	38.9			
Average hours, workers on full-time schedules	43.6	54.6	43.3			

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

(Numbers in thousands)

Reason for working less than 35 hours	October 1987					
	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	29,595	10,484	19,111	28,770	10,263	18,507
Economic reasons	5,129	1,519	3,610	4,856	1,407	3,449
Slack work	2,346	1,232	1,114	2,162	1,125	1,037
Material shortages or repairs to plant and equipment	45	45	-	43	43	-
New job started during week	168	168	-	168	168	-
Job terminated during week	74	74	-	71	71	-
Could find only part-time work	2,496	-	2,496	2,412	-	2,412
Other reasons	24,465	8,965	15,500	23,915	8,857	15,058
Does not want, or unavailable for, full-time work	13,295	-	13,295	12,925	-	12,925
Vacation	1,373	1,373	-	1,358	1,358	-
Illness	1,581	1,444	137	1,541	1,418	123
Bad weather	202	202	-	172	172	-
Industrial dispute	4	4	-	4	4	-
Legal or religious holiday	4,380	4,380	-	4,380	4,380	-
Full time for this job	1,481	-	1,481	1,451	-	1,451
All other reasons	2,148	1,561	587	2,080	1,522	558
Average hours:						
Economic reasons	22.1	24.5	21.1	22.3	24.6	21.3
Other reasons	22.4	28.4	19.0	22.5	28.4	19.0
Worked 30 to 34 hours:						
Economic reasons	1,654	712	942	1,578	659	919
Other reasons	9,014	6,218	2,796	8,880	6,173	2,707

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

(Numbers in thousands)

Industry	October 1987								
	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	105,999	4,856	15,058	86,085	55,213	11,252	19,620	38.9	43.3
Wage and salary workers	97,714	4,231	13,631	79,852	52,452	10,616	16,784	38.7	42.9
Mining	754	17	17	720	361	115	244	44.8	45.8
Construction	5,895	355	264	5,276	3,389	688	1,199	41.0	43.3
Manufacturing	19,861	443	645	18,773	11,941	3,114	3,718	42.0	43.1
Durable goods	11,897	169	293	11,435	7,227	1,891	2,317	42.5	43.3
Nondurable goods	7,964	274	352	7,338	4,715	1,222	1,401	41.3	43.0
Transportation and public utilities	7,077	187	395	6,495	4,075	906	1,514	42.0	43.8
Wholesale and retail trade	20,729	1,391	5,028	14,310	8,650	2,019	3,641	36.9	44.1
Finance, insurance, and real estate	7,117	115	693	6,309	4,572	694	1,043	38.8	41.2
Service industries	31,184	1,659	6,321	23,204	15,856	2,678	4,670	36.5	42.6
Private households	1,209	242	559	408	280	28	100	24.4	45.3
All other industries	29,975	1,417	5,762	22,796	15,576	2,650	4,570	37.0	42.6
Public administration	5,098	63	267	4,768	3,611	401	756	39.1	40.5
Self-employed workers	8,046	611	1,348	6,087	2,674	620	2,793	41.1	48.3
Unpaid family workers	240	14	79	147	88	16	43	35.2	44.0

**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	October 1987							
	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	105,999	4,856	15,058	86,085	55,213	30,872	38.9	43.3
16 to 19 years	6,016	486	3,673	1,857	1,459	398	24.1	40.0
16 to 17 years	2,441	104	2,137	200	168	32	17.0	37.2
18 to 19 years	3,575	382	1,535	1,658	1,292	366	28.9	40.4
20 years and over	99,983	4,370	11,385	84,228	53,755	30,473	39.8	43.4
20 to 24 years	12,736	812	2,270	9,654	6,661	2,993	37.2	42.6
25 years and over	87,247	3,557	9,115	74,575	47,095	27,480	40.2	43.5
25 to 44 years	57,778	2,387	5,129	50,262	31,160	19,102	40.8	43.7
45 to 64 years	26,843	1,041	2,671	23,131	15,080	8,051	40.0	43.2
65 years and over	2,626	130	1,315	1,181	854	327	28.5	42.2
Men, 16 years and over	57,725	2,071	4,567	51,087	29,045	22,042	42.1	45.0
16 to 19 years	2,997	200	1,756	1,041	771	270	25.5	41.1
16 to 17 years	1,170	38	1,014	118	94	24	18.2	38.6
18 to 19 years	1,827	162	742	923	676	247	30.1	41.4
20 years and over	54,728	1,871	2,811	50,046	28,275	21,771	43.0	45.1
20 to 24 years	6,517	404	961	5,152	3,197	1,955	39.2	44.2
25 years and over	48,211	1,466	1,849	44,896	25,079	19,817	43.5	45.2
25 to 44 years	31,722	984	706	30,032	16,306	13,726	44.2	45.4
45 to 64 years	14,967	409	464	14,094	8,243	5,851	43.2	44.6
65 years and over	1,523	73	680	770	529	241	30.4	43.1
Women, 16 years and over	48,274	2,785	10,491	34,998	26,167	8,831	35.1	40.9
16 to 19 years	3,019	286	1,917	816	688	128	22.8	38.7
16 to 17 years	1,271	66	1,124	81	73	8	16.0	35.1
18 to 19 years	1,748	220	793	735	614	121	27.7	39.1
20 years and over	45,255	2,498	8,574	34,183	25,480	8,703	36.0	41.0
20 to 24 years	6,220	407	1,310	4,503	3,465	1,038	35.1	40.9
25 years and over	39,036	2,091	7,264	29,681	22,017	7,664	36.1	41.0
25 to 44 years	26,056	1,402	4,424	20,230	14,855	5,375	36.6	41.1
45 to 64 years	11,876	632	2,206	9,038	6,837	2,201	36.0	40.8
65 years and over	1,103	57	635	411	324	87	25.9	40.6
RACE								
White, 16 years and over	91,799	3,925	13,592	74,282	46,205	28,077	39.0	43.6
Men	50,579	1,670	4,035	44,874	24,659	20,215	42.4	45.2
Women	41,220	2,256	9,557	29,407	21,544	7,863	35.0	41.1
Black, 16 years and over	10,955	796	1,038	9,121	7,144	1,977	37.9	41.3
Men	5,365	340	370	4,655	3,394	1,261	39.6	42.6
Women	5,590	455	668	4,467	3,750	717	36.2	40.0
MARITAL STATUS								
Men, 16 years and over:								
Married, spouse present	37,580	903	1,300	35,377	19,232	16,145	43.9	45.4
Widowed, divorced, or separated	5,623	263	246	5,114	2,864	2,250	43.2	45.4
Single (never married)	14,523	905	3,021	10,597	6,950	3,647	36.8	43.4
Women, 16 years and over:								
Married, spouse present	26,753	1,405	6,180	19,168	14,603	4,565	34.9	40.7
Widowed, divorced, or separated	9,548	637	1,119	7,792	5,561	2,231	37.6	41.4
Single (never married)	11,974	744	3,192	8,038	6,004	2,034	33.6	41.1

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

(Numbers in thousands)

Occupation and sex	October 1987								
	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	105,753	4,805	15,017	85,931	55,021	11,248	19,662	38.9	43.3
Managerial and professional specialty	27,263	481	2,483	24,299	13,575	3,038	7,686	41.9	44.7
Executive, administrative, and managerial	13,219	144	599	12,476	6,636	1,536	4,304	44.0	45.4
Professional specialty	14,044	336	1,885	11,823	6,939	1,503	3,382	40.0	44.1
Technical, sales, and administrative support	34,177	1,280	6,311	26,587	18,503	3,136	4,948	37.2	42.1
Technicians and related support	3,368	46	415	2,908	2,024	372	512	38.9	41.8
Sales occupations	13,110	672	2,805	9,633	5,150	1,265	3,219	38.8	45.5
Administrative support, including clerical	17,699	562	3,091	14,046	11,329	1,500	1,217	35.7	39.8
Service occupations	14,290	1,401	4,188	8,701	6,301	962	1,438	33.5	42.6
Private household	918	165	456	298	220	22	56	23.4	43.0
Protective service	1,750	52	182	1,516	907	237	372	41.1	44.7
Service, except private household and protective	11,622	1,184	3,550	6,888	5,174	704	1,010	33.1	42.1
Precision production, craft, and repair	13,110	596	448	12,066	7,544	1,896	2,626	41.8	43.5
Operators, fabricators, and laborers	16,912	1,048	1,587	14,278	9,099	2,215	2,964	40.1	43.6
Machine operators, assemblers, and inspectors	7,737	364	348	7,025	4,787	1,204	1,034	40.6	42.4
Transportation and material moving occupations	4,608	235	395	3,978	1,970	577	1,432	43.4	47.0
Handlers, equipment cleaners, helpers, and laborers	4,567	448	845	3,274	2,342	434	498	35.9	42.1
Men, 16 years and over ¹	57,328	2,014	4,471	50,843	28,792	7,123	14,928	42.2	45.0
Managerial and professional specialty	15,206	187	700	14,319	6,971	1,738	5,610	44.9	46.5
Executive, administrative, and managerial	8,159	78	194	7,887	3,648	947	3,292	46.1	46.9
Professional specialty	7,047	109	506	6,432	3,323	792	2,318	43.6	46.0
Technical, sales, and administrative support	12,148	243	1,245	10,661	5,866	1,465	3,329	42.0	45.1
Technicians and related support	1,758	14	127	1,617	1,023	218	376	41.3	43.2
Sales occupations	6,813	146	653	6,014	2,660	830	2,524	44.4	47.6
Administrative support, including clerical	3,577	82	465	3,030	2,183	417	430	37.7	41.2
Service occupations	5,510	339	1,175	3,996	2,629	525	842	37.4	44.2
Private household	33	9	8	16	10	3	4	(²)	(²)
Protective service	1,486	38	123	1,324	748	220	357	42.6	45.3
Service, except private household and protective	3,991	291	1,044	2,656	1,871	302	482	35.5	43.7
Precision production, craft, and repair	11,975	543	317	11,115	6,846	1,760	2,509	42.1	43.7
Operators, fabricators, and laborers	12,490	703	1,035	10,753	6,480	1,635	2,638	41.2	44.5
Machine operators, assemblers, and inspectors	4,556	170	145	4,242	2,713	726	803	42.0	43.5
Transportation and material moving occupations	4,236	197	258	3,781	1,843	551	1,387	44.4	47.2
Handlers, equipment cleaners, helpers, and laborers	3,698	336	632	2,730	1,924	357	448	36.6	42.5
Women, 16 years and over ¹	48,425	2,792	10,546	35,087	26,230	4,124	4,733	35.1	40.9
Managerial and professional specialty	12,058	294	1,783	9,981	6,604	1,300	2,076	38.2	42.2
Executive, administrative, and managerial	5,060	66	405	4,589	2,988	589	1,012	40.6	42.7
Professional specialty	6,998	227	1,379	5,391	3,616	711	1,064	36.5	41.8
Technical, sales, and administrative support	22,029	1,037	5,066	15,926	12,636	1,672	1,618	34.5	40.1
Technicians and related support	1,610	31	288	1,291	1,000	154	136	36.3	40.1
Sales occupations	6,297	526	2,152	3,619	2,490	435	695	32.7	42.1
Administrative support, including clerical	14,122	480	2,626	11,016	9,146	1,083	787	35.1	39.5
Service occupations	8,780	1,062	3,013	4,705	3,672	437	596	31.0	41.2
Private household	885	156	448	282	210	20	52	23.1	42.9
Protective service	264	13	59	192	160	16	16	33.0	40.4
Service, except private household and protective	7,631	893	2,506	4,232	3,303	401	528	31.9	41.1
Precision production, craft, and repair	1,136	54	132	950	698	135	117	38.0	41.2
Operators, fabricators, and laborers	4,423	345	552	3,525	2,619	580	326	37.0	40.8
Machine operators, assemblers, and inspectors	3,181	195	203	2,784	2,075	478	231	38.6	40.7
Transportation and material moving occupations	372	38	137	197	126	26	45	32.6	43.2
Handlers, equipment cleaners, helpers, and laborers	869	112	212	544	418	76	50	33.2	40.4

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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
TOTAL													
Noninstitutional population ¹	182,935	183,114	183,297	183,575	183,738	183,915	184,079	184,259	184,421	184,605	184,738	184,904	185,052
Labor force ¹	120,163	120,426	120,336	120,782	121,089	120,958	121,070	121,719	121,235	121,672	122,038	121,604	122,102
Percent of population ²	65.7	65.8	65.7	65.8	65.9	65.8	65.8	66.1	65.7	65.9	66.1	65.8	66.0
Total employed ¹	111,941	112,183	112,387	112,759	113,122	113,104	113,570	114,173	113,975	114,447	114,817	114,515	114,928
Employment-population ratio ³	61.2	61.3	61.3	61.4	61.6	61.5	61.7	62.0	61.8	62.0	62.2	61.9	62.1
Resident Armed Forces	1,749	1,751	1,750	1,748	1,740	1,736	1,735	1,726	1,718	1,720	1,736	1,743	1,741
Civilian employed	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081	112,772	113,187
Agriculture	3,162	3,215	3,161	3,145	3,236	3,284	3,290	3,335	3,178	3,219	3,092	3,170	3,283
Nonagricultural industries	107,030	107,217	107,476	107,866	108,146	108,084	108,545	109,112	109,079	109,508	109,989	109,602	109,903
Unemployed	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221	7,089	7,174
Unemployment rate ⁴	6.8	6.8	6.6	6.6	6.6	6.5	6.2	6.2	6.0	5.9	5.9	5.8	5.9
Not in labor force	62,772	62,688	62,961	62,793	62,649	62,957	63,009	62,540	63,187	62,933	62,700	63,300	62,950
Men													
Noninstitutional population ¹	87,682	87,773	87,868	88,020	88,099	88,186	88,271	88,361	88,442	88,534	88,598	88,683	88,756
Labor force ¹	67,130	67,407	67,425	67,672	67,764	67,644	67,603	67,816	67,556	67,656	67,925	67,736	67,916
Percent of population ²	76.6	76.8	76.7	76.9	76.9	76.7	76.6	76.7	76.4	76.4	76.7	76.4	76.5
Total employed ¹	62,565	62,833	62,986	63,187	63,335	63,282	63,417	63,562	63,471	63,715	63,918	63,939	64,024
Employment-population ratio ³	71.4	71.6	71.7	71.8	71.9	71.8	71.8	71.9	71.8	72.0	72.1	72.1	72.1
Resident Armed Forces	1,590	1,592	1,593	1,591	1,584	1,575	1,575	1,566	1,559	1,561	1,575	1,581	1,580
Civilian employed	60,975	61,241	61,393	61,596	61,751	61,707	61,842	61,996	61,912	62,154	62,343	62,358	62,444
Unemployed	4,565	4,574	4,439	4,484	4,429	4,362	4,186	4,254	4,085	3,941	4,007	3,798	3,893
Unemployment rate ⁴	6.8	6.8	6.6	6.6	6.5	6.4	6.2	6.3	6.0	5.8	5.9	5.6	5.7
Not in labor force	20,552	20,366	20,443	20,348	20,335	20,542	20,668	20,545	20,886	20,878	20,673	20,947	20,840
Women													
Noninstitutional population ¹	95,253	95,341	95,429	95,556	95,639	95,729	95,808	95,898	95,979	96,071	96,140	96,221	96,295
Labor force ¹	53,033	53,019	52,911	53,110	53,325	53,314	53,467	53,903	53,679	54,016	54,113	53,868	54,185
Percent of population ²	55.7	55.6	55.4	55.6	55.8	55.7	55.8	56.2	55.9	56.2	56.3	56.0	56.3
Total employed ¹	49,376	49,350	49,401	49,572	49,787	49,822	50,153	50,611	50,504	50,733	50,899	50,576	50,904
Employment-population ratio ³	51.8	51.8	51.8	51.9	52.1	52.0	52.3	52.8	52.6	52.8	52.9	52.6	52.9
Resident Armed Forces	159	159	157	157	156	161	160	160	159	159	161	162	161
Civilian employed	49,217	49,191	49,244	49,415	49,631	49,661	49,993	50,451	50,345	50,574	50,738	50,414	50,743
Unemployed	3,657	3,669	3,510	3,538	3,538	3,492	3,314	3,292	3,175	3,283	3,213	3,291	3,281
Unemployment rate ⁴	6.9	6.9	6.6	6.7	6.6	6.6	6.2	6.1	5.9	6.1	5.9	6.1	6.1
Not in labor force	42,220	42,322	42,518	42,446	42,314	42,415	42,341	41,995	42,300	42,055	42,027	42,353	42,110

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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
TOTAL													
Civilian noninstitutional population ¹	181,186	181,363	181,547	181,827	181,998	182,179	182,344	182,533	182,703	182,885	183,002	183,161	183,311
Civilian labor force	118,414	118,675	118,586	119,034	119,349	119,222	119,335	119,993	119,517	119,952	120,302	119,861	120,361
Percent of population	65.4	65.4	65.3	65.5	65.6	65.4	65.4	65.7	65.4	65.6	65.7	65.4	65.7
Employed	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081	112,772	113,187
Employment-population ratio ²	60.8	60.9	60.9	61.1	61.2	61.1	61.3	61.6	61.4	61.6	61.8	61.6	61.7
Unemployed	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221	7,089	7,174
Unemployment rate	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0	5.9	6.0
Men, 20 years and over													
Civilian noninstitutional population ¹	78,802	78,874	78,973	79,132	79,216	79,303	79,387	79,474	79,536	79,625	79,668	79,740	79,807
Civilian labor force	61,409	61,703	61,826	61,948	61,973	61,983	61,976	62,156	62,057	62,116	62,053	62,045	62,160
Percent of population	77.9	78.2	78.3	78.3	78.2	78.2	78.1	78.2	78.0	78.0	77.9	77.8	77.9
Employed	57,595	57,883	58,101	58,227	58,325	58,410	58,567	58,721	58,620	58,793	58,818	58,957	58,997
Employment-population ratio ²	73.1	73.4	73.6	73.6	73.6	73.7	73.8	73.9	73.7	73.8	73.8	73.9	73.9
Agriculture	2,297	2,303	2,289	2,254	2,300	2,411	2,411	2,441	2,307	2,343	2,254	2,355	2,354
Nonagricultural industries	55,298	55,580	55,812	55,974	56,024	55,999	56,155	56,280	56,313	56,450	56,564	56,601	56,643
Unemployed	3,814	3,820	3,725	3,720	3,648	3,573	3,409	3,436	3,437	3,323	3,235	3,089	3,163
Unemployment rate	6.2	6.2	6.0	6.0	5.9	5.8	5.5	5.5	5.5	5.4	5.2	5.0	5.1
Not in labor force	17,393	17,171	17,147	17,184	17,243	17,320	17,411	17,318	17,479	17,509	17,615	17,695	17,647
Women, 20 years and over													
Civilian noninstitutional population ¹	87,856	87,933	88,016	88,150	88,237	88,321	88,395	88,464	88,546	88,632	88,685	88,785	88,843
Civilian labor force	49,014	49,043	48,923	49,161	49,348	49,355	49,466	49,774	49,714	49,971	49,989	49,882	50,098
Percent of population	55.8	55.8	55.6	55.8	55.9	55.9	56.0	56.3	56.1	56.4	56.4	56.2	56.4
Employed	46,020	46,067	46,058	46,261	46,475	46,498	46,751	47,094	47,126	47,288	47,324	47,179	47,493
Employment-population ratio ²	52.4	52.4	52.3	52.5	52.7	52.6	52.9	53.2	53.2	53.4	53.4	53.1	53.5
Agriculture	612	675	621	628	641	589	587	634	615	619	603	585	648
Nonagricultural industries	45,408	45,392	45,437	45,633	45,835	45,909	46,164	46,460	46,512	46,669	46,722	46,594	46,845
Unemployed	2,994	2,976	2,865	2,900	2,873	2,857	2,715	2,680	2,588	2,683	2,664	2,703	2,605
Unemployment rate	6.1	6.1	5.9	5.9	5.8	5.8	5.5	5.4	5.2	5.4	5.3	5.4	5.2
Not in labor force	38,842	38,890	39,093	38,989	38,889	38,966	38,929	38,690	38,832	38,661	38,696	38,903	38,745
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹	14,527	14,557	14,558	14,545	14,546	14,555	14,562	14,595	14,621	14,628	14,649	14,637	14,661
Civilian labor force	7,991	7,929	7,837	7,926	8,028	7,884	7,894	8,063	7,746	7,865	8,260	7,933	8,103
Percent of population	55.0	54.5	53.8	54.5	55.2	54.2	54.2	55.2	53.0	53.8	56.4	54.2	55.3
Employed	6,577	6,482	6,478	6,524	6,582	6,460	6,518	6,633	6,511	6,647	6,939	6,636	6,697
Employment-population ratio ²	45.3	44.5	44.5	44.9	45.2	44.4	44.8	45.4	44.5	45.4	47.4	45.3	45.7
Agriculture	253	237	251	264	295	284	292	261	257	258	236	230	282
Nonagricultural industries	6,324	6,245	6,227	6,260	6,287	6,176	6,226	6,372	6,254	6,389	6,703	6,406	6,415
Unemployed	1,414	1,447	1,359	1,402	1,446	1,424	1,376	1,430	1,235	1,218	1,321	1,297	1,406
Unemployment rate	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0	16.3	17.4
Not in labor force	6,536	6,628	6,721	6,619	6,518	6,671	6,668	6,532	6,875	6,763	6,389	6,704	6,558

¹ The population figures are not adjusted for seasonal variation.

² Civilian employment as a percent of the civilian noninstitutional

population.

**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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
WHITE													
Civilian noninstitutional population ¹	155,856	155,979	156,111	156,313	156,431	156,561	156,676	156,811	156,930	157,058	157,134	157,242	157,342
Civilian labor force	102,297	102,455	102,503	102,746	102,893	102,797	102,894	103,573	103,106	103,272	103,614	103,278	103,640
Percent of population	65.6	65.7	65.7	65.7	65.8	65.7	65.7	66.1	65.7	65.8	65.9	65.7	65.9
Employed	96,147	96,281	96,533	96,717	96,995	96,998	97,340	98,050	97,716	97,958	98,299	97,995	98,284
Employment-population ratio ²	61.7	61.7	61.8	61.9	62.0	62.0	62.1	62.5	62.3	62.4	62.6	62.3	62.5
Unemployed	6,150	6,174	5,970	6,029	5,898	5,799	5,554	5,524	5,390	5,314	5,315	5,283	5,357
Unemployment rate	6.0	6.0	5.8	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.1	5.1	5.2
Men, 20 years and over													
Civilian labor force	53,757	54,015	54,172	54,182	54,175	54,107	54,051	54,314	54,213	54,214	54,164	54,152	54,367
Percent of population	78.3	78.7	78.8	78.7	78.6	78.4	78.3	78.6	78.4	78.3	78.2	78.1	78.4
Employed	50,845	51,089	51,286	51,297	51,362	51,364	51,462	51,755	51,581	51,682	51,714	51,771	51,856
Employment-population ratio ²	74.1	74.4	74.6	74.5	74.5	74.5	74.6	74.9	74.6	74.7	74.7	74.7	74.8
Unemployed	2,912	2,926	2,886	2,885	2,813	2,743	2,589	2,558	2,632	2,532	2,449	2,382	2,511
Unemployment rate	5.4	5.4	5.3	5.3	5.2	5.1	4.8	4.7	4.9	4.7	4.5	4.4	4.6
Women, 20 years and over													
Civilian labor force	41,598	41,540	41,514	41,680	41,762	41,828	41,982	42,239	42,159	42,280	42,418	42,312	42,352
Percent of population	55.2	55.1	55.0	55.2	55.2	55.3	55.5	55.8	55.6	55.7	55.9	55.7	55.7
Employed	39,431	39,399	39,456	39,568	39,735	39,839	40,041	40,343	40,318	40,379	40,535	40,395	40,522
Employment-population ratio ²	52.3	52.3	52.3	52.4	52.6	52.7	52.9	53.2	53.2	53.2	53.4	53.2	53.3
Unemployed	2,167	2,141	2,058	2,111	2,028	1,989	1,941	1,895	1,841	1,902	1,882	1,917	1,830
Unemployment rate	5.2	5.2	5.0	5.1	4.9	4.8	4.6	4.5	4.4	4.5	4.4	4.5	4.3
Both sexes, 16 to 19 years													
Civilian labor force	6,942	6,900	6,817	6,885	6,955	6,862	6,861	7,021	6,734	6,778	7,033	6,814	6,922
Percent of population	58.4	58.0	57.3	57.8	58.4	57.5	57.4	58.7	56.3	56.6	58.8	57.0	58.0
Employed	5,871	5,793	5,791	5,852	5,898	5,795	5,837	5,951	5,817	5,898	6,049	5,829	5,906
Employment-population ratio ²	49.4	48.7	48.7	49.2	49.5	48.5	48.9	49.8	48.6	49.3	50.6	48.8	49.5
Unemployed	1,071	1,107	1,026	1,033	1,057	1,067	1,024	1,070	917	880	984	985	1,016
Unemployment rate	15.4	16.0	15.1	15.0	15.2	15.5	14.9	15.2	13.6	13.0	14.0	14.5	14.7
Men	15.7	16.3	15.5	16.1	16.0	17.1	16.7	17.3	14.5	13.0	15.4	15.3	15.0
Women	15.2	15.7	14.6	13.8	14.3	13.9	13.1	13.1	12.7	13.0	12.5	13.6	14.3
BLACK													
Civilian noninstitutional population ¹	20,089	20,120	20,152	20,187	20,218	20,249	20,279	20,312	20,341	20,373	20,396	20,426	20,453
Civilian labor force	12,720	12,719	12,707	12,831	12,957	12,844	12,743	12,860	12,863	13,047	13,194	13,027	13,167
Percent of population	63.3	63.2	63.1	63.6	64.1	63.4	62.8	63.3	63.2	64.0	64.7	63.8	64.4
Employed	10,895	10,910	10,968	10,997	11,101	11,053	11,090	11,080	11,223	11,401	11,563	11,427	11,582
Employment-population ratio ²	54.2	54.2	54.4	54.5	54.9	54.6	54.7	54.6	55.2	56.0	56.7	55.9	56.6
Unemployed	1,825	1,809	1,739	1,833	1,855	1,791	1,653	1,779	1,640	1,647	1,630	1,599	1,586
Unemployment rate	14.3	14.2	13.7	14.3	14.3	13.9	13.0	13.8	12.7	12.6	12.4	12.3	12.0
Men, 20 years and over													
Civilian labor force	5,932	5,934	5,947	5,986	6,012	5,997	5,980	6,033	6,001	6,089	6,079	6,025	6,012
Percent of population	74.6	74.5	74.5	74.9	75.1	74.8	74.4	75.0	74.5	75.4	75.2	74.4	74.2
Employed	5,153	5,171	5,244	5,256	5,288	5,305	5,328	5,279	5,311	5,404	5,431	5,425	5,435
Employment-population ratio ²	64.8	65.0	65.7	65.7	66.0	66.1	66.3	65.6	65.9	66.9	67.2	67.0	67.1
Unemployed	779	763	703	730	724	692	652	754	690	686	647	600	577
Unemployment rate	13.1	12.9	11.8	12.2	12.0	11.5	10.9	12.5	11.5	11.3	10.7	10.0	9.6
Women, 20 years and over													
Civilian labor force	5,909	5,943	5,907	5,984	6,030	5,987	5,918	5,970	6,017	6,125	6,120	6,074	6,191
Percent of population	59.1	59.3	58.9	59.6	59.9	59.4	58.7	59.1	59.5	60.4	60.3	59.8	60.8
Employed	5,178	5,200	5,182	5,221	5,255	5,211	5,238	5,278	5,349	5,426	5,428	5,350	5,511
Employment-population ratio ²	51.8	51.9	51.7	52.0	52.2	51.7	51.9	52.2	52.9	53.5	53.5	52.7	54.2
Unemployed	731	743	725	763	775	776	680	691	669	699	692	723	680
Unemployment rate	12.4	12.5	12.3	12.8	12.9	13.0	11.5	11.6	11.1	11.4	11.3	11.9	11.0

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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	879	842	853	860	915	861	845	857	844	833	995	928	964
Percent of population	41.1	39.3	39.8	40.1	42.6	40.0	39.2	39.7	39.0	38.4	45.9	42.7	44.4
Employed	564	539	542	520	559	537	524	523	563	571	704	652	636
Employment-population ratio ² ..	26.3	25.1	25.3	24.2	26.0	24.9	24.3	24.2	26.0	26.3	32.5	30.0	29.3
Unemployed	315	303	311	340	356	324	321	334	281	262	291	276	328
Unemployment rate	35.8	36.0	36.5	39.5	38.9	37.6	38.0	39.0	33.3	31.5	29.2	29.7	34.0
Men	37.8	35.0	36.1	36.5	38.3	36.5	39.3	40.3	31.5	31.5	32.6	30.9	32.2
Women	33.8	37.0	36.9	43.2	39.5	38.8	36.5	37.6	35.1	31.4	25.3	28.7	35.8
HISPANIC ORIGIN													
Civilian noninstitutional population ¹	12,469	12,505	12,540	12,653	12,692	12,732	12,770	12,809	12,848	12,887	12,925	12,965	13,003
Civilian labor force	8,200	8,226	8,320	8,431	8,457	8,392	8,484	8,586	8,452	8,411	8,544	8,568	8,653
Percent of population	65.8	65.8	66.3	66.6	66.6	65.9	66.4	67.0	65.8	65.3	66.1	66.1	66.5
Employed	7,345	7,437	7,446	7,538	7,644	7,639	7,701	7,838	7,730	7,744	7,864	7,869	7,935
Employment-population ratio ² ..	58.9	59.5	59.4	59.6	60.2	60.0	60.3	61.2	60.2	60.1	60.8	60.7	61.0
Unemployed	855	789	874	893	813	753	783	748	722	667	680	699	718
Unemployment rate	10.4	9.6	10.5	10.6	9.6	9.0	9.2	8.7	8.5	7.9	8.0	8.2	8.3

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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
CHARACTERISTIC													
Total	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081	112,772	113,187
Married men, spouse present	39,780	39,952	40,093	40,102	39,913	40,100	39,967	40,029	40,057	40,241	40,260	40,370	40,580
Married women, spouse present ..	27,323	27,333	27,400	27,525	27,817	27,965	28,213	28,495	28,458	28,426	28,196	27,988	28,013
Women who maintain families	6,016	6,041	6,005	5,985	5,906	5,933	5,972	5,921	5,939	6,013	6,108	6,164	6,205
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers ..	1,562	1,582	1,621	1,650	1,647	1,739	1,589	1,695	1,614	1,619	1,566	1,615	1,716
Self-employed workers ..	1,451	1,425	1,400	1,370	1,454	1,418	1,505	1,442	1,386	1,429	1,363	1,417	1,441
Unpaid family workers	164	198	152	136	126	150	175	170	165	154	159	134	136
Nonagricultural industries:													
Wage and salary workers	98,846	98,869	99,164	99,550	99,748	99,834	100,112	100,834	100,420	100,838	101,334	101,221	101,503
Government	16,264	16,457	16,443	16,412	16,532	16,568	16,484	16,710	16,956	16,931	16,760	16,915	17,083
Private industries	82,582	82,412	82,721	83,138	83,216	83,265	83,628	84,124	83,464	83,907	84,574	84,306	84,420
Private households ..	1,216	1,183	1,189	1,269	1,204	1,227	1,266	1,266	1,146	1,224	1,172	1,088	1,235
Other industries	81,366	81,229	81,532	81,869	82,012	82,038	82,362	82,858	82,318	82,683	83,402	83,218	83,185
Self-employed workers ..	7,993	8,179	8,056	8,192	8,187	8,050	8,117	8,142	8,328	8,205	8,216	8,184	8,320
Unpaid family workers ..	265	252	239	246	255	273	268	275	274	268	250	300	238
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons ..	5,740	5,563	5,596	5,505	5,780	5,456	5,391	5,282	5,184	5,508	5,262	5,241	5,416
Slack work	2,481	2,510	2,444	2,473	2,535	2,440	2,322	2,223	2,317	2,456	2,515	2,212	2,389
Could only find part-time work ..	2,826	2,714	2,867	2,695	2,828	2,698	2,746	2,665	2,579	2,722	2,494	2,702	2,664
Voluntary part time	14,178	14,021	13,877	14,170	14,061	14,167	13,862	14,573	15,054	14,422	14,634	14,313	14,459
Nonagricultural industries:													
Part time for economic reasons ..	5,450	5,319	5,342	5,201	5,459	5,164	5,110	5,029	4,918	5,235	4,998	4,968	5,101
Slack work	2,314	2,366	2,286	2,281	2,340	2,218	2,137	2,071	2,155	2,295	2,306	2,038	2,211
Could only find part-time work ..	2,739	2,626	2,765	2,599	2,742	2,595	2,662	2,594	2,477	2,634	2,433	2,628	2,555
Voluntary part time ..	13,736	13,567	13,455	13,750	13,597	13,682	13,399	14,069	14,485	13,946	14,168	13,930	14,007

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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081	112,772	113,187
16 to 24 years	20,263	20,201	20,093	20,237	20,293	20,113	20,111	20,215	19,988	20,197	20,549	20,102	20,115
16 to 19 years	6,577	6,482	6,478	6,524	6,582	6,460	6,518	6,633	6,511	6,647	6,939	6,636	6,697
16 to 17 years	2,714	2,648	2,717	2,713	2,727	2,688	2,619	2,689	2,661	2,774	2,898	2,745	2,775
18 to 19 years	3,877	3,843	3,771	3,816	3,844	3,809	3,876	3,932	3,843	3,858	4,019	3,896	3,938
20 to 24 years	13,686	13,719	13,615	13,713	13,711	13,652	13,593	13,582	13,477	13,550	13,610	13,466	13,418
25 years and over	89,899	90,221	90,524	90,725	91,104	91,290	91,660	92,257	92,319	92,615	92,602	92,675	93,009
25 to 54 years	75,714	75,889	76,247	76,281	76,680	76,844	77,338	77,663	77,766	78,077	78,155	78,265	78,457
55 years and over	14,223	14,341	14,349	14,450	14,363	14,426	14,345	14,450	14,574	14,473	14,510	14,432	14,651
Men, 16 years and over	60,975	61,241	61,393	61,596	61,751	61,707	61,842	61,996	61,912	62,154	62,343	62,358	62,444
16 to 24 years	10,587	10,546	10,449	10,526	10,608	10,452	10,427	10,369	10,288	10,452	10,628	10,470	10,412
16 to 19 years	3,380	3,358	3,292	3,369	3,426	3,297	3,275	3,276	3,292	3,360	3,525	3,401	3,447
16 to 17 years	1,391	1,353	1,373	1,395	1,425	1,355	1,336	1,350	1,355	1,434	1,442	1,380	1,412
18 to 19 years	2,003	2,009	1,933	1,974	2,000	1,945	1,936	1,919	1,930	1,916	2,055	2,027	2,048
20 to 24 years	7,207	7,188	7,157	7,156	7,182	7,155	7,152	7,094	6,996	7,092	7,103	7,069	6,966
25 years and over	50,348	50,705	50,943	51,053	51,207	51,278	51,396	51,648	51,598	51,729	51,747	51,887	52,000
25 to 54 years	42,049	42,278	42,485	42,569	42,702	42,729	42,925	42,997	43,065	43,180	43,260	43,406	43,484
55 years and over	8,329	8,428	8,507	8,458	8,470	8,546	8,476	8,561	8,573	8,510	8,499	8,475	8,581
Women, 16 years and over	49,217	49,191	49,244	49,415	49,631	49,661	49,993	50,451	50,345	50,574	50,738	50,414	50,743
16 to 24 years	9,676	9,655	9,644	9,711	9,685	9,661	9,683	9,845	9,700	9,744	9,921	9,632	9,703
16 to 19 years	3,197	3,124	3,186	3,154	3,155	3,163	3,242	3,357	3,219	3,286	3,414	3,235	3,250
16 to 17 years	1,323	1,295	1,344	1,318	1,302	1,333	1,283	1,339	1,306	1,340	1,456	1,365	1,363
18 to 19 years	1,874	1,834	1,838	1,842	1,844	1,864	1,940	2,013	1,913	1,942	1,964	1,869	1,890
20 to 24 years	6,479	6,531	6,458	6,557	6,529	6,498	6,441	6,489	6,482	6,458	6,507	6,397	6,452
25 years and over	39,551	39,516	39,581	39,672	39,897	40,012	40,264	40,609	40,721	40,886	40,856	40,788	41,009
25 to 54 years	33,665	33,611	33,762	33,712	33,978	34,116	34,412	34,666	34,700	34,896	34,895	34,859	34,973
55 years and over	5,894	5,913	5,842	5,992	5,893	5,879	5,869	5,888	6,000	5,963	6,011	5,957	6,071

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

(In thousands)

Sex and age	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221	7,089	7,174
16 to 24 years	3,022	3,005	2,986	3,045	3,049	2,969	2,901	2,912	2,768	2,686	2,685	2,675	2,681
16 to 19 years	1,414	1,447	1,359	1,402	1,446	1,424	1,376	1,430	1,235	1,218	1,321	1,297	1,406
16 to 17 years	647	686	629	683	693	670	623	734	617	573	636	578	734
18 to 19 years	766	768	737	735	765	753	756	696	609	623	691	707	672
20 to 24 years	1,608	1,558	1,627	1,643	1,603	1,545	1,525	1,482	1,533	1,468	1,364	1,378	1,275
25 years and over	5,197	5,230	4,961	5,024	4,912	4,872	4,588	4,621	4,454	4,532	4,564	4,433	4,499
25 to 54 years	4,597	4,630	4,422	4,552	4,459	4,363	4,079	4,102	4,013	4,090	4,072	3,901	4,016
55 years and over	603	571	527	477	452	509	512	548	474	457	479	502	478
Men, 16 years and over	4,565	4,574	4,439	4,484	4,429	4,362	4,186	4,254	4,085	3,941	4,007	3,798	3,893
16 to 24 years	1,615	1,635	1,623	1,626	1,673	1,589	1,583	1,604	1,485	1,406	1,498	1,416	1,424
16 to 19 years	751	754	714	764	781	789	777	818	648	618	772	709	730
16 to 17 years	344	366	325	380	383	344	366	407	312	285	374	309	387
18 to 19 years	409	388	395	401	410	444	411	412	324	307	400	387	344
20 to 24 years	864	881	909	862	892	800	806	786	837	788	726	707	694
25 years and over	2,945	2,931	2,809	2,901	2,760	2,758	2,597	2,636	2,563	2,530	2,543	2,402	2,471
25 to 54 years	2,558	2,568	2,462	2,578	2,461	2,435	2,276	2,299	2,285	2,244	2,232	2,101	2,188
55 years and over	385	361	351	310	293	316	330	363	305	299	300	276	277
Women, 16 years and over	3,657	3,669	3,510	3,538	3,538	3,492	3,314	3,292	3,175	3,283	3,213	3,291	3,281
16 to 24 years	1,407	1,370	1,363	1,419	1,375	1,380	1,319	1,308	1,284	1,280	1,187	1,259	1,257
16 to 19 years	663	693	645	638	665	635	599	612	587	600	549	588	676
16 to 17 years	303	320	304	303	310	326	257	327	305	288	262	269	347
18 to 19 years	357	380	342	334	355	309	345	284	285	316	291	320	328
20 to 24 years	744	677	718	781	710	745	720	696	697	680	638	671	581
25 years and over	2,252	2,299	2,152	2,124	2,152	2,113	1,991	1,985	1,891	2,002	2,022	2,031	2,028
25 to 54 years	2,039	2,062	1,960	1,974	1,998	1,928	1,803	1,803	1,729	1,846	1,839	1,800	1,829
55 years and over	218	210	176	167	158	193	183	185	170	158	179	226	201

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

(Civilian workers)

Sex and age	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Total, 16 years and over	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0	5.9	6.0
16 to 24 years	13.0	12.9	12.9	13.1	13.1	12.9	12.6	12.6	12.2	11.7	11.6	11.7	11.8
16 to 19 years	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0	16.3	17.4
16 to 17 years	19.3	20.6	18.8	20.1	20.3	20.0	19.2	21.4	18.8	17.1	18.0	17.4	20.9
18 to 19 years	16.5	16.7	16.3	16.2	16.6	16.5	16.3	15.0	13.7	13.9	14.7	15.4	14.6
20 to 24 years	10.5	10.2	10.7	10.7	10.5	10.2	10.1	9.8	10.2	9.8	9.1	9.3	8.7
25 years and over	5.5	5.5	5.2	5.2	5.1	5.1	4.8	4.8	4.6	4.7	4.7	4.6	4.6
25 to 54 years	5.7	5.8	5.5	5.6	5.5	5.4	5.0	5.0	4.9	5.0	5.0	4.7	4.9
55 years and over	4.1	3.8	3.5	3.2	3.0	3.4	3.4	3.7	3.2	3.1	3.2	3.4	3.2
Men, 16 years and over	7.0	6.9	6.7	6.8	6.7	6.6	6.3	6.4	6.2	6.0	6.0	5.7	5.9
16 to 24 years	13.2	13.4	13.4	13.4	13.6	13.2	13.2	13.4	12.6	11.9	12.4	11.9	12.0
16 to 19 years	18.2	18.3	17.8	18.5	18.6	19.3	19.2	20.0	16.4	15.5	18.0	17.3	17.5
16 to 17 years	19.8	21.3	19.1	21.4	21.2	20.2	21.5	23.2	18.7	16.6	20.6	18.3	21.5
18 to 19 years	17.0	16.2	17.0	16.9	17.0	18.6	17.5	17.7	14.4	13.8	16.3	16.0	14.4
20 to 24 years	10.7	10.9	11.3	10.7	11.1	10.1	10.1	10.0	10.7	10.0	9.3	9.1	9.1
25 years and over	5.5	5.5	5.2	5.4	5.1	5.1	4.8	4.9	4.7	4.7	4.7	4.4	4.5
25 to 54 years	5.7	5.7	5.5	5.7	5.4	5.4	5.0	5.1	5.0	4.9	4.9	4.6	4.8
55 years and over	4.4	4.1	4.0	3.5	3.3	3.6	3.7	4.1	3.4	3.4	3.4	3.2	3.1
Women, 16 years and over	6.9	6.9	6.7	6.7	6.7	6.6	6.2	6.1	5.9	6.1	6.0	6.1	6.1
16 to 24 years	12.7	12.4	12.4	12.7	12.4	12.5	12.0	11.7	11.7	11.6	10.7	11.6	11.5
16 to 19 years	17.2	18.2	16.8	16.8	17.4	16.7	15.6	15.4	15.4	15.4	13.9	15.4	17.2
16 to 17 years	18.6	19.8	18.4	18.7	19.2	19.7	16.7	19.6	18.9	17.7	15.3	16.5	20.3
18 to 19 years	16.0	17.2	15.7	15.3	16.1	14.2	15.1	12.4	13.0	14.0	12.9	14.6	14.8
20 to 24 years	10.3	9.4	10.0	10.6	9.8	10.3	10.1	9.7	9.7	9.5	8.9	9.5	8.3
25 years and over	5.4	5.5	5.2	5.1	5.1	5.0	4.7	4.7	4.4	4.7	4.7	4.7	4.7
25 to 54 years	5.7	5.8	5.5	5.5	5.6	5.4	5.0	4.9	4.7	5.0	5.0	4.9	5.0
55 years and over	3.6	3.4	2.9	2.7	2.6	3.2	3.0	3.0	2.8	2.6	2.9	3.7	3.2

A-39. Selected unemployment indicators, seasonally adjusted

(Unemployment rates)

Category	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
CHARACTERISTIC													
Total (all civilian workers)	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0	5.9	6.0
Men, 20 years and over	6.2	6.2	6.0	6.0	5.9	5.8	5.5	5.5	5.5	5.4	5.2	5.0	5.1
Women, 20 years and over	6.1	6.1	5.9	5.9	5.8	5.8	5.5	5.4	5.2	5.4	5.3	5.4	5.2
Both sexes, 16 to 19 years	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0	16.3	17.4
White	6.0	6.0	5.8	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.1	5.1	5.2
Black and other	12.7	12.7	12.3	12.6	12.8	12.5	11.7	12.2	11.4	11.3	11.3	10.8	10.8
Black	14.3	14.2	13.7	14.3	14.3	13.9	13.0	13.8	12.7	12.6	12.4	12.3	12.0
Hispanic origin	10.4	9.6	10.5	10.6	9.6	9.0	9.2	8.7	8.5	7.9	8.0	8.2	8.3
Married men, spouse present	4.6	4.5	4.3	4.2	4.2	4.1	4.1	3.9	4.0	3.8	3.7	3.6	3.7
Married women, spouse present	5.0	5.0	4.8	4.8	4.8	4.5	4.4	4.1	4.0	4.2	4.3	4.2	4.1
Women who maintain families	8.9	9.7	9.8	9.8	9.5	9.7	9.3	9.6	9.7	9.4	9.0	8.8	9.0
Full-time workers	6.6	6.6	6.3	6.4	6.3	6.2	5.9	5.9	5.9	5.7	5.6	5.4	5.5
Part-time workers	9.2	9.1	8.8	9.0	8.7	9.2	8.6	8.7	6.9	7.9	8.2	8.5	8.5
Unemployed 15 weeks and over ¹	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.8	1.7	1.6	1.6	1.6	1.5
Labor force time lost ²	7.8	7.7	7.6	7.6	7.6	7.4	7.3	7.2	7.1	6.9	6.8	6.7	6.8
INDUSTRY													
Nonagricultural private wage and salary workers	7.0	7.0	6.8	6.7	6.6	6.5	6.2	6.3	6.2	6.1	5.9	5.9	5.9
Mining	14.5	14.5	14.1	14.0	12.4	9.3	11.1	12.9	10.8	7.8	8.9	7.0	8.5
Construction	13.8	15.1	13.7	12.2	11.6	12.5	11.9	12.1	11.6	10.7	11.2	12.1	11.4
Manufacturing	7.3	7.1	6.9	6.8	6.8	6.9	6.2	6.4	5.6	6.0	5.5	5.7	5.7
Durable goods	7.2	6.6	6.4	6.8	6.8	6.7	6.2	6.3	5.3	6.1	5.5	5.6	5.2
Nondurable goods	7.3	7.9	7.7	6.8	6.9	7.3	6.2	6.6	6.0	5.9	5.5	5.9	6.5
Transportation and public utilities	5.2	4.4	4.6	4.8	4.0	4.6	4.8	4.4	5.0	4.4	4.3	4.0	4.4
Wholesale and retail trade	7.4	7.2	7.2	7.5	7.2	7.3	7.0	6.9	7.2	6.8	7.0	6.4	6.4
Finance and service industries	5.4	5.4	5.1	5.2	5.4	4.9	4.7	4.8	4.8	5.1	4.6	4.9	4.7
Agricultural wage and salary workers	11.9	10.1	11.5	11.6	11.2	10.7	9.0	8.7	8.8	11.3	10.8	8.3	10.9

¹ Unemployment as a percent of the civilian labor force.

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

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

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Weeks of unemployment	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
DURATION													
Less than 5 weeks	3,418	3,382	3,355	3,416	3,361	3,383	3,143	3,349	3,085	3,168	3,197	3,230	3,227
5 to 14 weeks	2,563	2,613	2,389	2,530	2,477	2,447	2,232	2,118	2,114	2,141	2,170	1,932	2,121
15 weeks and over	2,168	2,217	2,171	2,200	2,131	2,050	2,075	2,101	2,055	1,907	1,884	1,920	1,759
15 to 26 weeks	950	1,045	1,023	1,022	1,008	945	1,025	1,003	998	945	814	909	799
27 weeks and over	1,218	1,172	1,148	1,178	1,123	1,105	1,049	1,098	1,057	962	1,070	1,011	959
Average (mean) duration, in weeks	15.2	14.8	15.0	15.0	14.6	14.9	14.9	14.9	14.8	14.0	14.3	14.2	14.0
Median duration, in weeks	7.0	7.0	7.1	7.0	6.6	6.6	7.0	6.5	6.7	6.7	6.4	5.7	6.2
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	41.9	41.2	42.4	41.9	42.2	42.9	42.2	44.3	42.5	43.9	44.1	45.6	45.4
5 to 14 weeks	31.5	31.8	30.2	31.1	31.1	31.1	30.0	28.0	29.1	29.7	29.9	27.3	29.8
15 weeks and over	26.6	27.0	27.4	27.0	26.7	26.0	27.9	27.8	28.3	26.4	26.0	27.1	24.7
15 to 26 weeks	11.7	12.7	12.9	12.5	12.7	12.0	13.8	13.2	13.8	13.1	11.2	12.8	11.2
27 weeks and over	14.9	14.3	14.5	14.5	14.1	14.0	14.1	14.5	14.6	13.3	14.8	14.3	13.5

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

(Numbers in thousands)

Reasons for unemployment	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
NUMBER OF UNEMPLOYED													
Job losers	3,984	3,947	3,890	3,971	3,839	3,822	3,732	3,611	3,565	3,522	3,339	3,321	3,447
On layoff	1,072	1,073	1,078	1,118	998	1,011	958	906	901	918	850	810	956
Other job losers	2,912	2,874	2,812	2,854	2,842	2,811	2,774	2,705	2,664	2,604	2,489	2,511	2,491
Job leavers	1,027	1,056	1,036	891	1,046	1,000	923	906	949	1,007	1,006	995	956
Reentrants	2,190	2,119	2,019	2,054	2,042	2,111	1,940	2,018	1,969	1,913	1,997	1,885	1,794
New entrants	972	1,076	1,015	1,084	1,040	956	911	1,018	798	801	829	883	961
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	48.7	48.1	48.9	49.6	48.2	48.4	49.7	47.8	49.0	48.6	46.6	46.9	48.2
On layoff	13.1	13.1	13.5	14.0	12.5	12.8	12.8	12.0	12.4	12.7	11.9	11.4	13.4
Other job losers	35.6	35.1	35.3	35.7	35.7	35.6	37.0	35.8	36.6	36.0	34.7	35.4	34.8
Job leavers	12.6	12.9	13.0	11.1	13.1	12.7	12.3	12.0	13.0	13.9	14.0	14.0	13.4
Reentrants	26.8	25.8	25.4	25.7	25.6	26.8	25.8	26.7	27.0	26.4	27.9	26.6	25.1
New entrants	11.9	13.1	12.8	13.6	13.1	12.1	12.1	13.5	11.0	11.1	11.6	12.5	13.4
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.9	2.8	2.8	2.9
Job leavers .....	.9	.9	.9	.7	.9	.8	.8	.8	.8	.8	.8	.8	.8
Reentrants	1.8	1.8	1.7	1.7	1.7	1.8	1.6	1.7	1.6	1.6	1.7	1.6	1.5
New entrants .....	.8	.9	.9	.9	.9	.8	.8	.8	.7	.7	.7	.7	.8

**ESTABLISHMENT DATA
HISTORICAL EMPLOYMENT**

B-1. Employees on nonagricultural payrolls by major industry, 1935 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															
1935	27,039	23,558	10,893	897	927	9,069	16,146	2,786	(¹)	(¹)	1,320	3,128	(¹)	(¹)	(¹)
1936	29,068	25,400	11,933	946	1,160	9,827	17,135	2,973	(¹)	(¹)	1,373	3,312	(¹)	(¹)	(¹)
1937	31,011	27,255	12,936	1,015	1,127	10,794	18,075	3,134	(¹)	(¹)	1,417	3,503	(¹)	(¹)	(¹)
1938	29,194	25,311	11,401	891	1,070	9,440	17,793	2,863	(¹)	(¹)	1,410	3,458	(¹)	(¹)	(¹)
1939	30,603	26,608	12,297	854	1,165	10,278	18,306	2,936	(¹)	(¹)	1,447	3,502	905	(¹)	(¹)
1940	32,361	28,159	13,221	925	1,311	10,985	19,140	3,038	(¹)	(¹)	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)	(¹)
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)	(¹)
1957	52,853	45,239	20,964	828	2,962	17,174	31,889	4,241	3,028	7,858	2,438	6,708	2,217	1,328	4,071
1958	51,324	43,483	19,513	751	2,817	15,945	31,811	3,976	2,980	7,770	2,481	6,765	2,191	1,415	4,232
1959 ²	53,268	45,186	20,411	732	3,004	16,675	32,857	4,011	3,082	8,045	2,549	7,087	2,233	1,484	4,366
1960	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	3,143	8,248	2,629	7,378	2,270	1,536	4,547
1961	53,999	45,404	19,857	672	2,859	16,326	34,142	3,903	3,133	8,204	2,688	7,620	2,279	1,607	4,708
1962	55,549	46,660	20,451	650	2,948	16,853	35,098	3,906	3,198	8,368	2,754	7,982	2,340	1,668	4,881
1963	56,653	47,429	20,640	635	3,010	16,995	36,013	3,903	3,248	8,530	2,830	8,277	2,358	1,747	5,121
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	3,337	8,823	2,911	8,660	2,348	1,856	5,392
1965	60,765	50,689	21,926	632	3,232	18,062	38,839	4,036	3,466	9,250	2,977	9,036	2,378	1,996	5,700
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	3,597	9,648	3,058	9,498	2,564	2,141	6,080
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	3,689	9,917	3,185	10,045	2,719	2,302	6,371
1968	67,897	56,058	23,737	606	3,350	19,781	44,160	4,318	3,779	10,320	3,337	10,567	2,737	2,442	6,660
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	3,907	10,798	3,512	11,169	2,758	2,533	6,904
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	3,993	11,047	3,645	11,548	2,731	2,664	7,158
1971	71,214	58,331	22,935	609	3,704	18,623	48,278	4,476	4,001	11,351	3,772	11,797	2,696	2,747	7,437
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	4,113	11,836	3,908	12,276	2,684	2,859	7,790
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	4,277	12,329	4,046	12,857	2,663	2,923	8,146
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	4,433	12,554	4,148	13,441	2,724	3,039	8,407
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	4,415	12,645	4,165	13,892	2,748	3,179	8,758
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,582	4,546	13,209	4,271	14,551	2,733	3,273	8,865
1977	82,471	67,344	24,346	813	3,851	19,682	58,125	4,713	4,708	13,808	4,467	15,303	2,727	3,377	9,023
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	4,969	14,573	4,724	16,252	2,753	3,474	9,446
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	5,204	14,989	4,975	17,112	2,773	3,541	9,633
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	5,275	15,035	5,160	17,890	2,866	3,610	9,765
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	5,358	15,189	5,298	18,619	2,772	3,640	9,619
1982	89,566	73,729	23,813	1,128	3,905	18,781	65,753	5,082	5,278	15,179	5,341	19,036	2,739	3,640	9,458
1983	90,200	74,330	23,334	952	3,948	18,434	66,866	4,954	5,268	15,613	5,468	19,694	2,774	3,662	9,434
1984	94,496	78,472	24,727	966	4,383	19,378	69,769	5,159	5,555	16,545	5,689	20,797	2,807	3,734	9,482
1985	97,519	81,125	24,859	927	4,673	19,260	72,660	5,238	5,717	17,356	5,955	22,000	2,875	3,832	9,687
1986	99,610	82,900	24,681	783	4,904	18,994	74,930	5,244	5,735	17,845	6,297	23,099	2,899	3,888	9,923
Monthly data, seasonally adjusted															
1986:															
October	100,209	83,337	24,611	735	4,942	18,934	75,598	5,251	5,731	17,980	6,395	23,369	2,897	3,907	10,068
November	100,415	83,515	24,630	730	4,946	18,954	75,785	5,278	5,728	18,009	6,418	23,452	2,900	3,915	10,085
December	100,567	83,643	24,630	724	4,936	18,970	75,937	5,286	5,725	18,007	6,451	23,544	2,904	3,927	10,093
1987:															
January	100,919	83,983	24,708	718	5,034	18,956	76,211	5,304	5,741	18,080	6,480	23,670	2,912	3,929	10,095
February	101,150	84,215	24,743	719	5,038	18,986	76,407	5,315	5,757	18,140	6,501	23,759	2,916	3,927	10,092
March	101,329	84,352	24,749	722	5,032	18,995	76,580	5,333	5,766	18,136	6,526	23,842	2,922	3,930	10,125
April	101,598	84,560	24,759	729	5,019	19,011	76,839	5,348	5,772	18,197	6,558	23,926	2,933	3,943	10,162
May	101,708	84,677	24,752	735	4,999	19,018	76,956	5,344	5,775	18,205	6,576	24,025	2,935	3,947	10,149
June	101,818	84,787	24,761	738	5,008	19,015	77,057	5,350	5,781	18,226	6,586	24,083	2,935	3,932	10,164
July	102,126	85,106	24,850	744	5,002	19,104	77,276	5,363	5,797	18,274	6,608	24,214	2,936	3,952	10,132
August	102,275	85,229	24,886	751											

**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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Total		100,549	100,984	102,152	102,913	103,749					
Total private		84,025	83,918	86,107	86,139	86,304	68,080	67,994	69,716	69,730	69,865
Mining		740	737	755	759	764	521	519	543	548	552
Metal mining	10	38.9	39.0	43.7	43.9		28.8	29.0	32.8	33.4	
Iron ores	101	6.7	6.6	9.4	9.3		4.9	4.8	7.2	7.1	
Copper ores	102	10.9	11.5	12.7	13.4		8.5	9.0	10.1	10.7	
Coal mining	11,12	172.9	170.4	162.7	163.7		141.6	139.6	132.7	134.0	
Bituminous coal and lignite mining	12	170.4	167.7	160.7	161.6		139.5	137.4	131.0	132.2	
Oil and gas extraction	13	415.7	415.7	433.0	435.1	441.0	263.7	264.7	287.1	290.1	
Crude petroleum, natural gas, and natural gas liquids	131,2	211.0	210.9	204.6	203.1	-	103.0	104.0	100.7	100.5	
Oil and gas field services	138	204.7	204.8	228.4	232.0		160.7	160.7	186.4	189.6	
Nonmetallic minerals, except fuels	14	112.2	111.6	115.8	116.2		87.0	86.1	90.1	90.4	
Crushed and broken stone	142	40.6	40.4	42.4	42.3		33.0	32.7	34.0	34.0	
Sand and gravel	144	35.2	34.4	35.5	35.7		-	-	-	-	
Chemical and fertilizer minerals	147	17.1	17.6	18.1	18.4						
Construction		5,258	5,204	5,366	5,292	5,285	4,184	4,132	4,238	4,170	4,165
General building contractors	15	1,354.5	1,345.7	1,345.0	1,318.7	1,325.8	1,013.4	1,005.8	995.0	973.2	
Residential building construction	152	690.2	682.0	700.4	688.6	-	502.8	495.1	503.7	494.2	
Operative builders	153	57.1	55.3	55.9	53.8		30.8	29.5	28.3	26.8	
Nonresidential building construction	154	607.2	608.4	588.7	576.3		479.8	481.2	463.0	452.2	
Heavy construction contractors	16	853.6	842.0	856.0	845.0		723.1	713.4	726.7	717.0	
Highway and street construction	161	328.0	319.0	346.9	338.8		281.5	273.3	296.5	289.1	
Heavy construction, except highway	162	525.6	523.0	509.1	506.2		441.6	440.1	430.2	427.9	
Special trade contractors	17	3,049.9	3,016.6	3,165.0	3,128.3		2,447.6	2,413.1	2,515.9	2,480.2	
Plumbing, heating, and air conditioning	171	649.3	652.1	682.1	676.3		484.7	486.4	508.9	502.4	
Painting, paper hanging, and decorating	172	175.8	172.0	183.8	177.8		148.6	145.5	155.8	149.7	
Electrical work	173	545.5	544.1	566.6	566.4		428.3	425.7	442.4	442.0	
Masonry, stonework, and plastering	174	510.8	497.0	520.7	519.2		441.0	427.6	445.3	442.7	
Carpentering and flooring	175	187.5	184.9	183.4	177.8		147.2	144.5	141.7	137.3	
Roofing and sheet metal work	176	227.7	231.9	232.0	227.3		187.1	190.2	187.2	183.4	
Manufacturing		19,113	19,041	19,225	19,349	19,345	13,017	12,954	13,104	13,251	13,241
Durable goods		11,251	11,209	11,238	11,343	11,362	7,442	7,410	7,447	7,566	7,584
Lumber and wood products	24	736.8	731.3	762.2	761.7	755.4	621.2	615.4	639.4	637.7	631.9
Logging camps and logging contractors	241	91.9	89.9	87.1	87.5	-	78.5	76.4	73.7	73.9	-
Sawmills and planing mills	242	198.6	198.3	205.7	206.7		176.0	175.9	181.8	182.4	
Sawmills and planing mills, general	2421	162.3	161.7	167.5	167.9		144.0	143.7	148.2	148.2	
Hardwood dimension and flooring	2426	33.4	33.6	35.3	36.0		29.4	29.6	31.0	31.6	
Millwork, plywood, and structural members	243	254.5	252.9	270.7	270.2		211.9	209.9	224.3	223.1	
Millwork	2431	97.1	96.7	107.0	106.4		79.2	78.7	87.2	86.1	
Wood kitchen cabinets	2434	67.8	68.0	71.7	72.0		54.9	54.9	57.7	57.8	
Hardwood veneer and plywood	2435	23.8	23.8	25.2	25.3		21.0	20.9	22.1	22.2	
Softwood veneer and plywood	2436	38.3	38.1	39.2	39.4		35.2	34.9	35.6	35.8	
Wood containers	244	41.2	40.0	41.4	40.7		34.9	33.8	35.2	34.5	
Wood buildings and mobile homes	245	72.5	71.8	76.1	75.6		55.0	54.3	58.0	57.6	
Mobile homes	2451	49.6	49.0	51.3	51.0		39.8	39.3	41.6	41.3	
Miscellaneous wood products	249	78.1	78.4	81.2	81.0		64.9	65.1	66.4	66.2	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Furniture and fixtures	25	500.3	502.6	515.7	521.8	526.1	400.5	402.5	412.6	417.5	422.1
Household furniture	251	294.1	297.6	303.8	309.0	-	247.7	250.7	256.5	260.7	-
Wood household furniture	2511	131.7	132.8	135.4	136.8	-	115.0	116.2	118.6	119.4	-
Upholstered household furniture	2512	94.1	94.9	99.2	101.0	-	78.3	78.9	83.0	84.8	-
Metal household furniture	2514	24.6	26.0	24.0	25.2	-	19.9	21.2	19.3	20.3	-
Mattresses and bedsprings	2515	30.1	30.0	31.4	31.8	-	23.1	22.9	24.0	24.5	-
Office furniture	252	66.8	66.2	69.0	69.0	-	51.3	50.8	52.1	52.2	-
Public building and related furniture	253	27.5	27.6	29.4	29.4	-	21.0	21.2	22.5	22.4	-
Partitions and fixtures	254	73.8	73.3	76.1	76.4	-	54.0	53.6	55.2	55.6	-
Miscellaneous furniture and fixtures	259	38.1	37.9	37.4	38.0	-	26.5	26.2	26.3	26.6	-
Stone, clay, and glass products	32	598.8	592.2	596.2	595.1	594.1	463.0	457.7	462.8	463.5	461.8
Flat glass	321	15.2	15.2	14.8	15.0	-	11.9	11.9	11.5	11.7	-
Glass and glassware, pressed or blown	322	91.0	89.0	87.5	87.9	-	77.8	75.9	75.1	75.4	-
Glass containers	3221	46.3	45.9	44.5	44.1	-	41.6	41.4	40.1	39.7	-
Pressed and blown glass, nec	3229	44.7	43.1	43.0	43.8	-	36.2	34.5	35.0	35.7	-
Products of purchased glass	323	50.9	51.0	52.0	51.7	-	36.0	36.2	36.7	37.0	-
Cement, hydraulic	324	22.6	22.5	22.2	21.7	-	17.7	17.6	17.3	16.8	-
Structural clay products	325	37.5	37.3	39.1	39.4	-	29.3	29.0	30.9	31.1	-
Pottery and related products	326	37.0	36.6	36.1	36.1	-	29.3	28.9	29.0	29.0	-
Concrete, gypsum, and plaster products	327	218.8	216.2	220.6	218.9	-	171.2	169.0	172.1	171.3	-
Concrete block and brick	3271	20.1	20.1	20.9	20.6	-	13.6	13.6	14.0	13.8	-
Concrete products, nec	3272	72.0	70.9	70.9	70.8	-	55.5	54.6	54.3	54.5	-
Ready-mixed concrete	3273	107.0	105.4	109.2	108.0	-	86.8	85.6	88.8	87.9	-
Misc. nonmetallic mineral products	329	113.1	111.7	110.6	111.1	-	79.9	79.1	79.9	80.7	-
Abrasive products	3291	20.9	20.6	20.4	20.4	-	13.8	13.7	13.8	13.8	-
Asbestos products	3292	9.1	8.9	9.4	9.4	-	7.0	6.8	7.2	7.3	-
Mineral wool	3296	27.7	27.5	24.5	24.7	-	-	-	-	-	-
Primary metal industries	33	731.6	726.8	752.9	764.1	764.8	546.4	541.9	568.3	579.3	579.6
Blast furnaces and basic steel products	331	258.6	257.4	279.0	281.7	282.9	195.1	193.3	211.9	214.3	215.5
Blast furnaces and steel mills	3312	192.6	192.3	212.3	214.5	-	146.4	145.5	162.9	164.5	-
Steel pipe and tubes	3317	22.9	22.3	23.6	23.8	-	16.5	15.9	17.3	17.6	-
Iron and steel foundries	332	129.4	128.7	130.7	134.6	-	102.2	101.1	102.8	106.5	-
Gray iron foundries	3321	81.6	80.5	81.2	84.0	-	66.6	65.4	65.8	68.3	-
Malleable iron foundries	3322	8.5	8.6	8.8	9.1	-	6.1	6.1	6.3	6.7	-
Steel foundries, nec	3325	26.2	26.4	26.6	27.2	-	19.3	19.5	19.9	20.5	-
Primary nonferrous metals	333	37.1	36.5	40.9	41.5	-	24.3	24.0	29.1	29.9	-
Primary aluminum	3334	19.2	18.9	22.9	23.3	-	12.1	11.9	16.4	17.0	-
Nonferrous rolling and drawing	335	180.2	179.4	175.8	177.8	-	126.2	126.4	126.0	127.9	-
Copper rolling and drawing	3351	23.2	22.9	22.8	23.3	-	18.1	17.9	17.8	18.3	-
Aluminum sheet, plate, and foil	3353	27.9	27.7	27.8	27.9	-	19.6	19.6	20.5	20.5	-
Nonferrous wire drawing and insulating	3357	77.0	76.4	73.9	75.1	-	53.2	53.3	52.1	53.4	-
Nonferrous foundries	336	85.4	84.7	85.2	86.6	-	68.5	67.7	68.2	69.7	-
Aluminum foundries	3361	52.6	51.7	52.0	53.0	-	42.9	42.0	42.3	43.3	-
Fabricated metal products	34	1,435.8	1,429.9	1,423.5	1,441.1	1,446.4	1,062.6	1,058.5	1,054.7	1,072.5	1,078.6
Metal cans and shipping containers	341	58.6	57.3	57.2	58.0	-	50.2	49.1	48.8	49.6	-
Metal cans	3411	47.4	46.1	46.0	46.6	-	41.5	40.3	39.9	40.5	-
Cutlery, hand tools, and hardware	342	135.4	136.4	131.6	133.3	-	99.4	100.0	96.6	98.3	-
Hand and edge tools, and hand saws and blades	3423,5	45.7	45.9	48.0	48.6	-	33.3	33.4	35.3	35.7	-
Hardware, nec	3429	77.3	78.0	72.7	73.9	-	57.8	58.3	54.0	55.1	-
Plumbing and heating, except electric	343	61.1	61.3	61.9	62.6	-	44.1	44.2	44.0	44.9	-
Plumbing fittings and brass goods	3432	23.7	23.7	24.5	24.5	-	17.3	17.2	17.7	18.1	-
Heating equipment, except electric	3433	27.4	27.5	27.1	27.4	-	19.2	19.3	18.6	18.7	-
Fabricated structural metal products	344	443.9	440.5	441.2	444.2	-	314.6	311.1	314.6	317.5	-
Fabricated structural metal	3441	78.7	78.1	77.5	78.2	-	55.8	55.2	55.6	56.3	-
Metal doors, sash, and trim	3442	94.9	93.1	99.5	99.7	-	71.1	69.5	74.4	74.3	-
Fabricated plate work (boiler shops)	3443	94.2	93.9	89.6	90.9	-	58.9	58.4	56.3	58.1	-
Sheet metal work	3444	111.8	111.1	111.4	112.3	-	83.7	83.2	84.2	85.0	-
Architectural metal work	3446	29.6	29.7	29.6	29.6	-	21.6	21.4	21.6	21.6	-

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Fabricated metal products—Continued											
Screw machine products, bolts, etc	345	93.5	93.2	93.8	95.1		71.1	70.9	71.6	73.1	
Screw machine products	3451	44.3	44.3	44.7	45.6		35.9	35.9	36.5	37.5	
Bolts, nuts, rivets, and washers	3452	49.2	48.9	49.1	49.5		35.2	35.0	35.1	35.6	
Metal forgings and stampings	346	241.5	240.4	229.9	237.4		193.4	193.0	181.9	188.9	
Iron and steel forgings	3462	31.5	30.3	29.3	30.1		24.1	23.2	22.3	23.0	
Automotive stampings	3465	102.8	103.0	93.9	98.3		87.6	88.2	79.2	83.6	
Metal stampings, nec	3469	96.3	96.2	96.0	98.3		73.7	73.6	72.7	74.6	
Metal services, nec	347	110.4	111.4	115.5	116.8		88.5	89.3	92.6	93.5	
Plating and polishing	3471	72.1	72.7	74.8	75.4		58.2	58.7	60.4	60.9	
Metal coating and allied services	3479	38.3	38.7	40.7	41.4		30.3	30.6	32.2	32.6	
Ordnance and accessories, nec	348	78.2	78.2	79.8	79.6		48.1	48.9	50.2	50.9	
Ammunition, except for small arms, nec	3483	45.3	45.6	45.0	44.9		28.2	28.5	26.2	26.8	
Misc. fabricated metal products	349	213.2	211.2	212.6	214.1		153.2	152.0	154.4	155.8	
Valves and pipe fittings	3494	77.6	76.8	77.3	77.9		51.1	50.7	51.9	52.6	
Misc. fabricated wire products	3496	51.9	52.0	51.5	51.8		39.2	39.4	39.0	39.3	
Machinery, except electrical	35	2,029.4	2,017.7	2,031.4	2,050.6	2,057.0	1,200.2	1,191.5	1,207.7	1,229.8	1,236.2
Engines and turbines	351	100.6	100.3	96.2	98.4	-	61.8	62.2	60.9	62.9	-
Turbines and turbine generator sets	3511	32.5	32.2	28.2	28.7		17.4	17.5	14.9	15.0	
Internal combustion engines, nec	3519	68.1	68.1	68.0	69.7		44.4	44.7	46.0	47.9	
Farm and garden machinery	352	85.0	85.2	100.6	104.7		54.4	53.2	66.7	71.2	
Farm machinery and equipment	3523	61.8	60.8	75.7	77.6		37.0	34.9	48.5	50.7	
Construction and related machinery	353	217.5	215.2	220.7	223.0		131.2	128.6	131.3	134.5	
Construction machinery	3531	76.9	76.2	80.1	81.0		46.8	45.6	47.6	49.2	
Mining machinery	3532	19.3	18.7	19.7	19.7		12.0	11.6	11.9	12.0	
Oil field machinery	3533	43.1	42.5	42.4	43.7		24.9	24.6	25.0	26.1	
Conveyors and conveying equipment	3535	29.9	29.6	30.0	29.9		15.6	15.4	15.7	16.0	
Industrial trucks and tractors	3537	25.7	25.3	25.5	25.5		18.5	17.9	17.9	17.8	
Metalworking machinery	354	303.8	302.5	295.0	298.0		216.2	215.7	210.7	213.9	
Machine tools, metal cutting types	3541	49.0	48.4	44.8	45.2		30.6	30.3	28.1	28.6	
Machine tools, metal forming types	3542	19.4	19.5	18.4	18.6		11.9	12.0	11.5	11.8	
Special dies, tools, jigs, and fixtures	3544	142.3	142.8	141.0	142.6		109.9	110.2	107.4	109.1	
Machine tool accessories	3545	54.2	53.3	53.6	54.3		37.5	37.0	37.9	38.5	
Power driven hand tools	3546	21.4	21.1	21.0	21.0		15.6	15.5	15.6	15.7	
Special industry machinery	355	156.7	156.0	159.3	161.0		92.3	92.3	95.0	96.6	
Food products machinery	3551	37.0	37.0	38.0	38.3		22.2	22.4	23.1	23.3	
Textile machinery	3552	18.5	18.7	20.3	20.6		12.3	12.4	13.8	14.0	
Printing trades machinery	3555	27.0	26.7	26.6	26.8		15.5	15.5	15.5	16.0	
General industrial machinery	356	253.5	252.8	252.4	254.9		161.0	160.6	161.1	164.0	
Pumps and pumping equipment	3561	43.7	43.0	44.2	44.9		25.2	24.9	25.1	25.8	
Ball and roller bearings	3562	43.1	43.5	42.8	43.8		32.4	32.9	33.1	34.1	
Air and gas compressors	3563	22.1	21.9	21.8	21.5		12.4	12.2	12.2	12.2	
Blowers and fans	3564	31.0	30.9	30.7	31.0		19.8	19.7	19.9	20.1	
Speed changers, drives, and gears	3566	19.9	19.7	19.9	20.0		13.4	13.4	13.4	13.5	
Power transmission equipment, nec	3568	16.4	16.5	16.3	16.4		11.0	10.9	10.8	10.9	
Office and computing machines	357	468.6	465.3	458.6	457.6		156.5	154.6	150.8	151.8	
Electronic computing equipment	3573	412.3	409.9	403.1	401.9		132.8	131.3	127.3	127.6	
Refrigeration and service machinery	358	170.4	168.9	175.6	177.0		119.5	118.4	125.2	126.8	
Refrigeration and heating equipment	3585	121.8	120.7	126.4	127.6		87.4	86.7	92.3	93.7	
Misc. machinery, except electrical	359	273.3	271.5	273.0	276.0		207.3	205.9	206.0	208.1	
Carburetors, pistons, rings, and valves	3592	35.5	35.0	34.9	35.0		29.0	28.7	28.1	28.1	
Machinery, except electrical, nec	3599	237.8	236.5	238.1	241.0		178.3	177.2	177.9	180.0	
Electrical and electronic equipment	36	2,126.8	2,124.2	2,095.0	2,106.0	2,118.1	1,233.0	1,231.3	1,221.2	1,235.9	1,251.1
Electric distributing equipment	361	107.0	106.9	105.4	106.5		77.4	77.4	76.3	77.4	
Transformers	3612	51.2	51.1	50.3	50.9		37.8	37.7	36.8	37.3	
Switchgear and switchboard apparatus	3613	55.8	55.8	55.1	55.6		39.6	39.7	39.5	40.1	
Electrical industrial apparatus	362	185.6	185.7	183.6	184.4		128.7	128.0	126.0	127.2	
Motors and generators	3621	90.1	90.3	89.2	90.2		69.5	69.3	67.9	69.1	
Industrial controls	3622	60.6	60.3	57.9	57.8		35.6	35.1	33.3	33.4	
Household appliances	363	137.6	138.3	136.1	137.5		107.3	108.2	108.2	109.6	
Household refrigerators and freezers	3632	27.1	26.9	28.4	28.0		21.3	21.4	23.2	22.7	
Household laundry equipment	3633	23.0	22.7	22.5	22.8		17.7	17.5	17.7	18.1	
Electric housewares and fans	3634	38.3	38.8	35.8	36.3		29.1	29.5	27.6	28.1	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Electrical and electronic equipment—Continued											
Electric lighting and wiring equipment	364	195.5	194.5	188.4	191.4		140.9	140.2	137.2	140.1	
Electric lamps	3641	27.3	27.3	26.7	26.9		23.3	23.3	22.8	22.9	
Current-carrying wiring devices	3643	76.4	75.2	72.2	73.3		49.1	48.2	48.2	49.4	
Noncurrent-carrying wiring devices	3644	17.1	17.0	16.3	16.6		12.1	12.1	11.7	11.9	
Residential lighting fixtures	3645	28.5	28.9	26.3	27.0		22.0	22.3	19.9	20.5	
Radio and TV receiving equipment	365	83.4	83.0	81.2	82.1		56.7	56.0	55.3	56.4	
Radio and TV receiving sets	3651	65.3	64.6	62.8	63.2		44.0	42.9	41.9	42.4	
Communication equipment	366	632.5	630.1	612.8	610.8		265.4	263.7	254.7	256.3	
Telephone and telegraph apparatus	3661	127.3	125.2	114.7	114.1		74.3	72.4	65.7	65.5	
Radio and TV communication equipment	3662	505.2	504.9	498.1	496.7		191.1	191.3	189.0	190.8	
Electronic components and accessories	367	631.3	631.3	637.5	641.2		349.9	350.6	358.6	361.4	
Electronic tubes	3671-3	39.7	39.7	37.9	37.7		24.1	24.3	24.2	24.1	
Semiconductors and related devices	3674	268.6	267.5	268.3	269.3		102.0	102.4	104.1	104.9	
Electronic components, nec	3679	252.1	253.9	259.2	261.7		170.5	171.3	176.0	177.7	
Misc. electrical equipment and supplies	369	153.9	154.4	150.0	152.1		106.7	107.2	104.9	107.5	
Storage batteries	3691	29.7	30.2	31.2	32.4		23.3	23.6	24.4	25.4	
Engine electrical equipment	3694	65.8	65.8	63.3	64.1		49.5	50.0	48.0	49.1	
Transportation equipment	37	2,022.9	2,014.8	1,991.4	2,029.7	2,022.6	1,265.9	1,261.8	1,230.7	1,274.1	1,264.9
Motor vehicles and equipment	371	864.9	852.2	819.4	847.7	841.0	664.6	655.0	630.7	662.3	654.0
Motor vehicles and car bodies	3711	396.0	386.5	349.8	367.9	-	293.2	285.9	257.9	279.0	-
Truck and bus bodies	3713	39.5	39.6	45.1	45.0		30.9	30.8	35.6	35.6	
Motor vehicle parts and accessories	3714	385.9	383.4	376.3	386.1		306.8	305.3	299.6	309.7	
Truck trailers	3715	28.9	27.9	31.5	31.8		22.5	21.5	24.6	24.8	
Aircraft and parts	372	681.6	685.9	691.5	696.7		334.4	339.1	339.1	346.3	
Aircraft	3721	342.6	346.9	361.0	363.7		149.1	153.0	159.7	163.0	
Aircraft engines and engine parts	3724	155.0	154.9	153.6	156.2		79.3	79.5	75.7	78.6	
Aircraft equipment, nec	3728	184.0	184.1	176.9	176.8		106.0	106.6	103.7	104.7	
Ship and boat building and repairing	373	184.3	185.1	183.7	186.8		139.3	140.8	136.3	140.5	
Ship building and repairing	3731	131.1	131.3	125.0	127.0		96.4	97.5	89.1	92.2	
Boat building and repairing	3732	53.2	53.8	58.7	59.8		42.9	43.3	47.2	48.3	
Railroad equipment	374	27.0	26.5	22.9	23.4		18.8	18.3	15.6	16.2	
Guided missiles, space vehicles, and parts	376	205.5	205.6	211.8	212.2		69.0	68.8	67.4	66.5	
Guided missiles and space vehicles	3761	155.4	155.6	160.7	160.8		49.7	49.4	50.2	50.0	
Miscellaneous transportation equipment	379	48.9	48.7	50.5	51.2		32.4	32.4	33.5	34.0	
Travel trailers and campers	3792	18.4	18.4	20.9	21.0		14.1	14.2	15.8	15.8	
Instruments and related products	38	702.8	700.8	695.9	694.9	693.8	381.3	378.8	376.8	378.8	376.0
Engineering and scientific instruments	381	83.1	82.8	83.1	82.7	-	36.6	36.7	37.4	37.4	-
Measuring and controlling devices	382	244.7	243.4	237.4	237.0		135.8	133.9	132.0	132.4	
Environmental controls	3822	41.8	41.7	41.3	41.1		26.3	26.2	26.2	26.6	
Process control instruments	3823	54.7	54.2	51.5	51.2		27.6	26.2	27.0	26.4	
Instruments to measure electricity	3825	103.8	102.8	100.3	99.8		52.6	52.0	49.1	49.1	
Optical instruments and lenses	383	32.5	32.5	32.1	32.2		16.0	15.9	15.3	15.5	
Medical instruments and supplies	384	181.1	181.4	181.2	182.6		108.9	109.3	108.2	109.9	
Surgical and medical instruments	3841	87.9	87.8	87.3	87.4		50.4	50.6	50.1	50.1	
Surgical appliances and supplies	3842	79.0	79.4	79.4	80.9		50.6	50.8	50.0	51.8	
Ophthalmic goods	385	38.1	38.5	42.0	42.5		25.7	25.6	28.8	29.2	
Photographic equipment and supplies	386	112.2	111.0	108.9	106.7		50.4	49.4	46.9	46.2	
Watches, clocks, and watchcases	387	11.1	11.2	11.2	11.2		7.9	8.0	8.2	8.2	
Miscellaneous manufacturing	39	365.5	368.6	373.8	378.3	383.7	268.3	270.2	273.0	276.5	281.7
Jewelry, silverware, and plated ware	391	54.9	56.2	53.9	55.5	-	38.4	39.4	37.2	38.5	-
Jewelry, precious metal	3911	38.6	39.8	37.5	39.0		26.7	27.6	25.6	26.8	
Musical instruments	393	12.3	12.2	13.1	13.3		10.0	9.9	11.0	11.2	
Toys and sporting goods	394	95.1	95.2	102.5	104.6		71.7	71.5	77.0	79.1	
Dolls, games, toys, and children's vehicles	3942.4	45.5	44.9	49.9	51.3		33.8	33.0	37.2	38.4	
Sporting and athletic goods, nec	3949	49.6	50.3	52.6	53.3		37.9	38.5	39.8	40.7	
Pens, pencils, office, and art supplies	395	32.4	32.5	33.3	33.4		21.9	22.1	23.2	23.2	
Costume jewelry and notions	396	42.4	44.1	44.3	43.7		33.8	35.1	34.1	33.3	
Costume jewelry	3961	23.3	24.5	25.2	24.5		18.5	19.4	19.5	18.7	
Miscellaneous manufactures	399	128.4	128.4	126.7	127.8		92.5	92.2	90.5	91.2	
Signs and advertising displays	3993	55.7	56.2	55.4	55.4		39.4	39.5	38.5	38.3	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Nondurable goods		7,862	7,832	7,987	8,006	7,983	5,575	5,544	5,657	5,685	5,657
Food and kindred products	20	1,705.9	1,664.9	1,722.1	1,714.2	1,677.1	1,221.5	1,182.0	1,231.6	1,225.6	1,191.7
Meat products	201	378.8	379.0	386.1	389.0	-	322.2	321.9	327.9	330.3	-
Meat packing plants	2011	139.2	138.3	137.0	138.9	-	116.4	115.3	114.8	116.5	-
Sausages and other prepared meats	2013	77.2	76.9	76.9	76.8	-	57.3	57.1	56.7	56.7	-
Poultry dressing plants	2016	144.5	145.3	152.9	153.9	-	132.1	132.5	138.6	139.4	-
Dairy products	202	165.5	163.1	169.6	167.2	-	99.4	97.6	103.3	101.2	-
Cheese, natural and processed	2022	40.2	39.5	40.6	40.4	-	30.6	30.2	31.3	31.1	-
Fluid milk	2026	85.0	84.5	86.9	86.2	-	41.8	41.6	43.9	43.2	-
Preserved fruits and vegetables	203	300.9	258.5	306.6	295.6	-	258.0	216.6	259.3	250.0	-
Canned specialties	2032	27.5	26.1	28.1	28.8	-	20.6	19.4	20.4	21.2	-
Canned fruits and vegetables	2033	129.5	91.6	134.7	125.1	-	113.8	77.0	116.7	108.4	-
Frozen fruits and vegetables	2037	56.5	53.2	50.3	49.8	-	51.1	47.7	45.3	44.9	-
Grain mill products	204	122.2	121.8	121.7	123.2	-	83.9	83.9	83.6	85.1	-
Flour and other grain mill products	2041	22.0	22.0	22.6	23.1	-	15.0	15.1	15.2	15.8	-
Prepared feeds, nec	2048	42.9	42.7	42.2	42.6	-	26.9	26.9	26.6	27.0	-
Bakery products	205	212.5	212.5	213.1	214.2	-	129.6	129.7	129.5	130.1	-
Bread, cake, and related products	2051	167.3	166.9	167.2	167.6	-	92.7	92.3	92.7	92.9	-
Cookies and crackers	2052	45.2	45.6	45.9	46.6	-	36.9	37.4	36.8	37.2	-
Sugar and confectionery products	206	102.2	110.5	95.2	99.5	-	80.8	88.8	74.9	78.6	-
Cane and beet sugar	2061-3	24.8	30.1	21.1	23.7	-	19.7	24.4	16.4	18.5	-
Confectionery products	2065	57.6	60.8	53.6	55.2	-	47.8	51.2	44.4	46.0	-
Fats and oils	207	34.3	34.7	32.2	33.3	-	24.9	25.3	23.0	24.1	-
Beverages	208	214.1	212.3	215.8	214.2	-	91.1	89.4	92.6	91.8	-
Malt beverages	2082	41.2	40.8	40.2	40.1	-	26.0	25.6	25.5	25.5	-
Bottled and canned soft drinks	2086	127.6	125.3	128.4	126.1	-	41.4	39.6	42.3	41.4	-
Misc. food and kindred products	209	175.4	172.5	181.8	178.0	-	131.6	128.8	137.5	134.4	-
Tobacco manufactures	21	62.7	62.5	56.7	59.6	57.4	48.5	48.6	42.2	44.5	43.0
Cigarettes	211	41.9	41.7	41.3	39.8	-	31.7	31.7	30.5	28.4	-
Textile mill products	22	712.4	713.1	736.1	740.5	740.1	617.2	618.4	639.5	644.0	643.0
Weaving mills, cotton	221	101.2	101.1	108.4	110.3	-	91.1	91.1	98.1	99.9	-
Weaving mills, synthetics	222	83.8	84.1	88.3	89.3	-	74.7	75.1	78.6	79.6	-
Weaving and finishing mills, wool	223	17.7	17.5	18.6	18.4	-	14.8	14.6	15.1	15.0	-
Narrow fabric mills	224	22.4	22.6	23.2	23.2	-	19.3	19.5	20.1	20.1	-
Knitting mills	225	210.0	209.9	211.4	210.7	-	183.1	183.2	185.5	184.6	-
Women's hosiery, except socks	2251	35.1	35.1	34.6	34.0	-	31.1	31.2	30.9	30.4	-
Hosiery, nec	2252	36.5	36.5	36.9	36.7	-	32.7	32.8	33.1	33.0	-
Knit outerwear mills	2253	71.9	72.3	73.0	72.9	-	63.2	63.6	65.0	64.8	-
Knit underwear mills	2254	24.3	24.0	23.2	23.3	-	20.3	20.0	19.6	19.6	-
Circular knit fabric mills	2257	24.0	23.9	25.8	25.9	-	20.7	20.7	22.4	22.3	-
Textile finishing, except wool	226	59.6	60.1	60.9	61.6	-	49.7	50.2	51.1	51.9	-
Finishing plants, cotton	2261	23.2	23.5	23.9	24.1	-	19.6	19.9	20.2	20.5	-
Finishing plants, synthetics	2262	22.3	22.4	22.6	22.7	-	18.0	18.1	18.4	18.5	-
Floor covering mills	227	56.9	56.7	59.8	60.3	-	47.0	46.8	48.7	49.2	-
Yarn and thread mills	228	105.8	106.0	109.7	110.1	-	94.5	94.9	98.2	98.8	-
Yarn mills, except wool	2281	76.5	76.8	80.4	80.8	-	69.2	69.5	72.8	73.3	-
Throwing and winding mills	2282	16.1	16.1	15.8	15.8	-	14.2	14.2	14.1	14.0	-
Miscellaneous textile goods	229	55.0	55.1	55.8	56.6	-	43.0	43.0	44.1	44.9	-
Apparel and other textile products	23	1,109.9	1,114.1	1,111.0	1,126.8	1,132.5	935.7	938.8	930.6	946.8	951.8
Men's and boys' suits and coats	231	59.0	58.7	56.7	57.5	-	50.6	50.5	48.7	49.7	-
Men's and boys' furnishings	232	306.9	306.1	316.7	319.9	-	265.3	264.5	272.7	275.8	-
Men's and boys' shirts and nightwear	2321	87.1	85.7	86.8	87.3	-	75.2	73.7	74.1	74.5	-
Men's and boys' separate trousers	2327	55.0	54.6	53.9	54.3	-	48.1	47.8	47.1	47.4	-
Men's and boys' work clothing	2328	90.9	91.0	97.3	99.0	-	79.2	79.5	84.9	86.6	-
Women's and misses' outerwear	233	355.1	357.7	355.9	360.9	-	296.9	298.7	294.9	300.5	-
Women's and misses' blouses and waists	2331	50.5	50.4	49.7	49.9	-	42.0	42.1	41.2	41.6	-
Women's and misses' dresses	2335	84.7	85.4	83.4	84.6	-	71.3	71.7	69.0	70.0	-
Women's and misses' suits and coats	2337	46.1	46.3	47.6	47.3	-	37.9	37.8	38.2	38.8	-
Women's and misses' outerwear, nec	2339	173.8	175.6	175.2	179.1	-	145.7	147.1	146.5	150.1	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	77.9	77.9	73.0	73.5		64.7	64.8	59.8	60.4	
Women's and children's underwear	2341	63.6	63.3	59.8	60.2		54.1	53.9	50.7	51.3	
Brassieres and allied garments	2342	14.3	14.6	13.2	13.3		10.6	10.9	9.1	9.1	
Children's outerwear	236	60.2	60.5	57.2	58.2		50.9	51.3	47.5	48.5	
Children's dresses and blouses	2361	25.4	25.4	23.6	24.0		22.3	22.3	20.6	21.0	
Misc. apparel and accessories	238	42.4	42.9	41.5	42.0		35.6	35.8	34.9	35.1	
Misc. fabricated textile products	239	189.5	191.2	191.2	196.2		156.9	158.2	157.3	162.1	
Curtains and draperies	2391	26.2	26.4	27.0	27.2		21.4	21.6	22.0	22.1	
House furnishings, nec	2392	51.7	52.8	53.0	55.2		44.1	45.1	45.1	47.0	
Automotive and apparel trimmings	2396	40.6	40.5	38.3	39.8		34.3	34.3	31.9	33.5	
Paper and allied products	26	676.8	678.2	681.2	681.8	678.2	513.5	514.3	517.1	518.8	515.4
Paper and pulp mills	261,2,6	195.2	194.8	193.7	192.8	-	148.8	148.7	146.5	146.1	-
Paper mills, except building paper	262	170.7	170.4	170.2	169.4		129.4	129.4	127.9	127.7	
Paperboard mills	263	53.0	53.1	53.1	53.0		40.0	40.1	40.0	40.1	
Misc. converted paper products	264	231.2	231.5	235.3	235.2		171.2	170.8	175.3	175.5	
Paper coating and glazing	2641	58.2	58.1	59.4	59.0		36.3	36.2	38.4	37.7	
Envelopes	2642	26.5	26.7	26.4	26.8		20.8	20.8	20.4	20.9	
Bags, except textile bags	2643	51.6	52.0	52.6	53.4		40.8	41.0	41.6	42.5	
Paperboard containers and boxes	265	197.4	198.8	199.1	200.8		153.5	154.7	155.3	157.1	
Folding paperboard boxes	2651	42.7	42.7	42.8	43.1		34.0	34.1	33.8	34.3	
Corrugated and solid fiber boxes	2653	104.8	105.7	104.3	105.4		79.4	79.9	79.4	80.2	
Sanitary food containers	2654	22.5	22.4	24.2	24.1		19.0	19.1	20.9	20.8	
Printing and publishing	27	1,460.2	1,468.8	1,503.6	1,502.0	1,510.7	820.7	826.0	840.7	841.4	844.5
Newspapers	271	458.0	460.8	462.4	463.0	-	170.5	171.6	169.7	171.2	-
Periodicals	272	115.6	116.2	123.9	123.0		42.6	43.0	45.4	44.9	
Books	273	107.6	107.2	113.5	110.8		57.0	56.7	60.3	57.8	
Book publishing	2731	79.9	79.6	84.3	82.0		35.2	35.1	37.6	35.3	
Book printing	2732	27.7	27.6	29.2	28.8		21.8	21.6	22.7	22.5	
Miscellaneous publishing	274	72.0	72.0	77.8	77.9		38.5	38.3	41.0	40.9	
Commercial printing	275	509.4	514.3	528.5	530.5		370.9	374.9	382.9	385.0	
Commercial printing, letterpress	2751	162.8	164.0	169.1	170.5		119.4	120.3	121.4	122.2	
Commercial printing, lithographic	2752	320.6	323.6	331.8	331.7		230.8	233.4	239.5	240.2	
Manifold business forms	276	49.6	49.6	48.2	48.6		34.8	34.9	33.4	33.8	
Blankbooks and bookbinding	278	73.7	74.0	74.3	73.6		59.5	59.3	59.4	59.0	
Printing trade services	279	51.5	51.9	53.5	53.3		38.4	38.9	39.7	39.6	
Chemicals and allied products	28	1,023.0	1,018.5	1,036.3	1,032.0	1,031.0	570.2	566.1	581.6	581.7	578.6
Industrial inorganic chemicals	281	135.7	135.3	133.1	132.5	-	69.1	69.0	67.8	67.9	-
Industrial inorganic chemicals, nec	2819	90.2	90.1	87.7	87.4		49.5	49.5	48.4	48.7	
Plastics materials and synthetics	282	166.7	165.6	167.6	167.3		112.0	111.2	110.1	109.6	
Plastics materials and resins	2821	75.2	74.4	77.4	77.1		45.1	44.5	45.6	45.7	
Organic fibers, noncellulosic	2824	62.3	61.8	61.1	60.8		45.2	44.8	42.9	41.9	
Drugs	283	207.4	207.8	213.7	211.7		95.3	95.2	97.4	97.4	
Pharmaceutical preparations	2834	165.6	165.8	169.7	168.3		75.2	75.2	75.8	76.2	
Soap, cleaners, and toilet goods	284	150.4	147.9	157.3	156.1		96.5	93.9	100.7	100.1	
Soap and other detergents	2841	41.9	41.9	42.4	41.9		26.6	26.6	26.7	26.4	
Polishing, sanitation, and finishing preparations	2842,3	40.0	40.1	41.0	40.9		21.3	21.4	22.5	22.6	
Toilet preparations	2844	68.5	65.9	73.9	73.3		48.6	45.9	51.5	51.1	
Paints and allied products	285	63.3	62.8	64.2	63.2		30.7	30.3	31.7	31.0	
Industrial organic chemicals	286	153.4	153.2	153.0	152.8		81.7	81.9	87.4	87.6	
Cyclic crudes and intermediates	2865	30.0	30.1	29.9	29.8		19.7	19.7	19.7	19.6	
Gum, wood, and industrial organic chemicals, nec	2861,9	123.4	123.1	123.1	123.0		62.0	62.2	67.7	68.0	
Agricultural chemicals	287	53.6	53.7	53.0	54.2		32.9	32.8	33.1	34.4	
Miscellaneous chemical products	289	92.5	92.2	94.4	94.2		52.0	51.8	53.4	53.7	
Petroleum and coal products	29	168.4	166.1	167.6	167.9	166.6	107.0	106.2	110.4	110.8	109.8
Petroleum refining	291	128.4	127.0	126.5	125.9	-	78.4	78.2	81.1	80.8	-
Paving and roofing materials	295	28.5	27.9	29.5	30.4		22.0	21.6	22.7	23.4	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Nondurable goods—Continued											
Rubber and misc. plastics products	30	794.1	796.2	818.2	827.1	833.8	617.8	620.3	633.4	641.9	649.0
Tires and inner tubes	301	87.5	87.4	86.1	86.2	-	64.3	64.1	61.3	60.6	-
Rubber and plastics footwear	302	10.2	10.4	10.5	10.9	-	8.5	8.8	8.7	9.0	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	21.6	21.7	21.6	21.9	-	15.1	15.2	15.5	16.0	-
Fabricated rubber products, nec	306	103.0	102.7	103.7	105.5	-	79.1	78.6	79.6	81.4	-
Miscellaneous plastics products	307	571.8	574.0	596.3	602.6	-	450.8	453.6	468.3	474.9	-
Leather and leather products	31	149.0	149.6	154.0	154.3	155.2	122.5	123.0	129.8	129.6	130.6
Leather tanning and finishing	311	13.8	13.8	13.5	13.6	-	11.5	11.5	11.2	11.2	-
Footwear, except rubber	314	87.5	87.0	91.8	91.2	-	73.6	73.1	79.7	79.0	-
Men's footwear, except athletic	3143	39.5	38.5	40.4	40.3	-	31.5	30.8	33.2	33.0	-
Women's footwear, except athletic	3144	30.6	31.2	33.3	32.3	-	27.0	27.3	29.6	28.7	-
Luggage	316	10.8	11.0	11.4	11.6	-	7.6	7.8	8.2	8.4	-
Handbags and personal leather goods	317	19.4	19.9	18.4	18.8	-	15.7	16.2	15.3	15.4	-
Transportation and public utilities		5,301	5,296	5,386	5,456	5,471	4,387	4,383	4,465	4,530	4,549
Transportation		3,094	3,101	3,138	3,222	3,240	-	-	-	-	-
Railroad transportation	40	330.9	328.5	312.3	307.0	-	-	-	-	-	-
Class I railroads ²	4011	294.4	292.1	276.4	271.4	-	-	-	-	-	-
Local and interurban passenger transit	41	287.0	289.3	232.1	285.0	-	266.4	268.2	211.3	262.9	-
Local and suburban transportation	411	98.5	99.1	100.1	101.6	-	90.7	91.0	91.5	92.8	-
Taxicabs	412	35.1	35.0	33.3	33.4	-	-	-	-	-	-
Intercity highway transportation	413	34.5	32.7	32.3	33.2	-	31.4	29.4	29.4	30.0	-
School buses	415	95.4	98.5	42.3	90.6	-	-	-	-	-	-
Trucking and warehousing	42	1,407.1	1,418.9	1,487.3	1,510.9	-	1,225.0	1,235.9	1,297.7	1,318.8	-
Trucking and trucking terminals	421,3	1,299.4	1,307.5	1,381.0	1,390.8	-	1,133.2	1,140.8	1,208.5	1,216.3	-
Public warehousing	422	107.7	111.4	106.3	120.1	-	91.8	95.1	89.2	102.5	-
Water transportation	44	180.1	170.2	176.3	188.8	-	-	-	-	-	-
Local water transportation	445	28.1	26.8	29.0	28.9	-	-	-	-	-	-
Water transportation services	446	98.4	90.9	93.0	106.3	-	-	-	-	-	-
Transportation by air	45	586.2	588.5	610.0	609.6	-	-	-	-	-	-
Air transportation	451,2	519.0	521.2	539.1	539.3	-	-	-	-	-	-
Air transportation services	458	67.2	67.3	70.9	70.3	-	-	-	-	-	-
Pipe lines, except natural gas	46	18.1	17.9	18.3	18.1	-	13.3	13.1	13.3	13.2	-
Transportation services	47	284.1	287.2	302.0	302.2	-	-	-	-	-	-
Freight forwarding	471	65.0	66.4	72.0	72.6	-	-	-	-	-	-
Communication and public utilities		2,207	2,195	2,248	2,234	2,231	-	-	-	-	-
Communication	48	1,283.5	1,272.2	1,306.2	1,300.7	-	979.1	969.7	994.0	988.3	-
Telephone communication	481	885.1	874.1	903.1	897.7	-	658.8	650.2	669.9	664.5	-
Radio and television broadcasting	483	238.2	238.7	232.9	232.8	-	194.8	195.2	191.8	191.2	-
Radio broadcasting	4832	112.0	112.6	113.3	112.3	-	-	-	-	-	-
Television broadcasting	4833	126.2	126.1	119.6	120.5	-	-	-	-	-	-
Electric, gas, and sanitary services	49	923.2	922.5	941.7	932.9	-	734.7	733.5	747.3	736.1	-
Electric services	491	452.6	452.2	457.0	453.8	-	348.5	348.2	349.4	345.1	-
Gas production and distribution	492	164.1	165.1	169.5	167.0	-	129.7	130.3	135.0	132.5	-
Combination utility services	493	206.9	205.9	205.1	202.4	-	171.2	170.1	169.4	165.6	-
Sanitary services	495	72.7	72.4	81.1	81.1	-	63.4	63.1	70.2	70.2	-
Wholesale trade		5,758	5,759	5,838	5,835	5,855	4,620	4,621	4,674	4,668	4,687
Durable goods	50	3,387	3,385	3,439	3,432	3,442	2,691	2,689	2,722	2,714	-
Motor vehicles and automotive equipment	501	432.5	431.3	437.7	434.6	-	347.5	346.6	351.4	347.6	-
Automobiles and other motor vehicles	5012	110.4	110.5	112.4	111.8	-	-	-	-	-	-
Automotive parts and supplies	5013	290.5	289.3	293.0	291.0	-	-	-	-	-	-

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Wholesale trade—Continued											
Durable goods—Continued											
Furniture and home furnishings	502	132.9	133.9	139.8	139.7		106.1	107.1	112.9	113.8	
Furniture	5021	57.8	57.9	60.7	60.2		-	-	-	-	
Home furnishings	5023	75.1	76.0	79.1	79.5		-	-	-	-	
Lumber and construction materials	503	230.4	228.5	233.0	230.9		189.7	188.3	192.6	190.0	
Lumber, plywood, and millwork	5031	102.6	101.5	106.1	104.8		-	-	-	-	
Construction materials, nec	5039	127.8	127.0	126.9	126.1		-	-	-	-	
Sporting goods, toys, and hobby goods	504	80.0	80.5	80.6	81.2		65.3	65.9	66.7	66.9	
Metals and minerals, except petroleum	505	132.3	131.8	134.2	134.9		104.2	103.8	105.1	105.6	
Electrical goods	506	488.0	487.9	492.6	493.0		370.7	370.4	375.4	375.3	
Electrical apparatus and equipment	5063	269.5	270.1	272.4	272.4		-	-	-	-	
Electrical appliances, TV and radios	5064	70.6	71.2	73.2	73.4		-	-	-	-	
Electronic parts and equipment	5065	147.9	146.6	147.0	147.2		-	-	-	-	
Hardware, plumbing, and heating equipment	507	257.5	258.0	266.7	264.6		206.8	207.6	215.4	213.8	
Hardware	5072	87.9	87.8	92.4	91.7		-	-	-	-	
Plumbing and hydronic heating supplies	5074	106.8	107.3	109.6	109.0		-	-	-	-	
Machinery, equipment, and supplies	508	1,443.0	1,442.1	1,458.0	1,455.5		1,148.4	1,145.7	1,145.2	1,142.2	
Commercial machines and equipment	5081	530.3	531.4	535.3	534.8		-	-	-	-	
Construction and mining machinery	5082	81.4	81.6	82.6	82.2		-	-	-	-	
Farm machinery and equipment	5083	118.7	117.7	123.1	121.5		-	-	-	-	
Industrial machinery and equipment	5084	300.7	298.6	296.5	297.5		-	-	-	-	
Industrial supplies	5085	129.0	128.6	130.3	130.1		-	-	-	-	
Professional equipment and supplies	5086	174.5	175.9	176.2	175.6		-	-	-	-	
Miscellaneous durable goods	509	189.9	190.8	196.8	197.8		152.1	153.2	157.6	158.6	
Scrap and waste materials	5093	87.4	87.5	90.6	90.5		-	-	-	-	
Nondurable goods	51	2,371	2,374	2,399	2,403	2,413	1,929	1,932	1,952	1,954	
Paper and paper products	511	190.9	190.8	193.8	191.7	-	155.6	155.3	157.1	155.1	
Drugs, proprietaries, and sundries	512	168.2	169.3	176.5	177.5		140.0	140.9	146.3	146.7	
Apparel, piece goods, and notions	513	192.8	193.9	194.5	195.0		144.6	146.0	146.3	146.3	
Groceries and related products	514	768.0	763.0	773.2	773.9		650.9	646.1	654.8	654.3	
Groceries, general line	5141	245.4	245.2	249.9	250.5		-	-	-	-	
Meats and meat products	5147	64.4	64.2	64.4	64.3		-	-	-	-	
Fresh fruits and vegetables	5148	96.9	88.2	90.2	91.0		-	-	-	-	
Chemicals and allied products	516	129.6	129.3	134.7	134.1		94.3	94.2	99.8	99.3	
Petroleum and petroleum products	517	199.4	197.8	197.0	196.2		154.6	153.1	154.1	153.2	
Petroleum bulk stations and terminals	5171	82.2	80.4	80.3	80.0		-	-	-	-	
Petroleum products, nec	5172	117.2	117.4	116.7	116.2		-	-	-	-	
Beer, wine, and distilled beverages	518	151.5	150.5	156.6	154.5		125.0	124.1	129.1	127.5	
Beer and ale	5181	94.7	94.1	99.5	98.2		-	-	-	-	
Wines and distilled beverages	5182	56.8	56.4	57.1	56.3		-	-	-	-	
Miscellaneous nondurable goods	519	436.5	437.7	444.4	447.5		353.5	355.3	359.8	362.6	
Farm supplies	5191	147.0	145.9	146.6	150.2		-	-	-	-	
Retail trade		18,040	18,034	18,384	18,411	18,443	16,063	16,067	16,339	16,339	16,360
Building materials and garden supplies	52	706.4	704.8	738.7	729.9		590.9	589.0	615.0	605.9	
Lumber and other building materials	521	382.5	381.2	404.6	398.7		325.3	323.8	344.5	337.8	
Hardware stores	525	157.3	158.7	162.8	162.4		131.5	132.8	135.0	134.3	
General merchandise stores	53	2,338.0	2,402.8	2,362.7	2,379.4	2,454.2	2,195.5	2,261.1	2,206.7	2,213.1	
Department stores	531	1,956.7	2,014.2	1,972.9	1,988.0	-	1,856.4	1,914.5	1,860.3	1,865.6	
Variety stores	533	241.3	246.2	243.7	245.3		218.6	223.4	220.2	221.4	
Misc. general merchandise stores	539	140.0	142.4	146.1	146.1		120.5	123.2	126.2	126.1	
Food stores	54	2,896.1	2,912.5	2,961.6	2,962.9	2,979.9	2,673.5	2,691.4	2,725.3	2,725.2	
Grocery stores	541	2,551.4	2,560.0	2,607.6	2,610.8	-	2,367.1	2,376.9	2,411.0	2,412.4	
Meat markets and freezer provisioners	542	59.5	59.4	59.7	59.6		-	-	-	-	
Dairy products stores	545	31.8	32.8	35.6	34.9		-	-	-	-	
Retail bakeries	546	160.9	162.9	161.7	163.0		145.9	147.8	146.5	148.2	
Automotive dealers and service stations	55	1,970.2	1,962.7	2,009.0	1,999.3	2,002.7	1,653.7	1,645.8	1,687.9	1,675.0	
New and used car dealers	551,2	959.4	960.4	971.4	975.1	-	798.8	799.1	808.2	809.5	
Auto and home supply stores	553	313.4	311.7	322.0	318.7		253.5	251.9	260.6	257.5	
Gasoline service stations	554	605.6	601.2	615.0	609.2		527.7	523.6	537.6	530.8	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Retail trade—Continued											
Apparel and accessory stores	56	1,058.3	1,073.6	1,087.7	1,080.6		893.8	907.7	918.4	911.0	
Men's and boys' clothing and furnishings	561	104.8	106.6	103.1	103.0		86.9	88.4	84.0	83.9	
Women's ready-to-wear stores	562	384.2	390.5	385.0	384.0		327.8	334.2	325.1	323.9	
Family clothing stores	565	234.3	237.1	247.4	243.6		202.9	205.1	214.9	211.1	
Shoe stores	566	201.4	203.8	214.3	213.6		161.6	163.8	176.5	175.7	
Furniture and home furnishings stores	57	769.0	780.7	800.1	806.2		638.9	649.6	663.1	667.6	
Furniture and home furnishings stores	571	432.3	439.5	454.4	455.1		355.5	362.5	373.8	373.6	
Furniture stores	5712	268.9	271.9	283.4	285.6		-	-	-	-	
Household appliance stores	572	86.2	85.1	83.4	86.0		73.8	72.4	71.3	73.3	
Radio, television, and music stores	573	250.5	256.1	262.3	265.1		209.6	214.7	218.0	220.7	
Radio and television stores	5732	184.5	189.4	195.8	198.0		-	-	-	-	
Music stores	5733	66.0	66.7	66.5	67.1		-	-	-	-	
Eating and drinking places	58	6,074.2	5,924.3	6,177.5	6,185.4	6,039.9	5,533.3	5,396.7	5,636.9	5,637.4	
Miscellaneous retail	59	2,227.5	2,272.7	2,246.3	2,267.7		1,883.1	1,925.5	1,885.5	1,903.6	
Drug stores and proprietary stores	591	564.5	571.1	586.6	589.0		481.0	487.0	497.5	499.9	
Liquor stores	592	124.7	126.7	124.2	123.6		-	-	-	-	
Miscellaneous shopping goods stores	594	734.2	752.4	739.9	748.4		616.4	633.5	617.6	625.1	
Sporting goods and bicycle shops	5941	129.9	132.3	130.2	134.0		-	-	-	-	
Book stores	5942	77.3	75.9	72.5	79.3		-	-	-	-	
Stationery stores	5943	73.9	75.3	74.7	75.0		-	-	-	-	
Jewelry stores	5944	144.3	146.0	143.2	142.8		-	-	-	-	
Gift, novelty, and souvenir shops	5947	138.4	140.4	143.8	140.9		-	-	-	-	
Sewing, needlework, and piece goods	5949	61.1	62.4	63.0	62.4		-	-	-	-	
Nonstore retailers	596	261.9	269.1	254.3	259.4		237.0	244.4	228.4	232.8	
Mail order houses	5961	124.7	129.8	120.5	123.6		-	-	-	-	
Merchandising machine operators	5962	78.8	79.7	81.7	82.5		-	-	-	-	
Fuel and ice dealers	598	104.8	108.8	111.1	111.8		87.4	91.3	91.5	92.0	
Retail stores, nec	599	357.0	364.0	345.0	351.5		291.2	297.2	279.9	285.9	
Finance, insurance, and real estate²		6,387	6,383	6,704	6,642	6,619	4,726	4,717	4,939	4,871	4,840
Finance		3,190	3,195	3,319	3,290	3,291					
Banking	60	1,739.3	1,735.4	1,750.1	1,729.8		1,262.8	1,258.5	1,265.8	1,245.8	
Commercial and stock savings banks	602	1,566.2	1,561.2	1,574.7	1,557.3		1,133.1	1,128.0	1,135.1	1,117.9	
State banks, Federal Reserve	6022	341.2	341.9	348.6	345.7		-	-	-	-	
State banks, not Federal Reserve	6023,4	374.1	372.4	380.3	375.5		-	-	-	-	
Mutual savings banks	603	83.1	83.4	88.0	86.0		-	-	-	-	
Credit agencies other than banks	61	851.1	855.2	906.3	899.3		640.7	642.4	677.6	672.2	
Savings and loan associations	612	383.1	384.6	407.2	404.8		292.0	292.8	310.9	308.0	
Federal savings and loan associations	6122	212.4	213.2	225.3	223.7		-	-	-	-	
State associations, insured	6123	163.1	163.7	173.6	173.1		-	-	-	-	
Personal credit institutions	614	228.4	229.2	236.2	234.9		176.7	177.2	181.8	180.9	
Business credit institutions	615	52.0	51.6	55.4	55.7		-	-	-	-	
Mortgage bankers and brokers	616	162.4	164.6	182.9	179.4		-	-	-	-	
Security, commodity brokers, and services	62	401.8	407.9	449.8	448.4						
Security brokers and dealers	621	319.6	323.9	358.6	358.1						
Holding and other investment offices	67	197.9	196.5	213.0	212.9						
Insurance		1,968	1,977	2,058	2,048	2,048					
Insurance carriers	63	1,377.3	1,380.7	1,420.7	1,411.3		941.5	943.7	954.9	941.5	
Life insurance	631	580.6	580.3	588.0	586.1		362.7	363.4	360.2	356.9	
Medical service and health insurance	632	189.0	189.8	193.1	189.2		153.0	153.8	155.2	150.1	
Fire, marine, and casualty insurance	633	507.7	510.2	537.5	536.3		348.5	349.2	361.5	358.6	
Title insurance	636	60.1	59.9	59.2	57.0		-	-	-	-	
Insurance agents, brokers, and service	64	591.1	596.1	637.3	636.9						

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Finance, insurance, and real estate—Continued											
Real estate, and combined real estate, insurance, etc		1,229	1,211	1,327	1,304	1,280					
Real estate	65	1,215.9	1,198.5	1,314.7	1,291.3						
Real estate operators and lessors	651	528.3	519.1	544.8	535.1						
Real estate agents and managers	653	494.5	489.0	550.1	541.2						
Subdividers and developers	655	161.8	158.7	182.6	177.9						
Combined real estate, insurance, etc	66	12.9	12.7	12.3	12.2						
Services		23,428	23,464	24,449	24,395	24,522	20,562	20,601	21,414	21,353	21,471
Hotels and other lodging places	70	1,469.1	1,388.6	1,571.2	1,513.5						
Hotels, motels, and tourist courts	701	1,421.0	1,351.3	1,506.7	1,475.2		1,274.5	1,208.5	1,354.0	1,320.6	
Personal services	72	1,100.0	1,109.6	1,133.8	1,144.4						
Laundry, cleaning, and garment services	721	387.1	391.8	408.8	410.4		345.2	348.8	363.7	364.6	
Photographic studios, portrait	722	62.3	67.1	59.4	63.4						
Beauty shops	723	352.2	350.4	348.3	351.4		319.0	317.3	313.9	316.6	
Funeral service and crematories	726	77.6	77.2	79.0	78.9						
Business services	73	4,880.2	4,911.2	5,189.6	5,194.0	5,233.9	4,196.5	4,222.6	4,458.1	4,462.4	
Advertising	731	200.7	201.2	201.0	200.1		149.1	150.0	150.0	149.0	
Advertising agencies	7311	148.2	148.4	148.4	147.8						
Credit reporting and collection	732	100.2	101.2	106.2	104.7						
Mailing, reproduction, and stenographic	733	195.9	201.9	205.8	213.1						
Services to buildings	734	696.5	691.8	698.6	697.0		630.2	626.4	633.9	632.8	
Personnel supply services	736	1,068.5	1,081.3	1,250.9	1,246.6						
Employment agencies	7361	161.7	167.8	187.7	192.4						
Temporary help supply services	7362	853.7	859.5	1,001.4	990.8						
Computer and data processing services	737	596.0	599.8	644.2	646.0		474.2	476.1	505.3	508.8	
Computer programming and software	7372	219.6	220.9	241.1	243.2						
Data processing services	7374	278.7	281.0	302.1	301.4						
Miscellaneous business services	739	2,013.5	2,025.0	2,073.9	2,077.5						
Research development laboratories, nec	7391	192.8	194.1	199.5	199.0						
Management and public relations	7392	551.8	558.5	574.4	570.6						
Detective and protective services	7393	454.6	453.4	449.6	457.6						
Equipment rental and leasing	7394	209.6	209.5	223.0	219.7						
Photofinishing laboratories	7395	82.3	83.2	81.7	84.5						
Auto repair, services, and garages	75	773.0	774.8	805.7	807.2		648.3	649.4	670.6	670.7	
Automotive rentals, without drivers	751	166.2	167.2	177.8	178.8						
Automotive repair shops	753	462.5	463.5	481.6	482.2		386.2	385.9	397.6	398.1	
Miscellaneous repair services	76	319.0	318.6	325.0	323.3		265.2	264.8	270.8	268.7	
Electrical repair shops	762	104.4	105.3	106.0	104.1						
Motion pictures	78	228.9	223.2	240.2	238.1		191.6	187.1	202.7	200.2	
Motion picture production and services	781	110.5	112.8	117.7	121.1		89.0	91.3	95.0	98.5	
Motion picture theaters	783	106.5	98.5	109.5	103.6						
Amusement and recreation services	79	1,015.0	903.1	1,179.0	1,060.0		906.1	795.7	1,040.7	928.8	
Health services	80	6,619.3	6,642.6	6,950.6	6,949.8	6,994.3	5,881.4	5,905.4	6,175.1	6,169.2	
Offices of physicians	801	1,006.5	1,012.9	1,091.4	1,093.9		829.8	838.1	895.8	895.6	
Offices of dentists	802	465.9	467.0	486.1	484.4		410.8	412.2	429.5	427.0	
Nursing and personal care facilities	805	1,267.7	1,267.5	1,309.1	1,303.0		1,145.3	1,144.2	1,184.2	1,178.3	
Skilled nursing care facilities	8051	846.3	847.0	873.2	869.7						
Nursing and personal care, nec	8059	421.4	420.5	435.9	433.3						
Hospitals	806	3,053.9	3,063.2	3,180.0	3,183.2		2,783.5	2,791.8	2,900.8	2,902.7	
General medical and surgical hospitals	8062	2,859.2	2,868.4	2,976.2	2,978.8						
Psychiatric hospitals	8063	65.0	65.0	68.0	68.0						
Specialty hospitals, excluding psychiatric	8069	129.7	129.8	135.8	136.4						
Medical and dental laboratories	807	131.3	132.8	143.4	142.6						
Outpatient care facilities	808	252.9	255.3	271.5	271.9						

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Services—Continued											
Legal services	81	754.8	762.0	805.7	790.9		636.1	642.1	677.9	662.7	
Educational services	82	1,386.9	1,529.2	1,203.8	1,362.1						
Elementary and secondary schools	821	359.3	372.1	312.0	355.6						
Colleges and universities	822	879.8	1,005.6	734.8	855.3						
Correspondence and vocational schools	824	69.4	71.3	69.3	70.0						
Social services	83	1,458.9	1,485.0	1,514.9	1,536.7						
Individual and family services	832	291.2	293.6	320.4	315.2						
Job training and related services	833	250.8	253.9	272.3	259.7						
Residential care	836	319.7	322.6	340.4	339.3						
Museums, botanical and zoological gardens	84	48.0	48.1	53.1	51.8						
Membership organizations	86	1,516.1	1,522.6	1,549.1	1,523.6						
Business associations	861	92.7	92.0	92.9	92.2						
Labor organizations	863	132.8	133.6	126.8	128.3						
Civic and social associations	864	339.5	344.4	379.8	340.0						
Miscellaneous services	89	1,259.5	1,261.4	1,323.8	1,312.7		1,025.9	1,029.5	1,077.6	1,064.0	
Engineering and architectural services	891	682.2	680.1	717.1	710.2		576.2	574.7	606.7	599.1	
Noncommercial research organizations	892	125.2	126.4	131.7	128.0		-	-	-	-	
Accounting, auditing, and bookkeeping	893	426.6	429.2	447.8	447.6		330.4	333.9	344.9	342.7	
Government		16,524	17,066	16,045	16,774	17,445					
Federal Government⁴		2,881	2,876	2,966	2,942	2,934					
Executive, by agency ⁴		2,825.7	2,821.0	2,906.9							
Department of Defense		973.0	971.5	996.7							
Postal Service ⁵		787.7	791.3	801.6							
Other executive agencies		1,065.0	1,058.2	1,108.6							
Legislative		36.4	36.1	38.9							
Judicial		18.7	18.7	19.7							
Federal government, by industry:											
Manufacturing activities		123.2	123.3	126.4	126.6						
Shipbuilding and repairing	3731	73.8	73.9	77.7	77.9						
Transportation and public utilities, except Postal Service		38.7	38.9	39.8	40.4						
Services		406.4	405.3	420.0	417.2						
Hospitals	806	244.6	244.1	255.3	253.0						
State government		3,821	4,001	3,738	3,900	4,096					
Hospitals	806	441.0	442.5	452.7	450.0	-					
Education	82	1,476.4	1,672.6	1,314.7	1,520.6						
General administration, including executive, legislative, and judicial functions		1,335.7	1,324.1	1,379.6	1,352.8						
Local government		9,822	10,189	9,341	9,932	10,415					
Transportation and public utilities		492.2	489.2	499.6	496.3	-					
Hospitals	806	608.2	610.7	627.6	626.8						
Education	82	5,373.9	5,795.9	4,568.7	5,402.4						
General administration, including executive, legislative, and judicial functions		3,015.3	2,973.9	3,271.8	3,060.1						

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 1986 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1986 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	July 1986	Aug. 1986	June 1987	July 1987	Aug. 1987
Total	44,889	45,052	47,323	46,569	46,677
Total private	37,215	37,428	38,626	38,609	38,798
Goods-producing	6,745	6,850	6,918	6,870	6,971
Mining	106	103	98	99	98
Construction	517	520	541	547	548
Manufacturing	6,122	6,227	6,279	6,224	6,325
Durable goods	2,948	2,973	3,000	2,963	3,000
Lumber and wood products	112	114	121	121	121
Furniture and fixtures	150	153	159	157	160
Stone, clay, and glass products	113	114	115	113	115
Primary metal industries	98	99	101	99	102
Fabricated metal products	314	319	325	318	323
Machinery, except electrical	446	441	447	445	446
Electrical and electronic equipment	878	885	868	862	872
Transportation equipment	377	378	391	384	387
Instruments and related products	301	303	301	299	300
Miscellaneous manufacturing	159	167	172	165	174
Nondurable goods	3,174	3,254	3,279	3,261	3,325
Food and kindred products	520	550	512	535	559
Tobacco manufactures	18	19	17	15	17
Textile mill products	339	346	354	349	355
Apparel and other textile products	852	882	892	867	883
Paper and allied products	165	165	168	166	168
Printing and publishing	618	619	644	642	645
Chemicals and allied products	289	289	295	298	300
Petroleum and coal products	26	26	24	24	24
Rubber and misc. plastics products	265	270	283	277	282
Leather and leather products	82	89	90	88	92
Service-producing	38,144	38,202	40,405	39,699	39,706
Transportation and public utilities	1,468	1,448	1,537	1,517	1,521
Wholesale trade	1,667	1,673	1,705	1,707	1,719
Retail trade	9,408	9,476	9,700	9,689	9,731
Finance, insurance, and real estate	3,957	3,974	4,138	4,163	4,165
Services	13,970	14,007	14,628	14,663	14,691
Government	7,674	7,624	8,697	7,960	7,879
Federal	1,039	1,035	1,061	1,064	1,058
State	1,727	1,729	1,833	1,787	1,790
Local	4,908	4,860	5,803	5,109	5,031

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are

introduced, all unadjusted data from April 1986 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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Oct. ^P
Total ...	100,209	100,415	100,567	100,919	101,150	101,329	101,598	101,708	101,818	102,126	102,275	102,396	102,945
Total private ...	83,337	83,515	83,643	83,983	84,215	84,352	84,560	84,677	84,787	85,106	85,229	85,348	85,709
Goods-producing ...	24,611	24,630	24,630	24,708	24,743	24,749	24,759	24,752	24,761	24,850	24,886	24,910	25,018
Mining	735	730	724	718	719	722	729	735	738	744	751	758	762
Oil and gas extraction	416	412	406	405	406	408	416	420	425	430	434	439	441
Construction	4,942	4,946	4,936	5,034	5,038	5,032	5,019	4,999	5,008	5,002	5,006	4,978	5,019
General building contractors	1,289	1,289	1,277	1,311	1,309	1,291	1,272	1,267	1,266	1,261	1,262	1,257	1,270
Manufacturing ..	18,934	18,954	18,970	18,956	18,986	18,995	19,011	19,018	19,015	19,104	19,129	19,174	19,237
Durable goods	11,169	11,174	11,175	11,157	11,179	11,176	11,175	11,175	11,176	11,195	11,248	11,276	11,321
Lumber and wood products	718	723	728	731	733	734	736	738	735	740	736	740	742
Furniture and fixtures	499	499	499	500	501	502	504	509	510	518	518	520	522
Stone, clay, and glass products	581	582	584	586	588	586	586	584	582	582	582	581	583
Primary metal industries	733	733	733	726	733	739	743	742	746	750	754	765	771
Blast furnaces and basic steel products	262	260	259	254	261	266	272	272	275	277	278	283	288
Fabricated metal products	1,421	1,419	1,422	1,422	1,419	1,419	1,423	1,420	1,424	1,424	1,425	1,430	1,438
Machinery, except electrical	2,022	2,015	2,011	2,007	2,018	2,015	2,022	2,025	2,028	2,033	2,044	2,053	2,061
Electrical and electronic equipment	2,120	2,119	2,118	2,111	2,106	2,099	2,092	2,087	2,080	2,088	2,095	2,098	2,114
Transportation equipment	2,013	2,023	2,018	2,014	2,022	2,022	2,011	2,011	2,010	1,995	2,028	2,022	2,021
Motor vehicles and equipment	850	858	853	851	859	854	847	843	842	814	848	840	838
Instruments and related products	702	700	698	697	695	694	694	693	693	695	695	695	694
Miscellaneous manufacturing	360	361	364	363	364	366	364	366	368	370	371	372	375
Nondurable goods	7,765	7,780	7,795	7,799	7,807	7,819	7,836	7,843	7,839	7,909	7,881	7,898	7,916
Food and kindred products	1,621	1,627	1,631	1,628	1,630	1,635	1,642	1,633	1,634	1,644	1,632	1,628	1,633
Tobacco manufactures	58	59	58	58	58	57	56	57	57	57	56	55	53
Textile mill products	709	714	715	718	722	725	724	727	729	736	732	735	736
Apparel and other textile products	1,104	1,101	1,110	1,106	1,101	1,103	1,104	1,107	1,108	1,130	1,110	1,119	1,122
Paper and allied products	677	678	679	678	679	678	677	677	676	678	677	680	677
Printing and publishing	1,469	1,472	1,474	1,479	1,483	1,485	1,493	1,497	1,498	1,504	1,508	1,507	1,511
Chemicals and allied products	1,020	1,020	1,017	1,018	1,018	1,017	1,018	1,022	1,014	1,026	1,031	1,030	1,032
Petroleum and coal products	166	165	163	164	164	164	164	164	164	164	164	167	167
Rubber and misc. plastics products	794	797	800	803	805	807	809	809	810	815	819	825	832
Leather and leather products	147	147	148	147	147	148	149	150	149	155	152	152	153
Service-producing ..	75,598	75,785	75,937	76,211	76,407	76,580	76,839	76,956	77,057	77,276	77,389	77,486	77,927
Transportation and public utilities ..	5,251	5,278	5,286	5,304	5,315	5,333	5,348	5,344	5,350	5,363	5,377	5,406	5,422
Transportation	3,053	3,071	3,078	3,089	3,097	3,112	3,124	3,120	3,128	3,133	3,147	3,174	3,189
Communication and public utilities ..	2,198	2,207	2,208	2,215	2,218	2,221	2,224	2,224	2,222	2,230	2,230	2,232	2,233
Wholesale trade	5,731	5,728	5,725	5,741	5,757	5,766	5,772	5,775	5,781	5,797	5,807	5,813	5,824
Durable goods	3,379	3,380	3,383	3,386	3,391	3,397	3,397	3,401	3,405	3,418	3,422	3,429	3,435
Nondurable goods	2,352	2,348	2,342	2,355	2,366	2,369	2,375	2,374	2,376	2,379	2,385	2,384	2,389
Retail trade	17,980	18,009	18,007	18,080	18,140	18,136	18,197	18,205	18,226	18,274	18,256	18,319	18,388
General merchandise stores	2,385	2,379	2,363	2,358	2,373	2,380	2,385	2,390	2,387	2,407	2,411	2,416	2,435
Food stores	2,901	2,906	2,916	2,929	2,940	2,944	2,953	2,956	2,960	2,959	2,962	2,960	2,968
Automotive dealers and service stations	1,960	1,963	1,970	1,978	1,979	1,979	1,978	1,978	1,983	1,985	1,985	1,987	2,001
Eating and drinking places	5,919	5,927	5,938	5,946	5,956	5,964	5,962	5,976	5,982	5,985	5,992	6,017	6,034
Finance, insurance, and real estate	6,395	6,418	6,451	6,480	6,501	6,526	6,558	6,576	6,586	6,608	6,624	6,626	6,633
Finance	3,204	3,212	3,227	3,235	3,243	3,256	3,272	3,276	3,280	3,291	3,293	3,293	3,301
Insurance	1,980	1,990	1,999	2,012	2,016	2,022	2,032	2,037	2,037	2,043	2,050	2,050	2,052
Real estate ..	1,211	1,216	1,225	1,233	1,242	1,248	1,254	1,263	1,269	1,274	1,281	1,283	1,280
Services	23,369	23,452	23,544	23,670	23,759	23,842	23,926	24,025	24,083	24,124	24,279	24,274	24,424
Business services ..	4,861	4,877	4,912	4,950	4,984	5,020	5,044	5,083	5,086	5,105	5,133	5,148	5,182
Health services ..	6,644	6,661	6,691	6,721	6,748	6,773	6,800	6,822	6,853	6,887	6,923	6,943	6,994
Government ..	16,872	16,900	16,924	16,936	16,935	16,977	17,038	17,031	17,031	17,020	17,046	17,048	17,236
Federal ..	2,897	2,900	2,904	2,912	2,916	2,922	2,933	2,935	2,935	2,936	2,940	2,963	2,955
State ..	3,907	3,915	3,927	3,929	3,927	3,930	3,943	3,947	3,932	3,952	3,964	3,971	4,000
Local ..	10,068	10,085	10,093	10,095	10,092	10,125	10,162	10,149	10,164	10,132	10,142	10,114	10,281

^P = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1986

benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 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	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total	45,801	45,960	46,111	46,229	46,358	46,517	46,654	46,766	46,937	46,999	47,142	47,372	47,461
Total private	37,382	37,436	37,547	37,653	37,767	37,909	38,057	38,133	38,271	38,337	38,445	38,649	38,754
Goods-producing	6,796	6,800	6,813	6,826	6,842	6,838	6,843	6,846	6,863	6,869	6,876	6,923	6,915
Mining	103	101	100	99	98	97	97	96	97	97	98	98	98
Construction	508	511	513	516	519	522	524	526	530	533	534	536	536
Manufacturing	6,185	6,188	6,200	6,211	6,225	6,219	6,222	6,224	6,236	6,239	6,244	6,289	6,281
Durable goods	2,979	2,979	2,981	2,983	2,985	2,979	2,983	2,978	2,980	2,980	2,983	2,990	3,005
Lumber and wood products	112	112	113	113	115	115	117	117	117	118	118	119	118
Furniture and fixtures	155	155	155	155	155	156	156	157	157	159	160	163	162
Stone, clay, and glass products	113	113	112	112	113	114	113	113	114	114	114	113	114
Primary metal industries	99	100	100	100	99	99	100	100	100	99	100	100	102
Fabricated metal products	320	320	320	321	321	320	320	320	322	322	323	323	324
Machinery, except electrical	445	443	443	442	441	440	441	441	444	444	444	446	450
Electrical and electronic equipment	886	885	886	885	884	880	876	870	868	866	864	869	872
Transportation equipment	381	382	384	387	389	388	392	392	391	390	390	385	391
Instruments and related products	303	303	302	301	301	300	300	299	299	299	299	301	300
Miscellaneous manufacturing	165	166	166	167	167	167	168	169	168	169	171	171	172
Nondurable goods	3,206	3,209	3,219	3,228	3,240	3,240	3,239	3,246	3,256	3,259	3,261	3,299	3,276
Food and kindred products	504	505	508	513	514	514	514	517	518	515	515	521	513
Tobacco manufactures	19	20	19	20	19	19	19	19	18	19	18	17	17
Textile mill products	345	344	345	347	349	349	350	352	351	351	352	355	354
Apparel and other textile products	883	882	883	881	889	883	878	878	880	883	883	902	884
Paper and allied products	163	164	164	165	165	165	165	165	165	165	165	165	165
Printing and publishing	621	623	626	628	629	632	634	636	640	641	643	644	647
Chemicals and allied products	287	287	288	288	287	289	290	290	291	292	292	295	298
Petroleum and coal products	26	25	25	25	25	24	24	24	24	24	24	24	24
Rubber and misc. plastics products	271	272	275	275	276	278	278	278	281	280	280	282	283
Leather and leather products	87	87	86	86	87	87	87	87	88	89	89	94	91
Service-producing	39,005	39,160	39,298	39,403	39,516	39,679	39,811	39,920	40,074	40,130	40,266	40,449	40,546
Transportation and public utilities	1,465	1,486	1,487	1,496	1,501	1,507	1,510	1,517	1,520	1,524	1,531	1,531	1,539
Wholesale trade	1,675	1,675	1,673	1,673	1,675	1,682	1,691	1,695	1,695	1,693	1,703	1,712	1,721
Retail trade	9,452	9,456	9,484	9,501	9,504	9,547	9,607	9,603	9,636	9,629	9,642	9,679	9,712
Finance, insurance, and real estate	3,944	3,961	3,978	3,996	4,016	4,036	4,053	4,064	4,087	4,100	4,109	4,126	4,132
Services	14,050	14,058	14,112	14,161	14,229	14,299	14,353	14,408	14,470	14,522	14,584	14,678	14,735
Government	8,419	8,524	8,564	8,576	8,591	8,608	8,597	8,633	8,666	8,662	8,697	8,723	8,707
Federal	1,024	1,033	1,032	1,033	1,035	1,037	1,038	1,041	1,043	1,045	1,044	1,044	1,048
State	1,850	1,852	1,861	1,865	1,869	1,878	1,871	1,883	1,890	1,897	1,896	1,913	1,916
Local	5,545	5,639	5,671	5,678	5,687	5,693	5,688	5,709	5,733	5,720	5,757	5,766	5,743

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all

seasonally adjusted data from January 1983 forward are subject to revision.

**ESTABLISHMENT DATA
EMPLOYMENT
SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Oct. ^P
Total private	67,411	67,570	67,665	67,939	68,149	68,263	68,419	68,488	68,598	68,843	68,951	68,990	69,281
Goods-producing	17,238	17,270	17,283	17,331	17,379	17,380	17,375	17,360	17,377	17,441	17,476	17,499	17,594
Mining	516	514	510	504	508	511	518	525	528	534	539	545	549
Construction	3,873	3,877	3,867	3,943	3,955	3,944	3,918	3,889	3,891	3,887	3,899	3,872	3,907
Manufacturing	12,849	12,879	12,906	12,884	12,916	12,925	12,939	12,946	12,958	13,020	13,038	13,082	13,138
Durable goods	7,369	7,385	7,393	7,370	7,398	7,399	7,406	7,409	7,421	7,425	7,475	7,504	7,546
Lumber and wood products	603	607	611	611	614	615	617	618	615	619	615	617	620
Furniture and fixtures	399	398	398	400	400	402	403	407	408	416	415	416	419
Stone, clay, and glass products	448	449	451	452	454	453	453	452	451	449	450	450	453
Primary metal industries	546	547	547	540	547	553	559	557	561	565	569	579	584
Blast furnaces and basic steel products	197	194	193	188	194	199	205	205	207	209	211	214	219
Fabricated metal products	1,050	1,049	1,052	1,051	1,051	1,051	1,053	1,050	1,054	1,055	1,057	1,062	1,070
Machinery, except electrical	1,195	1,190	1,187	1,183	1,190	1,190	1,198	1,203	1,210	1,212	1,222	1,232	1,240
Electrical and electronic equipment	1,226	1,230	1,234	1,226	1,223	1,218	1,216	1,215	1,212	1,221	1,226	1,230	1,246
Transportation equipment	1,261	1,273	1,267	1,265	1,276	1,273	1,265	1,265	1,265	1,241	1,275	1,269	1,264
Motor vehicles and equipment	652	663	658	659	668	663	657	655	655	629	664	657	652
Instruments and related products	380	379	379	377	377	376	376	375	376	378	377	379	378
Miscellaneous manufacturing	261	263	267	265	266	268	266	267	269	269	269	270	272
Nondurable goods	5,480	5,494	5,513	5,514	5,518	5,526	5,533	5,537	5,537	5,595	5,563	5,578	5,592
Food and kindred products	1,139	1,146	1,149	1,147	1,150	1,154	1,158	1,153	1,150	1,159	1,146	1,142	1,149
Tobacco manufactures	44	45	44	44	44	44	43	44	42	43	42	40	39
Textile mill products	615	619	621	624	627	630	628	631	633	640	636	638	639
Apparel and other textile products	929	927	937	931	925	926	929	927	930	950	930	939	941
Paper and allied products	514	515	517	515	516	515	514	513	513	515	514	517	515
Printing and publishing	827	828	830	833	833	832	832	836	839	841	845	845	845
Chemicals and allied products	568	568	566	568	569	570	569	572	568	576	579	580	580
Petroleum and coal products	105	105	105	106	106	106	106	107	108	107	108	109	109
Rubber and misc. plastics products	618	620	622	623	625	626	629	629	629	633	636	640	647
Leather and leather products	121	121	122	123	123	123	125	125	125	131	127	128	128
Service-producing	50,173	50,300	50,382	50,608	50,770	50,883	51,044	51,128	51,221	51,402	51,475	51,491	51,687
Transportation and public utilities	4,342	4,368	4,380	4,389	4,401	4,419	4,428	4,429	4,439	4,449	4,465	4,485	4,508
Wholesale trade	4,590	4,586	4,583	4,600	4,611	4,617	4,622	4,623	4,632	4,641	4,642	4,645	4,654
Retail trade	16,013	16,035	16,030	16,097	16,141	16,132	16,189	16,193	16,195	16,246	16,242	16,258	16,311
Finance, insurance, and real estate	4,726	4,743	4,767	4,786	4,806	4,823	4,840	4,844	4,851	4,853	4,861	4,856	4,850
Services	20,502	20,568	20,622	20,736	20,811	20,892	20,965	21,039	21,104	21,213	21,265	21,247	21,364

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 1986 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 forward are subject to revision.

**ESTABLISHMENT DATA
INDEXES OF DIFFUSION
SEASONALLY ADJUSTED**

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

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1985.....	55.9	47.0	52.4	47.3	53.2	46.8	53.8	53.8	47.8	53.2	54.3	57.3
	1986.....	53.2	48.1	48.1	53.5	52.4	46.8	52.4	56.2	55.1	53.2	59.7	59.7
	1987.....	53.5	56.8	58.6	58.4	58.6	55.7	68.6	54.6	^P 64.1	^P 62.7		
Over 3-month span	1985.....	51.1	48.4	42.4	46.5	44.3	49.7	47.0	48.6	45.9	47.6	55.1	56.5
	1986.....	49.7	44.9	45.7	48.4	47.6	45.4	48.4	55.1	55.9	58.1	58.6	60.3
	1987.....	58.6	59.5	61.1	61.6	61.4	67.3	66.2	^P 72.4	^P 67.0			
Over 6-month span	1985.....	46.5	46.5	43.2	44.3	44.3	45.1	43.0	44.3	49.2	49.2	47.3	45.9
	1986.....	47.6	47.6	43.0	43.2	45.4	48.4	47.3	53.0	59.2	58.9	57.8	58.9
	1987.....	61.9	62.7	58.9	67.3	67.6	^P 69.7	^P 73.5					
Over 12-month span	1985.....	44.6	44.1	43.8	40.8	41.6	41.6	42.2	42.4	43.8	44.3	44.1	42.4
	1986.....	43.2	44.1	46.2	45.7	47.8	49.5	49.5	51.6	54.9	52.2	55.1	56.5
	1987.....	62.2	63.5	^P 67.6	^P 71.1								

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

^P = preliminary.

NOTE: Figures are the percent of industries with employment

rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans. Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 forward are subject to revision.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a
Alabama	1,461.8	1,490.8	1,493.3	11.7	11.4	11.5	76.8	78.5	76.6
Birmingham	380.3	392.8	394.3	6.0	5.9	5.9	23.9	25.9	25.6
Huntsville	118.0	122.0	122.6	.1	.1	.1	5.0	5.3	5.2
Mobile	157.7	158.6	158.9	.5	.5	.5	10.5	8.9	8.8
Montgomery	121.7	123.7	123.4	.1	.1	.2	9.7	9.7	9.7
Tuscaloosa	57.3	57.8	58.4	2.7	2.4	2.4	2.9	3.5	3.4
Alaska	230.6	224.3	219.8	9.1	8.4	8.3	16.4	14.7	13.6
Arizona	1,351.7	1,342.3	1,369.6	10.8	11.1	11.2	113.9	103.9	102.9
Phoenix	886.3	886.0	902.4	.6	.6	.6	78.1	69.5	68.9
Tucson	241.5	235.8	242.1	1.6	1.6	1.7	22.4	20.8	20.6
Arkansas	831.0	837.1	854.5	4.3	4.1	4.0	38.8	37.6	36.9
Fayetteville-Springdale	45.5	46.8	48.0	(¹)	(¹)	(¹)	1.8	2.1	2.0
Fort Smith	73.3	74.5	75.2	.9	1.0	1.0	3.1	2.9	2.8
Little Rock-North Little Rock	226.5	228.7	230.9	.4	.4	.4	11.7	12.5	12.3
Pine Bluff	34.5	31.4	32.2	(¹)	(¹)	(¹)	4.0	1.5	1.4
California	11,380.9	11,616.9	11,765.8	40.6	40.0	39.6	548.2	585.5	590.3
Anaheim-Santa Ana	1,054.2	1,092.6	1,101.8	2.2	2.0	2.0	56.3	59.7	60.1
Bakersfield	156.2	157.4	159.0	12.5	12.4	12.3	9.8	10.2	10.5
Fresno	201.1	204.1	206.7	.7	.8	.8	12.7	12.7	11.8
Los Angeles-Long Beach	3,928.4	3,995.5	4,039.7	10.6	10.6	10.4	131.4	137.7	139.1
Modesto	102.1	108.0	107.9	.1	.1	.1	6.2	6.9	7.0
Oakland	798.1	815.7	824.4	2.5	2.5	2.5	47.7	50.4	50.7
Oxnard-Ventura	195.9	199.8	202.6	3.0	2.5	2.5	11.1	12.3	12.5
Riverside-San Bernardino	563.8	591.0	604.4	1.2	1.3	1.3	46.0	53.9	54.0
Sacramento	528.7	540.6	551.2	.8	.8	.8	33.3	35.3	35.8
Salinas-Seaside-Monterey	104.0	107.0	107.8	.5	.5	.5	4.2	4.6	4.6
San Diego	832.1	852.0	868.9	.8	.8	.8	54.7	60.0	59.9
San Francisco	925.4	930.3	939.0	1.1	1.1	1.0	34.8	35.1	35.7
San Jose	768.8	778.3	780.8	.2	.2	.2	32.2	32.5	32.9
Santa Barbara-Santa Maria-Lompoc	143.4	144.1	144.7	1.3	1.4	1.4	6.4	6.5	6.5
Santa Rosa-Petaluma	120.1	123.7	125.6	.7	.6	.6	8.7	9.3	9.4
Stockton	140.3	143.8	147.2	.1	.1	.1	8.9	9.5	9.6
Vallejo-Fairfield-Napa	124.1	128.8	130.2	.3	.3	.3	8.2	9.3	9.4
Colorado	1,394.0	1,389.3	1,394.2	25.5	24.2	23.8	78.4	74.0	72.0
Boulder-Longmont	103.7	103.3	105.0	.3	.3	.3	4.3	3.9	3.8
Denver	802.7	800.8	801.4	16.4	15.8	15.6	43.5	41.2	40.5
Connecticut	1,616.4	1,640.5	1,659.0	1.7	1.7	1.7	76.2	77.7	78.0
Bridgeport-Milford	193.2	197.2	199.8	(¹)	(¹)	(¹)	8.3	9.4	9.2
Hartford	465.3	473.9	481.4	.3	.4	.4	19.8	20.5	21.1
New Britain	65.9	65.4	66.6	(¹)	(¹)	(¹)	4.1	4.7	4.7
New Haven-Meriden	246.4	249.4	253.0	.3	.3	.3	12.9	13.5	14.1
Stamford	124.1	126.7	126.4	.6	.6	.6	5.4	5.7	5.6
Waterbury	85.1	86.0	86.7	(¹)	(¹)	(¹)	4.2	4.6	4.7
Delaware	306.6	317.2	317.8	.1	.1	.1	19.9	19.9	19.7
Wilmington	263.5	271.9	273.7	.2	.2	.2	19.0	18.4	18.3
District of Columbia	639.5	660.3	648.1	.1	.1	.1	14.2	14.9	15.1
Washington MSA	1,997.4	2,056.0	2,048.7	1.0	.9	.9	125.0	129.5	127.4
Florida	4,586.5	4,734.5	4,794.9	8.9	9.9	10.0	343.4	343.2	343.7
Daytona Beach	106.1	109.2	110.1	(¹)	(¹)	(¹)	7.9	8.0	8.1
Fort Lauderdale-Hollywood-Pompano Beach	437.7	446.7	451.5	.4	.4	.4	36.9	35.9	35.9
Fort Myers-Cape Coral	99.6	108.2	110.1	(¹)	(¹)	(¹)	12.0	12.9	12.7
Gainesville	90.4	91.1	94.2	(¹)	(¹)	(¹)	4.7	4.4	4.3
Jacksonville	377.4	387.4	392.6	.5	.5	.4	27.6	28.3	28.2
Lakeland-Winter Haven	132.1	137.9	140.1	3.8	4.7	4.8	8.3	9.2	9.2
Melbourne-Titusville-Palm Bay	136.7	140.6	141.4	(¹)	(¹)	(¹)	8.8	8.3	8.2
Miami-Hialeah	793.2	804.2	814.8	.9	.9	.9	40.0	39.7	39.3
Orlando	448.0	473.3	477.5	(¹)	(¹)	(¹)	34.6	34.0	33.9
Pensacola	122.1	122.5	123.8	.3	.3	.2	10.5	10.3	10.4
Sarasota	96.3	99.4	100.3	(¹)	(¹)	(¹)	10.1	9.8	9.8
Tallahassee	103.4	104.9	107.5	(¹)	(¹)	(¹)	5.4	6.0	6.1
Tampa-St. Petersburg-Clearwater	763.3	773.6	782.4	.7	.6	.6	62.4	64.4	64.5
West Palm Beach-Boca Raton-Delray Beach	298.3	313.6	319.6	(¹)	(¹)	(¹)	28.9	31.6	31.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Alabama	357.4	362.0	363.4	71.5	72.3	72.2	324.7	330.4	331.4
Birmingham	51.3	52.4	52.9	27.5	28.6	28.5	96.8	100.6	100.6
Huntsville	30.5	31.1	31.2	2.7	2.7	2.7	22.4	23.5	23.5
Mobile	26.6	26.7	26.3	9.5	9.2	9.2	43.6	44.4	44.6
Montgomery	17.8	17.5	17.6	4.7	4.8	4.7	27.6	28.1	28.1
Tuscaloosa	9.1	9.3	9.2	2.0	2.2	2.2	11.7	12.2	12.2
Alaska	15.1	19.9	15.2	19.5	19.3	19.0	45.6	44.1	43.4
Arizona	187.0	186.7	186.5	67.7	70.6	70.6	324.0	329.4	331.3
Phoenix	133.5	135.6	135.2	45.1	48.0	48.0	220.3	224.9	225.9
Tucson	31.7	30.5	30.5	9.8	9.8	9.8	53.8	54.1	54.5
Arkansas	215.2	222.1	224.3	49.6	51.3	52.3	187.6	194.5	195.3
Fayetteville-Springdale	10.0	11.3	11.5	3.9	4.3	4.3	10.8	11.0	11.2
Fort Smith	24.9	26.6	26.8	3.7	3.9	3.8	15.0	15.0	15.0
Little Rock-North Little Rock	32.3	32.3	32.4	14.8	15.0	15.1	55.1	56.1	56.2
Pine Bluff	6.2	6.5	6.6	2.8	2.8	2.8	6.7	6.3	6.3
California	2,090.2	2,114.3	2,116.1	589.1	590.4	595.1	2,742.2	2,832.3	2,857.0
Anaheim-Santa Ana	244.4	247.0	247.8	34.6	35.2	35.2	263.4	280.8	283.4
Bakersfield	10.5	10.3	10.5	8.3	8.5	8.4	40.8	40.7	40.5
Fresno	22.8	22.2	22.7	10.9	10.6	10.6	51.1	53.7	54.0
Los Angeles-Long Beach	887.9	899.2	901.6	206.8	204.4	207.8	932.6	956.5	963.5
Modesto	25.0	27.9	27.0	4.5	4.3	4.4	25.2	26.3	26.4
Oakland	102.0	105.9	104.8	56.8	56.1	56.0	200.7	207.0	207.8
Oxnard-Ventura	29.7	30.4	30.8	9.6	10.2	10.3	49.5	50.7	50.7
Riverside-San Bernardino	75.5	79.5	79.8	31.3	31.8	31.9	140.1	148.9	150.7
Sacramento	40.6	40.6	40.6	24.6	25.3	25.1	129.9	134.5	137.6
Salinas-Seaside-Monterey	10.2	10.4	10.4	4.9	5.1	5.1	27.8	28.4	28.2
San Diego	121.7	118.0	120.5	32.2	33.1	33.3	200.9	207.6	209.6
San Francisco	77.2	76.8	77.6	80.7	79.2	79.1	216.7	220.5	221.6
San Jose	266.7	266.9	265.7	21.2	21.3	21.5	150.3	154.7	155.0
Santa Barbara-Santa Maria-Lompoc	24.0	22.3	21.9	5.4	5.2	5.2	34.3	35.4	35.5
Santa Rosa-Petaluma	18.5	18.6	18.9	5.7	5.9	6.1	31.2	32.6	32.6
Stockton	25.0	28.2	27.1	9.2	9.2	9.3	32.7	32.7	33.6
Vallejo-Fairfield-Napa	13.5	13.9	14.0	4.5	4.5	4.5	29.8	31.7	31.6
Colorado	185.9	184.6	183.8	86.7	89.4	89.7	346.8	350.0	348.0
Boulder-Longmont	28.2	28.3	28.3	2.3	2.2	2.2	23.0	23.1	23.1
Denver	96.4	94.6	94.0	61.6	65.0	65.2	204.2	204.5	203.8
Connecticut	394.4	382.6	391.1	70.6	71.0	73.4	362.6	375.2	378.5
Bridgeport-Milford	60.1	59.4	60.7	7.6	7.2	7.7	45.0	46.1	46.2
Hartford	93.1	92.2	94.8	17.3	17.3	18.0	98.0	100.5	101.6
New Britain	22.2	19.8	20.3	3.3	3.2	3.2	13.4	13.6	13.9
New Haven-Meriden	47.3	45.3	46.7	18.1	18.0	18.3	57.6	59.2	59.7
Stamford	25.5	23.6	23.7	4.9	5.1	5.1	29.3	30.4	30.2
Waterbury	25.2	23.2	23.2	3.2	3.0	3.1	17.0	17.4	17.8
Delaware	68.5	69.5	69.4	12.6	12.6	12.8	69.4	72.6	71.8
Wilmington	58.0	58.7	58.9	13.5	13.8	14.0	56.1	58.7	58.0
District of Columbia	15.8	15.8	15.7	24.4	25.0	24.9	63.1	63.6	64.8
Washington MSA	85.3	85.3	85.6	95.1	100.5	100.3	401.4	414.8	416.0
Florida	514.6	522.7	525.0	245.3	250.2	251.1	1,235.8	1,301.4	1,307.4
Daytona Beach	12.0	13.0	13.0	3.3	3.4	3.4	31.0	32.4	32.3
Fort Lauderdale-Hollywood-Pompano Beach	42.9	44.6	44.9	21.1	22.4	22.4	128.6	133.3	133.4
Fort Myers-Cape Coral	5.2	5.7	5.7	4.7	5.1	5.1	28.5	32.2	32.5
Gainesville	5.5	5.8	5.8	1.7	1.7	1.7	20.3	20.7	21.3
Jacksonville	37.2	38.3	38.5	27.0	27.9	27.7	101.3	105.6	105.8
Lakeland-Winter Haven	20.8	20.7	21.0	5.8	6.1	6.0	36.8	38.3	38.4
Melbourne-Titusville-Palm Bay	26.9	27.3	27.4	5.6	5.3	5.3	31.2	32.9	32.8
Miami-Hialeah	91.8	92.4	92.5	67.5	66.7	66.5	210.2	218.1	219.5
Orlando	51.4	53.0	53.0	23.4	25.4	25.4	115.7	122.6	123.1
Pensacola	11.2	11.4	11.5	6.2	6.4	6.3	31.9	32.4	32.3
Sarasota	8.1	8.7	8.7	3.5	3.5	3.6	28.0	26.4	28.5
Tallahassee	4.5	4.8	4.9	2.8	2.9	2.9	22.1	22.4	22.5
Tampa-St. Petersburg-Clearwater	90.5	88.4	88.7	37.0	37.2	37.0	208.7	211.7	212.5
West Palm Beach-Boca Raton-Delray Beach	36.1	35.9	36.3	11.1	11.3	11.4	76.0	82.3	83.7

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a
Alabama	69.7	71.1	70.7	261.3	270.6	272.2	288.7	294.5	295.3
Birmingham	28.6	29.3	29.1	87.6	92.6	92.5	58.6	57.5	59.2
Huntsville	3.5	3.5	3.5	25.5	27.1	27.1	28.3	28.7	29.3
Mobile	7.7	7.4	7.3	33.5	34.6	34.5	25.8	26.9	27.7
Montgomery	7.3	7.3	7.3	24.2	24.3	24.4	30.3	31.9	31.4
Tuscaloosa	2.0	2.1	2.1	7.8	8.1	8.2	19.1	18.0	18.7
Alaska	12.6	11.7	11.7	44.8	43.4	42.3	67.5	62.8	66.3
Arizona	90.2	91.5	91.4	328.4	337.1	338.6	229.7	212.0	237.1
Phoenix	71.2	72.0	72.0	219.8	227.0	228.4	117.7	108.4	123.4
Tucson	12.4	12.8	12.8	61.3	62.1	62.6	48.5	44.1	49.6
Arkansas	37.8	38.6	38.5	149.2	155.1	155.1	148.5	133.8	148.1
Fayetteville-Springdale	1.5	1.4	1.4	6.3	6.9	7.0	11.2	9.8	10.6
Fort Smith	2.7	2.7	2.7	15.0	15.9	15.5	7.3	6.5	7.6
Little Rock-North Little Rock	15.4	15.6	15.7	51.1	52.7	52.8	45.7	44.1	46.0
Pine Bluff	1.6	1.7	1.7	5.8	5.9	5.9	7.4	6.7	7.5
California	775.6	795.1	795.7	2,790.4	2,895.6	2,916.1	1,804.6	1,763.7	1,855.9
Anaheim-Santa Ana	84.6	85.3	84.6	258.7	277.2	276.2	110.0	105.4	112.5
Bakersfield	6.4	6.4	6.3	30.4	31.7	31.7	37.5	37.2	38.8
Fresno	14.0	13.9	13.8	46.9	49.1	49.3	42.0	41.1	43.7
Los Angeles-Long Beach	276.5	285.0	285.2	1,009.8	1,040.7	1,050.6	472.8	461.4	481.5
Modesto	4.6	4.8	4.8	20.7	22.0	22.2	15.8	15.7	16.0
Oakland	52.7	55.6	55.7	180.2	183.6	186.5	155.5	154.6	160.4
Oxnard-Ventura	10.3	10.6	10.6	43.3	45.5	46.0	39.4	37.6	39.2
Riverside-San Bernardino	24.2	25.4	25.5	130.4	136.7	139.1	115.1	113.5	122.1
Sacramento	31.4	32.5	32.6	109.3	114.6	116.0	158.8	157.0	162.7
Salinas-Seaside-Monterey	5.0	5.3	5.3	25.7	26.7	26.6	25.7	26.0	27.1
San Diego	57.2	59.2	59.3	215.5	227.8	229.0	149.1	145.5	156.5
San Francisco	114.1	112.5	112.4	268.8	274.6	277.0	132.0	130.5	134.6
San Jose	33.3	33.1	33.1	183.7	189.4	189.0	81.2	80.2	83.4
Santa Barbara-Santa Maria-Lompoc	8.0	8.3	8.3	38.8	39.5	39.8	25.2	25.5	26.1
Santa Rosa-Petaluma	8.1	8.3	8.3	26.6	27.7	27.9	20.6	20.7	21.8
Stockton	8.1	8.3	8.3	28.7	28.3	29.1	27.6	27.5	30.1
Vallejo-Fairfield-Napa	4.8	4.9	4.8	27.1	28.4	28.8	35.9	35.8	36.8
Colorado	96.8	98.0	97.1	321.8	329.9	324.1	252.1	239.2	255.7
Boulder-Longmont	3.9	4.0	4.0	21.2	22.3	22.1	20.5	19.2	21.2
Denver	65.7	65.5	65.0	194.1	198.8	193.8	120.8	115.4	123.5
Connecticut	141.4	148.6	148.2	375.4	392.5	391.0	194.1	191.2	197.1
Bridgeport-Milford	10.6	11.7	11.6	44.1	47.1	46.6	17.5	16.3	17.8
Hartford	75.8	79.7	79.6	103.1	107.7	107.6	57.9	55.6	58.3
New Britain	3.8	4.4	4.3	12.9	13.8	13.8	6.2	5.9	6.4
New Haven-Meriden	14.6	15.2	15.1	65.7	68.1	68.3	29.9	29.8	30.5
Stamford	11.4	12.2	12.1	36.8	39.6	39.0	10.2	9.5	10.1
Waterbury	4.1	4.2	4.2	19.4	22.0	21.8	12.0	11.6	11.9
Delaware	23.5	25.5	25.3	68.5	72.4	72.1	44.2	44.7	46.6
Wilmington	21.5	23.5	23.2	60.4	64.1	64.2	34.8	34.5	36.9
District of Columbia	36.4	36.7	36.7	224.2	227.5	231.1	261.4	276.7	259.7
Washington MSA	116.5	122.3	121.1	624.5	642.7	643.1	548.7	560.1	554.3
Florida	342.4	357.2	356.9	1,203.8	1,272.2	1,273.2	692.3	677.7	727.6
Daytona Beach	6.6	6.4	6.4	28.5	29.2	29.0	16.8	16.8	17.9
Fort Lauderdale-Hollywood-Pompano Beach	37.1	38.1	38.2	116.1	120.1	119.7	54.6	51.9	56.6
Fort Myers-Cape Coral	7.9	8.7	8.7	26.6	29.2	29.5	14.6	14.3	15.8
Gainesville	4.0	4.1	4.0	20.3	21.2	21.5	33.8	33.1	35.5
Jacksonville	36.0	37.4	37.5	91.3	95.5	95.9	56.5	53.9	58.6
Lakeland-Winter Haven	7.9	8.1	8.0	30.2	33.7	33.7	18.5	17.1	19.0
Melbourne-Titusville-Palm Bay	5.1	5.3	5.3	39.2	41.3	41.6	19.8	20.1	20.7
Miami-Hialeah	68.2	70.2	69.8	212.6	214.5	216.2	102.0	101.7	110.1
Olando	30.8	33.0	33.0	140.8	156.6	153.7	51.2	48.6	55.3
Pensacola	5.6	5.7	5.6	28.9	30.0	30.0	27.5	26.0	27.5
Sarasota	8.1	8.1	8.0	26.5	29.6	29.4	11.9	11.2	12.3
Tallahassee	4.5	4.6	4.6	20.5	21.4	21.4	43.3	42.5	44.9
Tampa-St. Petersburg-Clearwater	61.9	64.0	64.1	204.4	214.3	213.7	97.7	93.0	101.3
West Palm Beach-Boca Raton-Delray Beach	25.4	27.6	27.3	84.0	89.7	90.1	36.8	35.2	39.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Georgia	2,712.0	2,753.4	2,762.1	8.7	8.9	8.9	162.4	159.5	157.3
Albany	48.3	48.3	49.0	(¹)	(¹)	(¹)	2.2	2.3	2.3
Athens	59.4	62.8	61.7	.1	.2	.2	2.6	2.8	2.8
Atlanta	1,356.3	1,386.4	1,387.7	1.6	1.7	1.7	82.3	80.5	78.5
Augusta	151.9	151.8	152.1	.5	.5	.5	9.0	9.0	8.7
Columbus	90.5	90.5	97.3	.1	.1	.1	5.4	5.4	5.2
Macon-Warner Robins	116.6	117.5	117.8	.1	.1	.1	5.1	5.3	5.1
Savannah	100.8	100.3	101.4	(¹)	(¹)	(¹)	7.8	7.1	7.3
Hawaii	433.2	451.3	446.3	(¹)	(¹)	(¹)	20.6	21.6	21.4
Honolulu	346.7	361.4	356.5	(¹)	(¹)	(¹)	16.9	17.6	17.4
Idaho	344.0	337.6	345.9	2.8	2.8	2.7	16.9	17.1	16.9
Boise City	88.9	89.2	89.2	(²)	(²)	(²)	5.3	5.4	5.4
Illinois	4,830.7	4,881.0	4,867.3	25.2	24.9	24.8	198.2	194.9	195.8
Aurora-Elgin	132.1	135.3	136.4	(¹)	(¹)	(¹)	5.6	6.2	6.1
Bloomington-Normal	54.2	53.2	55.7	(¹)	(¹)	(¹)	1.5	1.5	1.5
Champaign-Urbana-Rantoul	81.2	76.8	81.5	(¹)	(¹)	(¹)	2.3	2.3	2.2
Chicago	2,971.4	3,009.0	2,989.7	3.3	3.4	3.4	122.4	127.6	128.7
Davenport-Rock Island-Moline	150.9	154.0	153.6	(¹)	(¹)	(¹)	4.9	4.9	5.0
Decatur	50.2	49.4	49.7	(¹)	(¹)	(¹)	1.7	1.7	1.7
Joliet	94.6	93.3	94.6	(¹)	(¹)	(²)	4.5	4.6	4.6
Kankakee	33.3	32.9	32.8	(¹)	(¹)	(¹)	1.2	1.2	1.2
Lake County	178.0	182.0	184.5	(¹)	(¹)	(¹)	7.6	7.0	7.1
Peoria	131.5	132.3	132.4	(¹)	(¹)	(¹)	5.7	5.8	5.9
Rockford	125.7	123.7	124.0	(¹)	(¹)	(¹)	4.0	4.0	4.1
Springfield	94.9	98.6	93.4	(¹)	(¹)	(¹)	2.8	2.7	2.8
Indiana	2,266.3	2,315.1	2,344.8	9.1	8.6	8.6	108.0	124.8	123.4
Anderson	49.6	47.6	48.5	(²)	(²)	(²)	1.4	1.6	1.5
Bloomington	51.1	49.3	53.7	(²)	(²)	(²)	2.0	2.5	2.3
Elkhart-Goshen	93.0	97.4	98.1	(²)	(²)	(²)	2.6	3.1	3.0
Evansville	124.9	125.4	125.8	2.4	2.2	2.3	8.8	9.0	8.8
Fort Wayne	178.0	184.7	186.2	(²)	(²)	(²)	9.2	10.1	9.9
Gary-Hammond	207.9	216.2	219.1	(²)	(²)	(²)	11.9	12.6	12.5
Indianapolis	585.2	606.7	609.7	.8	.8	.8	30.9	34.9	34.5
Kokomo	44.6	45.1	45.9	(²)	(²)	(²)	1.3	1.4	1.3
Lafayette	63.2	58.8	64.9	(²)	(²)	(²)	2.3	3.0	3.0
Muncie	49.2	47.1	49.8	(²)	(²)	(²)	2.0	2.2	2.3
South Bend-Mishawaka	108.3	108.4	111.8	(²)	(²)	(²)	5.0	5.8	5.7
Terre Haute	52.9	50.6	52.2	.5	.4	.4	1.8	2.0	2.0
Iowa	1,088.8	1,097.2	1,114.0	2.1	2.1	2.1	43.0	44.2	43.7
Cedar Rapids	82.9	81.2	82.9	.2	.2	.2	3.4	3.7	3.6
Des Moines	199.4	205.7	206.2	(¹)	(¹)	(¹)	8.4	7.9	8.1
Dubuque	38.6	41.6	42.7	(¹)	(¹)	(¹)	1.4	1.3	1.3
Iowa City	48.8	48.4	49.7	(¹)	(¹)	(¹)	1.5	1.9	1.9
Sioux City	49.2	49.5	49.8	(¹)	(¹)	(¹)	1.9	2.0	2.0
Waterloo-Cedar Falls	57.3	59.5	63.3	(¹)	(¹)	(¹)	2.1	2.0	1.9
Kansas	989.5	988.6	1,007.0	11.1	12.3	12.4	47.4	46.7	45.4
Lawrence	31.5	30.3	32.2	(¹)	(¹)	(¹)	1.1	1.4	1.4
Topeka	84.4	84.9	85.4	(¹)	(¹)	(¹)	4.2	3.9	3.9
Wichita	206.6	214.2	216.4	2.2	2.6	2.6	10.7	12.6	12.3
Kentucky	1,295.6	1,297.8	1,313.3	40.4	39.7	39.7	61.6	66.4	66.0
Lexington-Fayette	170.2	169.7	171.3	.9	1.1	1.1	11.6	13.4	13.3
Louisville	427.7	435.2	437.5	.7	.7	.7	22.6	24.9	25.0
Owensboro	33.2	33.0	33.6	1.0	1.1	1.1	2.0	2.2	2.2
Louisiana	1,508.7	1,483.5	1,497.4	58.9	60.8	60.6	90.5	85.3	85.3
Alexandria	45.6	45.5	46.0	.2	.2	.2	2.7	2.7	2.6
Baton Rouge	214.0	211.9	215.1	1.0	1.0	1.0	19.6	20.1	20.3
Houma-Thibodaux	53.4	52.5	53.0	5.8	6.2	6.3	1.7	1.4	1.4
Lafayette	84.8	82.8	82.6	11.3	11.1	11.1	3.7	3.4	3.4
Lake Charles	57.0	58.6	58.6	1.3	1.3	1.3	5.4	4.8	4.7
Monroe	55.6	54.6	54.2	.4	.5	.5	3.1	2.8	2.6
New Orleans	516.2	511.4	511.9	16.2	17.0	17.0	25.1	24.2	24.1
Shreveport	135.3	129.3	132.8	3.5	3.3	3.4	7.9	8.4	8.1
Maine	493.0	508.5	509.9	.1	.2	.1	30.4	32.9	31.4
Lewiston-Auburn	38.5	39.0	38.6	(¹)	(¹)	(¹)	1.9	2.2	2.1
Portland	119.4	121.8	123.2	(¹)	(¹)	(¹)	7.8	8.4	8.4

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Georgia	569.7	570.4	571.5	168.4	171.1	172.5	680.3	696.4	697.0
Albany	8.7	8.5	8.5	2.2	2.2	2.2	12.4	12.5	12.4
Athens	15.3	15.8	15.8	1.7	1.7	1.7	12.5	12.8	12.9
Atlanta	193.9	191.1	191.4	110.0	112.6	112.9	374.6	387.1	387.3
Augusta	36.0	36.5	36.6	5.1	5.1	5.1	32.8	33.2	33.0
Columbus	20.1	19.8	27.4	3.5	3.4	3.4	20.1	20.4	20.5
Macon-Warner Robins	18.9	19.8	19.8	5.0	5.1	5.1	25.6	25.2	25.2
Savannah	16.9	17.0	17.4	10.0	9.5	9.7	23.7	23.8	23.7
Hawaii	21.6	22.5	22.1	34.2	34.4	34.6	116.7	120.0	119.8
Honolulu	15.9	16.6	16.4	27.9	28.1	28.3	91.8	94.7	94.7
Idaho	54.0	52.7	55.4	18.9	18.7	18.9	85.7	85.0	85.7
Boise City	10.2	10.8	10.8	5.6	5.9	6.0	22.6	22.8	22.5
Illinois	925.0	932.6	933.6	277.9	284.0	285.8	1,198.8	1,236.5	1,238.9
Aurora-Elgin	35.9	36.8	36.3	4.8	5.3	5.3	36.0	37.0	37.3
Bloomington-Normal	4.7	5.1	5.1	2.9	2.9	2.9	12.4	12.5	13.2
Champaign-Urbana-Rantoul	7.5	7.6	7.7	2.1	1.9	1.9	19.3	19.2	19.3
Chicago	547.1	540.3	542.4	189.3	193.4	194.5	734.3	745.9	746.3
Davenport-Rock Island-Moline	29.6	33.0	32.9	8.1	8.4	8.3	42.2	42.3	42.2
Decatur	13.8	13.4	13.4	4.5	4.6	4.5	11.5	11.1	11.4
Joliet	19.8	19.5	19.5	8.6	8.4	8.4	22.4	22.5	22.5
Kankakee	5.3	5.2	5.3	1.5	1.5	1.5	8.2	8.1	8.1
Lake County	39.5	40.2	40.4	6.2	6.3	6.6	45.3	46.6	46.5
Peoria	30.7	31.3	31.3	6.6	6.6	6.6	32.7	33.4	33.4
Rockford	45.8	44.5	44.5	4.5	4.5	4.5	28.5	28.6	28.5
Springfield	3.9	3.9	3.9	4.7	4.8	4.8	19.4	21.4	19.4
Indiana	607.1	611.7	616.0	112.9	118.4	118.3	536.4	561.4	559.4
Anderson	19.2	17.1	17.4	1.4	1.4	1.4	10.8	11.2	11.2
Bloomington	8.2	8.7	8.9	1.7	1.7	1.7	12.0	12.3	12.8
Elkhart-Goshen	49.4	52.3	52.3	2.8	2.9	2.8	18.0	18.9	18.7
Evansville	31.5	30.0	30.0	6.5	6.5	6.5	31.0	31.8	31.9
Fort Wayne	49.2	50.1	50.4	11.5	12.0	12.1	42.9	45.9	45.8
Gary-Hammond	49.7	55.6	55.2	13.4	14.0	14.0	50.5	52.3	52.1
Indianapolis	107.9	106.5	106.7	35.0	37.2	37.1	149.2	155.5	155.2
Kokomo	19.6	19.1	19.4	1.3	1.4	1.4	9.3	10.2	10.1
Lafayette	11.3	11.3	11.4	1.6	1.6	1.6	12.7	12.6	13.0
Muncie	10.9	10.3	10.3	2.2	2.2	2.3	12.1	12.1	12.3
South Bend-Mishawaka	24.1	23.6	23.9	4.8	5.0	5.0	28.1	29.0	29.2
Terre Haute	10.8	10.1	10.1	2.6	2.6	2.6	14.2	14.3	14.3
Iowa	199.0	213.5	215.8	52.2	53.6	53.5	283.1	280.9	281.1
Cedar Rapids	22.3	22.3	22.7	4.1	4.2	4.2	20.5	20.5	20.5
Des Moines	21.7	22.7	23.1	11.8	12.2	12.2	52.6	53.4	53.0
Dubuque	8.7	12.4	12.3	1.7	1.6	1.6	9.5	10.1	10.1
Iowa City	3.9	3.9	3.9	1.1	1.3	1.3	9.4	9.0	9.4
Sioux City	10.2	8.4	8.4	3.3	3.8	3.9	12.3	12.6	12.6
Waterloo-Cedar Falls	9.3	13.2	14.4	1.8	1.8	1.8	14.6	14.5	14.7
Kansas	175.5	180.0	179.7	62.0	63.1	63.0	250.1	251.9	253.7
Lawrence	4.5	4.5	4.5	1.3	1.3	1.3	7.0	6.8	7.2
Topeka	9.0	9.1	9.0	6.8	6.6	6.5	18.9	19.4	19.5
Wichita	55.3	59.4	59.4	9.7	9.9	9.9	49.8	50.3	50.5
Kentucky	252.9	259.1	260.5	68.3	70.5	70.4	306.9	303.3	302.9
Lexington-Fayette	27.6	27.7	28.0	7.7	7.1	7.2	40.2	39.5	39.7
Louisville	86.9	85.4	86.2	26.1	27.0	27.0	104.9	104.4	104.9
Owensboro	5.8	6.3	6.3	2.3	2.4	2.4	8.4	7.8	7.8
Louisiana	166.3	167.8	169.9	105.9	106.7	107.5	366.0	358.9	360.3
Alexandria	3.4	3.4	3.4	2.3	2.4	2.4	10.7	10.9	10.9
Baton Rouge	18.9	19.1	19.0	10.2	10.6	10.6	52.2	53.1	53.3
Houma-Thibodaux	5.2	4.3	4.4	5.7	5.9	6.1	13.4	13.8	13.7
Lafayette	5.7	5.8	5.8	6.6	6.4	6.4	23.0	21.8	21.9
Lake Charles	8.6	11.0	11.1	3.9	3.7	3.7	13.9	13.8	13.9
Monroe	7.5	7.1	7.2	2.9	2.7	2.6	15.0	14.8	14.8
New Orleans	43.4	42.1	42.8	42.8	42.3	42.2	136.0	133.0	134.3
Shreveport	19.1	18.2	18.6	8.6	7.9	8.1	31.4	30.2	29.9
Maine	104.9	104.6	104.2	20.2	19.9	20.0	120.3	131.1	129.0
Lewiston-Auburn	10.2	10.0	9.8	1.4	1.3	1.4	9.0	9.4	9.3
Portland	16.5	15.4	15.7	6.2	6.4	6.4	35.2	36.8	36.7

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a
Georgia	148.7	151.7	151.0	519.5	537.4	539.7	454.4	457.9	464.3
Albany	2.4	2.5	2.5	7.9	8.4	8.4	12.6	11.9	12.7
Athens	2.0	2.1	2.1	9.1	9.5	9.3	16.1	17.9	16.8
Atlanta	96.4	98.5	98.4	314.6	328.2	328.1	183.0	186.6	189.3
Augusta	5.9	6.0	6.0	29.8	28.8	28.8	32.9	32.8	33.3
Columbus	6.3	6.3	6.2	15.4	15.5	15.4	19.6	19.7	19.1
Macon-Warner Robins	7.4	7.7	7.7	20.8	20.8	20.7	33.7	33.4	34.0
Savannah	4.5	4.4	4.3	22.8	22.9	22.7	15.2	15.6	16.2
Hawaii	33.0	33.9	33.7	119.2	125.0	125.4	87.9	93.9	89.3
Honolulu	27.9	28.8	28.6	92.8	97.2	96.7	73.5	78.4	74.4
Idaho	24.1	24.5	24.5	69.3	69.6	69.5	72.3	67.2	72.3
Boise City	8.8	8.7	8.7	19.8	19.5	19.2	16.6	16.1	16.6
Illinois	349.0	358.8	355.3	1,139.9	1,165.1	1,150.7	716.7	684.2	682.4
Aurora-Elgin	6.8	6.8	6.8	28.7	30.1	30.0	14.2	13.0	14.5
Bloomington-Normal	9.1	9.4	9.4	11.4	11.4	11.2	12.2	10.4	12.4
Champaign-Urbana-Rantoul	3.3	3.2	3.3	14.9	15.0	14.7	31.8	27.6	32.4
Chicago	252.7	261.4	259.8	765.1	794.0	788.3	357.2	343.0	326.3
Davenport-Rock Island-Moline	8.0	8.1	8.1	31.0	30.2	29.7	27.1	27.1	27.4
Decatur	2.7	2.7	2.7	10.7	10.6	10.3	5.3	5.3	5.7
Joliet	3.9	3.9	3.9	19.4	19.5	19.1	15.8	14.7	16.4
Kankakee	1.5	1.6	1.6	8.4	8.6	8.2	7.2	6.7	6.9
Lake County	6.4	6.5	6.4	42.8	46.0	46.3	29.5	28.7	30.5
Peoria	7.0	7.1	7.1	32.8	33.1	32.3	16.0	15.0	15.8
Rockford	5.4	5.6	5.6	25.3	24.6	24.4	12.2	11.9	12.4
Springfield	7.8	7.9	7.8	24.5	25.3	22.7	31.7	32.5	31.9
Indiana	111.7	117.9	116.1	434.7	449.7	453.3	347.4	322.6	349.8
Anderson	1.6	1.6	1.6	9.4	9.3	9.6	5.8	5.4	5.8
Bloomington	1.6	1.9	1.8	7.5	8.0	8.1	18.0	14.2	18.0
Elkhart-Goshen	2.4	2.4	2.4	12.5	12.9	13.2	5.3	4.9	5.6
Evansville	4.9	5.2	5.1	28.3	29.7	29.8	11.5	10.9	11.3
Fort Wayne	11.7	12.1	12.0	36.0	37.4	38.0	17.5	17.1	18.1
Gary-Hammond	8.1	8.3	8.2	44.4	45.6	46.1	29.9	27.8	31.0
Indianapolis	43.6	46.0	45.4	129.8	138.8	139.2	88.0	87.0	90.8
Kokomo	1.4	1.4	1.4	6.2	6.7	6.7	5.5	5.0	5.6
Lafayette	3.0	3.1	3.0	11.1	11.2	11.4	21.2	16.0	21.4
Muncie	1.6	1.6	1.6	10.0	10.5	10.5	10.4	8.1	10.5
South Bend-Mishawaka	5.6	5.9	5.8	29.7	29.1	30.9	11.0	10.1	11.4
Terre Haute	1.8	1.9	1.9	10.8	10.6	11.2	10.4	8.7	9.8
Iowa	62.9	65.3	64.7	242.6	241.2	246.1	203.9	196.4	207.0
Cedar Rapids	4.7	4.5	4.5	18.0	17.9	18.2	9.7	7.9	9.0
Des Moines	25.7	27.6	27.3	50.9	53.2	53.6	28.2	28.6	28.8
Dubuque	1.4	1.5	1.5	12.5	11.7	12.5	3.4	3.0	3.4
Iowa City	1.5	1.8	1.7	7.7	7.6	7.6	23.6	22.7	23.8
Sioux City	2.6	2.6	2.6	12.7	13.7	14.0	6.2	6.4	6.3
Waterloo-Cedar Falls	3.2	3.3	3.3	14.4	14.1	14.9	11.8	10.6	12.3
Kansas	54.2	56.2	55.6	194.8	199.9	200.5	194.4	178.5	196.7
Lawrence	1.1	1.1	1.1	5.4	5.4	5.5	11.1	9.8	11.2
Topeka	5.9	6.4	6.4	18.9	19.7	19.8	20.6	19.7	20.2
Wichita	10.8	11.3	11.1	43.2	44.7	44.9	24.9	23.4	25.7
Kentucky	60.6	63.0	62.2	265.4	269.0	271.9	239.5	226.8	239.7
Lexington-Fayette	9.0	9.1	9.1	39.3	37.3	37.7	33.9	34.5	35.2
Louisville	27.9	29.4	29.1	99.2	104.3	103.9	59.3	59.1	60.7
Owensboro	1.4	1.4	1.4	7.3	7.4	7.5	5.0	4.4	4.9
Louisiana	85.7	84.3	84.1	316.9	315.3	318.4	318.5	304.4	311.3
Alexandria	2.7	2.7	2.7	11.1	11.0	11.2	12.5	12.2	12.6
Baton Rouge	13.7	13.5	13.4	41.5	42.3	42.3	56.9	52.2	55.2
Houma-Thibodaux	2.5	2.4	2.4	8.2	8.6	8.5	10.9	9.9	10.2
Lafayette	4.1	3.9	3.9	18.1	18.0	18.3	12.3	12.4	11.8
Lake Charles	2.7	2.8	2.8	10.6	10.7	10.6	10.6	10.5	10.5
Monroe	4.5	4.5	4.6	11.1	11.4	11.4	11.1	10.8	10.5
New Orleans	33.9	33.4	33.4	133.5	131.2	134.3	85.3	88.2	83.8
Shreveport	7.8	7.6	7.9	31.9	31.6	31.8	25.1	22.1	25.0
Maine	23.1	24.5	24.2	105.2	116.6	111.0	88.8	78.7	90.0
Lewiston-Auburn	2.1	2.2	2.2	10.0	10.4	9.9	3.9	3.5	3.9
Portland	11.2	12.2	12.2	28.3	29.6	29.9	14.2	13.0	13.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Maryland	1,968.4	1,991.3	1,992.9	1.7	1.7	1.8	145.9	147.6	145.7
Baltimore MSA	1,057.7	1,069.4	1,070.5	.2	.2	.3	69.2	71.7	71.0
Baltimore City	454.5	462.0	461.3	(¹)	(¹)	(¹)	18.8	18.9	18.8
Suburban Maryland-D.C.	694.8	710.5	713.2	.4	.4	.4	61.6	63.7	62.7
Massachusetts	2,994.7	3,049.0	3,055.6	1.9	2.2	2.2	129.6	139.3	136.0
Boston	1,679.7	1,705.4	1,723.3	.8	1.0	1.0	67.5	73.5	71.7
Brockton	71.0	72.5	73.6	(¹)	(¹)	(¹)	4.2	5.5	5.5
Fall River	55.5	56.4	57.4	(¹)	(¹)	(¹)	2.4	3.1	3.2
Fitchburg-Leominster	39.9	39.5	40.2	(¹)	(¹)	(¹)	2.2	2.4	2.3
Lawrence-Haverhill	158.8	161.3	162.2	(¹)	(¹)	(¹)	9.0	9.8	9.7
Lowell	103.7	104.1	105.7	.2	.1	.1	5.4	6.0	5.9
New Bedford	65.9	65.9	67.0	(¹)	(¹)	(¹)	3.3	4.0	4.1
Pittsfield	43.3	44.6	44.2	.1	.1	.1	2.0	2.5	2.4
Springfield	233.3	237.6	242.6	.2	.2	.2	9.1	10.3	10.2
Worcester	191.6	193.6	198.6	.2	.2	.2	9.3	9.8	9.9
Michigan	3,667.5	3,663.6	3,725.7	10.2	11.5	11.4	127.3	151.8	149.7
Ann Arbor	161.2	157.6	165.5	(¹)	(¹)	(¹)	6.0	5.9	5.8
Battle Creek	55.8	56.5	56.5	(¹)	(¹)	(¹)	1.7	1.9	1.9
Benton Harbor	62.1	63.7	63.4	(¹)	(¹)	(¹)	1.5	1.7	1.7
Detroit	1,861.8	1,857.4	1,873.5	.9	.9	1.0	68.4	77.4	75.6
Flint	180.5	172.3	175.9	(¹)	(¹)	(¹)	6.4	5.7	5.7
Grand Rapids	303.8	304.6	309.7	(¹)	(¹)	(¹)	14.9	16.8	16.6
Jackson	49.8	49.9	50.2	(¹)	(¹)	(¹)	1.4	1.6	1.6
Kalamazoo	102.9	102.2	105.2	(¹)	(¹)	(¹)	3.3	3.6	3.5
Lansing-East Lansing	193.7	193.7	197.0	(¹)	(¹)	(¹)	6.2	6.0	5.7
Muskegon	56.8	57.2	57.2	(¹)	(¹)	(¹)	2.4	2.1	2.1
Saginaw-Bay City-Midland	152.7	156.0	157.1	(¹)	(¹)	(¹)	6.6	6.8	6.9
Minnesota	1,923.0	1,962.4	1,980.5	6.2	7.1	7.1	87.7	94.7	94.6
Duluth	83.8	84.8	85.8	3.1	4.2	4.3	4.0	4.9	5.2
Minneapolis-St. Paul	1,241.9	1,262.6	1,274.0	(¹)	(¹)	(¹)	56.1	56.9	56.9
Rochester	56.0	57.1	57.6	(²)	(²)	(²)	2.0	2.5	2.6
St. Cloud	67.0	67.6	68.7	(²)	(²)	(²)	4.0	5.3	5.3
Mississippi	856.2	852.9	874.5	6.3	6.4	6.4	37.2	36.5	36.7
Jackson	172.1	172.7	176.2	1.0	1.1	1.2	9.3	8.8	9.0
Missouri	2,164.9	2,148.2	2,189.2	5.6	5.6	5.6	106.2	105.8	104.8
Kansas City	721.5	713.1	718.4	.5	.6	.6	37.6	36.7	36.8
St. Joseph	35.8	35.0	34.8	(¹)	(¹)	(¹)	1.6	1.8	1.8
St. Louis	1,102.9	1,103.6	1,110.8	3.6	3.4	3.5	60.3	57.4	56.8
Springfield	104.7	104.4	106.8	.1	.1	.1	4.5	4.7	4.8
Montana	281.2	274.6	276.5	5.8	6.6	6.4	11.9	10.5	10.6
Nebraska	660.9	663.4	671.7	2.0	2.1	2.0	27.4	25.5	24.9
Lincoln	108.4	107.9	110.6	(¹)	(¹)	(¹)	4.2	4.0	4.0
Omaha	293.8	296.8	298.7	.2	.2	.2	13.6	13.8	13.5
Nevada	480.1	507.0	511.3	6.5	7.2	7.2	29.3	32.9	32.7
Las Vegas	267.5	285.6	288.9	.3	.3	.2	17.3	19.5	19.4
Reno	129.9	134.2	135.8	.7	.8	.8	7.6	8.3	8.4
New Hampshire	496.7	515.4	517.1	.6	.6	.6	34.9	38.4	37.7
Nashua	87.6	90.5	91.7	.1	.1	.1	4.7	5.5	5.4
Portsmouth-Dover-Rochester,NH-ME	107.4	110.5	111.1	.1	.1	.1	5.6	5.4	5.3
New Jersey	3,513.2	3,606.7	3,584.3	2.3	2.4	2.4	164.9	180.3	179.1
Atlantic City	167.4	185.1	173.5	(¹)	(¹)	(¹)	9.7	11.7	11.5
Bergen-Passaic	647.3	656.0	657.4	.1	.1	.1	30.8	32.5	32.3
Camden	410.5	419.1	421.5	.1	.1	.1	21.6	25.0	24.8
Jersey City	240.3	244.5	246.2	(¹)	(¹)	(¹)	6.7	7.0	7.1
Middlesex-Somerset-Hunterdon	492.2	505.1	504.4	.6	.6	.6	23.2	23.1	22.9
Monmouth-Ocean	314.5	331.4	321.4	(¹)	(¹)	(¹)	20.0	21.9	21.5
Newark	945.1	958.3	955.4	.7	.7	.7	37.6	40.6	40.4
Trenton	188.2	193.2	194.0	(¹)	(¹)	(¹)	5.1	5.7	5.4
Vineland-Millville-Bridgeton	55.3	56.4	56.7	.3	.4	.4	2.5	2.7	2.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Maryland	209.3	208.3	209.5	90.8	93.4	94.4	502.3	515.2	513.5
Baltimore MSA	133.3	131.6	131.9	54.0	55.1	55.5	260.1	264.0	264.4
Baltimore City	47.0	45.5	45.7	27.8	26.9	27.2	96.4	97.7	98.9
Suburban Maryland-D.C.	34.7	34.9	35.3	24.1	25.9	25.9	185.7	192.1	192.1
Massachusetts	613.7	598.6	601.5	127.0	127.2	130.4	711.2	724.4	725.8
Boston	294.0	285.8	287.5	73.4	74.2	75.2	375.9	386.6	389.7
Brockton	11.2	11.0	11.0	4.9	4.8	4.8	21.2	21.9	22.0
Fall River	17.3	16.4	16.4	1.7	1.9	2.0	14.4	15.5	15.7
Fitchburg-Leominster	13.1	12.8	13.0	1.5	1.2	1.3	10.0	10.2	10.5
Lawrence-Haverhill	52.4	50.5	50.4	6.7	6.6	6.9	35.4	38.1	38.1
Lowell	37.1	36.8	36.9	3.3	3.0	3.2	21.8	21.3	21.7
New Bedford	20.4	20.2	20.5	3.2	3.4	3.4	15.4	15.2	15.4
Pittsfield	12.1	11.6	11.6	1.1	1.0	1.1	11.2	11.6	11.3
Springfield	52.0	52.3	53.2	9.0	9.0	9.3	54.6	56.6	57.5
Worcester	45.6	44.9	45.4	8.3	7.9	8.2	47.6	49.5	50.6
Michigan	996.3	945.4	972.9	150.1	149.9	149.3	831.0	852.1	852.4
Ann Arbor	38.7	37.1	37.8	4.7	4.9	5.0	25.8	27.5	28.6
Battle Creek	15.3	16.2	15.9	1.8	1.8	1.8	10.7	10.7	10.6
Benton Harbor	21.4	21.2	21.3	2.5	2.6	2.5	12.2	12.9	12.7
Detroit	490.2	453.0	471.5	84.5	85.4	85.3	431.0	442.9	444.1
Flint	64.4	53.7	55.7	4.6	4.5	4.5	43.5	44.4	44.5
Grand Rapids	94.2	94.2	94.7	10.8	10.9	10.9	75.8	77.1	77.8
Jackson	12.7	12.7	13.0	4.1	4.2	4.0	11.2	11.2	11.1
Kalamazoo	29.2	29.1	29.0	3.3	3.5	3.5	23.1	23.6	23.9
Lansing-East Lansing	38.3	34.9	35.0	5.3	5.1	5.0	39.5	39.1	39.2
Muskegon	17.7	17.9	18.0	2.7	2.5	2.5	12.4	12.6	12.5
Saginaw-Bay City-Midland	45.1	45.0	45.3	7.2	7.2	7.2	34.7	35.5	35.5
Minnesota	379.8	382.5	382.8	99.2	98.0	100.7	479.5	491.4	492.7
Duluth	7.3	7.4	7.5	5.8	5.4	5.4	22.0	22.2	22.3
Minneapolis-St. Paul	253.9	254.6	254.1	67.8	66.5	68.0	307.4	313.3	315.5
Rochester	10.9	10.9	10.7	1.6	1.6	1.6	11.2	11.6	11.6
St. Cloud	11.6	11.8	11.6	3.8	3.7	3.6	20.0	21.2	21.2
Mississippi	223.7	225.0	227.0	40.0	40.3	40.5	184.1	188.7	188.7
Jackson	20.5	20.7	20.9	11.1	11.3	11.3	41.7	42.6	42.6
Missouri	424.3	417.3	418.1	143.0	142.7	145.4	516.1	514.4	514.8
Kansas City	119.3	109.6	110.9	54.7	54.8	55.4	180.5	182.6	181.6
St. Joseph	9.2	9.1	8.9	2.1	1.9	2.1	8.7	8.6	8.5
St. Louis	221.4	219.9	218.6	74.3	74.9	75.0	262.4	263.4	262.5
Springfield	20.3	20.3	20.3	6.7	6.8	6.9	28.3	28.8	28.7
Montana	22.3	21.8	22.2	20.7	20.0	19.9	74.3	73.6	72.3
Nebraska	86.4	86.8	86.2	43.3	45.1	45.8	169.2	174.3	174.4
Lincoln	13.0	13.3	13.4	6.0	6.0	6.0	24.7	25.1	25.3
Omaha	32.2	32.6	32.7	22.8	24.5	24.6	75.2	78.4	78.4
Nevada	22.7	23.8	23.6	27.1	27.8	27.9	97.0	102.6	102.6
Las Vegas	8.2	8.7	8.7	15.3	15.8	15.9	55.7	59.0	59.2
Reno	8.4	8.6	8.5	8.7	8.9	8.9	29.2	30.5	30.5
New Hampshire	116.9	118.4	119.1	17.4	16.8	17.8	124.7	131.3	129.4
Nashua	35.4	36.8	36.9	2.2	2.1	2.3	19.7	20.4	20.4
Portsmouth-Dover-Rochester,NH-ME	20.1	19.3	19.6	2.9	3.1	3.0	29.2	31.3	30.7
New Jersey	695.2	678.2	680.7	232.3	230.7	234.1	843.0	868.0	864.6
Atlantic City	8.3	8.5	8.8	6.1	6.2	6.0	38.4	45.5	39.0
Bergen-Passaic	162.5	158.9	159.2	28.8	29.0	29.5	184.9	186.1	186.5
Camden	75.8	72.8	73.2	17.5	17.4	17.6	107.9	109.3	110.2
Jersey City	53.2	52.5	52.6	31.0	29.9	30.4	57.9	58.9	59.5
Middlesex-Somerset-Hunterdon	112.1	113.7	114.7	40.2	40.2	40.9	118.7	119.8	120.4
Monmouth-Ocean	30.5	29.7	29.7	15.8	15.9	16.2	88.0	94.4	89.6
Newark	186.8	184.3	185.8	81.2	79.1	79.8	193.4	196.5	197.4
Trenton	31.7	31.5	31.8	6.1	6.2	6.5	30.7	31.3	31.4
Vineland-Millville-Bridgeton	15.8	15.4	15.6	2.2	2.1	2.1	10.8	11.7	11.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Maryland	120.2	122.6	121.8	514.2	529.6	524.9	384.0	372.8	381.2
Baltimore MSA	73.4	75.1	74.8	268.0	273.2	273.4	199.5	198.4	199.1
Baltimore City	45.8	46.0	45.9	133.0	137.5	138.1	85.7	89.4	86.7
Suburban Maryland-D.C.	39.1	40.9	40.5	198.5	206.1	204.0	150.7	146.7	152.2
Massachusetts	208.2	220.0	217.1	823.7	860.8	860.8	379.4	376.5	381.8
Boston	142.3	149.6	148.6	530.2	547.2	551.9	195.6	187.5	197.7
Brockton	3.0	3.2	3.2	14.6	14.8	14.9	11.9	11.3	12.2
Fall River	2.9	3.0	3.0	10.7	11.0	11.0	6.1	5.5	6.1
Fitchburg-Leominster	1.6	1.7	1.7	7.1	7.2	7.1	4.4	4.0	4.3
Lawrence-Haverhill	6.0	6.6	6.5	31.5	32.5	32.1	17.8	17.2	18.5
Lowell	4.1	4.4	4.4	19.3	20.7	21.0	12.5	11.8	12.5
New Bedford	2.6	2.7	2.6	12.0	12.2	12.2	9.0	8.2	8.8
Pittsfield	2.1	2.3	2.3	10.2	11.3	10.9	4.5	4.2	4.5
Springfield	15.9	17.1	16.9	55.2	56.8	57.3	37.3	35.3	38.0
Worcester	12.7	13.7	13.5	45.2	46.2	48.0	22.7	21.4	22.8
Michigan	172.8	184.3	178.6	797.4	805.7	808.0	582.5	563.1	603.3
Ann Arbor	4.4	4.9	4.8	32.2	33.8	34.4	49.2	43.2	48.9
Battle Creek	3.7	3.2	3.2	11.1	11.3	11.6	11.4	11.3	11.5
Benton Harbor	2.4	2.6	2.6	13.8	14.4	14.2	8.3	8.2	8.3
Detroit	99.9	105.4	100.7	453.6	466.1	466.1	233.2	226.3	229.3
Flint	6.2	6.7	6.7	32.4	33.5	33.5	23.0	23.6	25.4
Grand Rapids	13.4	13.6	13.7	62.9	62.2	64.0	31.5	29.4	31.7
Jackson	1.6	1.6	1.5	9.5	9.3	9.3	9.1	9.2	9.4
Kalamazoo	4.6	4.8	4.9	22.7	23.6	23.3	16.4	13.9	16.9
Lansing-East Lansing	11.0	11.7	11.7	35.4	37.1	37.4	57.6	59.4	62.6
Muskegon	1.4	1.4	1.4	11.1	12.0	11.8	9.1	8.5	8.9
Saginaw-Bay City-Midland	6.1	6.2	6.2	30.7	33.1	33.2	22.1	21.9	22.6
Minnesota	118.6	122.5	122.2	456.0	474.9	477.9	296.1	291.3	302.5
Duluth	3.2	3.1	3.1	20.3	20.7	20.4	18.1	16.9	17.7
Minneapolis-St. Paul	91.4	94.7	94.8	307.3	319.0	320.1	157.0	156.9	163.7
Rochester	1.6	1.6	1.6	22.8	23.7	23.5	5.8	5.3	6.1
St. Cloud	2.4	2.5	2.5	13.1	12.7	13.6	12.1	10.4	10.9
Mississippi	37.8	39.2	39.0	134.7	136.9	139.1	192.5	180.0	196.9
Jackson	13.7	14.3	14.2	36.6	37.2	37.8	38.2	36.6	39.3
Missouri	131.4	136.7	135.6	499.3	515.0	513.9	339.0	310.7	351.0
Kansas City	56.7	57.4	57.1	163.2	165.8	165.6	109.0	105.6	110.4
St. Joseph	1.8	1.9	1.8	6.8	6.5	6.5	5.6	5.2	5.2
St. Louis	71.4	73.6	72.7	276.2	286.9	286.2	133.3	124.1	135.5
Springfield	5.1	5.2	5.2	26.4	26.9	27.2	13.3	11.6	13.6
Montana	13.2	13.4	13.1	64.1	64.7	64.3	68.9	64.0	67.7
Nebraska	47.4	48.9	48.6	150.1	148.2	149.3	135.1	132.5	140.5
Lincoln	7.7	7.9	7.9	22.6	23.5	24.2	30.2	28.1	29.8
Omaha	28.9	30.4	30.3	78.3	76.0	76.0	42.6	40.9	43.0
Nevada	23.1	24.5	24.5	212.4	228.0	227.8	62.0	60.2	65.0
Las Vegas	13.8	14.7	14.8	126.0	137.8	138.4	30.9	29.8	32.3
Reno	6.9	7.2	7.2	52.6	55.0	54.9	15.8	14.9	16.6
New Hampshire	29.1	31.4	31.2	110.5	119.3	118.1	62.6	59.2	63.2
Nashua	3.3	3.8	3.7	16.1	16.4	16.5	6.1	5.4	6.4
Portsmouth-Dover-Rochester,NH-ME	5.8	6.5	6.6	19.5	21.6	21.1	24.2	23.2	24.7
New Jersey	211.1	224.7	221.5	842.8	893.3	879.0	521.8	529.1	522.9
Atlantic City	6.9	7.5	7.3	71.9	80.6	75.7	26.1	25.0	25.1
Bergen-Passaic	34.5	38.0	37.3	142.3	148.7	147.8	63.4	62.7	64.7
Camden	22.1	23.9	24.0	95.3	99.9	99.3	70.3	70.7	72.3
Jersey City	9.9	11.2	11.2	41.7	43.1	44.8	39.8	41.9	40.6
Middlesex-Somerset-Hunterdon	33.2	34.4	34.1	97.0	104.0	101.8	67.3	69.3	69.0
Monmouth-Ocean	16.9	18.1	17.8	83.7	92.0	87.0	59.4	59.3	59.5
Newark	73.6	77.0	76.2	240.6	247.3	246.8	131.1	132.8	128.3
Trenton	8.8	9.4	9.2	53.2	54.5	54.7	52.6	54.6	55.0
Vineland-Millville-Bridgeton	2.8	2.9	2.9	9.8	10.0	10.3	11.1	11.2	11.1

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
New Mexico	531.3	534.5	539.7	15.1	15.2	15.3	36.5	35.9	35.1
Albuquerque	228.5	231.9	233.8	.2	.2	.2	17.5	17.1	17.0
Las Cruces	41.0	38.7	40.3	.1	.1	.1	2.7	2.9	2.8
Santa Fe	53.8	55.6	54.7	.1	.1	.1	3.5	3.4	3.3
New York	7,944.8	8,122.3	8,141.4	6.2	6.4	6.4	334.2	366.2	362.6
Albany-Schenectady-Troy	394.8	405.1	405.4	.3	.3	.3	19.2	22.7	22.4
Binghamton	117.3	119.0	120.7	(¹)	(¹)	(¹)	5.6	6.1	6.0
Buffalo	426.4	431.8	436.1	.4	.4	.4	17.4	19.0	18.9
Elmira	35.9	38.9	38.6	(¹)	(¹)	(¹)	1.7	2.0	1.9
Glens Falls	45.5	50.8	47.2	(¹)	(¹)	(¹)	2.1	2.7	2.7
Nassau-Suffolk	1,110.1	1,127.6	1,127.6	.2	.2	.2	58.8	61.1	60.6
New York PMSA	4,052.5	4,117.4	4,115.5	1.3	1.2	1.2	150.9	158.4	159.1
New York City	3,533.6	3,588.3	3,588.1	.8	.6	.6	116.8	121.2	121.9
Niagara Falls	79.6	79.1	79.9	(¹)	(¹)	(¹)	3.3	3.3	3.4
Orange County	97.2	99.2	99.1	(¹)	(¹)	(¹)	4.6	5.5	5.5
Poughkeepsie	115.2	118.8	118.2	(²)	(²)	(²)	6.3	7.0	6.9
Rochester	456.8	459.5	460.7	.9	.8	.8	18.7	19.4	19.4
Rockland County	95.6	97.8	97.4	(²)	(²)	(²)	5.1	5.6	5.6
Syracuse	294.5	293.9	296.6	.3	.3	.2	16.3	16.6	16.6
Utica-Rome	120.1	122.1	122.5	.2	.2	.2	4.3	4.8	4.6
Westchester County	405.8	412.7	412.2	.3	.3	.3	27.7	29.8	29.9
North Carolina	2,763.8	2,804.3	2,857.9	4.8	4.9	4.9	161.8	172.2	169.8
Asheville	77.2	77.6	77.4	.1	.1	.1	4.1	4.0	4.0
Charlotte-Gastonia-Rock Hill	547.8	564.6	568.2	.3	.3	.3	32.0	34.8	34.5
Greensboro-Winston-Salem-High Point	449.8	451.3	459.6	.3	.3	.3	24.6	25.0	24.6
Raleigh-Durham	370.6	376.6	380.7	.3	.4	.4	24.1	25.4	25.1
North Dakota	251.5	251.0	253.8	4.4	4.2	4.2	13.5	13.2	12.8
Bismarck	36.4	36.9	37.0	.2	.2	.2	1.8	1.9	1.8
Fargo-Moorhead	68.3	68.5	70.3	(¹)	(¹)	(¹)	4.0	4.1	4.0
Grand Forks	28.6	28.2	29.3	(¹)	(¹)	(¹)	2.0	2.1	2.0
Ohio	4,531.8	4,595.4	4,645.6	22.1	20.6	20.8	180.0	194.8	194.2
Akron	263.9	263.1	269.2	.6	.6	.7	9.7	11.2	11.2
Canton	153.8	156.1	156.7	1.0	1.1	1.1	6.1	7.3	7.3
Cincinnati	663.3	684.7	687.8	.3	.4	.4	28.6	31.7	31.6
Cleveland	889.4	908.3	910.2	1.1	1.0	1.0	28.4	29.3	29.1
Columbus	638.6	657.9	662.6	.9	1.0	1.0	26.9	30.1	29.8
Dayton-Springfield	427.6	431.4	437.5	.4	.5	.5	17.0	20.3	20.1
Toledo	277.3	282.9	288.8	.2	.2	.2	10.9	11.8	12.0
Youngstown-Warren	191.1	189.3	195.7	.6	.6	.6	7.8	9.4	9.2
Oklahoma	1,129.0	1,119.4	1,133.7	51.4	54.0	54.5	40.4	41.2	40.1
Enid	21.7	21.3	21.9	1.2	1.2	1.2	.8	.8	.8
Lawton	33.0	31.7	32.6	.2	.2	.1	1.4	1.3	1.3
Oklahoma City	408.0	397.8	403.9	12.1	11.7	11.6	14.2	15.1	14.9
Tulsa	300.6	300.4	300.6	17.2	17.3	17.2	12.4	12.8	12.1
Oregon	1,073.8	1,103.6	1,112.0	1.5	1.5	1.5	37.7	40.1	39.2
Eugene-Springfield	100.0	102.0	103.2	.2	.2	.2	3.5	3.9	3.9
Portland	531.1	553.4	558.0	.6	.6	.6	20.1	21.2	21.4
Salem	95.6	98.5	98.4	.1	.1	.1	3.2	3.2	3.0
Pennsylvania	4,838.8	4,943.2	4,964.7	33.6	31.5	31.9	225.3	247.4	245.2
Allentown-Bethlehem	264.8	272.2	273.2	.5	.6	.6	12.1	13.4	13.1
Altoona	50.5	52.1	52.0	(²)	(²)	(²)	2.9	3.1	3.2
Beaver County	51.0	50.0	50.4	(²)	(²)	(²)	3.8	4.0	4.2
Erie	110.0	110.4	111.4	.3	.3	.3	3.9	4.2	4.0
Harrisburg-Lebanon-Carlisle	287.8	297.0	297.5	.4	.4	.4	11.9	12.6	12.7
Johnstown	77.0	79.4	80.0	3.9	3.9	3.9	3.2	3.8	3.7
Lancaster	175.1	181.9	181.1	.4	.4	.4	9.8	11.4	10.9
Philadelphia PMSA	2,107.5	2,164.2	2,162.1	1.2	1.2	1.2	101.8	111.1	109.3
Philadelphia City	763.4	781.3	777.1	(²)	(²)	(²)	19.9	19.3	19.5
Pittsburgh	844.2	853.5	856.3	6.6	7.1	7.3	45.2	46.6	46.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a	Sept. 1986	Aug. 1987	Sept. 1987 ^a
New Mexico	38.3	40.0	40.1	29.6	27.9	28.9	128.9	131.6	131.7
Albuquerque	19.8	19.9	19.8	12.5	12.2	12.6	58.8	61.1	61.1
Las Cruces	3.8	3.9	4.0	1.3	1.2	1.3	7.8	7.9	8.0
Santa Fe	1.6	1.6	1.6	1.2	1.1	1.1	10.5	11.3	11.0
New York	1,253.2	1,217.5	1,224.4	405.4	402.3	411.6	1,693.0	1,725.3	1,727.9
Albany-Schenectady-Troy	49.8	47.6	47.8	16.6	16.3	16.6	85.4	86.8	87.6
Binghamton	37.2	37.2	37.4	4.1	4.3	4.3	24.9	26.2	26.4
Buffalo	77.1	75.1	76.0	21.8	21.4	22.1	106.2	108.8	109.6
Elmira	6.7	7.8	8.0	1.3	1.2	1.2	10.3	10.8	10.7
Glens Falls	10.2	10.2	10.2	1.5	1.6	1.5	11.0	12.6	11.4
Nassau-Suffolk	180.2	175.1	175.4	46.8	47.2	49.5	302.6	307.7	307.4
New York PMSA	478.5	466.4	468.8	242.8	238.5	243.3	763.6	760.6	767.7
New York City	393.4	381.8	383.6	217.2	213.2	217.5	638.2	634.6	640.8
Niagara Falls	24.7	23.2	23.8	3.8	3.6	3.9	17.8	18.7	18.7
Orange County	15.3	14.8	14.8	5.8	5.5	5.7	26.0	26.8	26.7
Poughkeepsie	31.7	30.5	30.0	3.3	3.4	3.4	21.4	24.0	24.0
Rochester	138.6	135.9	133.7	14.1	14.2	14.2	96.8	99.5	99.7
Rockland County	15.8	15.6	15.4	4.2	4.0	4.2	23.0	23.6	23.6
Syracuse	54.3	52.4	52.0	17.0	16.7	17.0	70.6	72.7	72.6
Utica-Rome	24.9	23.9	24.1	4.8	4.8	4.9	26.4	26.8	26.9
Westchester County	67.5	67.2	67.9	20.7	20.7	20.9	97.9	97.9	98.9
North Carolina	839.2	854.1	860.1	135.1	135.9	136.7	613.0	636.3	637.9
Asheville	20.1	19.9	20.1	3.6	3.7	3.7	17.3	17.5	17.4
Charlotte-Gastonia-Rock Hill	148.7	152.8	152.5	46.7	49.0	49.2	130.1	133.8	133.0
Greensboro-Winston-Salem-High Point	151.8	153.2	152.7	24.8	25.7	25.5	99.9	103.3	104.8
Raleigh-Durham	59.0	57.7	57.8	17.9	18.5	18.4	75.8	77.7	78.2
North Dakota	15.8	15.7	16.2	16.0	16.2	16.3	67.3	67.9	67.5
Bismarck	1.9	2.0	2.0	2.7	2.7	2.7	9.6	9.9	9.9
Fargo-Moorhead	5.0	5.0	5.2	4.3	4.2	4.4	20.5	20.8	21.1
Grand Forks	1.5	1.2	1.6	1.5	1.3	1.4	8.1	8.1	8.3
Ohio	1,109.4	1,092.0	1,103.3	210.8	212.5	212.8	1,082.5	1,113.2	1,116.0
Akron	66.7	64.3	65.4	13.0	13.5	13.6	64.4	66.0	66.6
Canton	44.0	42.2	42.3	5.8	6.1	6.1	38.8	40.5	40.5
Cincinnati	149.3	149.2	146.8	34.7	35.0	35.5	168.3	176.0	176.6
Cleveland	205.5	203.3	204.3	41.8	41.9	41.9	215.8	219.4	220.0
Columbus	107.4	102.7	102.6	27.8	29.3	29.6	158.1	163.5	164.8
Dayton-Springfield	106.8	104.6	105.4	14.9	15.2	15.1	96.1	98.5	98.8
Toledo	64.5	62.7	63.2	14.3	14.9	14.9	67.3	69.9	70.1
Youngstown-Warren	52.3	47.7	52.5	8.0	8.1	8.2	46.7	48.1	48.1
Oklahoma	160.1	159.1	158.5	63.5	62.4	62.4	280.5	273.7	275.6
Enid	1.5	1.6	1.7	2.2	2.1	2.1	6.4	6.1	6.2
Lawton	3.3	3.3	3.3	1.4	1.0	1.1	8.9	8.5	8.6
Oklahoma City	49.6	48.8	48.7	20.3	20.0	20.2	102.5	97.7	98.2
Tulsa	50.7	49.8	49.4	23.0	22.9	22.8	72.9	74.0	74.3
Oregon	206.5	212.3	211.0	57.9	57.8	57.7	274.6	284.8	286.7
Eugene-Springfield	19.2	20.2	19.9	4.1	4.0	4.1	26.1	26.7	26.8
Portland	91.4	95.0	95.4	33.1	34.2	34.3	141.4	149.0	149.2
Salem	17.4	19.4	17.4	2.6	2.5	2.6	21.4	21.8	22.3
Pennsylvania	1,046.9	1,042.2	1,046.3	242.1	239.5	245.7	1,106.7	1,150.2	1,153.8
Allentown-Bethlehem	78.2	77.0	76.9	14.2	14.3	14.4	58.9	61.4	61.6
Altoona	11.2	11.4	11.2	4.8	4.9	4.9	12.5	13.0	13.0
Beaver County	10.9	9.8	9.6	5.1	5.0	5.1	11.2	11.5	11.4
Erie	34.8	34.3	34.7	4.0	4.0	4.0	23.5	24.0	24.0
Harrisburg-Lebanon-Carlisle	51.2	52.2	52.6	18.3	18.1	18.4	64.6	67.9	67.6
Johnstown	12.7	13.1	13.0	5.1	4.5	5.0	16.3	16.8	16.7
Lancaster	59.6	60.6	60.4	7.2	7.4	7.6	42.1	45.2	44.2
Philadelphia PMSA	381.7	377.4	378.4	97.3	97.2	98.3	488.4	503.5	506.2
Philadelphia City	99.8	97.9	98.5	45.1	46.6	46.2	148.6	149.4	150.4
Pittsburgh	126.2	126.5	125.7	45.0	42.8	43.2	214.0	219.7	217.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
New Mexico	26.6	27.5	27.4	117.9	124.7	123.2	138.4	131.7	138.0
Albuquerque	14.3	15.0	14.9	60.7	64.1	64.1	44.7	42.3	44.1
Las Cruces	1.5	1.7	1.7	5.6	6.2	6.2	18.2	14.8	16.2
Santa Fe	2.1	2.2	2.2	13.8	14.8	14.3	21.0	21.1	21.1
New York	762.4	797.7	793.7	2,147.9	2,239.5	2,236.7	1,342.5	1,367.3	1,378.1
Albany-Schenectady-Troy	21.4	22.9	22.5	95.2	101.6	99.9	107.0	106.9	108.3
Binghamton	3.9	3.9	3.8	21.2	22.6	22.3	20.4	18.8	20.5
Buffalo	24.8	25.8	25.7	108.6	109.9	112.0	70.2	71.4	71.4
Elmira	1.2	1.2	1.2	8.6	9.5	9.5	6.3	6.3	6.1
Glens Falls	1.9	2.0	1.9	10.2	13.2	10.7	8.6	8.3	8.7
Nassau-Suffolk	72.3	76.4	75.6	278.1	290.7	285.8	171.0	168.4	173.1
New York PMSA	561.0	581.1	578.5	1,220.7	1,250.8	1,250.7	633.7	660.2	646.2
New York City	530.6	549.5	547.2	1,080.4	1,104.9	1,108.4	556.2	582.5	568.0
Niagara Falls	1.8	1.8	1.8	16.0	15.9	16.1	12.0	12.3	12.1
Orange County	4.0	4.2	4.1	20.5	21.7	21.0	21.0	20.7	21.2
Poughkeepsie	4.2	4.6	4.5	25.1	26.1	26.0	23.2	23.2	23.4
Rochester	21.1	22.1	21.6	106.0	108.9	110.7	60.7	58.7	60.5
Rockland County	3.9	4.2	4.2	23.1	24.8	23.6	20.6	19.9	20.8
Syracuse	19.1	19.3	19.1	69.4	67.8	70.7	47.6	48.1	48.2
Utica-Rome	6.4	6.9	6.8	24.9	25.2	25.8	28.2	29.6	29.1
Westchester County	25.8	26.8	26.5	112.5	115.8	113.9	53.2	54.2	53.8
North Carolina	120.7	129.2	128.9	459.0	482.5	482.3	430.2	389.3	437.2
Asheville	2.7	2.7	2.7	16.9	18.4	16.9	12.3	11.3	12.6
Charlotte-Gastonia-Rock Hill	33.0	35.1	34.8	97.0	101.8	102.8	60.0	57.0	61.1
Greensboro-Winston-Salem-High Point	21.9	22.3	22.3	75.4	77.9	77.7	51.1	43.5	51.6
Raleigh-Durham	22.1	23.7	23.7	86.1	90.0	90.8	85.4	83.2	86.3
North Dakota	12.5	12.7	12.7	59.8	60.8	60.9	62.2	60.3	63.2
Bismarck	1.7	1.6	1.6	10.4	10.4	10.4	8.1	8.2	8.4
Fargo-Moorhead	4.3	4.5	4.5	17.6	18.3	18.2	12.6	11.6	12.9
Grand Forks	1.1	1.2	1.2	6.3	6.4	6.5	8.1	7.9	8.3
Ohio	235.4	246.8	245.7	1,021.7	1,073.2	1,077.9	670.0	642.2	674.9
Akron	10.1	10.6	10.6	56.7	59.9	59.7	42.7	37.0	41.5
Canton	6.5	6.6	6.6	33.7	34.8	34.9	17.8	17.4	18.0
Cincinnati	38.5	40.8	40.4	158.8	170.2	170.2	84.9	81.4	86.3
Cleveland	53.1	55.8	55.5	229.2	239.4	242.2	114.5	118.2	116.2
Columbus	54.4	57.3	57.2	149.6	160.5	162.0	113.6	113.4	115.6
Dayton-Springfield	17.6	18.2	18.0	103.0	107.1	108.1	71.8	67.1	71.5
Toledo	11.2	11.7	11.7	68.2	75.6	75.7	40.6	36.2	41.0
Youngstown-Warren	8.1	8.5	8.5	44.6	45.2	45.7	23.0	21.6	22.9
Oklahoma	62.3	62.7	61.8	224.7	229.7	234.5	246.1	236.6	246.3
Enid	1.2	1.0	1.0	5.1	5.3	5.5	3.3	3.2	3.4
Lawton	1.5	1.5	1.5	5.4	5.7	5.8	10.9	10.2	10.9
Oklahoma City	26.2	26.1	25.7	86.7	86.1	89.0	96.4	92.3	95.6
Tulsa	17.5	17.8	17.7	69.8	71.4	72.0	37.1	34.4	35.1
Oregon	71.1	73.8	73.1	233.9	246.6	246.0	190.6	186.7	196.8
Eugene-Springfield	4.7	4.8	4.8	22.4	23.5	23.6	19.8	18.7	19.9
Portland	43.7	46.0	45.7	128.6	136.0	136.5	72.2	71.4	74.9
Salem	5.3	5.5	5.5	18.3	18.4	18.9	27.3	27.6	28.6
Pennsylvania	281.7	292.3	288.7	1,235.9	1,281.5	1,285.5	666.6	658.6	667.6
Allentown-Bethlehem	10.5	11.3	11.1	61.6	66.0	66.2	28.8	28.2	29.3
Altoona	1.6	1.6	1.6	10.1	10.9	10.5	7.4	7.2	7.6
Beaver County	1.8	1.8	1.8	11.0	10.8	10.9	7.2	7.1	7.4
Erie	5.1	5.2	5.1	25.4	26.4	26.4	13.0	12.0	12.9
Harrisburg-Lebanon-Carlisle	16.1	16.9	16.8	61.0	63.9	63.1	64.3	65.0	65.9
Johnstown	4.9	5.1	5.2	18.5	19.3	19.3	12.4	12.9	13.2
Lancaster	6.6	7.0	7.0	34.9	36.2	36.5	14.5	13.7	14.1
Philadelphia PMSA	155.2	159.7	158.4	592.3	618.7	621.6	289.6	295.4	288.7
Philadelphia City	70.3	71.9	71.5	243.0	246.3	251.1	136.7	149.9	139.9
Pittsburgh	52.1	53.6	53.2	255.9	257.9	262.4	99.2	99.3	100.3

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Pennsylvania-Continued									
Reading	144.6	147.5	149.5	(²)	(²)	(²)	6.4	7.1	6.9
Scranton-Wilkes-Barre	285.6	286.9	286.6	0.8	0.7	0.7	13.4	13.0	12.8
Sharon	40.0	41.3	41.4	.2	.2	.2	1.6	1.8	1.7
State College	52.1	51.1	53.8	.2	.2	.2	2.3	2.6	2.7
Williamsport	47.9	50.1	50.9	(²)	(²)	(²)	2.0	2.3	2.2
York	166.3	170.0	171.9	.4	.4	.4	9.1	10.0	10.0
Rhode Island	446.0	450.1	452.1	.2	.2	.2	18.3	19.3	19.4
Pawtucket-Woonsocket-Attleboro	132.9	134.0	134.7	.1	.1	.1	4.8	4.9	4.9
Providence	313.3	318.4	319.4	.1	.1	.1	15.2	16.6	16.6
South Carolina	1,355.4	1,386.6	1,402.0	1.7	1.6	1.6	89.1	93.1	91.8
Charleston	182.1	186.5	187.8	(¹)	(¹)	(¹)	14.1	14.9	14.8
Columbia	214.8	214.4	216.3	(¹)	(¹)	(¹)	14.2	15.0	14.7
Greenville-Spartanburg	301.7	301.8	307.4	(¹)	(¹)	(¹)	23.1	22.0	22.2
South Dakota	255.2	254.7	257.1	2.7	2.6	2.6	11.6	11.5	11.4
Rapid City	34.4	34.5	34.2	.3	.3	.3	2.6	2.4	2.4
Sioux Falls	63.9	63.0	63.7	(¹)	(¹)	(¹)	2.7	2.8	2.7
Tennessee	1,958.6	2,006.8	2,042.8	7.6	6.9	9.4	94.1	103.2	101.3
Chattanooga	180.8	182.2	185.6	1.0	1.0	1.0	7.3	7.4	7.6
Johnson City-Kingsport-Bristol	152.7	155.4	157.7	.2	.1	.1	5.5	6.0	6.0
Knoxville	241.8	243.6	246.1	2.2	1.7	1.7	12.1	11.9	11.7
Memphis	410.7	416.2	417.5	.1	.1	.1	19.4	19.8	19.5
Nashville	454.1	451.6	464.5	.8	1.0	.9	28.9	30.9	28.5
Texas	6,527.2	6,465.3	6,524.7	192.0	192.4	192.2	407.5	374.2	370.5
Abilene	49.8	49.1	50.3	2.3	2.2	2.2	2.4	2.3	2.3
Amarillo	77.6	77.6	78.2	1.4	1.2	1.2	4.3	4.3	4.2
Austin	361.9	347.0	357.1	1.0	.9	.9	23.4	19.5	19.3
Beaumont-Port Arthur	129.6	126.6	127.4	1.5	1.6	1.6	7.5	7.6	7.3
Brazoria	57.1	56.4	57.3	1.3	1.3	1.4	5.8	5.8	5.7
Brownsville-Harlingen	65.4	64.5	64.9	.1	.1	.1	2.7	2.7	2.7
Bryan-College Station	48.4	46.2	46.6	.8	.8	.9	2.3	2.2	2.2
Corpus Christi	130.0	125.6	126.8	6.4	5.5	5.4	8.9	7.3	7.1
Dallas	1,341.5	1,298.6	1,306.6	19.9	19.0	18.8	80.3	63.0	61.3
El Paso	186.4	185.7	187.7	.2	.1	.1	10.4	9.7	9.7
Ft. Worth-Arlington	511.6	516.5	517.8	3.5	3.4	3.4	30.4	31.2	29.9
Galveston-Texas City	71.8	70.4	70.8	.5	.4	.4	3.8	3.3	3.3
Houston	1,385.5	1,370.0	1,376.6	66.7	63.7	63.3	92.0	84.7	85.3
Killeen-Temple	68.7	69.0	68.6	.1	.1	.1	3.8	3.9	3.7
Laredo	34.9	34.6	34.6	1.7	2.2	2.2	1.3	1.2	1.2
Longview-Marshall	65.4	63.8	64.6	3.6	3.6	3.7	3.1	2.8	2.8
Lubbock	91.9	89.3	91.3	.3	.3	.3	3.9	2.8	2.7
McAllen-Edinburg-Mission	86.9	86.6	87.7	1.1	1.0	1.0	4.6	4.5	4.4
Midland	44.1	43.8	44.2	9.1	9.1	9.3	1.6	1.6	1.5
Odessa	44.1	43.5	43.7	6.0	6.5	6.5	2.5	2.3	2.2
San Angelo	36.8	36.3	36.5	.6	.6	.6	2.0	1.8	1.7
San Antonio	494.2	490.1	496.0	2.6	2.5	2.5	34.8	32.5	31.6
Sherman-Denison	38.2	37.4	38.0	.2	.1	.1	1.9	1.8	1.7
Texarkana	45.5	45.2	45.8	.1	.1	.1	1.9	1.6	1.6
Tyler	61.3	59.9	59.6	1.9	2.0	1.9	2.9	2.6	2.5
Victoria	28.5	28.0	28.2	1.8	1.9	1.9	2.0	1.9	1.8
Waco	78.0	75.8	78.2	.2	.1	.1	4.1	4.0	3.9
Wichita Falls	50.2	50.0	50.4	2.1	2.0	2.0	2.1	2.0	2.0
Utah	642.6	639.9	649.5	7.4	7.9	8.0	35.0	29.6	29.0
Provo-Orem	73.6	72.4	76.2	(¹)	(¹)	(¹)	3.0	2.9	2.8
Salt Lake City-Ogden	449.2	449.5	453.6	1.6	2.6	2.6	25.2	21.4	21.4
Vermont	236.8	239.9	240.2	.6	.5	.6	16.4	16.4	15.9
Barre-Montpelier	31.8	33.5	33.5	.2	.2	.2	2.2	2.4	2.3
Burlington	71.7	74.1	74.4	(¹)	(¹)	(¹)	4.3	4.6	4.5

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Pennsylvania-Continued									
Reading	48.9	48.4	49.5	6.6	6.6	6.9	31.7	32.4	32.4
Scranton-Wilkes-Barre	72.7	71.2	71.6	14.9	15.1	15.5	63.2	64.6	64.5
Sharon	9.2	9.3	9.7	1.8	1.8	1.8	10.7	11.5	11.3
State College	7.1	7.3	7.3	1.2	1.2	1.3	9.7	9.5	9.9
Williamsport	15.6	16.7	16.9	1.9	1.8	1.9	10.9	11.5	11.4
York	58.0	58.8	58.6	7.0	7.0	7.3	39.3	40.1	40.0
Rhode Island									
Pawtucket-Woonsocket-Attleboro	120.4	120.4	121.1	15.1	15.3	15.3	101.1	102.0	102.3
Providence	55.9	56.1	56.4	3.7	3.9	3.9	31.3	31.4	31.7
.....	74.5	75.2	75.4	11.6	11.9	11.8	69.2	71.1	71.3
South Carolina									
.....	365.0	370.1	370.8	56.4	58.3	58.9	299.3	316.4	313.7
Charleston	20.1	20.9	21.1	9.1	9.1	9.3	45.3	47.0	46.7
Columbia	28.3	29.4	29.4	10.1	10.4	10.5	47.5	47.1	46.8
Greenville-Spartanburg	99.1	99.0	99.5	10.8	11.3	11.4	68.4	70.5	70.9
South Dakota									
.....	29.4	29.2	29.8	12.8	12.4	12.7	66.9	68.5	67.8
Rapid City	3.2	3.2	3.2	1.8	1.7	1.8	10.2	11.0	10.4
Sioux Falls	8.9	8.4	8.5	4.7	4.7	4.7	16.6	16.7	16.7
Tennessee									
.....	495.5	497.8	501.3	98.2	99.7	99.9	458.2	481.4	484.3
Chattanooga	44.3	43.5	44.2	8.7	8.5	8.5	41.8	43.1	42.4
Johnson City-Kingsport-Bristol	51.9	52.4	51.9	6.3	6.3	6.3	33.2	34.9	34.6
Knoxville	50.7	50.8	52.2	9.2	9.8	9.9	61.0	60.3	60.6
Memphis	52.6	53.2	53.8	36.2	37.7	37.8	113.6	116.4	116.5
Nashville	89.7	88.3	88.1	21.8	21.6	21.6	109.6	110.3	121.7
Texas									
.....	954.8	964.0	969.3	374.7	381.1	380.9	1,682.0	1,661.4	1,663.8
Abilene	4.8	4.8	4.8	2.5	2.4	2.5	13.8	14.2	14.2
Amarillo	9.5	9.8	9.8	6.2	5.6	5.6	23.2	23.3	23.6
Austin	40.4	39.7	39.8	11.2	11.1	11.1	81.8	79.6	79.8
Beaumont-Port Arthur	25.1	23.9	23.9	10.0	9.4	9.4	32.3	31.6	31.4
Brazoria	15.4	14.9	14.9	2.3	2.2	2.2	11.3	11.1	11.1
Brownsville-Harlingen	9.6	9.7	9.6	3.2	3.2	3.0	17.9	17.4	17.4
Bryan-College Station	3.2	3.0	3.0	1.7	1.6	1.6	11.3	10.8	10.6
Corpus Christi	12.0	11.5	11.5	7.1	7.2	7.1	34.3	34.4	34.0
Dallas	227.4	222.7	223.0	86.7	87.3	87.5	357.6	350.5	350.6
El Paso	36.9	36.7	36.8	9.8	10.2	10.2	45.3	45.6	45.5
Ft. Worth-Arlington	114.1	115.2	116.5	26.8	28.2	28.4	136.4	133.7	133.4
Galveston-Texas City	9.2	8.9	9.0	4.8	4.4	4.5	14.2	14.4	14.0
Houston	150.0	150.5	151.5	93.4	90.6	90.2	358.0	349.5	348.7
Killeen-Temple	8.8	8.8	8.7	2.8	2.6	2.6	16.6	16.5	16.3
Laredo	1.8	1.9	1.9	3.9	4.1	4.1	10.5	9.8	9.8
Longview-Marshall	15.1	15.0	15.1	3.1	3.1	3.1	17.5	17.0	17.1
Lubbock	7.7	7.2	7.4	4.6	4.5	4.6	28.3	27.8	28.3
McAllen-Edinburg-Mission	11.9	12.2	12.2	2.8	2.9	2.9	25.5	25.6	25.9
Midland	3.1	2.9	3.0	2.2	2.2	2.2	10.6	10.8	10.8
Odessa	3.8	3.7	3.7	2.1	2.1	2.1	13.3	13.2	13.4
San Angelo	6.0	5.9	5.8	3.2	3.1	3.1	9.4	9.3	9.2
San Antonio	48.6	45.8	46.0	18.3	18.2	18.1	128.8	132.0	131.8
Sherman-Denison	11.2	11.2	11.3	2.1	2.1	2.1	8.7	8.7	8.7
Texarkana	7.2	7.2	7.2	1.8	1.7	1.7	11.3	11.4	11.3
Tyler	11.3	10.9	10.7	2.8	2.7	2.7	16.6	16.2	16.2
Victoria	3.1	3.1	3.2	1.5	1.5	1.4	8.1	7.9	8.0
Waco	14.6	14.9	15.0	3.5	3.3	3.4	19.1	19.2	19.2
Wichita Falls	8.2	8.3	8.2	2.6	2.6	2.6	12.2	12.5	12.5
Utah									
.....	91.6	94.4	94.8	37.4	37.9	37.7	155.4	157.2	157.4
Provo-Orem	10.1	10.2	10.3	2.5	2.8	2.7	15.8	16.0	16.3
Salt Lake City-Ogden	62.0	62.1	62.3	28.8	28.9	28.8	114.1	115.8	115.9
Vermont									
.....	49.9	49.4	49.6	9.8	10.4	10.4	52.9	56.4	55.6
Barre-Montpelier	4.4	4.5	4.6	.8	.8	.8	6.6	7.2	7.1
Burlington	16.5	16.8	16.9	3.1	3.1	3.1	16.3	16.7	16.5

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Pennsylvania-Continued									
Reading	7.4	7.9	7.9	28.1	30.0	29.9	15.5	15.1	16.0
Scranton-Wilkes-Barre	12.1	13.0	12.8	68.4	70.1	69.2	40.1	39.2	39.5
Sharon	1.3	1.3	1.3	10.4	10.6	10.6	4.8	4.8	4.8
State College	1.6	1.7	1.7	9.1	9.7	9.7	20.9	18.9	21.0
Williamsport	2.2	2.3	2.3	9.3	9.7	9.8	6.0	5.8	6.4
York	4.8	5.3	5.2	29.6	31.7	32.5	18.1	16.7	17.9
Rhode Island									
Pawtucket-Woonsocket-Attleboro	25.0	25.7	25.5	109.0	111.1	111.5	56.9	56.1	56.8
Providence	3.7	4.0	3.9	24.1	24.3	24.4	9.3	9.3	9.4
Providence	21.1	21.8	21.7	79.2	80.0	80.2	42.4	41.7	42.3
South Carolina									
Charleston	61.9	66.4	65.4	227.8	241.3	241.0	254.2	239.4	258.8
Columbia	8.4	8.7	8.7	36.1	37.6	38.0	48.9	48.2	49.1
Columbia	17.4	18.1	17.9	39.0	39.1	39.0	57.9	54.9	57.6
Greenville-Spartanburg	11.5	11.7	11.7	48.9	50.3	50.3	39.6	36.7	41.1
South Dakota									
Rapid City	14.4	14.5	14.4	60.8	61.9	61.5	56.8	54.3	57.1
Rapid City	1.7	1.7	1.7	8.4	8.4	8.1	6.3	5.8	6.4
Sioux Falls	6.1	5.9	5.9	17.7	18.1	18.1	7.3	6.3	7.2
Tennessee									
Chattanooga	95.0	98.0	97.3	392.9	413.0	415.4	317.3	306.8	333.9
Chattanooga	11.3	12.2	12.1	34.4	34.8	35.0	32.1	31.7	34.8
Johnson City-Kingsport-Bristol	4.8	5.0	4.9	26.4	27.0	28.1	24.2	23.7	25.8
Knoxville	8.7	8.8	8.7	48.8	51.7	52.4	49.2	48.6	48.9
Memphis	23.3	23.6	23.6	96.6	99.9	99.3	68.9	65.5	66.9
Nashville	30.8	30.6	30.6	107.2	106.5	105.8	65.3	62.4	67.3
Texas									
Abilene	446.2	440.2	436.3	1,370.5	1,374.1	1,373.4	1,099.5	1,077.9	1,138.3
Abilene	2.6	2.6	2.6	13.3	12.8	13.4	8.1	7.8	8.3
Amarillo	4.4	4.3	4.3	16.1	16.7	16.5	12.5	12.4	13.0
Austin	25.7	25.1	25.1	84.0	83.8	84.4	94.4	87.3	96.7
Beaumont-Port Arthur	5.7	5.5	5.5	27.7	28.5	28.3	19.8	18.5	20.0
Brazoria	2.1	2.2	2.1	7.8	8.0	8.1	11.1	10.9	11.8
Brownsville-Harlingen	3.3	3.4	3.4	13.4	14.6	13.9	15.2	13.4	14.8
Bryan-College Station	1.7	1.7	1.7	7.8	8.0	8.0	19.6	18.1	18.6
Corpus Christi	7.0	6.8	6.8	27.0	26.8	27.6	27.3	26.1	27.3
Dallas	134.2	130.4	129.6	289.9	288.4	289.4	145.5	137.3	146.4
El Paso	9.7	10.1	9.9	35.1	36.6	36.0	39.0	36.7	39.5
Ft. Worth-Arlington	28.5	29.2	29.1	110.8	115.1	114.3	61.1	60.5	62.8
Galveston-Texas City	4.5	4.4	4.4	13.4	14.0	13.8	21.4	20.6	21.4
Houston	102.7	98.7	96.9	337.8	353.7	353.8	184.9	178.6	186.9
Killeen-Temple	3.0	3.0	2.9	13.9	14.4	14.3	19.7	19.7	20.0
Laredo	1.6	1.6	1.6	6.0	6.0	6.0	8.1	7.8	7.8
Longview-Marshall	3.3	3.0	2.9	11.4	11.3	11.6	8.3	8.0	8.3
Lubbock	5.5	5.5	5.3	20.7	20.9	21.2	20.9	20.3	21.5
McAllen-Edinburg-Mission	3.9	3.8	3.7	13.8	13.6	13.7	23.3	23.0	23.9
Midland	2.9	2.7	2.7	8.7	8.8	8.8	5.9	5.7	5.9
Odessa	1.7	1.6	1.7	7.3	7.3	7.3	7.4	6.8	6.8
San Angelo	1.7	1.8	1.8	7.7	7.7	7.8	6.2	6.1	6.5
San Antonio	38.6	39.5	39.4	115.0	117.1	117.6	107.5	102.5	109.0
Sherman-Denison	1.5	1.4	1.4	7.5	7.3	7.8	5.1	4.8	4.9
Texarkana	1.9	1.9	1.9	8.8	9.1	9.0	12.5	12.2	13.0
Tyler	3.7	3.6	3.6	13.5	13.6	13.4	8.6	8.3	8.6
Victoria	1.6	1.5	1.5	6.0	5.9	5.9	4.4	4.3	4.5
Waco	4.8	4.8	4.7	19.6	18.8	19.6	12.1	10.7	12.3
Wichita Falls	2.4	2.4	2.4	11.1	11.1	11.2	9.5	9.1	9.5
Utah									
Provo-Orem	33.3	34.1	33.9	140.9	145.4	148.3	141.6	133.2	140.5
Provo-Orem	2.4	2.4	2.4	26.4	24.9	27.9	13.3	13.2	13.9
Salt Lake City-Ogden	27.5	28.1	28.0	96.0	100.6	100.5	93.9	89.9	94.2
Vermont									
Barre-Montpelier	11.2	12.2	12.1	57.1	59.0	56.1	38.9	35.6	39.9
Barre-Montpelier	2.8	3.0	2.9	6.6	7.7	7.4	8.2	7.7	8.2
Burlington	3.3	3.6	3.6	18.0	19.2	18.7	10.2	10.1	11.1

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Virginia	2,590.0	2,634.0	2,653.5	16.3	15.6	15.6	176.6	182.8	178.5
Bristol	29.9	30.8	31.5	.1	.1	.1	1.0	.8	.8
Charlottesville	63.9	61.0	63.0	.1	.1	.1	3.5	4.0	3.8
Danville	39.6	38.5	39.9	.1	.1	.1	1.5	1.4	1.3
Lynchburg	70.5	69.9	71.8	.1	.1	.1	3.3	3.4	3.4
Norfolk-Virginia Beach-Newport News	535.4	549.4	549.9	.1	.1	.1	38.1	38.3	37.9
Northern Virginia	663.1	685.1	687.4	.5	.4	.4	49.1	50.9	49.6
Richmond-Petersburg	419.1	429.8	431.0	.4	.4	.4	25.4	27.2	27.4
Roanoke	117.9	122.1	122.0	.2	.2	.2	7.1	7.6	7.5
Washington	1,804.7	1,848.4	1,867.8	3.0	3.0	3.1	93.5	97.9	97.8
Seattle	901.0	931.8	937.5	.6	.7	.7	47.8	48.5	48.2
West Virginia	601.7	599.4	604.3	38.5	36.7	36.8	25.8	27.2	25.9
Charleston	107.8	107.9	107.8	2.1	2.3	2.3	5.1	5.2	5.0
Huntington-Ashland	101.2	101.7	101.7	1.1	1.0	1.0	3.9	4.2	4.0
Parkersburg-Marietta	58.3	59.5	59.3	.8	.7	.7	3.0	3.1	2.9
Wheeling	56.5	57.7	57.6	2.4	2.4	2.4	1.8	2.0	1.9
Wisconsin	2,048.8	2,076.3	2,095.0	2.4	2.5	2.5	69.8	70.5	70.8
Appleton-Oshkosh-Neenah	141.2	146.0	147.5	(¹)	(¹)	(¹)	5.9	6.7	6.9
Eau Claire	53.8	54.1	55.4	(¹)	(¹)	(¹)	2.0	1.3	1.5
Green Bay	92.6	93.7	93.8	(¹)	(¹)	(¹)	3.2	2.6	2.6
Janesville-Beloit	53.2	52.2	53.6	(¹)	(¹)	(¹)	1.3	1.3	1.1
Kenosha	36.1	37.6	42.9	(¹)	(¹)	(¹)	.9	1.0	.9
La Crosse	48.8	49.0	51.1	(¹)	(¹)	(¹)	1.2	1.3	1.3
Madison	193.0	195.8	199.1	(¹)	(¹)	(¹)	6.3	6.3	6.4
Milwaukee	681.2	691.8	695.8	(¹)	(¹)	(¹)	21.0	21.2	21.8
Racine	68.6	68.7	69.8	(¹)	(¹)	(¹)	2.1	2.7	2.8
Sheboygan	45.2	47.1	46.4	(¹)	(¹)	(¹)	1.3	1.2	1.0
Wausau	45.0	47.3	47.4	(¹)	(¹)	(¹)	1.8	1.6	1.7
Wyoming	200.4	196.5	196.5	18.4	18.7	19.4	16.9	15.6	14.7
Puerto Rico	710.2	730.4	737.8	.7	.8	.8	30.3	34.0	34.1
Caguas	42.9	45.1	45.4	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Mayaguez	50.9	51.3	52.5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Ponce	45.2	46.3	47.0	.1	.1	.1	3.1	3.8	3.9
San Juan	438.6	450.9	453.2	.4	.5	.4	23.7	25.7	25.7
Virgin Islands	36.4	38.0	37.4	(¹)	(¹)	(¹)	2.6	1.7	1.9

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Virginia	427.3	426.1	427.0	139.5	142.7	143.0	586.1	611.3	608.5
Bristol	9.3	9.8	10.0	1.1	1.2	1.2	8.1	8.6	8.7
Charlottesville	8.7	8.6	8.7	2.0	2.3	2.3	12.1	12.2	12.1
Danville	17.0	16.7	17.3	1.0	1.0	1.0	8.1	8.3	8.3
Lynchburg	23.9	24.2	24.1	3.0	2.9	2.9	13.1	13.4	13.4
Norfolk-Virginia Beach-Newport News	69.3	66.6	66.4	25.8	26.1	26.1	131.2	140.4	139.1
Northern Virginia	34.8	34.6	34.5	46.6	49.7	49.5	152.5	159.1	159.1
Richmond-Petersburg	62.4	63.4	63.9	22.5	22.9	23.2	100.8	102.0	101.3
Roanoke	20.5	20.6	20.5	9.0	8.9	8.9	31.6	34.3	33.4
Washington	311.4	321.9	325.4	98.0	101.5	101.4	445.1	467.4	468.3
Seattle	175.3	185.1	186.1	59.2	59.8	60.0	223.0	233.8	235.7
West Virginia	87.6	87.0	87.2	37.2	36.3	36.5	139.0	141.5	141.5
Charleston	12.4	11.5	11.5	8.3	8.4	8.6	28.1	28.8	28.5
Huntington-Ashland	19.9	19.3	19.6	7.5	7.3	7.3	26.0	26.2	26.2
Parkersburg-Marietta	13.8	14.7	14.6	2.0	2.0	2.0	14.5	14.5	14.5
Wheeling	6.3	7.2	7.2	3.0	3.1	3.1	15.5	16.1	16.0
Wisconsin	523.4	531.9	535.5	93.9	90.9	94.7	488.8	506.5	504.6
Appleton-Oshkosh-Neenah	49.6	51.4	51.3	5.3	5.4	5.6	30.9	31.3	31.5
Eau Claire	10.3	10.3	10.1	2.8	3.0	3.2	15.3	16.5	16.9
Green Bay	25.5	25.8	24.9	6.5	6.7	6.7	23.8	24.6	24.6
Janesville-Beloit	17.2	16.0	16.8	1.9	1.7	1.8	13.6	14.1	14.1
Kenosha	9.7	10.7	15.5	1.4	1.4	1.4	8.6	8.9	8.9
La Crosse	10.2	10.3	10.5	2.3	2.3	2.3	13.5	14.6	14.7
Madison	21.8	22.8	22.7	6.6	6.6	6.8	42.9	43.6	44.6
Milwaukee	167.3	165.8	167.5	34.8	34.1	35.6	158.1	166.2	165.0
Racine	24.3	23.3	24.0	2.4	2.3	2.4	16.2	16.8	16.8
Sheboygan	19.0	20.3	19.9	1.4	1.4	1.5	8.6	9.1	9.0
Wausau	12.2	13.7	13.5	2.6	2.8	2.8	11.3	12.0	11.9
Wyoming	8.3	8.2	8.8	14.1	14.1	13.9	46.5	46.1	45.3
Puerto Rico	147.6	152.7	154.9	16.4	14.7	14.8	124.1	127.3	126.7
Caguas	14.5	16.3	16.4	(¹)	(¹)	(¹)	8.3	8.2	8.2
Mayaguez	20.1	19.3	20.4	(¹)	(¹)	(¹)	6.8	6.8	6.8
Ponce	8.7	8.4	8.4	(¹)	(¹)	(¹)	7.2	7.5	7.6
San Juan	64.5	65.2	65.8	12.1	11.7	11.7	85.2	88.8	88.1
Virgin Islands	1.8	1.9	1.9	2.4	2.5	2.5	8.0	8.3	8.4

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^o	Sept. 1986	Aug. 1987	Sept. 1987 ^o	Sept. 1986	Aug. 1987	Sept. 1987 ^o
Virginia	133.3	140.6	139.1	593.7	611.1	612.3	517.3	503.8	529.5
Bristol	1.0	.9	.9	4.4	4.5	4.6	5.0	4.9	5.3
Charlottesville	3.0	3.2	3.3	11.2	11.2	11.0	23.2	19.5	21.8
Danville	1.2	1.1	1.1	5.8	5.5	5.6	5.1	4.5	5.1
Lynchburg	3.3	3.4	3.4	14.3	13.5	14.8	9.6	9.0	9.7
Norfolk-Virginia Beach-Newport News	24.5	25.8	25.4	123.1	131.4	129.6	123.4	120.7	125.4
Northern Virginia	41.1	44.7	43.9	201.9	209.1	207.9	136.7	136.7	142.4
Richmond-Petersburg	33.2	35.1	35.0	85.7	90.8	90.6	88.8	88.0	89.4
Roanoke	8.0	8.4	8.4	27.0	27.1	27.2	14.6	15.1	15.9
Washington	107.2	108.7	108.1	402.4	414.4	418.8	344.1	333.6	344.9
Seattle	67.5	67.7	67.3	200.4	213.7	215.5	127.2	122.5	124.0
West Virginia	24.0	24.5	24.5	122.1	126.5	127.2	127.5	119.7	124.7
Charleston	6.0	6.0	6.0	25.0	25.0	25.0	20.8	20.7	20.9
Huntington-Ashland	4.3	4.4	4.3	20.2	20.6	20.6	18.3	18.7	18.7
Parkersburg-Marietta	2.2	2.2	2.2	12.8	13.2	13.2	9.2	9.1	9.2
Wheeling	2.6	2.6	2.6	15.7	15.3	15.3	9.2	9.0	9.1
Wisconsin	108.9	113.3	112.1	440.9	457.9	453.6	320.7	302.8	321.2
Appleton-Oshkosh-Neenah	7.0	7.4	7.3	26.6	28.7	29.0	15.8	15.1	15.8
Eau Claire	1.8	1.9	1.9	11.8	12.6	12.6	9.8	8.5	9.2
Green Bay	3.2	3.4	3.4	20.0	20.7	20.9	10.3	9.9	10.6
Janesville-Beloit	1.7	1.7	1.7	10.9	11.4	11.5	6.6	6.1	6.5
Kenosha	1.1	1.2	1.2	8.2	8.4	8.5	6.2	6.0	6.5
La Crosse	1.5	1.5	1.5	13.1	13.5	13.7	6.9	5.5	7.0
Madison	17.1	18.0	17.7	40.0	41.5	41.9	58.0	56.7	58.8
Milwaukee	46.6	48.6	48.3	172.7	179.0	177.5	80.3	76.4	79.6
Racine	2.2	2.2	2.2	13.2	13.5	13.5	8.2	7.9	8.1
Sheboygan	2.1	2.1	2.1	7.5	8.0	7.9	5.4	5.0	5.1
Wausau	3.4	3.4	3.4	8.0	8.5	8.2	5.6	5.3	5.7
Wyoming	8.2	7.8	7.7	35.4	36.7	34.8	52.6	49.3	51.9
Puerto Rico	32.7	34.3	33.9	97.8	103.3	104.5	260.5	263.5	268.1
Caguas	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	14.7	14.6	14.9
Mayaguez	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	16.1	16.3	16.4
Ponce	(¹)	(¹)	(¹)	8.0	7.9	8.1	15.2	15.4	15.7
San Juan	26.5	27.8	27.4	71.3	73.5	74.1	154.9	157.7	159.9
Virgin Islands	1.5	1.6	1.6	7.3	8.5	8.5	12.8	13.5	12.6

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

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

ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS

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

Year and month	Total private ¹			Mining			Construction		
	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings	Weekly hours	Hourly earnings	Weekly earnings
Annual averages									
1964	38.7	\$2.36	\$91.33	41.9	\$2.81	\$117.74	37.2	\$3.55	\$132.06
1965	38.8	2.46	95.45	42.3	2.92	123.52	37.4	3.70	138.38
1966	38.6	2.56	98.82	42.7	3.05	130.24	37.6	3.89	146.26
1967	38.0	2.68	101.84	42.6	3.19	135.89	37.7	4.11	154.95
1968	37.8	2.85	107.73	42.6	3.35	142.71	37.3	4.41	164.49
1969	37.7	3.04	114.61	43.0	3.60	154.80	37.9	4.79	181.54
1970	37.1	3.23	119.83	42.7	3.85	164.40	37.3	5.24	195.45
1971	36.9	3.45	127.31	42.4	4.06	172.14	37.2	5.69	211.67
1972	37.0	3.70	136.90	42.6	4.44	189.14	36.5	6.06	221.19
1973	36.9	3.94	145.39	42.4	4.75	201.40	36.8	6.41	235.89
1974	36.5	4.24	154.76	41.9	5.23	219.14	36.6	6.81	249.25
1975	36.1	4.53	163.53	41.9	5.95	249.31	36.4	7.31	266.08
1976	36.1	4.86	175.45	42.4	6.46	273.90	36.8	7.71	283.73
1977	36.0	5.25	189.00	43.4	6.94	301.20	36.5	8.10	295.65
1978	35.8	5.69	203.70	43.4	7.67	332.88	36.8	8.66	318.69
1979	35.7	6.16	219.91	43.0	8.49	365.07	37.0	9.27	342.99
1980	35.3	6.66	235.10	43.3	9.17	397.06	37.0	9.94	367.78
1981	35.2	7.25	255.20	43.7	10.04	438.75	36.9	10.82	399.26
1982	34.8	7.68	267.26	42.7	10.77	459.88	36.7	11.63	426.82
1983	35.0	8.02	280.70	42.5	11.28	479.40	37.1	11.94	442.97
1984	35.2	8.32	292.86	43.3	11.63	503.58	37.8	12.13	458.51
1985	34.9	8.57	299.09	43.4	11.98	519.93	37.7	12.32	464.46
1986	34.8	8.76	304.85	42.2	12.44	524.97	37.4	12.47	466.38
Monthly data, not seasonally adjusted									
1986:									
October	34.7	\$8.82	\$306.05	42.1	\$12.50	\$526.25	37.9	\$12.68	\$480.57
November	34.7	8.88	308.14	41.4	12.57	520.40	36.5	12.66	462.09
December	34.8	8.86	308.33	42.4	12.63	535.51	36.8	12.77	469.94
1987:									
January	34.4	8.90	306.16	42.5	12.66	538.05	37.2	12.58	467.98
February	34.5	8.92	307.74	42.0	12.56	527.52	36.8	12.51	460.37
March	34.6	8.92	308.63	41.8	12.51	522.92	37.4	12.59	470.87
April	34.6	8.91	308.29	41.8	12.43	519.57	37.4	12.55	469.37
May	34.8	8.93	310.76	42.4	12.42	526.61	38.5	12.60	485.10
June	35.0	8.92	312.20	42.4	12.44	527.46	38.1	12.61	480.44
July	35.1	8.91	312.74	42.1	12.31	518.25	38.6	12.57	485.20
August	35.3	8.94	315.58	42.4	12.32	522.37	38.6	12.67	489.06
September ^p	34.7	9.06	314.38	42.1	12.45	524.15	36.4	12.78	465.19
October ^p	34.9	9.09	317.24	43.1	12.33	531.42	38.7	12.78	494.59

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	38.4	9.35	359.04
Monthly data, not seasonally adjusted										
1986:										
October	40.7	\$9.72	\$9.32	\$395.60	39.1	\$11.77	\$460.21	38.4	\$9.36	\$359.42
November	41.0	9.78	9.37	400.98	39.3	11.90	467.67	38.4	9.47	363.65
December	41.5	9.85	9.42	408.78	39.1	11.90	465.29	38.4	9.47	363.65
1987:										
January	40.8	9.84	9.44	401.47	38.5	11.89	457.77	38.1	9.49	361.57
February	40.8	9.84	9.44	401.47	39.0	11.93	465.27	37.9	9.55	361.95
March	40.9	9.85	9.44	402.87	38.9	11.90	462.91	37.9	9.53	361.19
April	40.4	9.87	9.48	398.75	38.8	11.94	463.27	38.1	9.53	363.09
May	40.9	9.87	9.45	403.68	39.0	11.95	466.05	38.3	9.57	366.53
June	41.1	9.87	9.44	405.66	39.1	11.91	465.68	38.4	9.57	367.49
July	40.6	9.87	9.46	400.72	39.4	12.00	472.80	38.3	9.57	366.53
August	40.9	9.86	9.42	403.27	39.6	11.97	474.01	38.4	9.62	369.41
September ^a	40.6	10.01	9.55	406.41	39.0	12.00	468.00	38.2	9.68	369.78
October ^a	41.1	9.97	9.50	409.77	39.2	12.00	470.40	38.4	9.65	370.56

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	8.35	303.94	32.5	8.16	265.20
Monthly data, not seasonally adjusted									
1986:									
October	29.0	\$6.06	\$175.74	36.4	\$8.39	\$305.40	32.4	\$8.23	\$266.65
November	29.0	6.08	176.32	36.5	8.57	312.81	32.4	8.33	269.89
December	29.4	6.07	178.46	36.5	8.48	309.52	32.4	8.32	269.57
1987:									
January	28.3	6.09	172.35	36.3	8.60	312.18	32.2	8.37	269.51
February	28.7	6.09	174.78	36.4	8.75	318.50	32.4	8.43	273.13
March	28.9	6.08	175.71	36.3	8.72	316.54	32.4	8.41	272.48
April	29.2	6.09	177.83	36.3	8.71	316.17	32.3	8.40	271.32
May	29.3	6.09	178.44	36.3	8.72	316.54	32.4	8.38	271.51
June	29.6	6.08	179.97	36.4	8.68	315.95	32.6	8.35	272.21
July	30.0	6.07	182.10	36.2	8.69	314.58	32.8	8.33	273.22
August	30.3	6.06	183.62	36.4	8.81	320.68	32.9	8.40	276.36
September ^p	29.6	6.21	183.82	36.0	8.81	317.16	32.4	8.54	276.70
October ^p	29.1	6.16	179.26	36.1	8.79	317.32	32.5	8.61	279.83

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 1986 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1986 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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Total private		34.8	34.7	35.3	34.7	34.9					
Mining		42.1	42.1	42.4	42.1	43.1					
Metal mining	10	41.7	41.1	42.1	42.3						
Iron ores	101	41.6	39.8	41.1	43.1						
Copper ores	102	41.9	41.7	43.0	42.9						
Coal mining	11,12	40.3	40.7	41.5	41.3						
Bituminous coal and lignite mining	12	40.3	40.8	41.6	41.4						
Oil and gas extraction	13	41.8	41.7	41.8	41.6						
Crude petroleum, natural gas, and natural gas liquids	131,2	41.8	41.1	40.8	41.3						
Oil and gas field services	138	41.8	42.1	42.3	41.7						
Nonmetallic minerals, except fuels	14	46.1	45.4	46.1	44.8						
Crushed and broken stone	142	48.4	46.6	48.0	45.7						
Construction		38.5	37.9	38.6	36.4	38.7					
General building contractors	15	37.6	37.4	38.0	36.3						
Residential building construction	152	36.8	36.6	37.4	36.1						
Operative builders	153	39.3	38.7	38.9	37.4						
Nonresidential building construction	154	38.4	38.1	38.6	36.4						
Heavy construction contractors	16	43.0	41.5	42.9	39.0						
Highway and street construction	161	44.4	42.9	44.2	39.7						
Heavy construction, except highway	162	42.1	40.7	42.1	38.5						
Special trade contractors	17	37.5	37.1	37.6	35.7						
Plumbing, heating, and air conditioning	171	38.5	38.5	38.7	37.0						
Painting, paper hanging, and decorating	172	35.9	35.6	36.4	35.6						
Electrical work	173	39.2	39.0	39.1	37.2						
Masonry, stonework, and plastering	174	35.4	35.1	35.7	33.6						
Carpentering and flooring	175	34.8	34.7	35.5	34.2						
Roofing and sheet metal work	176	34.9	34.4	35.5	33.2						
Manufacturing		41.0	40.7	40.9	40.6	41.1	3.7	3.5	3.9	3.9	4.0
Durable goods		41.6	41.3	41.3	41.0	41.7	3.8	3.6	3.9	3.9	4.2
Lumber and wood products	24	40.8	40.6	40.7	39.9	40.4	3.9	3.7	4.1	3.7	
Logging camps and logging contractors	241	40.3	41.0	38.9	36.3	-	3.8	4.3	4.7	3.8	
Sawmills and planing mills	242	41.7	41.4	41.8	41.3		4.5	4.3	4.9	4.4	
Sawmills and planing mills, general	2421	41.9	41.4	42.0	41.6		4.8	4.5	5.1	4.6	
Hardwood dimension and flooring	2426	41.2	41.4	41.5	40.6		3.5	3.4	3.9	3.6	
Millwork, plywood, and structural members	243	41.0	40.5	41.0	40.4		3.8	3.4	3.8	3.5	
Millwork	2431	41.7	40.6	41.4	40.5		3.7	2.9	3.5	3.1	
Wood kitchen cabinets	2434	40.2	39.8	39.7	39.2		3.1	3.0	3.2	3.0	
Hardwood veneer and plywood	2435	40.7	40.5	41.1	40.4		3.6	3.4	3.9	3.4	
Softwood veneer and plywood	2436	41.6	41.8	42.1	42.0		4.9	4.6	5.2	5.1	
Wood containers	244	38.6	38.8	39.0	38.4		2.8	2.6	3.1	2.6	
Wood buildings and mobile homes	245	39.5	39.4	39.9	38.3		3.2	2.9	3.3	2.6	
Mobile homes	2451	39.5	39.7	39.7	38.0		3.1	2.8	2.8	2.6	
Miscellaneous wood products	249	40.3	40.3	40.5	40.0		3.5	3.3	3.3	3.3	
Furniture and fixtures	25	40.5	40.5	40.3	39.7	40.5	3.1	2.9	3.2	3.2	
Household furniture	251	40.0	40.1	39.8	39.5		2.7	2.7	2.8	3.1	
Wood household furniture	2511	40.0	40.5	39.9	39.5		2.7	2.9	2.7	2.7	
Upholstered household furniture	2512	39.5	39.8	39.0	39.1		2.3	2.7	2.3	2.6	
Metal household furniture	2514	40.4	39.8	40.5	39.6		3.2	2.4	3.4	4.5	
Mattresses and bedspings	2515	40.9	38.9	40.7	40.0		3.6	2.6	4.3	4.7	
Office furniture	252	41.2	41.2	41.2	39.8		3.2	3.1	3.6	3.0	
Public building and related furniture	253	40.9	40.3	40.4	39.2		3.8	3.0	3.6	3.4	
Partitions and fixtures	254	42.1	41.6	41.2	40.1		4.6	3.8	4.4	4.1	
Miscellaneous furniture and fixtures	259	41.0	40.8	40.8	40.3		3.2	2.9	3.4	3.5	
Stone, clay, and glass products	32	43.0	42.6	42.6	42.4	42.7	5.4	5.1	5.4	5.2	
Flat glass	321	45.1	45.3	45.4	48.8	-	6.2	6.1	6.2	8.8	
Glass and glassware, pressed or blown	322	41.6	41.8	41.4	41.2		4.8	4.7	4.9	5.4	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Total private		\$8.82	\$8.82	\$8.94	\$9.06	\$9.09	\$306.94	\$306.05	\$315.58	\$314.38	\$317.24
Mining		12.52	12.50	12.32	\$12.45	\$12.33	527.09	526.25	522.37	\$524.15	\$531.42
Metal mining	10	13.04	12.85	13.03	13.21		543.77	528.14	548.56	558.78	
Iron ores	101	14.47	14.13	14.72	14.58		601.95	562.37	604.99	628.40	
Copper ores	102	11.49	11.44	11.40	11.89		481.43	477.05	490.20	510.08	
Coal mining	11,12	15.42	15.49	15.66	15.81		621.43	630.44	649.89	652.95	
Bituminous coal and lignite mining	12	15.49	15.56	15.72	15.87		624.25	634.85	653.95	657.02	
Oil and gas extraction	13	11.69	11.62	11.27	11.38		488.64	484.55	471.09	473.41	
Crude petroleum, natural gas, and natural gas liquids	131,2	13.82	13.71	13.95	14.05		577.68	563.48	569.16	580.27	
Oil and gas field services	138	10.32	10.31	9.87	9.98		431.38	434.05	417.50	416.17	
Nonmetallic minerals, except fuels	14	10.50	10.53	10.71	10.75		484.05	478.06	493.73	481.60	
Crushed and broken stone	142	9.98	9.91	10.22	10.14		483.03	461.81	490.56	463.40	
Construction		12.59	12.68	12.67	12.78	12.78	484.72	480.57	489.06	465.19	494.59
General building contractors	15	11.53	11.61	11.85	11.98		433.53	434.21	450.30	434.87	
Residential building construction	152	10.86	10.93	11.18	11.33		399.65	400.04	418.13	409.01	
Operative builders	153	9.79	9.87	10.47	10.57		384.75	381.97	407.28	395.32	
Nonresidential building construction	154	12.33	12.39	12.63	12.76		473.47	472.06	487.52	464.46	
Heavy construction contractors	16	12.15	12.32	12.05	12.07		522.45	511.28	516.95	470.73	
Highway and street construction	161	12.15	12.34	12.20	12.23		539.46	529.39	539.24	485.53	
Heavy construction, except highway	162	12.14	12.30	11.94	11.96		511.09	500.61	502.67	460.46	
Special trade contractors	17	13.18	13.24	13.20	13.32		494.25	491.20	496.32	475.52	
Plumbing, heating, and air conditioning	171	13.37	13.37	13.38	13.49		514.75	514.75	517.81	499.13	
Painting, paper hanging, and decorating	172	12.54	12.58	12.44	12.66		450.19	447.85	452.82	450.70	
Electrical work	173	14.68	14.60	14.67	14.82		575.46	569.40	573.60	551.30	
Masonry, stonework, and plastering	174	13.36	13.47	13.44	13.50		472.94	472.80	479.81	453.60	
Carpentering and flooring	175	12.63	12.69	12.59	12.71		439.52	440.34	446.95	434.68	
Roofing and sheet metal work	176	11.50	11.78	11.66	11.65		401.35	405.23	413.93	386.78	
Manufacturing		9.73	9.72	9.86	10.01	9.97	398.93	395.60	403.27	406.41	409.77
Durable goods		10.29	10.27	10.42	10.54	10.51	428.06	424.15	430.35	432.14	438.27
Lumber and wood products	24	8.35	8.32	8.49	\$8.48	\$8.45	340.68	337.79	345.54	\$338.35	\$341.38
Logging camps and logging contractors	241	10.73	10.80	11.11	10.87	-	432.42	442.80	432.18	394.58	-
Sawmills and planing mills	242	8.50	8.43	8.60	8.64		354.45	349.00	359.48	356.83	
Sawmills and planing mills, general	2421	8.90	8.83	8.96	9.00		372.91	365.56	376.32	374.40	
Hardwood dimension and flooring	2426	6.55	6.49	6.84	6.93		269.86	268.69	283.86	281.36	
Millwork, plywood, and structural members	243	8.25	8.17	8.41	8.43		338.25	330.89	344.81	340.57	
Millwork	2431	8.49	8.41	8.69	8.70		354.03	341.45	359.77	352.35	
Wood kitchen cabinets	2434	7.59	7.59	7.71	7.67		305.12	302.08	306.09	300.66	
Hardwood veneer and plywood	2435	6.81	6.77	6.89	6.89		277.17	274.19	283.18	278.36	
Softwood veneer and plywood	2436	9.62	9.52	9.79	9.94		400.19	397.94	412.16	417.48	
Wood containers	244	6.02	6.00	6.21	6.23		232.37	232.80	242.19	239.23	
Wood buildings and mobile homes	245	7.67	7.72	7.90	7.88		302.97	304.17	315.21	301.80	
Mobile homes	2451	7.74	7.80	8.00	8.00		305.73	309.66	317.60	304.00	
Miscellaneous wood products	249	7.22	7.16	7.30	7.35		290.97	288.55	295.65	294.00	
Furniture and fixtures	25	7.55	7.53	7.74	7.77	7.77	305.78	304.97	311.92	308.47	314.69
Household furniture	251	6.95	6.94	7.11	7.17		278.00	278.29	282.98	283.22	-
Wood household furniture	2511	6.39	6.40	6.56	6.57		255.60	259.20	261.74	259.52	
Upholstered household furniture	2512	7.60	7.64	7.74	7.85		300.20	304.07	301.86	306.94	
Metal household furniture	2514	7.20	7.03	7.32	7.48		290.88	279.79	296.46	296.21	
Mattresses and bedspreads	2515	7.36	7.28	7.65	7.76		301.02	283.19	311.36	310.40	
Office furniture	252	8.42	8.41	8.91	8.76		346.90	346.49	367.09	348.65	
Public building and related furniture	253	8.06	7.89	8.05	8.13		329.65	317.97	325.22	318.70	
Partitions and fixtures	254	9.02	9.07	9.12	9.28		379.74	377.31	375.74	372.13	
Miscellaneous furniture and fixtures	259	7.90	7.85	8.21	8.19		323.90	320.28	334.97	330.06	
Stone, clay, and glass products	32	10.11	10.10	10.31	10.42	10.34	434.73	430.26	439.21	441.81	441.52
Flat glass	321	14.11	13.94	14.23	14.96	-	636.36	631.48	646.04	730.05	-
Glass and glassware, pressed or blown	322	11.16	11.07	11.49	11.66		464.26	462.73	475.69	480.39	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	41.9	41.8	41.6	40.3		5.9	5.7	5.8	6.7	
Pressed and blown glass, nec	3229	41.2	41.8	41.2	42.3		3.5	3.4	3.8	3.9	
Products of purchased glass	323	42.0	41.5	41.4	41.6		3.8	3.6	3.8	3.5	
Cement, hydraulic	324	41.5	41.1	42.0	43.3		3.4	3.0	3.7	4.0	
Structural clay products	325	42.2	41.9	42.0	41.3		4.1	4.0	4.7	4.2	
Pottery and related products	326	40.3	40.6	40.0	39.6		2.8	2.8	2.8	3.7	
Concrete, gypsum, and plaster products	327	45.5	44.7	44.3	43.5		7.7	7.1	7.3	6.0	
Concrete block and brick	3271	46.5	45.9	45.5	43.9		8.4	8.2	8.6	6.8	
Concrete products, nec	3272	45.1	44.5	43.7	42.8		7.0	6.4	6.6	5.7	
Ready-mixed concrete	3273	45.1	44.0	44.1	42.9		7.8	7.0	7.5	5.5	
Misc. nonmetallic mineral products	329	40.9	40.8	41.5	42.1		3.8	3.7	4.4	5.0	
Abrasive products	3291	38.9	38.2	42.0	40.5		2.4	2.5	3.8	3.3	
Asbestos products	3292	42.3	43.1	41.2	42.0		3.9	4.0	3.8	5.3	
Primary metal industries	33	42.1	42.0	43.0	43.2	43.7	4.3	4.3	5.1	5.5	
Blast furnaces and basic steel products	331	41.8	41.8	43.5	45.0	44.9	4.0	4.0	5.3	5.8	
Blast furnaces and steel mills	3312	41.9	41.8	43.7	45.7		4.1	4.0	5.4	5.9	
Steel pipe and tubes	3317	41.6	42.5	42.1	41.9		3.6	4.2	5.3	4.9	
Iron and steel foundries	332	42.0	41.6	42.6	41.4		4.6	4.3	5.1	5.1	
Gray iron foundries	3321	42.2	42.0	43.1	41.8		5.2	5.0	5.8	5.8	
Malleable iron foundries	3322	39.3	39.7	41.6	38.2		2.7	2.8	4.1	3.5	
Steel foundries, nec	3325	41.4	40.1	42.3	41.7		3.8	3.1	3.8	3.9	
Primary nonferrous metals	333	42.8	43.3	43.5	44.7		4.3	4.2	4.6	5.8	
Primary aluminum	3334	43.4	44.7	44.3	46.0		4.5	4.0	4.9	6.2	
Nonferrous rolling and drawing	335	43.0	42.5	43.2	42.9		5.3	5.2	5.7	6.3	
Copper rolling and drawing	3351	42.2	41.9	44.0	42.6		4.7	4.5	5.6	6.0	
Aluminum sheet, plate, and foil	3353	44.2	43.4	44.0	43.0		6.0	6.3	7.4	8.5	
Nonferrous wire drawing and insulating	3357	42.7	42.4	42.6	42.9		5.2	5.1	5.5	5.8	
Nonferrous foundries	336	41.7	41.8	41.9	40.7		3.6	3.4	3.8	4.0	
Aluminum foundries	3361	42.3	42.3	42.4	41.0		3.9	3.7	4.1	4.3	
Fabricated metal products	34	41.6	41.3	41.3	40.8	41.7	3.8	3.6	3.9	3.9	
Metal cans and shipping containers	341	43.4	43.1	44.9	44.1		5.9	5.3	6.5	5.9	
Metal cans	3411	43.4	43.3	45.0	44.5		5.9	5.4	6.6	5.9	
Cutlery, hand tools, and hardware	342	40.8	40.8	40.8	39.8		3.0	3.0	3.3	3.4	
Hand and edge tools, and hand saws and blades	3423,5	41.0	41.1	41.2	40.1		2.9	2.8	3.5	3.3	
Hardware, nec	3429	40.7	40.7	40.3	39.4		3.1	3.2	3.2	3.5	
Plumbing and heating, except electric	343	40.3	40.6	41.0	40.6		3.0	3.0	3.5	3.6	
Plumbing fittings and brass goods	3432	40.2	40.5	41.6	41.2		2.4	2.3	3.1	2.9	
Heating equipment, except electric	3433	40.0	40.4	39.8	39.8		2.7	3.0	3.1	4.0	
Fabricated structural metal products	344	41.3	41.1	40.9	40.4		3.8	3.6	3.7	3.6	
Fabricated structural metal	3441	42.4	42.0	42.1	41.7		4.3	4.1	4.2	4.3	
Metal doors, sash, and trim	3442	40.6	40.6	40.2	39.6		3.5	3.4	3.4	3.3	
Fabricated plate work (boiler shops)	3443	41.6	41.3	42.1	41.5		3.5	3.1	4.0	4.0	
Sheet metal work	3444	40.5	40.4	39.7	39.2		3.2	3.3	3.2	3.2	
Architectural metal work	3446	40.3	40.4	40.2	39.8		3.7	3.7	3.6	3.0	
Screw machine products, bolts, etc	345	42.4	42.2	42.1	41.4		4.6	4.3	4.7	4.3	
Screw machine products	3451	40.6	40.4	40.7	40.8		3.3	3.2	3.5	3.4	
Bolts, nuts, rivets, and washers	3452	44.2	43.9	43.5	42.1		5.8	5.5	5.8	5.1	
Metal forgings and stampings	346	43.0	42.4	41.8	40.9		4.7	4.4	4.3	4.5	
Iron and steel forgings	3462	40.9	40.4	41.6	41.6		3.2	2.9	4.0	4.3	
Automotive stampings	3465	44.6	43.7	42.3	41.3		5.9	5.4	4.7	5.4	
Metal stampings, nec	3469	41.7	41.6	41.1	40.0		3.8	3.7	4.0	3.5	
Metal services, nec	347	41.1	41.0	40.8	40.1		3.7	3.5	3.4	3.2	
Plating and polishing	3471	41.0	40.6	40.6	39.6		3.6	3.4	3.4	3.1	
Metal coating and allied services	3479	41.3	41.7	41.1	40.9		3.8	3.7	3.5	3.4	
Ordnance and accessories, nec	348	41.1	40.8	40.8	41.3		2.9	2.8	3.1	3.3	
Ammunition, except for small arms, nec	3483	40.5	39.9	39.6	40.3		2.5	2.2	2.5	2.3	
Misc. fabricated metal products	349	40.8	40.5	40.8	41.0		3.0	2.7	3.5	3.9	
Valves and pipe fittings	3494	40.2	39.6	41.1	41.0		2.5	2.2	3.6	4.0	
Misc. fabricated wire products	3496	40.6	40.5	40.5	40.4		3.0	2.7	3.0	3.0	
Machinery, except electrical	35	41.7	41.5	41.8	41.5	42.3	3.6	3.4	4.0	3.9	
Engines and turbines	351	42.2	42.1	42.1	42.3	-	4.1	4.4	4.8	4.4	
Turbines and turbine generator sets	3511	41.8	40.7	38.8	38.8		5.0	4.5	4.1	3.9	
Internal combustion engines, nec	3519	42.3	42.7	43.1	43.4		3.8	4.4	5.0	4.6	
Farm and garden machinery	352	40.6	40.0	41.2	41.9		2.8	2.2	3.7	3.6	
Farm machinery and equipment	3523	41.2	40.5	42.3	42.6		3.4	2.7	4.6	4.4	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	\$11.55	\$11.45	\$11.97	\$12.19		\$483.95	\$478.61	\$497.95	\$491.26	
Pressed and blown glass, nec	3229	10.71	10.61	10.93	11.10		441.25	443.50	450.32	469.53	
Products of purchased glass	323	8.85	8.84	8.78	8.85		371.70	366.86	363.49	368.16	
Cement, hydraulic	324	13.26	13.20	13.45	13.83		550.29	542.52	564.90	598.84	
Structural clay products	325	8.08	8.20	8.62	8.81		340.98	343.58	362.04	363.85	
Pottery and related products	326	8.79	8.74	9.00	9.16		354.24	354.84	360.00	362.74	
Concrete, gypsum, and plaster products	327	9.90	9.93	10.13	10.09		450.45	443.87	448.76	438.92	
Concrete block and brick	3271	8.74	8.79	9.03	8.92		406.41	403.46	410.87	391.59	
Concrete products, nec	3272	8.74	8.63	9.01	9.03		394.17	384.04	393.74	386.48	
Ready-mixed concrete	3273	10.81	10.93	10.95	10.84		487.53	480.92	482.90	465.04	
Misc. nonmetallic mineral products	329	10.24	10.26	10.40	10.51		418.82	418.61	431.60	442.47	
Abrasive products	3291	9.76	9.74	9.62	9.76		379.66	372.07	404.04	395.28	
Asbestos products	3292	10.20	10.23	10.19	10.33		431.46	440.91	419.83	433.86	
Primary metal industries	33	11.82	11.75	11.98	12.26	\$11.99	497.62	493.50	515.14	529.63	\$523.96
Blast furnaces and basic steel products	331	13.76	13.63	13.81	14.16	13.80	575.17	569.73	600.74	637.20	619.62
Blast furnaces and steel mills	3312	14.56	14.38	14.50	14.88	-	610.06	601.08	633.65	680.02	-
Steel pipe and tubes	3317	10.89	10.99	10.98	11.17		453.02	467.08	462.26	468.02	
Iron and steel foundries	332	10.56	10.52	10.68	10.73		443.52	437.63	454.97	444.22	
Gray iron foundries	3321	10.96	10.92	11.12	11.14		462.51	458.64	479.27	465.65	
Malleable iron foundries	3322	11.16	11.15	11.49	11.45		438.59	442.66	477.98	437.39	
Steel foundries, nec	3325	9.97	9.92	9.90	10.13		412.76	397.79	418.77	422.42	
Primary nonferrous metals	333	13.28	13.16	13.07	13.54		568.38	569.83	568.55	605.24	
Primary aluminum	3334	14.04	13.60	13.41	13.89		609.34	607.92	594.06	638.94	
Nonferrous rolling and drawing	335	11.27	11.21	11.43	11.67		484.61	476.43	493.78	500.64	
Copper rolling and drawing	3351	10.24	10.33	10.55	10.57		432.13	432.83	464.20	450.28	
Aluminum sheet, plate, and foil	3353	14.03	13.65	13.98	14.48		620.13	592.41	615.12	622.64	
Nonferrous wire drawing and insulating	3357	11.06	11.00	11.42	11.76		472.26	466.40	486.49	504.50	
Nonferrous foundries	336	9.48	9.53	9.44	9.56		395.32	398.35	395.54	389.09	
Aluminum foundries	3361	9.74	9.80	9.68	9.79		412.00	414.54	410.43	401.39	
Fabricated metal products	34	9.88	9.88	9.97	10.04	10.07	411.01	408.04	411.76	409.63	419.92
Metal cans and shipping containers	341	13.35	13.15	13.34	\$13.41	-	579.39	566.77	598.97	\$591.38	-
Metal cans	3411	14.05	13.87	14.15	14.14		609.77	600.57	636.75	629.23	
Cutlery, hand tools, and hardware	342	9.73	9.83	9.80	9.91		396.98	401.06	399.84	394.42	
Hand and edge tools, and hand saws and blades	3423,5	9.04	9.03	9.04	9.16		370.64	371.13	372.45	367.32	
Hardware, nec	3429	10.11	10.26	10.22	10.31		411.48	417.58	411.87	406.21	
Plumbing and heating, except electric	343	9.09	9.13	9.15	9.19		366.33	370.68	375.15	373.11	
Plumbing fittings and brass goods	3432	8.70	8.70	8.74	8.64		349.74	352.35	363.58	355.97	
Heating equipment, except electric	3433	8.86	8.97	9.20	9.32		354.40	362.39	366.16	370.94	
Fabricated structural metal products	344	9.12	9.10	9.28	9.33		376.66	374.01	379.55	376.93	
Fabricated structural metal	3441	9.63	9.62	9.92	9.96		408.31	404.04	417.63	415.33	
Metal doors, sash, and trim	3442	7.58	7.60	7.57	7.70		307.75	308.56	304.31	304.92	
Fabricated plate work (boiler shops)	3443	10.16	10.08	10.33	10.37		422.66	416.30	434.89	430.36	
Sheet metal work	3444	9.43	9.39	9.73	9.70		381.92	379.36	386.28	380.24	
Architectural metal work	3446	8.85	8.79	8.73	8.90		356.66	355.12	350.95	354.22	
Screw machine products, bolts, etc	345	9.51	9.48	9.82	9.78		403.22	400.06	413.42	404.89	
Screw machine products	3451	8.89	8.90	9.07	9.05		360.93	359.56	369.15	369.24	
Bolts, nuts, rivets, and washers	3452	10.09	10.02	10.54	10.53		445.98	439.88	458.49	443.31	
Metal forgings and stampings	346	11.74	11.80	11.70	11.82		504.82	500.32	489.06	483.44	
Iron and steel forgings	3462	12.29	12.27	12.41	\$12.92		502.66	495.71	516.26	\$537.47	
Automotive stampings	3465	13.67	13.84	13.72	13.75		609.68	604.81	580.36	567.88	
Metal stampings, nec	3469	9.07	9.09	9.19	\$9.20		378.22	378.14	377.71	\$368.00	
Metal services, nec	347	7.96	7.93	8.03	8.12		327.16	325.13	327.62	325.61	
Plating and polishing	3471	7.82	7.83	8.01	8.12		320.62	317.90	325.21	321.55	
Metal coating and allied services	3479	8.22	8.13	8.07	8.11		339.49	339.02	331.68	331.70	
Ordnance and accessories, nec	348	10.67	10.73	10.90	10.92		438.54	437.78	444.72	451.00	
Ammunition, except for small arms, nec	3483	10.31	10.32	10.52	10.42		417.56	411.77	416.59	419.93	
Misc. fabricated metal products	349	9.14	9.13	9.37	9.45		372.91	369.77	382.30	387.45	
Valves and pipe fittings	3494	9.75	9.77	9.99	10.08		391.95	386.89	410.59	413.28	
Misc. fabricated wire products	3496	8.26	8.26	8.45	8.50		335.36	334.53	342.23	343.40	
Machinery, except electrical	35	10.61	10.58	10.76	10.81	\$10.82	442.44	439.07	449.77	448.62	\$457.69
Engines and turbines	351	12.93	13.07	13.24	13.19	-	545.65	550.25	557.40	557.94	-
Turbines and turbine generator sets	3511	13.23	13.11	13.27	13.20		553.01	533.58	514.88	512.16	
Internal combustion engines, nec	3519	12.81	13.06	13.23	13.19		541.86	557.66	570.21	572.45	
Farm and garden machinery	352	9.68	9.43	10.18	10.46		393.01	377.20	419.42	438.27	
Farm machinery and equipment	3523	10.27	10.03	10.84	11.27		423.12	406.22	458.53	480.10	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	41.3	41.3	42.4	42.2		2.8	2.6	4.0	4.0	
Construction machinery	3531	41.7	42.0	43.4	43.3		2.4	2.1	3.4	3.8	
Mining machinery	3532	40.9	40.7	42.7	42.6		2.8	2.3	4.4	4.3	
Oil field machinery	3533	40.0	40.2	42.0	41.4		3.3	3.0	5.6	5.7	
Conveyors and conveying equipment	3535	41.7	41.4	43.0	41.8		3.3	3.3	4.7	3.6	
Industrial trucks and tractors	3537	41.5	40.9	40.2	41.0		3.1	2.9	3.4	3.3	
Metalworking machinery	354	42.5	42.2	42.1	41.5		4.7	4.4	4.6	4.3	
Machine tools, metal cutting types	3541	41.7	41.7	41.7	41.2		3.7	3.5	3.7	3.7	
Machine tools, metal forming types	3542	41.5	41.9	42.9	43.4		4.8	5.1	4.9	5.6	
Special dies, tools, jigs, and fixtures	3544	43.6	43.2	42.7	41.8		5.6	5.4	5.3	4.8	
Machine tool accessories	3545	40.4	40.3	40.9	40.8		3.4	3.2	4.0	3.9	
Power driven hand tools	3546	42.4	41.3	41.7	40.7		3.0	2.4	3.6	2.8	
Special industry machinery	355	41.9	41.6	41.7	41.2		3.6	3.4	4.0	4.0	
Food products machinery	3551	42.3	42.3	42.1	41.1		3.4	3.3	3.8	3.6	
Textile machinery	3552	42.5	42.9	42.3	42.5		4.0	4.2	3.8	3.2	
Printing trades machinery	3555	40.5	40.6	39.7	39.6		3.9	3.5	4.2	5.0	
General industrial machinery	356	41.6	41.4	41.6	41.5		3.5	3.3	4.0	3.9	
Pumps and pumping equipment	3561	40.8	40.9	42.9	42.8		2.3	2.3	4.4	4.1	
Ball and roller bearings	3562	42.7	43.0	42.5	42.7		4.7	4.8	4.7	4.8	
Air and gas compressors	3563	41.0	41.3	40.8	42.1		2.3	2.9	3.6	4.1	
Blowers and fans	3564	42.0	40.7	41.4	40.8		3.7	2.6	4.0	3.4	
Speed changers, drives, and gears	3566	42.5	42.7	41.4	40.2		4.6	4.3	4.5	3.7	
Power transmission equipment, nec	3568	42.8	41.4	41.3	41.9		5.2	4.0	4.2	4.9	
Office and computing machines	357	42.2	41.9	42.4	42.1		3.2	3.1	3.4	3.6	
Electronic computing equipment	3573	42.3	41.8	42.1	41.9		3.1	2.9	3.3	3.6	
Refrigeration and service machinery	358	41.5	41.0	41.1	40.4		3.4	3.0	3.6	3.5	
Refrigeration and heating equipment	3585	42.0	41.3	41.4	40.7		3.7	3.3	3.6	3.7	
Misc. machinery, except electrical	359	41.2	41.2	41.3	41.0		3.6	3.5	3.9	3.7	
Carburetors, pistons, rings, and valves	3592	42.6	41.6	41.2	41.1		4.8	3.9	3.6	3.2	
Machinery, except electrical, nec	3599	40.9	41.1	41.3	41.0		3.4	3.4	3.9	3.8	
Electrical and electronic equipment	36	41.3	41.0	40.8	40.5	40.9	3.1	2.9	3.0	3.0	
Electric distributing equipment	361	41.4	41.0	40.9	40.3	-	3.0	2.7	3.3	3.1	
Transformers	3612	42.8	41.9	41.6	41.5		3.3	2.8	3.3	3.5	
Switchgear and switchboard apparatus	3613	40.0	40.1	40.2	39.2		2.8	2.7	3.2	2.8	
Electrical industrial apparatus	362	40.9	40.1	41.1	40.4		2.8	2.3	3.5	3.2	
Motors and generators	3621	41.3	40.2	40.8	39.9		3.3	2.5	3.6	3.2	
Industrial controls	3622	40.2	39.6	40.3	39.8		1.9	1.7	2.7	2.2	
Household appliances	363	41.2	41.1	39.8	39.7		3.5	3.4	2.2	2.9	
Household refrigerators and freezers	3632	39.9	39.6	40.3	40.2		2.7	3.2	2.0	3.5	
Household laundry equipment	3633	43.1	41.4	41.6	40.5		4.8	2.7	2.8	3.6	
Electric housewares and fans	3634	41.4	42.5	40.2	40.2		3.9	4.5	2.5	3.0	
Electric lighting and wiring equipment	364	40.5	40.1	39.9	39.2		2.7	2.5	2.7	2.8	
Electric lamps	3641	41.0	40.5	39.5	38.9		3.1	3.0	2.2	2.5	
Current-carrying wiring devices	3643	40.3	40.1	39.8	38.6		2.2	1.9	3.0	2.9	
Noncurrent-carrying wiring devices	3644	40.8	41.1	40.8	40.3		2.7	3.0	2.6	2.9	
Residential lighting fixtures	3645	39.1	38.7	39.1	38.4		1.7	1.6	1.6	1.6	
Radio and TV receiving equipment	365	42.6	42.3	41.1	39.9		3.4	2.7	2.7	3.1	
Radio and TV receiving sets	3651	43.0	41.9	40.5	39.5		3.0	1.7	2.2	2.5	
Communication equipment	366	41.4	41.3	41.1	41.4		2.8	2.7	2.6	2.7	
Telephone and telegraph apparatus	3661	41.8	40.9	42.4	42.7		2.4	2.0	2.9	3.1	
Radio and TV communication equipment	3662	41.3	41.5	40.7	41.0		2.9	2.9	2.5	2.6	
Electronic components and accessories	367	41.4	40.8	40.8	40.4		3.3	3.1	3.3	3.2	
Electronic tubes	3671-3	43.4	44.0	41.4	42.0		3.0	3.6	2.0	2.2	
Semiconductors and related devices	3674	41.5	40.1	40.4	40.2		3.5	3.1	3.5	3.5	
Electronic components, nec	3679	41.6	41.2	41.1	40.8		3.5	3.3	3.5	3.4	
Misc. electrical equipment and supplies	369	42.0	42.0	41.7	41.1		3.6	3.5	3.4	3.5	
Storage batteries	3691	44.1	44.8	41.5	41.0		4.2	4.7	4.1	4.4	
Engine electrical equipment	3694	42.2	41.7	42.5	42.1		4.1	3.6	3.9	4.1	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	\$11.06	\$11.02	\$11.12	\$11.29		\$456.78	\$455.13	\$471.49	\$476.44	
Construction machinery	3531	12.23	12.21	12.44	12.71		509.99	512.82	539.90	550.34	
Mining machinery	3532	11.42	11.28	11.26	11.41		467.08	459.10	480.80	486.07	
Oil field machinery	3533	11.18	11.06	11.03	11.18		447.20	444.61	463.26	462.85	
Conveyors and conveying equipment	3535	9.90	9.83	9.82	9.76		412.83	406.96	422.26	407.97	
Industrial trucks and tractors	3537	9.74	9.73	9.64	9.78		404.21	397.96	387.53	400.98	
Metalworking machinery	354	11.03	11.05	11.11	11.14		468.78	466.31	467.73	462.31	
Machine tools, metal cutting types	3541	11.04	11.04	11.07	11.17		460.37	460.37	461.62	460.20	
Machine tools, metal forming types	3542	11.46	11.53	11.38	11.50		475.59	483.11	488.20	499.10	
Special dies, tools, jigs, and fixtures	3544	11.72	11.75	11.89	11.90		510.99	507.60	507.70	497.42	
Machine tool accessories	3545	9.97	9.94	10.05	10.03		402.79	400.58	411.05	409.22	
Power driven hand tools	3546	8.49	8.44	8.49	8.50		359.98	348.57	354.03	345.95	
Special industry machinery	355	10.45	10.42	10.61	10.76		437.86	433.47	442.44	443.31	
Food products machinery	3551	10.59	10.60	10.68	10.81		447.96	448.38	449.63	444.29	
Textile machinery	3552	8.54	8.47	8.74	8.77		362.95	363.36	369.70	372.73	
Printing trades machinery	3555	11.08	11.09	11.45	11.73		448.74	450.25	454.57	464.51	
General industrial machinery	356	10.29	10.27	10.40	10.41		428.06	425.18	432.64	432.02	
Pumps and pumping equipment	3561	10.94	10.91	11.00	11.06		446.35	446.22	471.90	473.37	
Ball and roller bearings	3562	10.79	10.71	10.88	10.86		460.73	460.53	462.40	463.72	
Air and gas compressors	3563	10.12	10.12	10.23	10.20		414.92	417.96	417.38	429.42	
Blowers and fans	3564	9.03	9.07	9.37	9.30		379.26	369.15	387.92	379.44	
Speed changers, drives, and gears	3566	10.46	10.35	10.09	10.08		444.55	441.95	417.73	405.22	
Power transmission equipment, nec	3568	10.49	10.35	10.39	10.53		448.97	428.49	429.11	441.21	
Office and computing machines	357	10.12	10.05	10.42	10.38		427.06	421.10	441.81	437.00	
Electronic computing equipment	3573	10.08	10.09	10.43	10.39		426.38	421.76	439.10	435.34	
Refrigeration and service machinery	358	10.36	10.32	10.43	10.42		429.94	423.12	428.67	420.97	
Refrigeration and heating equipment	3585	10.59	10.55	10.61	10.62		444.78	435.72	439.25	432.23	
Misc. machinery, except electrical	359	10.25	10.21	10.42	10.45		422.30	420.65	430.35	428.45	
Carburetors, pistons, rings, and valves	3592	12.76	12.56	12.76	12.53		543.58	522.50	525.71	514.98	
Machinery, except electrical, nec	3599	9.83	9.83	10.05	10.12		402.05	404.01	415.07	414.92	
Electrical and electronic equipment	36	9.70	9.67	9.90	9.98	\$9.96	400.61	396.47	403.92	404.19	\$407.36
Electric distributing equipment	361	9.06	9.09	9.32	9.31	-	375.08	372.69	381.19	375.19	
Transformers	3612	8.92	8.97	9.18	9.21		381.78	375.84	381.89	382.22	
Switchgear and switchboard apparatus	3613	9.21	9.21	9.46	9.41		368.40	369.32	380.29	368.87	
Electrical industrial apparatus	362	9.74	9.66	9.83	9.83		398.37	387.37	404.01	397.13	
Motors and generators	3621	9.67	9.59	9.70	9.66		399.37	385.52	395.76	385.43	
Industrial controls	3622	9.68	9.52	9.77	9.72		389.14	376.99	393.73	386.86	
Household appliances	363	9.56	9.47	9.85	9.95		393.87	389.22	392.03	395.02	
Household refrigerators and freezers	3632	11.03	11.05	11.33	11.53		440.10	437.58	456.60	463.51	
Household laundry equipment	3633	11.40	11.37	11.84	12.05		491.34	470.72	492.54	488.03	
Electric housewares and fans	3634	7.25	7.17	7.27	7.25		300.15	304.73	292.25	291.45	
Electric lighting and wiring equipment	364	8.88	8.88	9.07	9.17		359.64	356.09	361.89	359.46	
Electric lamps	3641	9.84	9.85	10.60	10.61		403.44	398.93	418.70	412.73	
Current-carrying wiring devices	3643	8.38	8.39	8.51	8.54		337.71	336.44	338.70	329.64	
Noncurrent-carrying wiring devices	3644	9.28	9.34	9.40	9.44		378.62	383.87	383.52	380.43	
Residential lighting fixtures	3645	6.44	6.40	6.69	6.79		251.80	247.68	261.58	260.74	
Radio and TV receiving equipment	365	9.27	9.19	9.01	9.09		394.90	388.74	370.31	362.69	
Radio and TV receiving sets	3651	9.60	9.53	9.29	9.30		412.80	399.31	376.25	367.35	
Communication equipment	366	11.40	11.37	11.81	11.92		471.96	469.58	485.39	493.49	
Telephone and telegraph apparatus	3661	11.18	11.17	11.22	11.20		467.32	456.85	475.73	478.24	
Radio and TV communication equipment	3662	11.49	11.45	12.03	12.18		474.54	475.18	489.62	499.38	
Electronic components and accessories	367	8.73	8.71	8.99	9.04		361.42	355.37	366.79	365.22	
Electronic tubes	3671-3	10.79	10.76	11.00	11.15		468.29	473.44	455.40	468.30	
Semiconductors and related devices	3674	10.37	10.31	10.72	10.81		430.36	413.43	433.09	434.56	
Electronic components, nec	3679	7.88	7.89	8.13	8.15		327.81	325.07	334.14	332.52	
Misc. electrical equipment and supplies	369	10.43	10.47	10.45	10.55		438.06	439.74	435.77	433.61	
Storage batteries	3691	11.09	11.06	11.13	11.30		489.07	495.49	461.90	463.30	
Engine electrical equipment	3694	10.84	10.93	11.04	11.08		457.45	455.78	469.20	466.47	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Transportation equipment	37	42.3	41.9	41.1	41.0	42.2	4.5	4.2	4.0	4.2	
Motor vehicles and equipment	371	42.5	41.9	40.8	40.8	42.6	4.4	4.0	3.9	4.4	
Motor vehicles and car bodies	3711	42.4	41.3	39.0	40.1	-	4.4	3.8	3.2	4.2	
Truck and bus bodies	3713	40.6	40.3	42.4	41.3		3.0	2.8	4.3	4.4	
Motor vehicle parts and accessories	3714	43.0	42.8	42.1	41.4		4.7	4.5	4.5	4.7	
Truck trailers	3715	40.5	39.5	41.8	40.4		2.8	2.2	3.8	3.3	
Aircraft and parts	372	42.9	42.6	42.1	41.9		5.3	5.1	4.8	4.8	
Aircraft	3721	42.1	41.9	41.9	42.1		4.5	4.6	4.3	4.5	
Aircraft engines and engine parts	3724	43.4	43.0	42.6	41.8		5.9	5.6	5.3	4.7	
Aircraft equipment, nec	3728	43.8	43.5	42.1	41.8		5.9	5.5	5.3	5.3	
Ship and boat building and repairing	373	40.7	40.4	39.7	39.5		3.1	2.8	2.5	2.7	
Ship building and repairing	3731	41.1	40.4	39.8	40.3		3.4	2.9	2.5	2.9	
Boat building and repairing	3732	39.7	40.3	39.4	38.0		2.4	2.5	2.4	2.3	
Railroad equipment	374	40.9	40.8	40.8	40.6		2.9	3.3	2.1	1.8	
Guided missiles, space vehicles, and parts	376	41.9	41.8	42.1	42.4		4.3	4.1	4.2	4.3	
Guided missiles and space vehicles	3761	42.0	41.9	42.1	42.2		4.5	4.3	4.2	4.2	
Miscellaneous transportation equipment	379	41.9	41.6	39.8	39.1		4.4	4.3	3.5	3.1	
Travel trailers and campers	3792	39.0	38.2	38.7	36.5		2.5	2.3	2.4	1.4	
Instruments and related products	38	40.8	40.7	41.3	40.8	41.8	2.8	2.6	3.0	3.1	
Engineering and scientific instruments	381	41.6	41.4	41.9	41.1		3.0	2.9	3.3	3.1	
Measuring and controlling devices	382	40.6	40.3	41.2	40.4		2.4	2.3	2.7	2.7	
Environmental controls	3822	39.9	39.5	40.0	38.8		2.4	2.1	3.0	2.7	
Process control instruments	3823	40.7	40.7	42.1	42.0		2.6	2.3	3.3	3.3	
Instruments to measure electricity	3825	40.3	39.9	41.0	40.1		2.1	2.0	2.4	2.1	
Optical instruments and lenses	383	41.9	41.9	42.1	43.2		2.9	2.9	3.0	3.2	
Medical instruments and supplies	384	40.6	40.3	40.5	40.0		2.8	2.6	3.0	3.0	
Surgical and medical instruments	3841	40.6	40.4	40.4	39.7		3.0	2.7	2.8	3.0	
Surgical appliances and supplies	3842	40.8	40.4	40.5	40.1		2.8	2.6	3.1	3.0	
Ophthalmic goods	385	39.9	40.2	40.7	40.7		2.6	2.5	2.6	3.0	
Photographic equipment and supplies	386	41.2	42.3	43.5	43.7		3.4	3.6	3.9	4.4	
Watches, clocks, and watchcases	387	40.9	39.6	40.2	37.9		2.4	2.0	2.4	2.9	
Miscellaneous manufacturing	39	39.5	39.8	39.4	39.0	39.7	2.6	2.9	2.7	2.7	
Jewelry, silverware, and plated ware	391	38.9	40.5	38.1	38.2	-	2.6	3.8	1.9	2.4	
Jewelry, precious metal	3911	37.8	39.6	37.5	37.6		2.2	3.8	1.7	2.3	
Musical instruments	393	41.3	40.7	41.4	40.0		3.2	2.6	3.2	2.4	
Toys and sporting goods	394	39.2	39.2	39.7	38.9		2.0	2.2	2.6	2.3	
Dolls, games, toys, and children's vehicles	3942.4	39.1	39.0	38.8	38.6		2.1	2.0	2.7	2.7	
Sporting and athletic goods, nec	3949	39.2	39.5	40.5	39.2		1.8	2.3	2.5	1.9	
Pens, pencils, office, and art supplies	395	40.2	40.2	40.4	39.9		2.2	2.3	2.1	2.1	
Costume jewelry and notions	396	38.6	39.1	37.0	37.7		3.2	3.5	3.3	3.6	
Costume jewelry	3961	37.4	37.1	34.8	36.4		3.5	3.3	2.7	3.2	
Miscellaneous manufactures	399	40.1	40.1	40.2	39.6		2.9	3.0	3.0	3.1	
Signs and advertising displays	3993	40.4	40.8	39.5	39.1		3.0	3.2	2.8	2.9	
Nondurable goods		40.1	40.0	40.4	40.2	40.3	3.7	3.5	3.9	4.0	3.9
Food and kindred products	20	40.4	40.0	40.7	40.6	40.7	4.4	4.0	4.6	4.9	-
Meat products	201	40.5	39.3	40.0	40.6	-	4.1	3.6	4.0	4.4	
Meat packing plants	2011	41.5	40.6	41.8	41.7		4.9	4.1	4.9	5.6	
Sausages and other prepared meats	2013	40.5	39.6	41.1	41.0		3.8	3.3	4.1	4.2	
Poultry dressing plants	2016	39.9	38.0	38.2	39.7		3.7	3.1	3.4	3.5	
Dairy products	202	41.2	40.6	41.4	42.3		4.3	4.1	4.5	5.5	
Cheese, natural and processed	2022	39.6	38.6	39.5	40.8		3.8	3.4	3.8	4.6	
Fluid milk	2026	42.8	42.2	42.3	43.9		5.2	5.0	5.0	6.5	
Preserved fruits and vegetables	203	39.6	39.3	40.9	39.8		4.8	4.2	6.0	5.8	
Canned specialties	2032	44.3	41.8	40.6	40.5		7.9	6.3	5.5	7.5	
Canned fruits and vegetables	2033	39.1	39.5	41.5	40.3		4.9	4.5	7.1	6.9	
Frozen fruits and vegetables	2037	37.5	37.7	40.3	38.4		4.5	3.5	6.0	5.9	
Grain mill products	204	44.6	44.2	44.0	45.1		6.3	6.1	5.9	7.1	
Flour and other grain mill products	2041	48.6	48.1	47.6	49.5		7.3	7.3	6.9	9.5	
Prepared feeds, nec	2048	43.9	42.9	43.8	44.4		6.2	5.8	6.1	6.9	
Bakery products	205	40.3	39.8	39.8	39.8		4.2	3.7	4.0	4.3	
Bread, cake, and related products	2051	39.7	39.1	39.1	39.0		4.2	3.7	4.0	4.7	
Cookies and crackers	2052	41.8	41.5	41.6	41.7		4.1	3.5	4.0	3.1	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Durable goods—Continued											
Transportation equipment	37	\$12.82	\$12.82	\$12.90	\$13.10	\$13.15	\$542.29	\$537.16	\$530.19	\$537.10	\$554.93
Motor vehicles and equipment	371	13.42	13.42	13.43	13.74	13.83	570.35	562.30	547.94	560.59	589.16
Motor vehicles and car bodies	3711	14.97	15.06	15.37	15.69	-	634.73	621.98	599.43	629.17	-
Truck and bus bodies	3713	10.96	11.09	11.35	11.58	-	444.98	446.93	481.24	478.25	-
Motor vehicle parts and accessories	3714	12.65	12.61	12.67	12.86	-	543.95	539.71	533.41	532.40	-
Truck trailers	3715	9.48	9.44	9.38	9.20	-	383.94	372.88	392.08	371.68	-
Aircraft and parts	372	12.92	12.95	13.25	13.30	-	554.27	551.67	557.83	557.27	-
Aircraft	3721	(¹)	(¹)	(¹)	(¹)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	\$13.17	\$13.12	\$13.49	\$13.44	-	571.58	564.16	574.67	561.79	-
Aircraft equipment, nec	3728	11.97	12.05	12.30	12.44	-	524.29	524.18	517.83	519.99	-
Ship and boat building and repairing	373	10.54	10.51	10.29	10.39	-	428.98	424.60	408.51	410.41	-
Ship building and repairing	3731	11.64	11.63	11.53	11.58	-	478.40	469.85	458.89	466.67	-
Boat building and repairing	3732	7.96	7.97	7.92	7.97	-	316.01	321.19	312.05	302.86	-
Railroad equipment	374	12.48	12.53	12.04	12.16	-	510.43	511.22	491.23	493.70	-
Guided missiles, space vehicles, and parts	376	12.25	12.22	12.95	13.06	-	513.28	510.80	545.20	553.74	-
Guided missiles and space vehicles	3761	12.62	12.60	13.26	13.36	-	530.04	527.94	558.25	563.79	-
Miscellaneous transportation equipment	379	10.71	10.86	10.38	10.30	-	448.75	451.78	413.12	402.73	-
Travel trailers and campers	3792	8.84	9.11	8.35	8.35	-	344.76	348.00	323.15	304.78	-
Instruments and related products	38	9.54	9.56	9.78	9.82	9.75	389.23	389.09	403.91	400.66	407.55
Engineering and scientific instruments	381	10.23	10.33	10.82	10.77	-	425.57	427.66	453.36	442.65	-
Measuring and controlling devices	382	9.34	9.34	9.64	9.64	-	379.20	376.40	397.17	389.46	-
Environmental controls	3822	8.76	8.78	9.13	9.16	-	349.52	346.81	365.20	355.41	-
Process control instruments	3823	9.48	9.41	9.49	9.42	-	385.84	382.99	399.53	395.64	-
Instruments to measure electricity	3825	9.49	9.49	9.90	9.82	-	382.45	378.65	405.90	393.78	-
Optical instruments and lenses	383	10.51	10.41	10.48	10.34	-	440.37	436.18	441.21	446.69	-
Medical instruments and supplies	384	8.53	8.54	8.68	8.72	-	346.32	344.16	351.54	348.80	-
Surgical and medical instruments	3841	8.71	8.68	8.78	8.85	-	353.63	350.67	354.71	351.35	-
Surgical appliances and supplies	3842	8.38	8.44	8.58	8.58	-	341.90	340.98	347.49	344.06	-
Ophthalmic goods	385	7.23	7.28	7.44	7.57	-	288.48	292.66	302.81	308.10	-
Photographic equipment and supplies	386	12.93	12.98	13.26	13.55	-	532.72	549.05	576.81	592.14	-
Watches, clocks, and watchcases	387	6.97	6.97	7.18	7.12	-	285.07	276.01	288.64	269.85	-
Miscellaneous manufacturing	39	7.58	7.57	7.70	7.77	7.77	299.41	301.29	303.38	303.03	308.47
Jewelry, silverware, and plated ware	391	8.19	8.28	8.25	8.36	-	318.59	335.34	314.33	319.35	-
Jewelry, precious metal	3911	8.18	8.28	8.35	8.44	-	309.20	327.89	313.13	317.34	-
Musical instruments	393	7.18	7.21	7.47	7.54	-	296.53	293.45	309.26	301.60	-
Toys and sporting goods	394	7.02	6.97	7.15	7.18	-	275.18	273.22	283.86	279.30	-
Dolls, games, toys, and children's vehicles	3942,4	6.81	6.80	6.89	6.93	-	266.27	265.20	267.33	267.50	-
Sporting and athletic goods, nec	3949	7.21	7.12	7.39	7.42	-	282.63	281.24	299.30	290.86	-
Pens, pencils, office, and art supplies	395	7.77	7.80	7.67	7.69	-	312.35	313.56	309.87	306.83	-
Costume jewelry and notions	396	6.08	5.91	6.20	6.31	-	234.69	231.08	229.40	237.89	-
Costume jewelry	3961	5.72	5.53	5.82	5.94	-	213.93	205.16	202.54	216.22	-
Miscellaneous manufactures	399	8.28	8.33	8.50	8.58	-	332.03	334.03	341.70	339.77	-
Signs and advertising displays	3993	8.68	8.80	8.84	8.98	-	350.67	359.04	349.18	351.12	-
Nondurable goods		8.96	8.96	9.12	9.29	9.21	359.30	358.40	368.45	373.46	371.16
Food and kindred products	20	8.65	8.69	8.80	8.96	8.92	349.46	347.60	358.16	363.78	363.04
Meat products	201	7.32	7.30	7.43	7.51	-	296.46	286.89	297.20	304.91	-
Meat packing plants	2011	8.33	8.29	8.39	8.48	-	345.70	336.57	350.70	353.62	-
Sausages and other prepared meats	2013	8.76	8.69	8.78	8.88	-	354.78	344.12	360.86	364.08	-
Poultry dressing plants	2016	5.93	5.95	6.14	6.23	-	236.61	234.10	234.55	247.33	-
Dairy products	202	9.51	9.49	9.59	9.86	-	391.81	385.29	397.03	417.08	-
Cheese, natural and processed	2022	8.86	8.79	8.87	9.14	-	350.86	339.29	350.37	372.91	-
Fluid milk	2026	9.97	9.95	10.08	10.37	-	426.72	419.89	426.38	455.24	-
Preserved fruits and vegetables	203	7.82	7.90	7.95	8.17	-	309.67	310.47	325.16	325.17	-
Canned specialties	2032	9.95	9.84	9.95	9.88	-	440.79	411.31	403.97	400.14	-
Canned fruits and vegetables	2033	7.59	7.63	7.94	7.93	-	296.77	301.39	329.51	319.58	-
Frozen fruits and vegetables	2037	7.10	7.21	7.13	7.66	-	266.25	271.82	287.34	294.14	-
Grain mill products	204	10.50	10.59	10.77	10.99	-	468.30	468.08	473.88	495.65	-
Flour and other grain mill products	2041	10.21	10.30	10.59	11.02	-	496.21	495.43	504.08	545.49	-
Prepared feeds, nec	2048	8.23	8.20	8.33	8.49	-	361.30	351.78	364.85	376.96	-
Bakery products	205	9.96	9.93	9.98	10.17	-	401.39	395.21	397.20	404.77	-
Bread, cake, and related products	2051	9.89	9.85	9.95	10.22	-	392.63	385.14	389.05	398.58	-
Cookies and crackers	2052	10.14	10.13	10.04	10.05	-	423.85	420.40	417.66	419.09	-

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	40.9	41.2	40.5	39.9		3.9	3.9	3.2	3.4	
Cane and beet sugar	2061-3	41.5	41.6	41.5	41.9		6.2	6.2	4.5	5.4	
Confectionery products	2065	40.3	40.9	39.8	39.0		3.0	2.9	2.7	2.5	
Fats and oils	207	43.7	43.8	41.2	43.2		5.8	5.7	4.9	5.9	
Beverages	208	40.0	40.2	41.1	40.9		3.7	3.5	4.1	4.2	
Malt beverages	2082	41.5	41.5	42.5	41.6		4.6	4.9	4.8	5.5	
Bottled and canned soft drinks	2086	39.2	39.3	41.5	40.4		3.1	3.0	4.3	3.3	
Misc. food and kindred products	209	38.1	38.0	39.8	38.9		3.8	3.6	4.6	4.2	
Tobacco manufactures	21	38.3	39.0	36.1	38.5	40.3	1.8	2.1	2.3	2.1	
Cigarettes	211	37.0	36.9	36.2	36.9		1.5	1.4	2.3	1.8	
Textile mill products	22	41.8	41.6	42.3	41.5	41.8	4.5	4.3	4.7	4.3	
Weaving mills, cotton	221	43.2	43.2	43.7	43.1		6.0	6.0	6.5	6.4	
Weaving mills, synthetics	222	41.9	42.1	42.5	42.3		4.3	4.4	4.7	4.6	
Weaving and finishing mills, wool	223	41.5	41.7	41.2	39.8		3.6	4.0	1.3	1.0	
Narrow fabric mills	224	40.5	40.6	40.7	40.1		3.1	3.0	3.8	3.4	
Knitting mills	225	39.4	39.5	40.8	39.7		3.2	3.2	3.6	3.0	
Women's hosiery, except socks	2251	37.5	38.0	38.9	36.9		2.3	2.2	3.1	2.3	
Hosiery, nec	2252	38.6	39.3	40.2	38.2		2.6	3.0	2.9	2.2	
Knit outerwear mills	2253	39.0	38.7	40.9	40.1		3.2	3.0	3.6	3.0	
Knit underwear mills	2254	40.5	40.3	39.4	39.8		2.9	2.9	2.0	2.1	
Circular knit fabric mills	2257	42.1	41.9	42.9	41.9		4.8	5.0	4.9	4.5	
Textile finishing, except wool	226	43.1	42.5	43.3	42.4		5.3	4.9	5.3	4.8	
Finishing plants, cotton	2261	43.5	42.3	43.5	42.5		5.9	5.2	5.3	4.1	
Finishing plants, synthetics	2262	42.2	42.0	42.5	42.0		5.4	5.2	4.8	4.7	
Floor covering mills	227	44.1	42.4	43.9	41.6		5.6	4.3	4.9	3.9	
Yarn and thread mills	228	42.8	42.5	42.8	42.7		5.1	4.9	5.2	5.4	
Yarn mills, except wool	2281	43.7	43.5	43.6	43.3		5.7	5.4	5.8	6.1	
Throwing and winding mills	2282	38.7	38.4	39.0	39.3		3.5	3.4	2.7	2.6	
Miscellaneous textile goods	229	42.8	42.8	42.5	42.1		4.5	4.5	4.6	4.3	
Apparel and other textile products	23	36.8	36.9	37.4	36.1	37.2	1.8	1.7	1.9	1.8	
Men's and boys' suits and coats	231	35.0	35.7	35.6	35.7		.8	.9	1.2	1.3	
Men's and boys' furnishings	232	36.8	37.1	38.0	36.4		1.3	1.3	1.9	1.6	
Men's and boys' shirts and nightwear	2321	37.3	37.3	38.1	36.7		1.3	1.3	1.8	1.4	
Men's and boys' separate trousers	2327	36.0	37.4	37.5	35.6		.7	1.1	1.5	1.1	
Men's and boys' work clothing	2328	35.5	36.0	37.8	36.2		1.1	1.1	2.0	1.8	
Women's and misses' outerwear	233	35.0	35.0	36.2	34.1		1.5	1.4	1.7	1.4	
Women's and misses' blouses and waists	2331	35.7	35.9	35.7	34.8		1.4	1.4	1.3	1.2	
Women's and misses' dresses	2335	34.1	33.9	35.4	33.6		1.1	1.2	1.4	1.2	
Women's and misses' suits and coats	2337	35.8	34.6	37.2	33.9		2.0	1.6	2.5	2.0	
Women's and misses' outerwear, nec	2339	35.0	35.3	36.4	34.2		1.5	1.5	1.8	1.4	
Women's and children's undergarments	234	38.3	37.8	38.3	37.8		2.0	1.6	1.6	1.7	
Women's and children's underwear	2341	38.7	38.2	38.6	38.2		2.1	1.7	1.5	1.7	
Brassieres and allied garments	2342	36.1	35.7	36.7	35.8		1.4	1.3	2.0	1.7	
Children's outerwear	236	36.5	37.3	36.4	35.8		1.4	1.5	1.7	1.2	
Children's dresses and blouses	2361	35.2	36.5	35.0	34.6		1.3	1.3	1.0	.7	
Misc. apparel and accessories	238	37.9	38.3	38.3	37.9		1.9	2.0	1.9	2.0	
Misc. fabricated textile products	239	39.9	39.9	39.2	38.5		3.5	3.1	2.9	3.3	
Curtains and draperies	2391	38.0	38.2	37.7	35.3		2.1	2.0	1.7	1.6	
House furnishings, nec	2392	39.5	40.2	39.5	39.7		3.4	3.5	3.2	4.1	
Automotive and apparel trimmings	2396	42.1	41.3	41.1	41.3		6.0	4.8	4.7	5.8	
Paper and allied products	26	43.2	43.1	43.2	44.0	43.3	5.1	4.9	5.2	6.2	
Paper and pulp mills	261,2,6	45.3	45.3	45.0	47.7		6.7	6.6	6.4	8.9	
Paper mills, except building paper	262	45.6	45.5	45.1	48.2		6.9	6.7	6.6	9.3	
Paperboard mills	263	44.0	43.9	43.6	45.3		6.8	7.0	7.3	8.6	
Misc. converted paper products	264	41.6	41.6	42.0	42.1		3.6	3.4	3.9	4.4	
Paper coating and glazing	2641	42.0	42.2	43.9	44.2		3.1	3.0	4.3	4.7	
Envelopes	2642	42.3	41.8	41.5	40.9		3.6	3.3	3.1	3.3	
Bags, except textile bags	2643	42.4	42.2	41.8	42.1		4.4	4.2	4.3	5.0	
Paperboard containers and boxes	265	42.9	42.4	42.7	42.4		4.7	4.3	4.9	5.1	
Folding paperboard boxes	2651	42.4	42.8	42.3	42.0		4.1	4.2	4.6	4.7	
Corrugated and solid fiber boxes	2653	44.3	43.3	43.4	43.0		5.4	4.8	5.4	5.7	
Sanitary food containers	2654	40.3	39.5	41.7	42.3		4.6	3.9	4.2	4.6	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	\$8.88	\$8.73	\$9.28	\$9.34		\$363.19	\$359.68	\$375.84	\$372.67	
Cane and beet sugar	2061-3	10.48	9.86	11.04	11.03		434.92	410.18	458.16	462.16	
Confectionery products	2065	7.59	7.59	8.07	8.05		305.88	310.43	321.19	313.95	
Fats and oils	207	8.94	8.83	9.49	9.30		390.68	386.75	390.99	401.76	
Beverages	208	11.64	11.78	11.81	11.95		465.60	473.56	485.39	488.76	
Malt beverages	2082	16.19	16.47	16.46	16.80		671.89	683.51	699.55	698.88	
Bottled and canned soft drinks	2086	9.11	9.16	9.48	9.47		357.11	359.99	393.42	382.59	
Misc. food and kindred products	209	8.00	7.95	8.20	8.35		304.80	302.10	326.36	324.82	
Tobacco manufactures	21	12.29	12.14	14.20	12.87	\$12.74	470.71	473.46	512.62	495.50	\$513.42
Cigarettes	211	15.78	15.79	16.85	16.87	-	583.86	582.65	609.97	622.50	-
Textile mill products	22	7.02	7.02	7.16	7.22	7.23	293.44	292.03	302.87	299.63	302.21
Weaving mills, cotton	221	7.45	7.45	7.57	7.58	-	321.84	321.84	330.81	326.70	-
Weaving mills, synthetics	222	7.50	7.53	7.70	7.72		314.25	317.01	327.25	326.56	
Weaving and finishing mills, wool	223	7.42	7.42	7.53	7.76		307.93	309.41	310.24	308.85	
Narrow fabric mills	224	6.65	6.53	6.77	6.85		269.33	265.12	275.54	274.69	
Knitting mills	225	6.41	6.41	6.51	6.55		252.55	253.20	265.61	260.04	
Women's hosiery, except socks	2251	6.34	6.23	6.52	6.53		237.75	236.74	253.63	240.96	
Hosiery, nec	2252	6.06	6.07	6.21	6.32		233.92	238.55	249.64	241.42	
Knit outerwear mills	2253	6.42	6.45	6.36	6.38		250.38	249.62	260.12	255.84	
Knit underwear mills	2254	5.88	5.93	6.10	6.17		238.14	238.98	240.34	245.57	
Circular knit fabric mills	2257	7.00	7.01	7.16	7.23		294.70	293.72	307.16	302.94	
Textile finishing, except wool	226	7.33	7.26	7.42	7.46		315.92	308.55	321.29	316.30	
Finishing plants, cotton	2261	7.46	7.29	7.47	7.43		324.51	308.37	324.95	315.78	
Finishing plants, synthetics	2262	7.68	7.65	7.64	7.69		324.10	321.30	324.70	322.98	
Floor covering mills	227	7.40	7.36	7.48	7.49		326.34	312.06	328.37	311.58	
Yarn and thread mills	228	6.57	6.61	6.82	6.89		281.20	280.93	291.90	294.20	
Yarn mills, except wool	2281	6.59	6.60	6.82	6.92		287.98	287.10	297.35	299.64	
Throwing and winding mills	2282	6.51	6.68	6.83	6.86		251.94	256.51	266.37	269.60	
Miscellaneous textile goods	229	7.92	7.93	8.09	8.24		338.98	339.40	343.83	346.90	
Apparel and other textile products	23	5.91	5.87	5.90	6.03	6.02	217.49	216.60	220.66	217.68	223.94
Men's and boys' suits and coats	231	6.68	6.61	6.63	6.72	-	233.80	235.98	236.03	239.90	-
Men's and boys' furnishings	232	5.40	5.39	5.42	5.51		198.72	199.97	205.96	200.56	
Men's and boys' shirts and nightwear	2321	5.16	5.15	5.24	5.37		192.47	192.10	199.64	197.08	
Men's and boys' separate trousers	2327	5.22	5.26	5.25	5.30		187.92	196.72	196.88	188.68	
Men's and boys' work clothing	2328	5.53	5.48	5.50	5.58		196.32	197.28	207.90	202.00	
Women's and misses' outerwear	233	5.69	5.67	5.73	5.87		199.15	198.45	207.43	200.17	
Women's and misses' blouses and waists	2331	5.09	5.04	5.02	5.10		181.71	180.94	179.21	177.48	
Women's and misses' dresses	2335	5.92	5.98	6.04	6.21		201.87	202.72	213.82	208.66	
Women's and misses' suits and coats	2337	6.51	6.45	6.55	6.74		233.06	223.17	243.66	228.49	
Women's and misses' outerwear, nec	2339	5.53	5.51	5.57	5.72		193.55	194.50	202.75	195.62	
Women's and children's undergarments	234	5.41	5.37	5.53	5.60		207.20	202.99	211.80	211.68	
Women's and children's underwear	2341	5.25	5.21	5.38	5.43		203.18	199.02	207.67	207.43	
Brassieres and allied garments	2342	6.28	6.22	6.42	6.62		226.71	222.05	235.61	237.00	
Children's outerwear	236	5.18	5.15	5.29	5.42		189.07	192.10	192.56	194.04	
Children's dresses and blouses	2361	4.98	4.98	5.20	5.26		175.30	181.77	182.00	182.00	
Misc. apparel and accessories	238	5.61	5.57	5.79	5.86		212.62	213.33	221.76	222.09	
Misc. fabricated textile products	239	7.27	7.13	7.08	7.24		290.07	284.49	277.54	278.74	
Curtains and draperies	2391	5.61	5.66	5.69	6.02		213.18	216.21	214.51	212.51	
House furnishings, nec	2392	6.05	5.97	6.11	6.23		238.98	239.99	241.35	247.33	
Automotive and apparel trimmings	2396	11.58	11.15	10.85	10.88		487.52	460.50	445.94	449.34	
Paper and allied products	26	11.23	11.25	11.41	11.69	11.49	485.14	484.88	492.91	514.36	497.52
Paper and pulp mills	261,2,6	13.75	13.80	13.98	14.45		622.88	625.14	629.10	689.27	-
Paper mills, except building paper	262	13.81	13.86	14.08	14.52		629.74	630.63	635.01	699.86	
Paperboard mills	263	14.02	14.17	14.29	14.45		616.88	622.06	623.04	654.59	
Misc. converted paper products	264	9.65	9.66	9.92	10.08		401.44	401.86	416.64	424.37	
Paper coating and glazing	2641	11.08	11.17	11.09	11.09		465.36	471.37	486.85	490.18	
Envelopes	2642	8.88	8.85	9.29	9.33		375.62	369.93	385.54	381.60	
Bags, except textile bags	2643	8.98	8.95	9.27	9.41		380.75	377.69	387.49	396.16	
Paperboard containers and boxes	265	9.61	9.56	9.74	9.83		412.27	405.34	415.90	416.79	
Folding paperboard boxes	2651	9.81	9.80	10.14	10.13		415.94	419.44	428.92	425.46	
Corrugated and solid fiber boxes	2653	9.92	9.85	9.96	10.10		439.46	426.51	432.26	434.30	
Sanitary food containers	2654	9.26	9.27	9.38	9.49		373.18	366.17	391.15	401.43	

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Nondurable goods—Continued											
Printing and publishing	27	38.3	38.1	38.1	38.4	38.1	3.3	3.1	3.2	3.5	
Newspapers	271	33.6	33.7	33.7	34.6	-	1.8	1.9	1.6	2.0	
Periodicals	272	38.5	38.5	40.0	39.9		3.5	3.2	4.3	4.4	
Books	273	40.6	39.5	38.4	37.8		3.8	4.0	3.5	3.4	
Book publishing	2731	38.8	38.4	38.0	37.5		2.5	2.6	2.7	2.7	
Book printing	2732	43.4	41.3	39.0	38.2		5.9	6.1	4.7	4.6	
Miscellaneous publishing	274	36.6	36.3	36.6	36.2		2.6	2.1	2.6	2.5	
Commercial printing	275	39.7	39.7	39.6	40.0		3.9	3.7	3.8	4.1	
Commercial printing, letterpress	2751	39.1	39.1	39.0	39.6		3.2	3.1	3.0	3.4	
Commercial printing, lithographic	2752	39.9	39.9	39.6	40.0		4.2	4.0	4.0	4.3	
Manifold business forms	276	40.9	40.8	41.1	41.1		3.4	3.1	3.8	4.3	
Blankbooks and bookbinding	278	38.9	37.9	38.4	38.2		2.7	2.1	2.7	3.0	
Printing trade services	279	39.1	38.6	38.5	38.3		4.1	3.8	4.0	3.7	
Chemicals and allied products	28	41.8	41.8	42.1	42.5	42.1	3.8	3.6	4.0	4.3	
Industrial inorganic chemicals	281	42.1	42.2	42.6	43.0	-	3.6	3.7	4.3	4.6	
Industrial inorganic chemicals, nec	2819	42.7	42.7	42.8	43.1		3.8	3.6	4.0	4.6	
Plastics materials and synthetics	282	41.8	41.8	43.1	44.3		3.7	3.8	4.5	5.2	
Plastics materials and resins	2821	42.8	43.0	42.9	44.8		4.5	4.6	4.7	5.9	
Organic fibers, noncellulosic	2824	41.2	41.0	43.8	44.4		2.9	3.1	4.1	4.6	
Drugs	283	42.0	41.6	41.2	41.0		3.2	3.0	2.8	3.0	
Pharmaceutical preparations	2834	41.8	41.5	40.8	40.7		3.2	3.1	2.8	3.0	
Soap, cleaners, and toilet goods	284	40.7	40.8	41.1	40.4		3.6	3.1	3.5	3.6	
Soap and other detergents	2841	43.9	43.5	43.6	43.1		5.6	4.7	5.6	5.5	
Polishing, sanitation, and finishing preparations	2842,3	41.7	40.6	41.4	41.4		3.2	2.5	3.4	3.3	
Toilet preparations	2844	38.6	39.3	39.6	38.6		2.7	2.4	2.5	2.7	
Paints and allied products	285	41.8	41.5	42.0	41.6		3.6	3.2	4.0	3.9	
Industrial organic chemicals	286	43.3	43.3	43.3	44.6		5.0	4.8	5.5	6.0	
Cyclic crudes and intermediates	2865	43.1	42.7	42.6	44.0		5.2	4.6	5.5	6.4	
Gum, wood, and industrial organic chemicals, nec	2861,9	43.4	43.5	43.5	44.8		4.9	4.8	5.5	5.9	
Agricultural chemicals	287	41.5	41.6	41.9	43.1		3.9	4.4	3.6	4.3	
Miscellaneous chemical products	289	41.2	41.1	41.2	42.0		3.8	3.6	3.6	3.5	
Petroleum and coal products	29	44.1	43.9	43.5	43.6	43.4	4.7	5.1	5.0	5.4	
Petroleum refining	291	43.8	43.8	42.9	43.4	-	3.9	4.5	4.0	4.9	
Paving and roofing materials	295	46.5	45.6	46.4	45.2		8.2	7.7	9.1	7.8	
Rubber and misc. plastics products	30	41.6	41.5	41.4	41.2	41.8	4.0	3.8	4.2	4.3	
Tires and inner tubes	301	43.4	43.7	43.9	44.3		5.9	4.9	6.0	6.7	
Rubber and plastics footwear	302	39.8	39.9	41.7	39.6		2.5	2.6	2.9	1.8	
Reclaimed rubber, and rubber and plastics hose and belting	303,4	43.1	42.6	43.1	41.9		3.9	3.9	5.0	4.4	
Fabricated rubber products, nec	306	41.3	41.2	41.2	40.8		3.5	3.4	3.6	3.5	
Miscellaneous plastics products	307	41.3	41.2	41.1	40.9		3.9	3.8	4.1	4.1	
Leather and leather products	31	36.7	36.8	38.9	37.2	38.1	1.8	1.8	2.4	2.1	
Leather tanning and finishing	311	40.2	39.9	42.3	41.3	-	2.9	3.0	4.4	4.2	
Footwear, except rubber	314	35.5	35.7	38.5	36.5		1.5	1.4	2.2	1.7	
Men's footwear, except athletic	3143	35.7	35.7	38.7	37.1		1.3	1.4	2.2	2.1	
Women's footwear, except athletic	3144	35.0	35.5	38.5	36.0		1.6	1.6	2.5	1.3	
Luggage	316	38.6	38.8	40.2	39.0		2.0	1.5	3.0	2.5	
Handbags and personal leather goods	317	37.8	37.4	37.7	36.4		2.0	3.0	2.7	2.4	
Transportation and public utilities		39.2	39.1	39.6	39.0	39.2					
Railroad transportation:											
Class I railroads ³	4011	43.7	43.3	43.2	42.3						
Local and interurban passenger transit	41	34.2	34.3	36.8	33.7						
Local and suburban transportation	411	38.1	38.0	38.9	38.8						
Intercity highway transportation	413	38.6	40.7	39.5	39.3						
Trucking and warehousing	42	38.6	38.3	39.0	38.4						
Trucking and trucking terminals	421,3	38.6	38.3	39.0	38.2						
Public warehousing	422	39.2	39.2	38.8	40.1						
Pipe lines, except natural gas	46	41.2	41.5	42.4	41.6						

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Nondurable goods—Continued											
Printing and publishing	27	\$10.12	\$10.09	\$10.31	\$10.50	\$10.45	\$387.60	\$384.43	\$392.81	\$403.20	\$398.15
Newspapers	271	10.06	10.08	10.12	10.38	-	338.02	339.70	341.04	359.15	-
Periodicals	272	10.75	10.70	11.00	11.08	-	413.88	411.95	440.00	442.09	-
Books	273	9.32	9.40	9.33	9.55	-	378.39	371.30	358.27	360.99	-
Book publishing	2731	8.84	8.89	8.89	9.11	-	342.99	341.38	337.82	341.63	-
Book printing	2732	10.02	10.18	10.04	10.24	-	434.87	420.43	391.56	391.17	-
Miscellaneous publishing	274	9.22	9.17	9.59	9.74	-	337.45	332.87	350.99	352.59	-
Commercial printing	275	10.41	10.34	10.62	10.81	-	413.28	410.50	420.55	432.40	-
Commercial printing, letterpress	2751	9.99	9.96	10.09	10.42	-	390.61	389.44	393.51	412.63	-
Commercial printing, lithographic	2752	10.56	10.47	10.79	10.94	-	421.34	417.75	427.28	437.60	-
Manifold business forms	276	10.39	10.35	10.78	10.91	-	424.95	422.28	443.06	448.40	-
Blankbooks and bookbinding	278	7.92	7.89	8.23	8.29	-	308.09	299.03	316.03	316.68	-
Printing trade services	279	12.29	12.29	12.48	12.62	-	480.54	474.39	480.48	483.35	-
Chemicals and allied products	28	12.03	12.08	12.34	12.56	12.49	502.85	504.94	519.51	533.80	525.83
Industrial inorganic chemicals	281	13.22	13.19	13.71	13.97	-	556.56	556.62	584.05	600.71	-
Industrial inorganic chemicals, nec	2819	13.35	13.33	13.82	14.09	-	570.05	569.19	591.50	607.28	-
Plastics materials and synthetics	282	12.17	12.26	12.46	12.70	-	508.71	512.47	537.03	562.61	-
Plastics materials and resins	2821	13.19	13.30	13.51	13.68	-	564.53	571.90	579.58	612.86	-
Organic fibers, noncellulosic	2824	11.70	11.82	11.87	12.22	-	482.04	484.62	519.91	542.57	-
Drugs	283	11.20	11.22	11.62	11.78	-	470.40	466.75	478.74	482.98	-
Pharmaceutical preparations	2834	10.99	11.00	11.35	11.40	-	459.38	456.50	463.08	463.98	-
Soap, cleaners, and toilet goods	284	10.66	10.77	10.68	10.79	-	433.86	439.42	438.95	435.92	-
Soap and other detergents	2841	13.83	13.95	14.01	14.26	-	607.14	606.83	610.84	614.61	-
Polishing, sanitation, and finishing preparations	2842,3	10.11	10.08	9.92	9.95	-	421.59	409.25	410.69	411.93	-
Toilet preparations	2844	8.96	9.07	9.12	9.19	-	345.86	356.45	361.15	354.73	-
Paints and allied products	285	10.51	10.49	10.75	10.98	-	439.32	435.34	451.50	456.77	-
Industrial organic chemicals	286	14.52	14.56	14.90	15.14	-	628.72	630.45	645.17	675.24	-
Cyclic crudes and intermediates	2865	14.20	14.35	14.64	14.84	-	612.02	612.75	623.66	652.96	-
Gum, wood, and industrial organic chemicals, nec	2861,9	14.62	14.63	14.97	15.22	-	634.51	636.41	651.20	681.86	-
Agricultural chemicals	287	11.82	11.81	12.07	12.32	-	490.53	491.30	505.73	530.99	-
Miscellaneous chemical products	289	11.12	11.15	11.41	11.53	-	458.14	458.27	470.09	484.26	-
Petroleum and coal products	29	14.18	14.19	14.52	14.71	14.66	625.34	622.94	631.62	641.36	636.24
Petroleum refining	291	15.41	15.37	15.71	15.93	-	674.96	673.21	673.96	691.36	-
Paving and roofing materials	295	11.05	11.10	11.57	11.66	-	513.83	506.16	536.85	527.03	-
Rubber and misc. plastics products	30	8.72	8.73	8.90	8.99	8.94	362.75	362.30	368.46	370.39	373.69
Tires and inner tubes	301	13.60	13.74	14.23	14.35	-	590.24	600.44	624.70	635.71	-
Rubber and plastics footwear	302	5.97	5.95	6.07	6.08	-	237.61	237.41	253.12	240.77	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	8.67	8.82	9.00	8.96	-	373.68	375.73	387.90	375.42	-
Fabricated rubber products, nec	306	8.44	8.38	8.62	8.68	-	348.57	345.26	355.14	354.14	-
Miscellaneous plastics products	307	8.09	8.08	8.26	8.36	-	334.12	332.90	339.49	341.92	-
Leather and leather products	31	5.95	5.95	6.01	6.14	6.13	218.37	218.96	233.79	228.41	233.55
Leather tanning and finishing	311	7.67	7.69	8.20	8.29	-	308.33	306.83	346.86	342.38	-
Footwear, except rubber	314	5.65	5.63	5.70	5.84	-	200.58	200.99	219.45	213.16	-
Men's footwear, except athletic	3143	6.02	6.04	6.10	6.24	-	214.91	215.63	236.07	231.50	-
Women's footwear, except athletic	3144	5.35	5.31	5.34	5.50	-	187.25	188.51	205.59	198.00	-
Luggage	316	6.14	6.22	6.43	6.48	-	237.00	241.34	258.49	252.72	-
Handbags and personal leather goods	317	5.79	5.83	5.79	5.89	-	218.86	218.04	218.28	214.40	-
Transportation and public utilities		11.77	11.77	11.97	12.00	12.00	461.38	460.21	474.01	468.00	470.40
Railroad transportation:											
Class I railroads ³	4011	13.88	13.77	14.32	14.35	-	606.56	596.24	618.62	607.01	-
Local and interurban passenger transit	41	8.08	8.14	8.55	8.52	-	276.34	279.20	314.64	287.12	-
Local and suburban transportation	411	8.58	8.63	8.92	9.07	-	326.90	327.94	346.99	351.92	-
Intercity highway transportation	413	11.60	11.84	11.97	11.98	-	447.76	481.89	472.82	470.81	-
Trucking and warehousing	42	10.73	10.71	10.74	10.76	-	414.18	410.19	418.86	413.18	-
Trucking and trucking terminals	421,3	10.95	10.95	10.92	11.00	-	422.67	419.39	425.88	420.20	-
Public warehousing	422	8.08	7.95	8.37	8.01	-	316.74	311.64	324.76	321.20	-
Pipe lines, except natural gas	46	15.12	15.07	15.22	15.48	-	622.94	625.41	645.33	643.97	-

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Transportation and public utilities—Continued											
Communication	48	40.4	40.1	40.4	40.7						
Telephone communication	481	41.8	41.6	41.8	42.3						
Radio and television broadcasting	483	36.8	36.3	36.2	36.4						
Electric, gas, and sanitary services	49	41.7	41.8	41.3	41.4						
Electric services	491	41.7	41.8	41.1	41.2						
Gas production and distribution	492	41.5	41.8	40.5	40.6						
Combination utility services	493	41.7	41.9	42.0	41.9						
Sanitary services	495	43.1	42.9	42.8	43.8						
Wholesale trade		38.3	38.4	38.4	38.2	38.4					
Durable goods	50	38.8	38.8	38.9	38.6						
Motor vehicles and automotive equipment	501	38.2	38.0	38.4	38.1						
Furniture and home furnishings	502	36.6	36.8	37.5	37.5						
Lumber and construction materials	503	40.1	39.7	40.0	39.2						
Sporting goods, toys, and hobby goods	504	36.6	36.8	36.4	36.3						
Metals and minerals, except petroleum	505	40.3	40.5	40.9	40.2						
Electrical goods	506	38.4	38.6	38.5	38.0						
Hardware, plumbing, and heating equipment	507	38.6	38.5	38.6	38.3						
Machinery, equipment, and supplies	508	39.3	39.2	39.2	39.0						
Miscellaneous durable goods	509	37.5	37.5	38.0	37.8						
Nondurable goods	51	37.7	37.9	37.7	37.7						
Paper and paper products	511	37.2	37.4	37.2	36.9						
Drugs, proprietaries, and sundries	512	37.5	37.7	37.7	37.5						
Apparel, piece goods, and notions	513	36.7	36.5	36.8	36.9						
Groceries and related products	514	38.2	38.1	38.1	38.4						
Chemicals and allied products	516	38.9	39.3	39.4	39.1						
Petroleum and petroleum products	517	38.9	38.9	39.0	38.8						
Beer, wine, and distilled beverages	518	36.0	36.4	36.0	35.4						
Miscellaneous nondurable goods	519	37.3	37.6	37.2	37.0						
Retail trade		29.1	29.0	30.3	29.6	29.1					
Building materials and garden supplies	52	36.6	36.5	37.5	36.7						
Lumber and other building materials	521	38.5	38.5	39.3	38.7						
Hardware stores	525	32.9	32.5	34.3	32.8						
General merchandise stores	53	28.7	28.1	29.2	29.4						
Department stores	531	28.5	28.0	29.0	29.4						
Variety stores	533	29.3	29.0	30.1	29.0						
Misc. general merchandise stores	539	30.0	29.4	31.4	30.6						
Food stores	54	30.0	29.7	31.0	31.0						
Grocery stores	541	30.2	29.9	31.2	31.2						
Retail bakeries	546	28.0	27.8	28.2	27.7						
Automotive dealers and service stations	55	36.5	36.6	37.2	36.5						
New and used car dealers	551,2	37.3	37.5	37.7	37.2						
Auto and home supply stores	553	39.5	39.3	40.0	39.2						
Gasoline service stations	554	33.9	34.0	35.1	34.3						
Apparel and accessory stores	56	26.6	26.4	28.2	27.3						
Men's and boys' clothing and furnishings	561	29.7	29.7	30.7	29.7						
Women's ready-to-wear stores	562	25.6	25.3	26.8	26.0						
Family clothing stores	565	26.4	26.6	28.3	27.5						
Shoe stores	566	27.7	27.3	29.2	28.0						
Furniture and home furnishings stores	57	33.1	33.0	33.7	33.1						
Furniture and home furnishings stores	571	33.0	32.8	33.8	33.4						
Household appliance stores	572	33.8	34.6	34.7	33.6						
Radio, television, and music stores	573	33.0	32.8	33.0	32.2						
Eating and drinking places ⁴	58	25.5	25.4	27.2	25.9						

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Transportation and public utilities—Continued											
Communication	48	\$12.27	\$12.26	\$12.56	\$12.67		\$495.71	\$491.63	\$507.42	\$515.67	
Telephone communication	481	12.99	13.05	13.41	13.46		542.98	542.88	560.54	569.36	
Radio and television broadcasting	483	10.82	10.68	10.84	11.18		398.18	387.68	392.41	406.95	
Electric, gas, and sanitary services	49	13.51	13.56	13.36	13.48		563.37	566.81	551.77	558.07	
Electric services	491	13.55	13.64	13.87	13.89		565.04	570.15	570.06	572.27	
Gas production and distribution	492	12.68	12.73	12.96	13.14		526.22	532.11	524.88	533.48	
Combination utility services	493	15.82	15.77	14.37	14.64		659.69	660.76	603.54	613.42	
Sanitary services	495	9.91	9.95	10.14	10.39		427.12	426.86	433.99	455.08	
Wholesale trade		9.37	9.36	9.62	9.68	\$9.65	358.87	359.42	369.41	369.78	\$370.56
Durable goods	50	9.48	9.49	9.77	9.82		367.82	368.21	380.05	379.05	
Motor vehicles and automotive equipment	501	8.47	8.49	8.72	8.84		323.55	322.62	334.85	336.80	
Furniture and home furnishings	502	8.74	8.78	8.98	8.94		319.88	323.10	336.75	335.25	
Lumber and construction materials	503	9.10	9.12	9.37	9.40		364.91	362.06	374.80	368.48	
Sporting goods, toys, and hobby goods	504	9.79	9.75	9.86	9.91		358.31	358.80	358.90	359.73	
Metals and minerals, except petroleum	505	10.15	10.08	10.45	10.41		409.05	408.24	427.41	418.48	
Electrical goods	506	9.69	9.74	10.09	10.15		372.10	375.96	388.47	385.70	
Hardware, plumbing, and heating equipment	507	8.97	9.01	9.28	9.27		346.24	346.89	358.21	355.04	
Machinery, equipment, and supplies	508	10.10	10.08	10.41	10.48		396.93	395.14	408.07	408.72	
Miscellaneous durable goods	509	7.59	7.56	7.78	7.79		284.63	283.50	295.64	294.46	
Nondurable goods	51	9.20	9.17	9.40	9.47		346.84	347.54	354.38	357.02	
Paper and paper products	511	9.93	9.93	10.16	10.35		369.40	371.38	377.95	381.92	
Drugs, proprietaries, and sundries	512	10.49	10.42	10.87	10.92		393.38	392.83	409.80	409.50	
Apparel, piece goods, and notions	513	8.84	8.79	9.11	9.21		324.43	320.84	335.25	339.85	
Groceries and related products	514	9.32	9.35	9.47	9.61		356.02	356.24	360.81	369.02	
Chemicals and allied products	516	11.47	11.43	12.04	12.11		446.18	449.20	474.38	473.50	
Petroleum and petroleum products	517	9.75	9.73	9.60	9.63		379.28	378.50	374.40	373.64	
Beer, wine, and distilled beverages	518	10.83	10.81	11.18	11.05		389.88	393.48	402.48	391.17	
Miscellaneous nondurable goods	519	7.59	7.57	7.69	7.73		283.11	284.63	286.07	286.01	
Retail trade		6.06	6.06	6.06	6.21	6.16	176.35	175.74	183.62	183.82	179.26
Building materials and garden supplies	52	6.89	6.92	7.01	7.08		252.17	252.58	262.88	259.84	
Lumber and other building materials	521	7.21	7.24	7.34	7.41		277.59	278.74	288.46	286.77	
Hardware stores	525	5.80	5.79	5.93	6.03		190.82	188.18	203.40	197.78	
General merchandise stores	53	6.37	6.44	6.43	6.67		182.82	180.96	187.76	196.10	
Department stores	531	6.67	6.75	6.74	6.99		190.10	189.00	195.46	205.51	
Variety stores	533	4.77	4.74	4.76	4.85		139.76	137.46	143.28	140.65	
Misc. general merchandise stores	539	4.91	4.91	5.01	5.09		147.30	144.35	157.31	155.75	
Food stores	54	6.99	6.95	6.83	7.15		209.70	206.42	211.73	221.65	
Grocery stores	541	7.15	7.11	6.97	7.31		215.93	212.59	217.46	228.07	
Retail bakeries	546	5.52	5.49	5.58	5.70		154.56	152.62	157.36	157.89	
Automotive dealers and service stations	55	7.95	7.75	7.88	7.84		290.18	283.65	293.14	286.16	
New and used car dealers	551,2	9.97	9.49	9.75	9.60		371.88	355.88	367.58	357.12	
Auto and home supply stores	553	6.51	6.56	6.70	6.71		257.15	257.81	268.00	263.03	
Gasoline service stations	554	5.41	5.47	5.49	5.50		183.40	185.98	192.70	188.65	
Apparel and accessory stores	56	5.39	5.38	5.53	5.70		143.37	142.03	155.95	155.61	
Men's and boys' clothing and furnishings	561	6.23	6.25	6.51	6.68		185.03	185.63	199.86	198.40	
Women's ready-to-wear stores	562	5.17	5.14	5.19	5.32		132.35	130.04	139.09	138.32	
Family clothing stores	565	5.37	5.31	5.49	5.62		141.77	141.25	155.37	154.55	
Shoe stores	566	5.33	5.29	5.55	5.88		147.64	144.42	162.06	164.64	
Furniture and home furnishings stores	57	7.29	7.30	7.57	7.62		241.30	240.90	255.11	252.22	
Furniture and home furnishings stores	571	7.37	7.35	7.59	7.64		243.21	241.08	256.54	255.18	
Household appliance stores	572	7.35	7.24	7.61	7.64		248.43	250.50	264.07	256.70	
Radio, television, and music stores	573	7.12	7.22	7.50	7.56		234.96	236.82	247.50	243.43	
Eating and drinking places ⁴	58	4.35	4.36	4.39	4.44		110.93	110.74	119.41	115.00	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Retail trade—Continued											
Miscellaneous retail	59	30.2	30.0	30.8	30.1						
Drug stores and proprietary stores	591	28.3	28.2	28.8	28.2						
Miscellaneous shopping goods stores	594	28.7	28.2	29.8	28.7						
Nonstore retailers	596	32.7	32.5	33.2	32.9						
Fuel and ice dealers	598	38.1	38.6	38.3	38.1						
Retail stores, nec	599	31.7	32.0	32.2	31.4						
Finance, insurance, and real estate⁵		36.2	36.4	36.4	36.0	36.1					
Banking	60	36.1	36.5	36.6	35.9						
Commercial and stock savings banks	602	36.1	36.5	36.5	35.8						
Credit agencies other than banks	61	36.6	36.7	37.1	36.4						
Savings and loan associations	612	35.9	35.9	36.4	35.6						
Personal credit institutions	614	36.1	36.4	37.2	36.9						
Insurance carriers	63	37.3	37.3	37.3	37.1						
Life insurance	631	36.7	36.8	36.9	36.7						
Medical service and health insurance	632	38.0	37.7	37.3	37.6						
Fire, marine, and casualty insurance	633	37.2	37.3	37.4	37.0						
Services		32.4	32.4	32.9	32.4	32.5					
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	30.5	30.9	31.9	30.9						
Personal services:											
Laundry, cleaning, and garment services	721	34.0	34.5	34.3	34.0						
Beauty shops ⁴	723	29.1	29.5	29.8	28.9						
Business services	73	33.4	33.4	33.8	33.1						
Advertising	731	36.4	36.2	36.6	36.7						
Services to buildings	734	28.6	28.6	28.9	28.1						
Computer and data processing services	737	37.8	37.7	37.8	37.4						
Auto repair, services, and garages	75	37.4	37.4	37.3	36.6						
Automotive repair shops	753	38.5	38.6	38.6	38.0						
Miscellaneous repair services	76	37.8	38.0	38.3	37.7						
Motion pictures	78	27.8	28.5	31.1	29.6						
Motion picture production and services ..	781	36.2	36.5	38.8	37.7						
Amusement and recreation services ..	79	27.9	27.9	30.6	28.2						
Health services	80	32.3	32.2	32.6	32.5						
Offices of physicians	801	31.0	30.9	31.2	30.8						
Offices of dentists	802	27.7	27.9	28.4	28.1						
Nursing and personal care facilities ..	805	31.4	31.2	32.0	32.1						
Hospitals	806	34.1	34.0	34.3	34.3						
Legal services	81	34.4	34.6	35.0	34.4						
Miscellaneous services	89	38.4	38.5	38.3	38.2						
Engineering and architectural services ..	891	39.8	39.9	39.6	39.3						
Accounting, auditing, and bookkeeping ..	893	36.7	37.0	36.3	36.6						

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				
		Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^P	Oct. 1987 ^P
Retail trade—Continued											
Miscellaneous retail	59	\$6.17	\$6.19	\$6.31	\$6.39		\$186.33	\$185.70	\$194.35	\$192.34	
Drug stores and proprietary stores	591	5.68	5.71	5.83	5.94		160.74	161.02	167.90	167.51	
Miscellaneous shopping goods stores	594	5.77	5.77	5.87	5.94		165.60	162.71	174.93	170.48	
Nonstore retailers	596	7.06	6.99	7.22	7.28		230.86	227.18	239.70	239.51	
Fuel and ice dealers	598	8.68	8.90	8.86	8.97		330.71	343.54	339.34	341.76	
Retail stores, nec	599	6.40	6.40	6.57	6.59		202.88	204.80	211.55	206.93	
Finance, insurance, and real estate⁵		8.39	8.39	8.81	8.81	\$8.79	303.72	305.40	320.68	317.16	\$317.32
Banking	60	7.23	7.22	7.51	7.51		261.00	263.53	274.87	269.61	
Commercial and stock savings banks	602	7.04	7.01	7.28	7.26		254.14	255.87	265.72	259.91	
Credit agencies other than banks	61	7.67	7.69	8.10	8.00		280.72	282.22	300.51	291.20	
Savings and loan associations	612	7.03	7.11	7.50	7.46		252.38	255.25	273.00	265.58	
Personal credit institutions	614	7.28	7.22	7.63	7.54		262.81	262.81	283.84	278.23	
Insurance carriers	63	9.14	9.19	9.74	9.66		340.92	342.79	363.30	358.39	
Life insurance	631	8.68	8.72	9.25	9.25		318.56	320.90	341.33	339.48	
Medical service and health insurance	632	9.06	9.17	9.54	9.36		344.28	345.71	355.84	351.94	
Fire, marine, and casualty insurance	633	9.47	9.53	10.10	10.06		352.28	355.47	377.74	372.22	
Services		8.19	8.23	8.40	8.54	8.61	265.36	266.65	276.36	276.70	279.83
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	5.98	6.00	5.95	6.14		182.39	185.40	189.81	189.73	
Personal services:											
Laundry, cleaning, and garment services	721	6.00	6.00	6.14	6.23		204.00	207.00	210.60	211.82	
Beauty shops ⁴	723	6.14	6.09	6.50	6.50		178.67	179.66	193.70	187.85	
Business services	73	8.43	8.42	8.72	8.79		281.56	281.23	294.74	290.95	
Advertising	731	11.52	11.41	12.16	11.97		419.33	413.04	445.06	439.30	
Services to buildings	734	6.56	6.53	6.82	6.86		187.62	186.76	197.10	192.77	
Computer and data processing services	737	11.71	11.71	12.23	12.30		442.64	441.47	462.29	460.02	
Auto repair, services, and garages	75	7.57	7.62	7.85	7.87		283.12	284.99	292.81	288.04	
Automotive repair shops	753	8.19	8.21	8.43	8.42		315.32	316.91	325.40	319.96	
Miscellaneous repair services	76	8.84	8.83	9.17	9.25		334.15	335.54	351.21	348.73	
Motion pictures	78	12.13	12.40	11.69	12.22		337.21	353.40	363.56	361.71	
Motion picture production and services	781	16.33	16.40	16.24	16.18		591.15	598.60	630.11	609.99	
Amusement and recreation services	79	6.76	6.98	6.28	6.91		188.60	194.74	192.17	194.86	
Health services	80	8.41	8.42	8.72	8.81		271.64	271.12	284.27	286.33	
Offices of physicians	801	8.21	8.19	8.47	8.46		254.51	253.07	264.26	260.57	
Offices of dentists	802	8.29	8.24	8.49	8.54		229.63	229.90	241.12	239.97	
Nursing and personal care facilities	805	5.81	5.82	5.99	6.08		182.43	181.58	191.68	195.17	
Hospitals	806	9.48	9.50	9.88	10.01		323.27	323.00	338.88	343.34	
Legal services	81	11.22	11.33	12.06	11.95		385.97	392.02	422.10	411.08	
Miscellaneous services	89	11.76	11.79	12.25	12.20		451.58	453.92	469.18	466.04	
Engineering and architectural services	891	12.63	12.69	12.94	12.99		502.67	506.33	512.42	510.51	
Accounting, auditing, and bookkeeping	893	9.94	9.92	10.74	10.52		364.80	367.04	389.86	385.03	

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 the aircraft industry (SIC 3721).

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 1986 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1986 forward are subject to revision.

A Note on Average Hourly Earnings in Aircraft Manufacturing

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

As a service to aircraft companies and other interested parties, BLS has calculated an average hourly earnings series for SIC 3721 which includes lump-sum payments. This series is presented in table C-2a along with the average hourly earnings series produced as part of the Current Employment Statistics program. The series begins in October 1983, the effective date of the first aircraft bargaining agreement using lump-sum payments.

The general practice in the industry has been to make this payment at the beginning of the contract year "in lieu of a wage increase" and to base the amount of the payment on the workers' earnings during the preceding year. As a result, the Bureau considered three approaches to the method for calculating an average hourly earnings series which includes lump-sum payments:

1. The entire payment could be included in the month in which the payment was made.
2. The payments could be prorated backward to payroll periods used to determine the amount of the lump-sum payment.
3. The payments could be prorated forward as an advance

payment for payroll periods in the year following the payment.

The first approach, attractive because it includes the payment in the month in which it is received by the worker, creates 1-month "spikes" and a series which would not be useful for escalation purposes. The second approach, which prorates the payments backward, places emphasis on the determination of the amount of the payment from workers' earnings in the previous year. This approach generally relates the payments to the workers who receive them. However, the Bureau has received statements from both union and company officials who negotiated the agreements covering a majority of the workers in the industry. These statements make clear that the intent of the bargainers was to make an advance payment for the upcoming contract year in lieu of an increase in wage rates for that following year.

Because BLS has a longstanding policy of leaving the interpretation of collective bargaining agreements to the parties involved, the Bureau calculated the inclusion of lump-sum payments using the third method, prorating the payments forward through the years covered by the contract. Because the payments prorated forward under this approach may include payments to workers no longer on the payroll, data provided by the aircraft companies have been used to adjust for this difference.

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 plans to conduct 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 manufacturing (SIC 3721)

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average hourly earnings, excluding lump-sum payments													
1983											\$12.76	\$12.83	\$12.93
1984	\$12.91	\$12.82	\$12.88	\$12.85	\$12.81	\$12.78	\$12.87	\$12.89	\$12.87	\$12.97	13.04	13.05	13.13
1985	13.18	13.01	13.12	13.11	13.04	13.06	13.11	13.05	13.16	13.26	13.35	13.37	13.48
1986	13.48	13.38	13.44	13.46	13.45	13.38	13.42	13.41	13.44	13.48	13.52	13.67	13.65
1987		13.61	13.61	13.66	13.63	13.73	13.72	13.68	13.76	^P 13.79			
Average hourly earnings, including lump-sum payments													
1983											\$12.83	\$12.92	\$13.03
1984	\$13.11	\$12.95	\$13.02	\$13.02	\$12.98	\$12.97	\$13.06	\$13.11	\$13.09	\$13.19	13.26	13.28	13.37
1985	13.40	13.26	13.36	13.33	13.26	13.27	13.33	13.29	13.39	13.48	13.54	13.57	13.68
1986	13.80	13.58	13.64	13.66	13.68	13.60	13.64	13.61	13.63	13.67	14.19	14.31	14.26
1987		14.21	14.25	14.29	14.36	14.42	14.39	14.37	14.43	^P 14.44			

^P = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ²	Oct. 1987 ³
Manufacturing	\$9.31	\$9.32	\$9.42	\$9.55	\$9.50
Durable goods	9.84	9.84	9.95	10.06	10.02
Lumber and wood products	7.98	7.96	8.08	8.11	(3)
Furniture and fixtures	7.28	7.27	7.44	7.47	(3)
Stone, clay, and glass products	9.51	9.53	9.69	9.82	(3)
Primary metal industries	11.24	11.19	11.31	11.52	(3)
Fabricated metal products	9.45	9.46	9.52	9.59	(3)
Machinery, except electrical	10.17	10.16	10.27	10.33	(3)
Electrical and electronic equipment	9.35	9.34	9.55	9.62	(3)
Transportation equipment	12.18	12.21	12.31	12.46	(3)
Instruments and related products	9.22	9.26	9.44	9.47	(3)
Miscellaneous manufacturing	7.34	7.31	7.44	7.51	(3)
Nondurable goods	8.57	8.59	8.70	8.85	\$8.79
Food and kindred products	8.21	8.28	8.33	8.46	(3)
Tobacco manufactures	12.01	11.83	13.77	12.53	(3)
Textile mill products	6.66	6.67	6.79	6.86	(3)
Apparel and other textile products	5.77	5.73	5.75	5.88	(3)
Paper and allied products	10.61	10.64	10.76	10.92	(3)
Printing and publishing	9.70	9.69	9.89	10.04	(3)
Chemicals and allied products	11.51	11.58	11.78	11.95	(3)
Petroleum and coal products	13.46	13.42	13.74	13.86	(3)
Rubber and misc. plastics products	8.31	8.34	8.47	8.55	(3)
Leather and leather products	5.81	5.81	5.83	5.97	(3)

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

² Not available.

³ = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all unadjusted data from April 1986 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				
	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p	Sept. 1986	Oct. 1986	Aug. 1987	Sept. 1987 ^p	Oct. 1987 ^p
Total private:										
Current dollars	\$8.82	\$8.82	\$8.94	\$9.06	\$9.09	\$306.94	\$306.05	\$315.58	\$314.38	\$317.24
Constant (1977) dollars	4.93	4.92	4.81	4.85	(²)	171.47	170.88	169.76	168.30	(²)
Mining:										
Current dollars	12.52	12.50	12.32	12.45	\$12.33	527.09	526.25	522.37	524.15	\$531.42
Constant (1977) dollars	6.99	6.98	6.63	6.66	(²)	294.46	293.83	281.00	280.59	(²)
Construction:										
Current dollars	12.59	12.68	12.67	12.78	\$12.78	484.72	480.57	489.06	465.19	\$494.59
Constant (1977) dollars	7.03	7.08	6.82	6.84	(²)	270.79	268.32	263.08	249.03	(²)
Manufacturing:										
Current dollars	9.73	9.72	9.86	10.01	\$9.97	398.93	395.60	403.27	406.41	\$409.77
Constant (1977) dollars	5.44	5.43	5.30	5.36	(²)	222.87	220.88	216.93	217.56	(²)
Transportation and public utilities:										
Current dollars	11.77	11.77	11.97	12.00	\$12.00	461.38	460.21	474.01	468.00	\$470.40
Constant (1977) dollars	6.58	6.57	6.44	6.42	(²)	257.75	256.96	254.98	250.54	(²)
Wholesale trade:										
Current dollars	9.37	9.36	9.62	9.68	\$9.65	358.87	359.42	369.41	369.78	\$370.56
Constant (1977) dollars	5.23	5.23	5.17	5.18	(²)	200.49	200.68	198.71	197.96	(²)
Retail trade:										
Current dollars	6.06	6.06	6.06	6.21	\$6.16	176.35	175.74	183.62	183.82	\$179.26
Constant (1977) dollars	3.39	3.38	3.26	3.32	(²)	98.52	98.12	98.77	98.40	(²)
Finance, insurance, and real estate:										
Current dollars	8.39	8.39	8.81	8.81	\$8.79	303.72	305.40	320.68	317.16	\$317.32
Constant (1977) dollars	4.69	4.68	4.74	4.72	(²)	169.68	170.52	172.50	169.79	(²)
Services:										
Current dollars	8.19	8.23	8.40	8.54	\$8.61	265.36	266.65	276.36	276.70	\$279.83
Constant (1977) dollars	4.58	4.60	4.52	4.57	(²)	148.25	148.88	148.66	148.13	(²)

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

² Not available.

³ = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced all unadjusted data from April 1986 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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Oct. ^P
Total private	34.7	34.8	34.6	34.7	34.9	34.8	34.7	34.9	34.8	34.8	34.9	34.6	34.8
Mining	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Construction	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Manufacturing	40.7	40.8	40.8	40.9	41.1	40.9	40.6	41.0	41.0	41.0	41.0	40.4	41.1
<i>Overtime hours</i>	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.8	3.7	3.8	3.8	3.6	4.0
Durable goods	41.3	41.4	41.4	41.6	41.7	41.5	41.2	41.6	41.5	41.6	41.6	40.9	41.7
<i>Overtime hours</i>	3.5	3.5	3.6	3.7	3.7	3.7	3.6	3.9	3.8	3.8	4.0	3.7	4.1
Lumber and wood products	40.4	40.8	40.6	40.8	41.3	40.9	40.6	41.0	40.6	40.6	40.4	39.4	40.2
Furniture and fixtures	39.9	39.8	39.9	40.2	40.2	40.0	39.1	39.9	40.0	40.0	40.1	39.2	39.9
Stone, clay, and glass products	42.3	41.9	42.2	42.5	42.8	42.5	41.9	42.3	42.0	42.2	42.1	41.8	42.3
Primary metal industries	42.3	42.4	42.5	42.6	42.6	42.6	42.3	43.1	43.1	43.4	43.5	43.2	44.0
Blast furnaces and basic steel products ..	42.4	42.5	42.6	42.7	42.3	42.3	42.4	43.3	43.5	44.1	44.0	45.1	45.5
Fabricated metal products	41.3	41.4	41.2	41.6	41.6	41.5	41.2	41.6	41.5	41.4	41.5	40.7	41.7
Machinery, except electrical	41.7	41.7	41.7	42.0	42.2	42.0	41.8	42.2	42.2	42.4	42.2	41.5	42.5
Electrical and electronic equipment	41.0	41.0	41.0	41.0	41.1	40.9	40.6	40.8	41.1	41.1	41.0	40.4	40.9
Transportation equipment	42.1	42.2	42.1	42.3	42.5	42.3	41.9	42.2	41.9	41.7	41.9	41.1	42.4
Motor vehicles and equipment	42.1	42.4	42.4	42.9	43.0	42.9	42.1	42.5	42.0	41.9	41.9	41.0	42.9
Instruments and related products	40.9	41.1	41.1	41.2	41.3	41.3	41.0	41.5	41.5	41.6	41.7	40.8	42.1
Miscellaneous manufacturing	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Nondurable goods	39.9	40.0	40.0	40.1	40.3	40.1	39.7	40.2	40.2	40.3	40.3	39.9	40.3
<i>Overtime hours</i>	3.4	3.5	3.5	3.5	3.5	3.5	3.3	3.7	3.6	3.7	3.7	3.6	3.8
Food and kindred products	39.8	40.0	39.8	40.0	40.1	40.0	39.8	40.1	40.1	39.9	40.3	40.0	40.5
Tobacco manufactures	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Textile mill products	41.4	41.4	41.6	41.6	42.0	42.1	41.4	42.0	42.1	42.4	42.1	41.1	41.6
Apparel and other textile products	36.8	36.9	37.0	37.0	37.4	37.0	36.1	37.2	37.1	37.3	37.4	36.1	37.1
Paper and allied products	43.1	43.2	43.2	43.4	43.3	43.0	43.0	43.5	43.3	43.5	43.4	43.7	43.3
Printing and publishing	38.0	38.0	38.0	37.9	38.1	37.9	37.7	37.9	38.1	38.1	37.9	38.1	38.0
Chemicals and allied products	42.0	42.3	42.1	42.2	42.2	42.0	42.2	42.1	42.0	42.2	42.4	42.5	42.4
Petroleum and coal products	43.7	43.8	43.6	44.6	44.0	44.1	43.9	44.3	43.3	44.4	43.3	43.0	43.1
Rubber and misc. plastics products	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Leather and leather products	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Transportation and public utilities	39.1	39.2	38.9	39.0	39.2	39.0	39.0	39.2	38.8	39.2	39.3	38.9	39.2
Wholesale trade	38.3	38.3	38.2	38.3	38.3	38.1	38.2	38.3	38.2	38.1	38.3	38.1	38.4
Retail trade	29.1	29.2	28.9	29.0	29.3	29.3	29.5	29.4	29.2	29.3	29.6	29.6	29.2
Finance, insurance, and real estate	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Services	32.4	32.5	32.4	32.4	32.6	32.5	32.4	32.5	32.5	32.5	32.5	32.5	32.5

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

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

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

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 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	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^p	Oct. ^p
Total private	117.7	118.2	117.9	118.7	119.7	119.6	119.6	120.2	120.0	120.6	121.2	120.2	121.5
Goods-producing	97.6	97.8	97.8	98.8	99.3	98.9	98.0	99.2	98.9	99.5	99.7	97.5	100.8
Mining	81.0	79.5	79.5	78.9	79.9	80.0	81.3	83.4	83.5	85.0	85.2	84.9	88.2
Construction	131.6	131.1	130.7	136.2	136.2	135.5	132.8	134.3	132.6	133.2	133.6	124.6	135.3
Manufacturing	91.8	92.2	92.3	92.5	93.1	92.8	92.1	93.1	93.1	93.6	93.8	92.8	94.7
Durable goods	89.5	89.8	89.8	90.0	90.6	90.2	89.6	90.5	90.5	90.6	91.2	90.0	92.5
Lumber and wood products	99.2	100.9	101.0	101.5	103.3	102.5	102.0	103.2	101.7	102.4	101.2	99.0	101.5
Furniture and fixtures	106.8	106.3	106.5	107.9	107.9	107.9	105.7	109.0	109.5	111.6	111.7	109.4	112.2
Stone, clay, and glass products	86.1	85.5	86.5	87.3	88.3	87.5	86.3	86.9	86.1	86.1	86.1	85.5	87.1
Primary metal industries	60.7	60.9	61.1	60.4	61.2	61.9	62.1	63.1	63.5	64.4	65.0	65.7	67.5
Blast furnaces and basic steel products	47.7	47.1	46.9	46.1	46.8	47.7	49.6	50.7	51.4	52.6	53.0	55.1	56.9
Fabricated metal products	88.3	88.5	88.3	89.1	89.1	88.9	88.4	89.0	89.1	89.0	89.4	88.1	90.9
Machinery, except electrical	84.4	84.1	83.8	84.2	85.1	84.7	84.8	86.0	86.5	87.0	87.4	86.6	89.3
Electrical and electronic equipment	100.8	101.1	101.5	100.8	100.8	99.9	99.0	99.4	99.9	100.6	100.8	99.7	102.2
Transportation equipment	96.8	97.9	97.2	97.5	98.9	98.2	96.6	97.3	96.6	94.3	97.4	95.1	97.7
Motor vehicles and equipment	84.9	87.0	86.3	87.5	89.0	88.0	85.6	86.1	85.1	81.5	86.1	83.3	86.5
Instruments and related products	101.8	102.1	102.1	101.8	102.0	101.7	101.0	102.0	102.2	103.0	103.0	101.3	104.3
Miscellaneous manufacturing	79.0	80.2	81.0	81.0	81.1	81.1	79.9	81.0	81.4	81.9	82.3	80.7	82.3
Nondurable goods	95.3	95.8	96.0	96.3	96.7	96.5	95.7	97.0	97.0	98.1	97.7	96.9	98.1
Food and kindred products	97.6	98.7	98.5	98.8	99.3	99.4	99.3	99.6	99.3	99.6	99.5	98.4	100.2
Tobacco manufactures	76.9	76.7	75.9	76.3	76.0	77.7	77.3	80.1	76.3	73.1	71.0	69.9	70.3
Textile mill products	79.6	80.1	80.8	81.2	82.3	82.9	81.3	82.9	83.3	84.8	83.7	82.0	83.1
Apparel and other textile products	85.1	85.2	86.3	85.8	86.1	85.3	83.5	85.8	85.9	88.2	86.6	84.4	86.9
Paper and allied products	99.7	100.1	100.5	100.6	100.6	99.7	99.5	100.5	100.0	100.8	100.4	101.7	100.4
Printing and publishing	128.9	129.1	129.4	129.5	130.2	129.4	128.7	130.0	131.1	131.4	131.4	132.1	131.7
Chemicals and allied products	92.8	93.4	92.7	93.2	93.4	93.1	93.4	93.7	92.8	94.5	95.5	95.9	95.6
Petroleum and coal products	81.8	82.0	81.6	84.3	83.1	83.3	82.9	84.5	83.4	84.7	83.4	83.5	83.7
Rubber and misc. plastics products	112.0	112.4	112.7	112.9	113.5	113.5	112.6	114.5	114.8	115.0	115.5	115.2	118.1
Leather and leather products	55.4	55.5	56.7	57.4	57.8	57.8	57.4	59.5	59.7	62.2	61.4	59.2	60.6
Service-producing	128.8	129.6	129.0	129.8	131.0	131.0	131.5	131.9	131.7	132.3	133.1	132.8	133.0
Transportation and public utilities	106.1	107.0	106.5	107.0	107.8	107.7	107.9	108.5	107.6	109.0	109.7	109.0	110.4
Wholesale trade	116.9	116.8	116.4	117.1	117.4	116.9	117.4	117.7	117.6	117.5	118.2	117.6	118.8
Retail trade	118.6	119.2	118.0	118.9	120.4	120.3	121.6	121.2	120.4	121.2	122.4	122.5	121.3
Finance, insurance, and real estate	139.0	140.3	139.8	140.4	141.0	141.5	142.0	142.5	142.7	142.0	143.0	141.3	141.5
Services	146.9	147.9	147.8	148.6	150.1	150.2	150.3	151.2	151.7	152.5	152.9	152.7	153.6

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.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 forward are subject to revision.

**ESTABLISHMENT DATA
EARNINGS
SEASONALLY ADJUSTED**

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

Industry	1986			1987									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^o	Oct. ^p
Hourly Earnings Index ² (1977=100)													
Total private (in current dollars)	170.2	171.2	171.1	171.2	171.8	172.2	172.6	172.9	172.9	173.2	174.1	174.5	174.6
Mining	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Construction	153.2	154.7	154.3	152.8	152.4	153.8	153.7	154.1	155.0	154.3	154.7	154.1	154.7
Manufacturing	173.0	173.2	173.4	173.4	173.7	174.3	175.0	174.4	174.7	174.7	175.5	176.2	175.8
Transportation and public utilities	171.9	172.9	173.5	173.6	174.3	174.6	175.2	176.2	175.6	176.4	176.0	175.6	176.0
Wholesale trade	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Retail trade	159.3	159.3	159.3	158.9	158.9	159.0	159.8	160.2	160.3	160.9	161.5	162.9	162.4
Finance, insurance, and real estate	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Services	175.7	177.1	176.6	177.5	178.4	179.0	179.4	179.9	179.9	180.5	182.4	182.1	183.6
Total private (in constant dollars) ⁴	95.1	95.5	95.3	94.7	94.6	94.4	94.2	94.0	93.8	93.7	93.7	93.7	(^q)
Average hourly earnings													
Total private	\$8.82	\$8.86	\$8.84	\$8.86	\$8.88	\$8.91	\$8.91	\$8.95	\$8.94	\$8.96	\$9.02	\$9.02	\$9.08
Mining	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)	(^q)
Construction	\$12.57	\$12.70	\$12.65	\$12.51	\$12.48	\$12.62	\$12.61	\$12.65	\$12.72	\$12.67	\$12.71	\$12.68	\$12.67
Manufacturing	9.77	9.78	9.79	9.79	9.81	9.83	9.86	9.88	9.88	9.87	9.93	10.03	10.02
Transportation and public utilities	11.77	11.82	11.83	11.86	11.89	11.92	11.96	12.05	11.97	12.04	12.01	\$11.95	\$12.00
Wholesale trade	9.40	9.48	9.42	9.47	9.50	9.53	9.52	9.59	9.58	9.59	9.68	9.66	9.70
Retail trade	6.06	6.07	6.09	6.05	6.04	6.05	6.08	6.09	6.10	6.11	6.13	6.20	6.16
Finance, insurance, and real estate	8.43	8.59	8.46	8.59	8.66	8.67	8.69	8.74	8.68	8.74	8.88	8.81	8.83
Services	8.22	8.29	8.25	8.30	8.35	8.38	8.39	8.41	8.40	8.44	8.54	8.52	8.60
Average weekly earnings													
Total private:													
In current dollars	306.05	308.33	305.86	307.44	309.91	310.07	309.18	312.36	311.11	311.81	314.80	312.09	315.98
In constant (1977) dollars ⁴	171.07	171.96	170.40	170.04	170.75	170.09	168.77	169.95	168.71	168.73	169.52	167.70	(^q)

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

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

³ These series are not published seasonally adjusted because the seasonal components are small relative to the trend-cycle and/or irregular

components and consequently cannot be separated with sufficient precision.

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

⁵ Not available.

^p = preliminary.

NOTE: Establishment survey estimates are currently projected from March 1986 benchmark levels. When more recent benchmark data are introduced, all seasonally adjusted data from January 1983 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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Alabama	41.6	41.4	41.5	\$8.63	\$8.74	\$8.84	\$359.01	\$361.84	\$366.86
Birmingham	41.1	40.5	40.6	8.44	9.09	9.04	346.88	368.15	367.02
Mobile	41.8	41.1	42.9	10.09	10.25	10.36	421.76	421.28	444.44
Alaska	35.1	45.7	39.1	12.00	11.05	12.86	421.20	504.99	502.83
Arizona	41.0	40.9	40.1	9.96	9.98	10.03	408.36	408.18	402.20
Arkansas	41.6	40.9	41.2	7.73	7.93	7.99	321.57	324.34	329.19
Fayetteville-Springdale	40.9	39.2	40.9	6.94	7.19	7.13	283.85	281.85	291.62
Fort Smith	40.3	39.1	39.3	7.97	8.27	8.23	321.19	323.36	323.44
Little Rock-North Little Rock	41.6	42.1	41.1	8.36	8.40	8.45	347.78	353.64	347.30
Pine Bluff	42.8	44.0	43.1	9.99	10.45	10.96	427.57	459.80	472.38
California	40.3	40.4	39.6	10.44	10.78	11.02	420.73	435.51	436.39
Colorado	40.2	40.3	40.0	9.97	10.15	10.08	400.79	409.05	403.20
Denver	40.8	40.5	40.7	11.01	10.83	10.71	449.21	438.62	435.90
Connecticut	41.8	41.8	42.0	10.12	10.41	10.45	423.02	435.14	438.90
Bridgeport-Milford	41.1	41.0	41.4	10.34	10.78	10.90	424.97	441.98	451.26
Hartford	41.9	41.3	41.9	10.37	10.68	10.69	434.50	441.08	447.91
New Britain	42.3	43.2	42.9	10.56	10.75	10.78	446.69	464.40	462.46
New Haven-Meriden	41.2	40.7	40.1	9.79	10.14	10.10	403.35	412.70	405.01
Stamford	38.9	42.2	42.2	10.93	11.22	11.19	425.18	473.48	472.22
Waterbury	42.1	42.2	41.6	8.69	8.96	9.08	365.85	378.11	377.73
Delaware	41.1	40.8	38.6	9.97	10.51	10.91	409.77	428.81	421.13
Wilmington	41.1	40.6	38.3	12.04	12.50	13.18	494.84	507.50	504.79
District of Columbia:									
Washington MSA	39.4	38.7	39.3	10.29	10.73	11.05	405.43	415.25	434.27
Florida	40.8	40.3	39.9	8.08	8.16	8.25	329.66	328.85	329.18
Fort Lauderdale-Hollywood-Pompano Beach	41.6	40.6	41.7	7.85	8.11	8.11	326.56	329.27	338.19
Jacksonville	41.9	40.5	41.1	8.82	8.85	8.97	369.56	358.43	368.67
Lakeland-Winter Haven	39.1	39.9	39.8	7.66	8.03	8.14	299.51	320.40	323.97
Miami-Hialeah	38.8	39.0	37.6	7.11	7.16	7.18	275.87	279.24	269.97
Orlando	41.9	40.7	40.3	8.44	8.32	8.55	353.64	338.62	344.57
Pensacola	42.9	40.1	41.8	10.00	9.90	9.83	429.00	396.99	410.89
Tampa-St. Petersburg-Clearwater	40.2	40.3	39.9	7.52	7.69	7.75	302.30	309.91	309.23
West Palm Beach-Boca Raton-Delray Beach	39.6	40.8	40.8	8.72	9.17	9.04	345.31	374.14	368.83
Georgia	41.5	41.8	41.3	8.37	8.27	8.55	347.36	345.69	353.12
Atlanta	41.3	40.8	41.5	10.15	9.92	10.19	419.20	404.74	422.89
Savannah	45.2	45.2	46.3	10.77	10.95	11.13	486.80	494.94	515.32
Hawaii	39.4	40.5	39.8	9.12	9.25	9.42	359.33	374.63	374.82
Honolulu	38.8	39.9	39.5	9.27	9.44	9.63	359.68	376.66	380.39
Idaho	39.6	38.0	37.8	9.57	9.74	9.65	378.97	370.12	364.77
Illinois	41.6	41.6	41.5	10.73	10.90	10.86	446.37	453.44	450.69
Aurora-Elgin	41.3	42.5	42.7	10.00	10.49	10.63	413.00	445.83	453.90
Bloomington-Normal	40.0	40.6	40.6	10.87	10.97	11.10	434.80	445.38	450.66
Champaign-Urbana-Rantoul	40.0	39.8	40.7	9.26	8.98	9.11	370.40	357.40	370.76
Chicago	42.2	41.6	42.2	10.53	10.59	10.65	444.37	440.54	449.43
Davenport-Rock Island-Moline	42.1	41.7	40.4	12.18	12.72	12.55	512.78	530.42	507.02
Decatur	38.8	41.8	42.2	13.76	13.86	14.03	533.89	579.35	592.07
Joliet	41.3	40.7	40.3	11.63	11.96	11.89	480.32	486.77	479.17
Kankakee	40.4	38.7	38.7	9.96	10.03	9.95	402.38	388.16	385.07
Lake County	40.3	39.0	40.1	10.55	10.88	11.01	425.17	424.32	441.50
Peoria	41.0	44.4	45.3	13.09	12.99	13.00	536.69	576.76	588.90
Rockford	43.0	41.3	40.7	11.10	11.23	11.31	477.30	463.80	460.32
Springfield	43.3	44.4	41.7	11.87	12.14	11.84	513.97	539.02	493.73

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Indiana	41.8	41.8	41.4	\$10.77	\$10.89	\$11.04	\$450.19	\$455.20	\$457.06
Iowa	40.9	41.6	40.9	10.17	10.60	10.87	415.95	440.96	444.58
Cedar Rapids	40.7	39.9	40.9	11.35	12.30	12.46	461.95	490.77	509.61
Des Moines	41.6	41.6	42.6	11.60	11.69	12.24	482.56	486.30	521.42
Dubuque	34.7	43.4	40.2	8.95	12.05	12.28	310.57	522.97	493.66
Sioux City	42.4	42.7	42.3	8.74	8.11	8.22	370.58	346.30	347.71
Kansas	40.6	41.1	40.1	9.90	9.95	10.11	401.94	408.95	405.41
Topeka	41.7	41.8	42.7	11.20	11.40	11.64	476.52	476.52	497.03
Wichita	39.3	40.2	40.6	10.51	10.94	11.07	413.04	439.79	449.44
Kentucky	39.6	40.3	40.7	9.95	10.03	10.18	394.02	404.21	414.33
Lexington-Fayette	37.9	39.0	38.4	10.26	10.26	10.28	388.85	400.14	394.75
Louisville	41.3	41.6	43.1	10.97	11.63	11.82	453.06	483.81	509.44
Louisiana	42.5	41.5	41.8	10.58	10.80	11.10	449.65	448.20	463.98
Baton Rouge	42.7	41.6	43.1	12.52	12.19	13.08	534.60	507.10	563.75
New Orleans	40.7	41.2	40.3	10.79	10.63	10.70	439.15	437.96	431.21
Shreveport	42.2	39.5	37.8	11.20	11.29	12.16	472.64	445.96	459.65
Maine	41.2	41.7	40.1	8.70	8.65	9.33	358.44	360.71	374.13
Lewiston-Auburn	39.5	39.6	38.9	7.23	7.38	7.63	285.59	292.25	296.81
Portland	38.7	41.3	41.6	9.16	8.77	9.10	354.49	362.20	378.56
Maryland	40.5	40.8	40.3	9.85	10.07	10.49	398.93	410.86	422.75
Baltimore MSA	40.9	41.6	40.9	10.19	10.91	11.17	416.78	453.86	456.85
Massachusetts	41.4	41.2	40.7	9.40	9.83	9.91	389.16	405.00	403.34
Boston	40.6	40.5	40.0	10.30	10.71	10.84	418.18	433.76	433.60
Springfield	42.7	42.4	42.6	8.98	9.27	9.27	383.45	393.05	394.90
Worcester	40.5	40.8	40.2	9.40	9.71	9.79	380.70	396.17	393.56
Michigan	42.6	41.4	40.3	12.83	12.72	13.09	546.56	526.61	527.53
Ann Arbor	44.7	42.8	45.0	14.02	13.74	13.92	626.69	588.07	626.40
Battle Creek	42.1	43.2	42.4	13.40	14.03	14.14	564.14	606.10	599.54
Detroit	43.3	42.6	42.3	13.80	13.58	13.97	597.54	578.51	590.93
Flint	44.1	40.7	36.9	14.45	15.58	15.82	637.24	634.11	583.76
Grand Rapids	40.9	39.9	39.2	10.81	11.03	11.25	442.13	440.10	441.00
Jackson	41.2	41.6	40.0	10.00	10.20	9.97	412.00	424.32	398.80
Kalamazoo	43.4	44.0	40.8	11.93	11.87	12.01	517.76	522.28	490.01
Lansing-East Lansing	45.0	41.3	41.4	14.20	13.33	13.36	639.00	550.53	553.10
Muskegon	39.9	40.6	40.4	11.69	12.11	12.23	466.43	491.67	494.09
Saginaw-Bay City-Midland	42.6	42.0	40.2	14.29	14.38	14.41	608.75	603.96	579.28
Minnesota	41.0	41.2	40.7	10.19	10.37	10.48	417.79	427.24	426.54
Duluth	37.3	36.9	37.6	10.90	10.94	10.87	406.57	403.69	408.71
Minneapolis-St. Paul	41.3	41.5	41.3	11.08	11.12	11.17	457.60	461.48	461.32
St. Cloud	38.8	38.9	38.4	9.58	9.58	9.92	371.70	372.66	380.93
Mississippi	40.9	40.4	40.7	7.55	7.58	7.67	308.80	306.23	312.17
Jackson	40.3	39.5	40.4	8.23	8.47	8.54	331.67	334.57	345.02
Missouri	41.2	40.2	40.6	9.83	9.73	9.91	405.00	391.15	402.35
Kansas City	40.9	40.4	40.1	11.24	10.88	10.99	459.72	439.55	440.70
St. Joseph	40.2	41.0	42.6	9.51	9.95	10.36	382.30	407.95	441.34
St. Louis	41.4	40.5	41.0	11.34	11.62	11.79	469.48	470.61	483.39
Springfield	44.1	38.9	39.2	8.83	8.58	8.48	389.40	333.76	332.42
Montana	38.4	39.1	38.3	10.77	10.75	10.61	413.57	420.33	406.36
Nebraska	41.3	41.1	40.5	9.26	9.34	9.53	382.44	383.87	385.97
Lincoln	41.8	40.7	40.8	9.93	10.00	10.33	415.07	407.00	421.46
Omaha	40.8	40.5	39.7	9.81	10.06	10.10	400.25	407.43	400.97
Nevada	40.8	39.8	39.5	9.44	9.73	10.08	385.15	387.25	398.16
Las Vegas	39.7	39.9	39.4	11.42	11.84	13.04	453.37	472.42	513.78

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
New Hampshire	41.6	40.9	40.0	\$8.83	\$9.24	\$9.44	\$367.33	\$377.92	\$377.80
Nashua	42.2	40.8	40.7	10.52	11.51	11.71	443.94	469.61	476.60
New Jersey	41.2	40.8	40.8	10.15	10.49	10.54	418.18	427.99	430.03
New Mexico	39.5	39.2	38.7	8.81	8.79	8.83	348.00	344.57	341.72
Albuquerque	39.8	39.4	38.7	8.93	9.08	9.25	355.41	357.75	357.98
New York	40.2	39.7	39.2	9.89	9.98	10.09	397.58	396.21	395.53
Albany-Schenectady-Troy	40.7	39.7	38.7	10.29	10.58	10.68	418.80	420.03	413.32
Binghamton	41.1	40.5	41.3	9.06	9.24	9.22	372.37	374.22	380.79
Buffalo	42.8	40.5	41.1	11.67	11.84	11.90	499.48	479.52	489.09
Elmira	40.9	41.0	40.8	9.51	9.45	9.48	388.96	387.45	386.78
Glens Falls	41.0	(¹)	(¹)	9.53	(¹)	(¹)	390.73	(¹)	(¹)
Nassau-Suffolk	40.8	40.1	39.5	10.15	10.92	10.91	414.12	437.89	430.95
New York PMSA	37.5	37.1	36.7	9.11	9.40	9.51	341.63	348.74	349.02
New York City	37.1	36.8	36.6	8.98	9.28	9.33	333.16	341.50	341.48
Niagara Falls	41.9	40.5	38.8	12.76	12.60	13.04	534.64	510.30	505.95
Orange County	39.5	38.6	38.5	7.96	7.85	8.01	314.42	303.01	308.39
Poughkeepsie	43.2	41.5	40.7	9.41	9.49	9.58	406.51	393.84	389.91
Rochester	41.9	41.7	41.4	11.94	11.73	12.05	500.29	489.14	498.87
Rockland County	41.2	39.5	39.3	9.26	10.36	10.55	381.51	409.22	414.62
Syracuse	42.1	41.2	41.0	11.32	11.10	11.38	476.57	457.32	466.58
Utica-Rome	41.9	41.0	40.8	9.29	9.35	9.57	389.25	383.35	390.46
Westchester County	39.2	38.7	37.1	10.13	10.07	10.71	397.10	389.71	397.34
North Carolina	41.1	41.2	40.9	7.59	7.82	7.89	311.95	322.18	322.70
Asheville	42.0	42.2	42.3	7.64	7.86	7.85	320.88	331.69	332.06
Charlotte-Gastonia-Rock Hill	42.2	42.8	41.7	7.83	8.08	8.14	330.43	345.82	339.44
Greensboro-Winston-Salem-High Point	40.5	40.6	40.7	8.49	8.62	8.70	343.85	349.97	354.09
Raleigh-Durham	41.2	42.2	41.9	8.59	9.00	8.95	353.91	379.80	375.01
North Dakota	38.7	38.6	38.6	8.23	8.48	8.55	318.50	327.33	330.03
Fargo-Moorhead	38.3	38.0	37.8	8.37	8.45	8.67	320.57	321.10	327.73
Ohio	42.3	42.3	42.5	11.52	11.64	11.76	487.30	492.37	499.80
Akron	43.3	43.3	43.2	11.32	11.14	11.28	490.16	482.36	487.30
Canton	39.8	41.1	41.1	11.25	11.21	11.32	447.75	460.73	465.25
Cincinnati	42.3	42.7	42.9	10.80	11.07	10.97	456.84	472.69	470.61
Cleveland	42.4	42.4	42.3	11.44	11.48	11.47	485.06	486.75	485.18
Columbus	41.3	41.1	41.7	11.28	11.38	11.46	465.86	467.72	477.88
Dayton-Springfield	42.9	41.7	41.5	12.04	11.82	11.81	516.52	492.89	490.12
Toledo	42.7	42.4	42.6	12.28	12.61	12.68	524.36	534.66	540.17
Youngstown-Warren	41.9	42.1	43.6	13.31	13.04	13.64	557.69	548.98	594.70
Oklahoma	41.5	41.4	40.9	9.66	10.16	10.28	400.89	420.62	420.45
Oklahoma City	40.4	40.2	40.5	10.89	11.24	11.26	439.96	451.85	456.03
Tulsa	40.2	42.1	42.1	10.38	10.62	11.01	417.28	447.10	463.52
Oregon	38.9	39.6	38.3	10.38	10.41	10.66	403.78	412.24	408.28
Eugene-Springfield	38.5	39.0	37.0	10.55	10.71	10.93	406.18	417.69	404.41
Portland	39.7	39.5	38.8	10.90	10.72	10.92	432.73	423.44	423.70
Salem	36.2	38.1	36.7	8.22	8.13	8.52	297.56	309.75	312.68

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Pennsylvania	40.6	41.1	40.8	\$9.78	\$9.97	\$10.06	\$397.07	\$409.77	\$410.45
Allentown-Bethlehem	39.3	39.8	39.8	10.26	10.45	10.49	403.22	415.91	417.50
Altoona	39.0	39.5	39.5	8.77	8.48	8.69	342.03	334.96	343.26
Beaver County	41.3	41.5	40.4	11.84	11.15	11.17	486.99	462.73	451.27
Erie	42.1	42.3	41.8	10.23	10.28	10.37	430.68	434.84	433.47
Harrisburg-Lebanon-Carlisle	40.3	40.2	39.9	9.31	9.47	9.55	375.19	380.69	381.05
Johnstown	38.8	39.4	39.2	8.20	8.29	8.39	318.16	326.63	328.89
Lancaster	40.6	40.5	40.1	9.43	9.70	9.69	382.86	392.85	388.57
Philadelphia PMSA	40.5	40.5	40.4	10.47	10.86	11.04	424.04	439.83	446.02
Pittsburgh	40.9	41.7	41.4	10.91	11.38	11.40	446.22	474.55	471.96
Reading	41.2	41.3	41.1	10.01	10.06	10.18	412.41	415.48	418.40
Scranton-Wilkes-Barre	38.9	39.1	39.3	8.64	8.78	8.90	336.10	343.30	349.77
Sharon	40.2	42.4	43.6	11.57	11.26	11.48	465.11	477.42	500.53
State College	39.8	39.0	39.0	7.96	8.18	8.30	316.81	319.02	323.70
Williamsport	40.5	41.3	42.1	8.82	8.48	8.42	357.21	350.22	354.48
York	41.4	42.6	41.9	9.23	9.38	9.52	382.12	399.59	398.89
Rhode Island	40.5	39.9	40.0	7.94	8.28	8.30	321.57	330.37	332.00
Pawtucket-Woonsocket-Attleboro	40.3	40.0	40.1	7.46	7.75	7.78	300.64	310.00	311.98
Providence	39.9	39.9	40.0	7.92	8.22	8.24	316.01	327.98	329.60
South Carolina	41.2	41.6	41.4	7.96	8.12	8.12	327.95	337.79	336.17
Charleston	42.1	41.2	41.0	9.20	8.98	8.98	387.32	370.80	368.18
Columbia	40.5	41.0	40.2	7.81	7.89	7.91	316.30	323.49	317.98
Greenville-Spartanburg	41.6	41.3	41.3	7.81	7.98	8.01	324.90	329.57	330.81
South Dakota	43.1	41.7	42.3	7.69	7.85	7.86	331.44	327.35	332.48
Sioux Falls	46.7	44.2	44.4	7.95	7.86	7.89	371.27	347.41	350.32
Tennessee	41.3	41.8	40.7	8.67	8.66	9.17	358.07	361.99	373.22
Chattanooga	41.0	41.5	41.3	7.71	7.86	7.96	316.11	326.19	328.75
Johnson City-Kingsport-Bristol	44.0	41.9	40.2	9.05	9.39	11.54	398.20	393.44	463.91
Knoxville	40.5	40.7	39.5	9.28	8.75	8.67	375.84	356.13	342.47
Memphis	42.1	42.5	40.9	8.74	8.66	8.86	367.95	368.05	362.37
Nashville	40.4	39.8	40.6	9.70	10.00	10.37	391.88	398.00	421.02
Texas	41.8	41.6	41.5	9.64	9.87	10.00	402.95	410.59	415.00
Dallas	42.2	41.8	41.4	9.45	9.71	9.82	398.79	405.88	406.55
Ft. Worth-Arlington	42.0	40.7	40.0	9.76	9.90	10.06	409.92	402.93	402.40
Houston	43.1	43.3	44.0	11.13	11.14	11.17	479.70	482.36	491.48
San Antonio	40.4	40.7	39.8	7.39	7.65	7.61	298.56	311.36	302.88
Utah	40.8	40.7	40.9	9.89	9.89	9.98	403.51	402.52	408.18
Salt Lake City-Ogden	41.4	41.0	41.3	9.85	9.88	9.82	407.79	405.08	405.57
Vermont	41.5	41.0	40.1	8.98	9.19	9.41	372.67	376.79	377.34
Burlington	43.3	41.1	40.5	10.06	9.94	10.15	435.60	408.53	411.08
Virginia	40.7	40.6	41.7	8.93	8.91	9.09	363.45	361.75	379.05
Bristol	40.8	40.6	41.7	7.34	7.51	7.59	299.47	304.91	316.50
Charlottesville	42.5	40.8	40.4	7.50	7.43	7.49	318.75	303.14	302.60
Danville	41.4	42.3	44.5	8.37	8.51	8.58	346.52	359.97	381.81
Lynchburg	41.2	41.9	40.3	8.51	8.55	8.57	350.61	358.25	345.37
Northern Virginia	41.9	39.5	39.4	9.48	9.78	9.93	397.21	386.31	391.24
Richmond-Petersburg	40.7	41.3	42.4	11.33	11.66	11.76	461.13	481.56	498.62
Roanoke	40.9	40.1	41.5	8.37	8.88	8.71	342.33	356.09	361.47

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^p	Sept. 1986	Aug. 1987	Sept. 1987 ^p	Sept. 1986	Aug. 1987	Sept. 1987 ^p
Washington	39.3	39.5	38.9	\$11.83	\$11.57	\$11.65	\$457.06	\$457.02	\$453.19
West Virginia	39.9	40.4	39.9	10.38	10.62	10.98	414.16	429.05	438.10
Charleston	42.0	42.3	42.3	12.78	13.20	13.59	536.76	558.36	574.86
Huntington-Ashland	38.5	39.4	38.0	11.79	12.09	13.03	453.92	476.35	495.14
Parkersburg-Marietta	42.2	40.8	41.4	12.40	11.79	12.30	523.28	481.03	509.22
Wheeling	41.2	40.3	39.8	11.17	11.81	12.02	460.20	475.94	478.40
Wisconsin	41.4	41.4	41.3	10.24	10.28	10.52	423.94	425.59	434.48
Appleton-Oshkosh	42.4	42.5	42.5	10.38	10.67	10.84	440.11	453.48	460.70
Eau Claire	40.8	41.8	40.6	10.53	10.88	11.03	429.62	446.42	447.82
Green Bay	42.0	41.9	40.7	10.95	10.91	11.44	459.90	457.13	465.61
Janesville-Beloit	41.5	33.2	36.0	12.24	11.69	12.06	507.96	388.11	434.16
Kenosha	40.7	40.9	41.9	10.96	11.61	13.04	446.07	474.85	546.38
La Crosse	39.5	39.7	39.4	9.08	9.04	9.21	358.66	358.89	362.87
Madison	41.4	41.1	41.4	9.69	9.54	9.76	401.17	392.09	404.06
Milwaukee	41.0	41.3	40.9	11.65	11.59	11.71	477.65	478.67	478.94
Racine	40.6	40.1	39.8	10.80	10.77	10.98	438.48	431.88	437.00
Sheboygan	41.4	42.4	42.0	9.48	9.36	9.45	392.47	396.86	396.90
Wausau	43.3	42.5	43.1	9.78	9.94	10.04	423.47	422.45	432.72
Wyoming	38.3	37.8	40.1	9.67	10.11	10.18	370.36	382.16	408.22
Puerto Rico	39.2	39.3	39.5	5.34	5.43	5.36	209.33	213.40	211.72
Virgin Islands	41.9	42.3	42.4	9.34	9.76	10.26	391.35	412.85	435.02

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 1986 benchmarks.

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

Industry	Millions of hours (annual rate) ¹			Percent change		
	Aug. 1987 ^r	Sept. 1987 ^r	Oct. 1987 ^p	Oct. 1986 to Oct. 1987 ^p	Aug. 1987 to Sept. 1987 ^r	Sept. 1987 to Oct. 1987 ^p
Total	190,781	187,396	191,857	3.0	-1.8	2.4
Private sector	156,919	156,110	157,411	3.2	-5	.8
Mining	1,655	1,643	1,695	6.4	-8	3.2
Construction	9,845	9,201	9,990	3.7	-6.5	8.6
Manufacturing	40,654	40,630	40,945	2.2	-.1	.8
Durable goods	24,147	24,203	24,377	2.0	.2	.7
Nondurable goods	16,507	16,427	16,568	2.6	-5	.9
Transportation and public utilities	10,995	10,940	11,065	3.7	-5	1.1
Wholesale trade	11,567	11,578	11,620	1.7	.1	.4
Retail trade	28,100	28,148	27,924	2.6	.2	-.8
Finance, insurance, and real estate	12,565	12,533	12,482	3.1	-.3	-.4
Services	41,538	41,437	41,689	4.6	-2	.6
Government	33,863	31,286	34,446	2.4	-7.6	10.1

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 2134-1, chapter 13, Productivity Measures: Business Economy and Major Sectors.

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

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

(1977=100)

Item	Annual average		Quarterly index										
	1985	1986	1985				1986				1987		
			I	II	III	IV	I	II	III	IV	I	II	III
Business sector													
Output per hour of all persons	107.5	109.5	106.5	107.2	108.2	107.9	109.5	109.7	109.6	109.6	109.7	110.1	110.9
Output	123.9	128.0	122.2	123.3	124.7	125.3	127.3	127.5	128.1	129.0	130.2	131.1	132.5
Hours	115.2	116.9	114.7	115.0	115.2	116.1	116.3	116.3	116.9	117.8	118.7	119.1	119.5
Compensation per hour	175.9	182.8	172.4	174.6	177.0	179.3	180.7	182.2	183.6	185.2	185.8	187.3	189.3
Real compensation per hour	99.1	101.0	98.5	98.6	99.4	99.7	100.1	101.3	101.4	101.6	100.7	100.3	100.4
Unit labor costs	163.6	166.9	161.9	162.8	163.6	166.1	165.0	166.2	167.5	169.0	169.4	170.2	170.7
Unit nonlabor payments	160.3	163.8	158.7	160.4	161.8	160.2	163.1	163.9	165.7	162.4	166.0	168.6	169.7
Implicit price deflator	162.4	165.8	160.8	162.0	163.0	164.0	164.3	165.4	166.9	166.7	168.2	169.6	170.3
Nonfarm business sector													
Output per hour of all persons	105.8	107.5	105.2	105.7	106.4	105.9	107.7	107.7	107.5	107.5	107.6	108.0	108.7
Output	123.6	127.5	122.0	123.1	124.3	124.9	126.9	127.1	127.6	128.5	129.7	130.7	132.1
Hours	116.8	118.6	115.9	116.4	116.9	117.9	117.9	118.0	118.7	119.6	120.6	121.1	121.6
Compensation per hour	175.2	182.0	172.2	174.1	176.2	178.3	180.0	181.3	182.6	184.4	184.9	186.3	188.1
Real compensation per hour	98.7	100.6	98.4	98.3	98.9	99.2	99.7	100.8	100.9	101.2	100.2	99.7	99.7
Unit labor costs	165.6	169.3	163.6	164.7	165.7	168.3	167.2	168.4	169.8	171.5	171.8	172.5	173.1
Unit nonlabor payments	161.3	165.2	159.5	161.5	163.4	160.8	164.7	165.2	167.0	163.9	167.4	169.2	170.6
Implicit price deflator	164.1	167.8	162.2	163.6	164.9	165.7	166.4	167.3	168.8	168.8	170.3	171.4	172.2
Manufacturing¹													
Output per hour of all persons	124.2	128.8	121.3	124.1	125.3	126.1	127.6	128.4	129.3	129.8	130.8	132.9	134.4
Output	122.5	125.9	120.6	122.2	123.2	124.1	125.2	125.3	126.0	127.1	128.4	129.9	132.5
Hours	98.7	97.8	99.4	98.5	98.3	98.4	98.1	97.5	97.5	97.9	98.1	97.7	98.6
Compensation per hour	176.9	182.7	173.3	176.1	178.0	180.2	181.0	182.1	183.1	184.3	183.9	184.8	185.4
Real compensation per hour	99.6	100.9	99.0	99.5	99.9	100.2	100.3	101.2	101.2	101.2	99.6	98.9	98.3
Unit labor costs	142.4	141.8	142.9	142.0	142.1	142.9	141.9	141.8	141.7	142.0	140.5	139.0	138.0
Durable goods¹													
Output per hour of all persons	130.1	136.8	126.1	129.6	131.6	133.1	135.3	136.0	137.5	138.4	139.9	141.7	143.4
Output	129.9	134.1	127.0	129.3	130.8	132.2	133.6	133.2	134.1	135.3	136.9	137.8	140.5
Hours	99.8	98.0	100.7	99.8	99.4	99.4	98.0	98.0	97.5	97.8	97.8	97.2	98.0
Compensation per hour	175.4	181.4	171.4	174.4	176.6	179.4	179.9	180.8	181.6	183.1	182.2	182.9	183.4
Real compensation per hour	98.8	100.2	97.9	98.5	99.2	99.8	99.7	100.5	100.3	100.5	98.7	97.9	97.3
Unit labor costs	134.9	132.6	135.9	134.6	134.2	134.8	133.0	132.9	132.1	132.3	130.2	129.1	127.9
Nondurable goods¹													
Output per hour of all persons	115.1	116.8	113.9	115.4	115.6	115.4	116.0	117.0	117.0	117.1	117.4	119.9	121.2
Output	111.6	113.7	110.9	111.5	111.8	112.1	112.7	113.4	113.9	114.9	115.8	118.1	120.5
Hours	97.0	97.4	97.4	96.6	96.8	97.1	97.2	96.9	97.3	98.1	98.6	98.5	99.5
Compensation per hour	178.9	184.8	176.1	178.6	180.0	181.2	182.7	184.3	185.8	186.5	186.9	188.2	189.1
Real compensation per hour	100.8	102.1	100.5	100.8	101.0	100.8	101.2	102.4	102.7	102.4	101.2	100.7	100.3
Unit labor costs	155.5	158.3	154.6	154.7	155.7	157.0	157.5	157.5	158.8	159.3	159.1	156.9	156.1
Nonfinancial corporations													
Output per all-employee hour	108.2	109.9	107.0	107.7	109.2	108.9	109.8	109.7	109.9	110.5	109.7	109.9	(²)
Output	126.1	129.4	124.0	125.4	127.4	127.7	129.1	128.8	129.3	130.4	130.9	131.6	(²)
Hours	116.5	117.7	115.9	116.4	116.6	117.3	117.6	117.4	117.6	118.0	119.3	119.8	(²)
Compensation per hour	172.8	178.9	169.9	171.8	173.8	175.7	177.2	178.4	179.5	181.0	180.8	182.0	(²)
Real compensation per hour	97.4	98.9	97.0	97.0	97.6	97.7	98.2	99.1	99.2	99.3	98.0	97.4	(²)
Total unit costs	164.4	167.7	163.6	164.3	163.7	166.0	166.3	167.2	168.5	168.7	169.7	170.9	(²)
Unit labor costs	159.7	162.8	158.9	159.5	159.1	161.4	161.5	162.6	163.2	163.8	164.8	165.6	(²)
Unit nonlabor costs	178.3	182.2	177.5	178.7	177.5	179.4	180.7	180.6	184.2	183.2	184.1	186.6	(²)
Unit profits	133.9	129.3	132.0	132.2	142.5	128.7	129.7	129.5	130.6	127.7	132.2	132.9	(²)
Implicit price deflator	160.7	163.1	159.8	160.5	161.2	161.5	161.9	162.7	164.0	163.8	165.2	166.3	(²)

¹ Revisions to quarterly output measures were introduced in the manufacturing sector; measures of productivity and unit labor costs were also affected.

² Not available.

² =preliminary.
=revised.

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

**PRODUCTIVITY DATA
SEASONALLY ADJUSTED**

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

Item	Percent change from											
	Previous quarter						Same quarter, previous year					
	II 1986	III 1986	IV 1986	I 1987	II 1987 ¹	III 1987 ²	II 1986	III 1986	IV 1986	I 1987	II 1987 ¹	III 1987 ²
Business sector												
Output per hour of all persons	0.6	-0.3	-0.1	0.5	1.4	2.9	2.3	1.3	1.5	0.2	0.4	1.2
Output .....	.7	1.8	3.0	3.5	3.0	4.2	3.4	2.7	2.9	2.3	2.8	3.4
Hours .....	.1	2.1	3.1	3.0	1.6	1.3	1.1	1.5	1.4	2.1	2.5	2.2
Compensation per hour	3.5	3.0	3.6	1.4	3.3	4.2	4.4	3.7	3.3	2.8	2.8	3.1
Real compensation per hour	4.8	.5	.9	-3.7	-1.6	.3	2.7	2.0	1.9	.6	-1.0	-1.0
Unit labor costs	2.8	3.3	3.7	.9	1.8	1.3	2.1	2.4	1.8	2.7	2.4	1.9
Unit nonlabor payments	2.1	4.5	-7.7	9.0	6.4	2.6	2.2	2.4	1.4	1.8	2.8	2.4
Implicit price deflator	2.6	3.7	-5	3.7	3.4	1.7	2.1	2.4	1.7	2.3	2.6	2.1
Nonfarm business sector												
Output per hour of all persons .....	.1	-6	.0	.4	1.4	2.6	1.9	1.1	1.5	-1	.3	1.1
Output .....	.6	1.7	2.9	3.8	3.2	4.4	3.3	2.6	2.9	2.2	2.9	3.6
Hours .....	.6	2.3	2.9	3.4	1.7	1.7	1.4	1.6	1.4	2.3	2.6	2.4
Compensation per hour	2.9	2.8	4.0	1.1	3.0	4.0	4.1	3.6	3.4	2.7	2.7	3.0
Real compensation per hour	4.2	.4	1.3	-3.9	-1.8	.1	2.5	1.9	2.0	.5	-1.0	-1.1
Unit labor costs	2.8	3.5	4.0	.8	1.5	1.3	2.2	2.5	1.9	2.8	2.4	1.9
Unit nonlabor payments	1.3	4.2	-7.2	8.8	4.6	3.1	2.3	2.2	1.9	1.6	2.4	2.2
Implicit price deflator	2.3	3.7	.0	3.4	2.6	2.0	2.3	2.4	1.9	2.4	2.4	2.0
Manufacturing¹												
Output per hour of all persons	2.6	2.7	1.7	3.2	6.4	4.5	3.5	3.2	2.9	2.5	3.5	3.9
Output .....	.2	2.3	3.7	4.0	4.7	8.2	2.5	2.3	2.4	2.5	3.7	5.1
Hours	-2.3	-4	2.0	.8	-1.6	3.5	-9	-9	-5	.0	.2	1.1
Compensation per hour	2.5	2.2	2.7	-1.0	2.0	1.4	3.4	2.9	2.3	1.6	1.5	1.2
Real compensation per hour	3.8	-2	.0	-6.0	-2.8	-2.4	1.8	1.2	.9	-7	-2.3	-2.8
Unit labor costs	-1	-5	.9	-4.1	-4.2	-3.0	-1	-3	-6	-1.0	-2.0	-2.6
Durable goods¹												
Output per hour of all persons	2.1	4.4	2.6	4.5	5.3	4.7	4.9	4.5	4.0	3.4	4.2	4.3
Output	-1.1	2.7	3.8	4.5	2.8	7.9	3.0	2.5	2.4	2.4	3.4	4.7
Hours	-3.2	-1.7	1.1	.0	-2.4	3.1	-1.8	-1.9	-1.5	-9	-7	.4
Compensation per hour	1.9	1.7	3.4	-1.9	1.6	1.0	3.6	2.8	2.1	1.3	1.2	1.0
Real compensation per hour	3.3	-7	.7	-6.8	-3.1	-2.8	2.0	1.1	.7	-9	-2.5	-3.0
Unit labor costs	-2	-2.6	.8	-6.1	-3.5	-3.5	-1.2	-1.6	-1.8	-2.1	-2.9	-3.1
Nondurable goods¹												
Output per hour of all persons	3.6	.1	.4	1.1	8.7	4.2	1.3	1.3	1.4	1.3	2.5	3.6
Output	2.5	1.7	3.6	3.1	8.2	8.6	1.7	1.8	2.5	2.7	4.1	5.8
Hours	-1.0	1.6	3.3	1.9	-5	4.2	.4	.6	1.1	1.4	1.6	2.2
Compensation per hour	3.6	3.4	1.5	.7	2.8	2.1	3.2	3.3	2.9	2.3	2.1	1.8
Real compensation per hour	5.0	.9	-1.1	-4.4	-2.0	-1.8	1.6	1.6	1.6	.1	-1.6	-2.3
Unit labor costs .....	.0	3.3	1.2	-5	-5.4	-2.1	1.8	2.0	1.5	1.0	-4	-1.7
Nonfinancial corporations												
Output per all-employee hour	-2	.9	2.1	-2.9	.7	(³)	1.8	.7	1.5	.0	.2	(³)
Output	-9	1.6	3.4	1.5	2.2	(³)	2.7	1.5	2.1	1.4	2.2	(³)
Hours	-6	.7	1.3	4.6	1.6	(³)	.8	.8	.6	1.5	2.0	(³)
Compensation per hour	2.6	2.5	3.5	-5	2.6	(³)	3.9	3.3	3.0	2.0	2.0	(³)
Real compensation per hour	4.0	.0	.8	-5.5	-2.2	(³)	2.2	1.6	1.6	-2	-1.7	(³)
Total unit costs	2.0	3.3	.3	2.4	2.9	(³)	1.7	2.9	1.6	2.0	2.2	(³)
Unit labor costs	2.9	1.5	1.3	2.5	2.0	(³)	2.0	2.6	1.5	2.1	1.8	(³)
Unit nonlabor costs	-2	8.2	-2.3	2.2	5.4	(³)	1.0	3.8	2.1	1.9	3.3	(³)
Unit profits	-5	3.3	-8.5	14.7	2.1	(³)	-2.1	-8.4	-8	1.9	2.6	(³)
Implicit price deflator	1.8	3.3	-5	3.5	2.8	(³)	1.4	1.7	1.4	2.0	2.3	(³)

¹ Revisions to quarterly output measures were introduced in the manufacturing sector; measures of productivity and unit labor costs were also affected.

² Not available.

³ = preliminary.

(³) = 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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Alabama	1,902.0	1,904.2	1,920.9	183.6	138.0	133.9	9.7	7.2	7.0
Birmingham	446.0	451.8	454.8	38.6	28.4	28.0	8.6	6.3	6.1
Huntsville	128.4	130.4	131.6	9.7	6.1	6.0	7.6	4.6	4.6
Mobile	212.1	212.4	214.5	22.7	18.9	19.2	10.7	8.9	9.0
Montgomery	136.2	138.0	138.4	10.0	8.8	8.5	7.4	6.4	6.1
Tuscaloosa	70.0	70.4	71.2	5.3	4.1	3.9	7.6	5.8	5.4
Alaska	263.4	263.1	256.3	24.2	24.0	22.0	9.2	9.1	8.6
Arizona	1,596.0	1,611.5	1,636.7	109.3	97.3	92.6	6.8	6.0	5.7
Phoenix	986.0	1,001.7	1,017.7	55.9	48.2	47.9	5.7	4.8	4.7
Tucson	308.9	307.2	314.4	17.2	14.2	14.4	5.6	4.6	4.6
Arkansas	1,091.9	1,096.3	1,112.9	86.0	83.3	79.3	7.9	7.6	7.1
Fayetteville-Springdale	55.8	57.2	58.9	2.3	2.1	2.2	4.1	3.7	3.8
Fort Smith	88.4	89.0	90.2	6.2	5.2	5.1	7.0	5.9	5.7
Little Rock-North Little Rock	254.4	257.8	260.5	17.6	18.3	17.5	6.9	7.1	6.7
Pine Bluff	39.4	36.4	37.2	3.1	3.3	3.0	7.8	9.0	8.2
California¹	13,473.6	13,891.5	13,804.3	832.6	750.9	764.8	6.2	5.4	5.5
Anaheim-Santa Ana	1,248.4	1,307.3	1,319.5	45.8	42.1	43.8	3.7	3.2	3.3
Bakersfield	218.7	226.6	224.2	23.4	20.3	22.3	10.7	8.9	10.0
Fresno	327.6	311.4	320.5	26.9	25.1	25.9	8.2	8.1	8.1
Los Angeles-Long Beach ¹	4,144.0	4,210.0	4,237.0	310.0	247.0	254.0	7.5	5.9	6.0
Modesto	150.7	155.1	152.6	16.6	13.8	13.7	11.0	8.9	9.0
Oakland	1,016.0	1,063.3	1,035.1	53.0	51.0	51.4	5.2	4.8	5.0
Oxnard-Ventura	325.7	338.4	331.2	21.8	19.7	19.8	6.7	5.8	6.0
Riverside-San Bernardino	843.1	908.7	903.3	50.6	54.3	55.3	6.0	6.0	6.1
Sacramento	648.3	685.0	670.6	32.5	34.2	34.7	5.0	5.0	5.2
Salinas-Seaside-Monterey	150.8	156.8	153.1	10.3	9.7	9.5	6.8	6.2	6.2
San Diego	1,022.6	1,080.2	1,056.2	47.0	48.4	49.3	4.6	4.5	4.7
San Francisco	864.9	893.9	866.1	34.6	34.1	32.5	4.0	3.8	3.8
San Jose	789.7	806.0	788.7	39.3	33.7	33.9	5.0	4.2	4.3
Santa Barbara-Santa Maria-Lompoc	174.7	181.4	175.1	7.5	7.9	7.7	4.3	4.4	4.4
Santa Rosa-Petaluma	183.3	184.9	189.0	8.3	8.1	8.2	4.5	4.4	4.3
Stockton	193.0	192.4	197.3	15.7	15.0	15.3	8.1	7.8	7.8
Vallejo-Fairfield-Napa	183.9	189.6	190.8	9.7	9.7	10.0	5.3	5.1	5.2
Colorado	1,687.3	1,667.6	1,670.2	122.1	106.7	100.1	7.2	6.4	6.0
Boulder-Longmont	129.8	128.5	129.9	7.3	6.3	5.7	5.6	4.9	4.4
Denver	898.7	887.0	887.7	62.2	53.4	50.5	6.9	6.0	5.7
Connecticut	1,748.2	1,796.2	1,795.5	57.1	56.8	50.7	3.3	3.2	2.8
Bridgeport-Milford	228.8	234.1	235.0	9.5	8.8	7.9	4.2	3.8	3.4
Hartford	420.4	433.1	435.3	12.4	12.7	11.0	3.0	2.9	2.5
New Britain	74.8	74.9	75.6	2.7	2.7	2.2	3.5	3.5	3.0
New Haven-Meriden	272.2	281.3	279.5	8.4	8.9	7.6	3.1	3.2	2.7
Stamford	117.7	121.4	120.1	2.9	2.6	2.5	2.5	2.2	2.1
Waterbury	103.4	103.7	103.5	4.6	4.4	3.9	4.5	4.3	3.7
Delaware	327.3	335.3	329.1	11.7	9.4	8.1	3.6	2.8	2.5
Wilmington	280.5	283.5	281.3	12.1	9.1	8.2	4.3	3.2	2.9
District of Columbia	323.7	358.1	339.9	24.6	21.5	21.8	7.6	6.0	6.4
Washington	2,047.7	2,148.1	2,123.6	68.7	68.4	68.7	3.4	3.2	3.2
Florida¹	5,615.0	5,925.3	5,902.0	352.3	336.4	310.5	6.3	5.7	5.3
Daytona Beach	139.5	148.3	146.1	7.4	7.5	6.2	5.3	5.0	4.2
Fort Lauderdale-Hollywood-Pompano Beach	579.6	611.0	606.8	27.5	27.9	25.1	4.7	4.6	4.1
Fort Myers-Cape Coral	121.7	136.1	136.1	5.5	5.6	4.9	4.5	4.1	3.6
Gainesville	102.0	105.6	107.3	4.2	3.6	3.3	4.1	3.4	3.1
Jacksonville	429.7	450.0	449.9	27.9	23.6	22.8	6.5	5.2	5.1
Lakeland-Winter Haven	168.2	178.2	176.2	21.6	20.4	17.9	12.9	11.5	10.2
Melbourne-Titusville-Palm Bay	169.5	179.6	176.6	10.8	9.5	9.1	6.4	5.3	5.1
Miami-Hialeah	891.5	924.3	920.1	63.2	55.6	51.2	7.1	6.0	5.6
Orlando	531.3	576.2	573.6	26.4	27.3	25.8	5.0	4.7	4.5
Pensacola	147.1	152.6	151.5	9.6	9.7	8.8	6.5	6.4	5.8
Sarasota	108.1	114.9	114.4	4.6	4.1	4.3	4.3	3.6	3.7
Tallahassee	118.3	124.4	125.2	4.4	5.2	4.5	3.7	4.1	3.6
Tampa-St. Petersburg-Clearwater	921.1	962.4	960.3	48.0	46.9	45.2	5.2	4.9	4.7
West Palm Beach-Boca Raton-Delray Beach	369.6	397.3	398.3	26.7	26.2	23.6	7.2	6.6	5.9

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Georgia	3,081.4	3,083.9	3,066.5	174.1	156.4	153.4	5.6	5.1	5.0
Albany	57.8	55.7	55.6	6.9	4.9	4.6	11.9	8.8	8.2
Athens	70.9	73.6	71.8	3.4	3.0	3.0	4.8	4.1	4.1
Atlanta	1,436.0	1,458.2	1,446.1	63.9	65.0	63.3	4.5	4.5	4.4
Augusta	176.9	175.8	175.2	11.0	9.2	9.0	6.2	5.2	5.1
Columbus	99.9	98.7	98.1	7.0	5.8	5.6	7.0	5.8	5.7
Macon-Warner Robins	129.0	127.8	127.1	7.4	6.1	6.0	5.8	4.7	4.7
Savannah	109.7	108.3	108.0	6.7	6.2	6.0	6.1	5.8	5.5
Hawaii	484.6	506.8	493.3	22.4	18.9	18.6	4.6	3.7	3.8
Honolulu	362.8	379.2	368.4	15.4	12.9	12.8	4.2	3.4	3.5
Idaho	479.4	476.7	473.8	36.1	34.0	25.9	7.5	7.1	5.5
Boise City	103.1	103.0	102.2	5.4	4.9	4.4	5.2	4.8	4.4
Illinois ¹	5,720.0	5,864.5	5,803.8	447.8	398.9	355.3	7.8	6.8	6.1
Aurora-Elgin	171.1	178.4	179.0	10.3	8.4	7.5	6.0	4.7	4.2
Bloomington-Normal	63.9	64.2	65.3	2.9	2.7	2.3	4.5	4.2	3.5
Champaign-Urbana-Rantoul	85.2	83.0	86.3	3.6	3.4	3.1	4.2	4.1	3.6
Chicago	3,138.5	3,237.2	3,206.1	232.9	204.0	184.1	7.4	6.3	5.7
Davenport-Rock Island-Moline	183.2	180.0	177.2	17.5	13.0	12.3	9.5	7.2	6.9
Decatur	60.0	58.9	58.2	6.7	5.4	4.6	11.1	9.1	7.9
Joliet	190.6	192.5	192.8	13.1	13.2	11.7	6.8	6.8	6.1
Kankakee	44.9	45.9	44.9	3.8	3.9	3.5	8.5	8.4	7.8
Lake County	257.2	268.5	267.2	12.2	10.9	9.8	4.7	4.1	3.7
Peoria	154.4	155.3	153.4	14.2	11.2	9.8	9.2	7.2	6.4
Rockford	148.1	150.3	148.3	12.9	13.4	11.8	8.7	8.9	7.9
Springfield	105.6	112.1	106.3	5.8	5.2	4.8	5.5	4.6	4.5
Indiana	2,766.0	2,774.0	2,772.7	164.1	160.8	154.6	5.9	5.8	5.6
Anderson	62.0	60.2	59.4	3.2	4.7	3.5	5.2	7.9	5.8
Bloomington	59.1	57.5	60.8	1.6	2.4	2.0	2.8	4.2	3.3
Elkhart-Goshen	90.2	93.2	93.2	3.7	4.2	4.2	4.1	4.5	4.5
Evansville	144.1	142.1	141.7	8.3	9.1	9.2	5.8	6.4	6.5
Fort Wayne	190.9	195.0	195.3	8.2	9.8	10.2	4.3	5.0	5.2
Gary-Hammond	261.9	250.5	250.3	33.4	21.0	20.0	12.7	8.4	8.0
Indianapolis	651.8	665.3	662.9	28.6	32.2	32.5	4.4	4.8	4.9
Kokomo	49.7	50.8	49.3	3.7	3.6	3.1	7.5	7.2	6.3
Lafayette	66.5	62.4	66.5	2.3	2.4	2.2	3.4	3.9	3.4
Muncie	59.7	56.9	58.7	3.7	3.9	3.6	6.2	6.9	6.1
South Bend-Mishawaka	127.2	124.9	127.7	6.2	6.4	6.5	4.8	5.1	5.1
Terre Haute	60.2	56.8	58.0	3.3	3.3	3.3	5.5	5.8	5.6
Iowa	1,441.1	1,416.6	1,411.4	80.8	67.1	67.8	5.6	4.7	4.8
Cedar Rapids	88.4	85.7	86.4	4.5	4.2	4.5	5.1	4.9	5.2
Des Moines	215.4	216.8	214.7	10.7	8.7	8.8	5.0	4.0	4.1
Dubuque	43.1	42.3	43.0	2.5	2.1	2.2	5.8	4.9	5.1
Iowa City	55.9	54.6	55.8	1.2	1.0	1.2	2.1	1.9	2.2
Sioux City	57.8	57.8	56.9	4.1	3.4	3.0	7.0	5.8	5.3
Waterloo-Cedar Falls	70.1	65.7	68.5	7.4	4.6	4.7	10.6	7.1	6.9
Kansas	1,227.2	1,238.0	1,241.8	61.3	52.6	49.3	5.0	4.2	4.0
Lawrence	38.0	37.3	39.1	1.2	1.3	1.2	3.3	3.4	3.0
Topeka	86.1	88.6	87.6	4.1	3.7	3.6	4.8	4.2	4.1
Wichita LMA	221.9	232.4	231.1	12.7	10.0	9.4	5.7	4.3	4.1
Kentucky	1,704.0	1,671.7	1,674.5	137.7	125.1	114.2	8.1	7.5	6.8
Lexington-Fayette	182.5	175.7	177.3	8.8	7.8	7.3	4.8	4.4	4.1
Louisville	495.0	491.0	488.7	30.6	31.5	28.0	6.2	6.4	5.7
Owensboro	45.9	43.9	44.1	4.6	4.2	3.7	9.9	9.5	8.4
Louisiana	2,004.0	1,966.0	1,991.0	268.9	204.5	197.6	13.4	10.4	9.9
Alexandria	61.4	61.8	62.7	6.2	5.4	5.1	10.1	8.7	8.2
Baton Rouge	264.2	265.0	269.3	28.3	23.7	22.7	10.7	9.0	8.4
Houma-Thibodaux	77.5	72.3	73.0	15.1	9.3	8.8	19.4	12.8	12.1
Lafayette	106.8	101.0	101.4	17.0	10.8	10.5	15.9	10.7	10.3
Lake Charles	75.4	77.0	77.3	11.1	8.9	8.7	14.7	11.5	11.3
Monroe	70.5	70.7	70.0	6.9	6.1	5.9	9.8	8.7	8.4
New Orleans	608.1	605.9	609.3	69.1	54.9	54.1	11.4	9.1	8.9
Shreveport	169.3	164.0	168.7	19.9	15.5	15.4	11.8	9.5	9.2
Maine	578.4	618.8	612.0	24.2	18.7	17.8	4.2	3.0	2.9
Lewiston-Auburn	40.4	42.0	41.3	2.2	1.8	1.5	5.4	4.2	3.6
Portland	119.4	126.9	127.2	2.5	2.1	2.1	2.1	1.7	1.7

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Maryland	2,370.4	2,408.3	2,393.1	96.3	93.6	93.2	4.1	3.9	3.9
Baltimore	1,153.4	1,160.5	1,153.5	54.4	49.8	49.1	4.7	4.3	4.3
Massachusetts ¹	3,051.7	3,153.4	3,053.2	132.0	88.7	84.2	4.3	2.8	2.8
Boston	1,502.8	1,553.4	1,506.0	57.0	39.0	37.8	3.8	2.5	2.5
Brockton	95.3	99.4	96.1	4.6	3.2	3.0	4.8	3.2	3.1
Fall River	77.3	78.0	76.3	5.0	3.3	3.0	6.5	4.2	3.9
Fitchburg-Leominster	45.9	45.8	44.5	2.6	1.7	1.7	5.6	3.8	3.8
Lawrence-Haverhill	180.5	186.1	180.8	9.6	7.6	7.1	5.3	4.1	3.9
Lowell	148.3	150.4	146.3	7.6	4.7	4.4	5.1	3.1	3.0
New Bedford	85.2	84.6	82.2	5.2	3.4	3.1	6.1	4.0	3.8
Pittsfield	41.3	43.6	41.5	1.6	1.5	1.4	3.9	3.4	3.4
Springfield	247.2	254.4	249.0	11.1	7.2	6.7	4.5	2.8	2.7
Worcester	208.3	212.8	208.8	9.7	5.8	5.3	4.7	2.7	2.6
Michigan ¹	4,355.2	4,685.7	4,575.7	359.6	389.4	333.5	8.3	8.3	7.3
Ann Arbor	149.8	158.7	159.1	6.9	7.4	6.0	4.6	4.7	3.8
Battle Creek	61.2	66.4	64.2	5.3	5.6	5.0	8.6	8.5	7.8
Benton Harbor	73.7	80.3	77.1	6.2	5.6	4.9	8.3	6.9	6.3
Detroit	2,115.7	2,275.2	2,231.7	168.7	192.3	166.5	8.0	8.5	7.5
Flint	202.9	212.0	205.4	23.8	28.9	23.4	11.7	13.7	11.4
Grand Rapids	329.4	352.2	345.2	23.5	22.7	19.0	7.1	6.5	5.5
Jackson	60.7	65.2	63.2	5.0	5.3	4.5	8.2	8.2	7.2
Kalamazoo	110.0	117.1	116.5	6.6	6.4	5.9	6.0	5.5	5.1
Lansing-East Lansing	222.2	240.8	234.6	15.1	18.7	14.8	6.8	7.8	6.3
Muskegon	66.6	71.0	69.1	6.6	6.4	6.2	9.9	9.1	9.0
Saginaw-Bay City-Midland	179.8	194.0	189.0	16.8	15.6	13.8	9.3	8.0	7.3
Minnesota	2,213.7	2,262.2	2,246.4	88.9	103.8	104.1	4.0	4.6	4.6
Duluth	101.9	104.3	103.3	7.5	8.2	8.0	7.3	7.9	7.7
Minneapolis-St.Paul	1,306.9	1,347.2	1,333.0	45.8	53.7	56.1	3.5	4.0	4.2
Rochester	55.7	58.5	57.9	1.7	1.7	1.9	3.0	3.0	3.4
St. Cloud	88.6	90.8	89.9	3.7	4.5	4.4	4.2	5.0	4.9
Mississippi	1,181.3	1,159.6	1,178.1	130.8	113.4	105.3	11.1	9.8	8.9
Jackson	198.1	198.1	201.0	15.4	13.7	12.9	7.8	6.9	6.4
Missouri	2,572.1	2,584.5	2,600.2	139.7	158.2	140.7	5.4	6.1	5.4
Kansas City	800.2	815.3	809.5	33.8	46.7	40.8	4.2	5.7	5.0
St. Joseph	40.7	40.8	41.3	2.8	2.8	2.7	6.9	6.8	6.6
St. Louis	1,246.4	1,261.8	1,255.8	84.3	85.0	76.7	6.8	6.7	6.1
Springfield	118.5	119.6	121.0	4.7	5.6	5.0	3.9	4.7	4.1
Montana ..	411.2	400.6	392.9	27.1	23.2	21.7	6.6	5.8	5.5
Nebraska	802.4	803.7	791.5	32.4	32.9	31.1	4.0	4.1	3.9
Lincoln	118.1	117.7	117.6	3.1	4.1	3.7	2.6	3.4	3.2
Omaha	311.6	309.9	307.8	14.6	14.5	14.0	4.7	4.7	4.5
Nevada	550.0	566.6	566.5	27.7	32.2	30.0	5.0	5.7	5.3
Las Vegas	314.5	326.3	327.2	17.3	20.2	18.8	5.5	6.2	5.8
Reno	138.6	139.8	140.2	5.7	6.8	6.3	4.1	4.9	4.5
New Hampshire	570.5	611.5	600.6	13.3	12.8	12.4	2.3	2.1	2.1
Nashua	92.3	97.2	98.1	2.4	2.3	2.4	2.6	2.3	2.4
Portsmouth-Dover-Rochester	129.0	136.0	135.6	3.0	2.4	2.4	2.3	1.8	1.7
New Jersey ¹	3,885.6	4,022.0	3,884.1	165.5	155.2	152.5	4.3	3.9	3.9
Atlantic City	178.1	196.5	180.7	9.1	7.9	8.4	5.1	4.0	4.6
Bergen-Passaic	699.5	712.5	694.4	28.0	24.3	23.9	4.0	3.4	3.4
Jersey City	266.9	272.4	266.8	18.1	16.5	16.3	6.8	6.0	6.1
Middlesex-Somerset-Hunterdon	530.4	550.3	532.4	17.3	17.0	15.7	3.3	3.1	3.0
Monmouth-Ocean	459.3	488.5	460.5	15.5	14.5	14.6	3.4	3.0	3.2
Newark	954.8	975.3	947.5	44.3	40.7	41.5	4.6	4.2	4.4
Trenton	166.6	173.1	168.2	6.1	6.3	5.6	3.7	3.6	3.3
Vineland-Millville-Bridgeton	56.4	58.5	56.7	3.8	3.8	3.7	6.7	6.5	6.5
New Mexico	678.2	673.2	671.8	60.3	57.0	56.0	8.9	8.5	8.3
Albuquerque	255.2	254.0	256.4	16.4	16.2	16.7	6.4	6.4	6.5
Las Cruces	56.9	55.1	55.6	4.2	4.2	4.2	7.4	7.6	7.5
Santa Fe	65.0	67.2	65.3	3.2	3.6	3.5	5.0	5.3	5.4

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
New York¹	8,437.6	8,668.6	8,395.3	492.8	376.4	368.7	5.8	4.3	4.4
Albany-Schenectady-Troy	417.5	425.6	414.4	20.4	14.7	16.6	4.9	3.5	4.0
Binghamton	126.7	126.7	124.9	7.1	4.3	4.8	5.6	3.4	3.9
Buffalo	447.5	448.2	439.3	31.3	23.2	24.5	7.0	5.2	5.6
Elmira	40.2	42.3	41.2	2.6	1.5	1.7	6.5	3.5	4.0
Glens Falls	53.4	58.6	53.9	3.0	2.1	2.4	5.6	3.7	4.5
Nassau-Suffolk	1,431.0	1,449.1	1,407.3	64.5	48.0	51.5	4.5	3.3	3.7
New York	3,822.5	4,011.8	3,851.6	235.6	190.1	166.4	6.2	4.7	4.3
New York City ¹	3,143.0	3,316.0	3,178.0	209.0	169.0	142.0	6.6	5.1	4.5
Orange County	128.4	130.0	126.6	6.3	4.4	5.1	4.9	3.4	4.0
Poughkeepsie	127.5	131.6	126.7	4.5	3.3	3.5	3.6	2.5	2.8
Rochester	501.3	500.4	488.4	27.7	20.7	22.1	5.5	4.1	4.5
Syracuse	323.6	319.0	314.4	24.2	17.6	20.1	7.5	5.5	6.4
Utica-Rome	137.8	138.2	135.3	8.8	6.0	6.4	6.4	4.3	4.7
North Carolina¹	3,196.0	3,351.2	3,303.1	158.2	139.9	116.4	5.0	4.2	3.5
Asheville	86.0	89.7	87.2	4.3	3.5	3.0	5.0	3.9	3.4
Charlotte-Gastonia-Rock Hill	595.8	634.0	625.6	26.8	22.6	20.0	4.5	3.6	3.2
Greensboro-Winston-Salem-High Point	495.6	517.8	513.0	21.4	19.2	15.2	4.3	3.7	3.0
Raleigh-Durham	381.3	403.3	398.7	12.8	12.3	10.4	3.4	3.1	2.6
North Dakota	341.1	345.2	329.9	16.2	13.0	11.3	4.8	3.8	3.4
Bismarck	45.9	45.4	43.8	2.4	1.5	1.5	5.3	3.3	3.5
Fargo-Moorhead	79.4	82.9	82.4	2.4	2.5	2.2	3.0	3.0	2.7
Grand Forks	33.1	35.0	34.8	.9	1.4	.9	2.6	4.0	2.7
Ohio¹	5,189.4	5,271.9	5,171.2	434.2	363.6	286.6	8.4	6.9	5.5
Akron	317.0	318.8	315.6	26.1	23.1	18.1	8.2	7.2	5.7
Canton	187.2	188.8	183.6	18.6	14.8	11.6	9.9	7.9	6.3
Cincinnati	725.7	744.9	737.6	47.7	38.9	36.4	6.6	5.2	4.9
Cleveland	925.5	942.3	919.1	73.5	59.4	46.9	7.9	6.3	5.1
Columbus	671.2	692.2	682.4	44.4	36.6	31.5	6.6	5.3	4.6
Dayton-Springfield	459.6	465.5	459.1	31.6	26.8	20.9	6.9	5.8	4.5
Toledo	305.6	311.9	309.6	26.3	22.3	18.4	8.6	7.1	5.9
Youngstown-Warren	223.2	228.0	219.4	23.8	27.3	15.0	10.7	12.0	6.8
Oklahoma	1,578.7	1,548.8	1,542.4	131.8	102.0	91.4	8.4	6.6	5.9
Enid	29.9	29.6	29.4	2.3	1.8	1.6	7.8	6.1	5.3
Lawton	47.9	47.4	47.5	2.5	2.4	2.2	5.2	5.0	4.7
Oklahoma City	510.4	501.3	501.6	35.7	28.5	25.6	7.0	5.7	5.1
Tulsa	357.9	357.3	352.9	31.1	25.6	22.8	8.7	7.2	6.5
Oregon	1,355.4	1,365.3	1,368.2	97.9	73.5	73.6	7.2	5.4	5.4
Eugene-Springfield	132.0	131.0	132.4	9.9	6.5	7.1	7.5	4.9	5.4
Portland	605.0	615.6	616.7	40.6	30.7	29.7	6.7	5.0	4.8
Salem	130.4	130.7	128.3	8.5	6.5	6.4	6.5	5.0	5.0
Pennsylvania¹	5,676.7	5,828.7	5,707.5	364.5	302.6	296.7	6.4	5.2	5.2
Allentown-Bethlehem	320.9	324.3	317.6	23.1	12.8	12.2	7.2	3.9	3.8
Altoona	59.1	61.1	59.7	4.4	3.6	3.6	7.4	6.0	6.0
Beaver County	64.1	63.6	63.8	6.9	6.5	7.6	10.7	10.2	11.9
Erie	129.8	131.1	128.8	11.0	9.1	8.5	8.5	6.9	6.6
Harrisburg-Lebanon-Carlisle	305.3	322.5	315.2	12.7	9.5	9.0	4.1	2.9	2.9
Johnstown	93.9	97.8	95.8	8.2	7.2	6.8	8.7	7.4	7.1
Lancaster	211.2	224.2	217.2	6.2	5.7	5.5	2.9	2.6	2.5
Philadelphia	2,378.2	2,467.3	2,408.0	121.6	111.3	108.1	5.1	4.5	4.5
Pittsburgh	959.1	975.2	956.0	73.9	65.0	62.8	7.7	6.7	6.6
Reading	168.9	173.5	170.9	9.1	6.6	6.3	5.4	3.8	3.7
Scranton-Wilkes-Barre	347.4	351.1	344.6	26.2	21.0	22.4	7.5	6.0	6.5
Sharon	49.7	51.9	50.5	4.0	3.2	3.1	8.1	6.1	6.2
State College	58.9	59.1	60.2	3.3	2.8	2.8	5.7	4.7	4.6
Williamsport	56.3	59.6	58.8	3.2	2.4	2.6	5.8	4.1	4.5
York	209.5	215.9	213.0	9.9	7.7	7.0	4.7	3.6	3.3
Rhode Island	511.8	520.6	522.6	18.2	18.3	16.0	3.6	3.5	3.1
Pawtucket-Woonsocket-Attleboro	167.4	168.6	167.4	8.5	6.7	6.0	5.1	4.0	3.6
Providence	330.8	336.4	338.4	11.2	11.7	10.2	3.4	3.5	3.0
South Carolina	1,621.3	1,653.5	1,664.2	91.6	80.6	74.1	5.6	4.9	4.5
Charleston	219.1	232.9	230.8	9.6	9.5	8.7	4.4	4.1	3.8
Columbia	221.6	229.0	229.4	8.5	8.3	7.8	3.8	3.6	3.4
Greenville-Spartanburg	323.6	332.3	335.0	14.9	13.4	12.3	4.6	4.0	3.7
South Dakota	351.0	356.6	352.5	11.7	13.4	13.8	3.3	3.8	3.9
Rapid City	38.1	38.9	38.1	1.3	1.6	1.7	3.4	4.0	4.5
Sioux Falls	68.1	69.3	69.2	1.8	2.1	2.7	2.7	3.1	3.9

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		
	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P	Sept. 1986	Aug. 1987	Sept. 1987 ^P
Tennessee	2,321.1	2,328.9	2,357.8	167.3	154.5	147.2	7.2	6.6	6.2
Chattanooga	201.3	201.7	202.2	12.8	11.6	11.1	6.3	5.7	5.5
Johnson City-Kingsport-Bristol	207.4	212.5	215.5	13.8	14.7	14.3	6.6	6.9	6.6
Knoxville	277.6	277.6	280.5	18.7	16.9	15.9	6.7	6.1	5.7
Memphis LMA	440.0	441.4	445.4	28.0	25.8	25.5	6.4	5.9	5.7
Nashville	508.3	504.7	510.4	24.1	23.5	22.9	4.7	4.7	4.5
Texas¹	8,227.2	8,590.1	8,430.0	748.8	710.1	717.3	9.1	8.3	8.5
Abilene	55.5	57.4	56.8	5.4	4.6	4.5	9.7	7.9	8.0
Amarillo	99.4	105.9	103.6	6.7	6.7	6.8	6.7	6.4	6.5
Austin	426.4	443.0	442.1	24.5	29.5	29.5	5.7	6.7	6.7
Beaumont-Port Arthur	163.9	167.0	164.1	22.8	20.6	20.3	13.9	12.3	12.4
Brazoria	81.6	85.5	84.4	9.1	8.2	8.4	11.2	9.6	9.9
Brownsville-Harlingen	95.4	99.3	96.6	15.5	13.6	14.1	16.2	13.7	14.6
Bryan-College Station	57.8	58.6	57.3	3.7	3.2	3.2	6.3	5.5	5.5
Corpus Christi	165.6	169.9	166.9	20.3	19.0	19.5	12.3	11.2	11.7
Dallas	1,421.6	1,483.1	1,454.9	82.2	95.6	98.5	5.8	6.4	6.8
El Paso	234.9	242.4	240.9	30.4	25.5	26.5	12.9	10.5	11.0
Fort Worth-Arlington	655.8	711.0	692.2	42.8	50.2	48.0	6.5	7.1	6.9
Galveston-Texas City	108.3	114.2	111.6	12.0	12.5	12.4	11.1	10.9	11.1
Houston	1,613.7	1,664.7	1,629.2	174.7	146.6	147.2	10.8	8.8	9.0
Killeen-Temple	90.4	97.3	95.3	7.2	7.6	8.2	8.0	7.9	8.6
Laredo	44.2	46.3	45.3	7.1	6.6	6.7	16.0	14.2	14.7
Longview-Marshall	81.1	82.7	80.9	10.1	8.7	8.5	12.4	10.5	10.6
Lubbock	111.3	115.6	114.9	7.2	7.3	7.5	6.4	6.3	6.5
McAllen-Edinburg-Mission	141.1	147.2	147.1	27.4	26.2	27.9	19.4	17.8	19.0
Midland	52.2	53.0	52.2	6.5	4.4	4.3	12.4	8.3	8.3
Odessa	59.8	57.6	57.1	10.6	5.6	5.4	17.7	9.7	9.5
San Angelo	45.8	47.3	46.3	3.4	2.8	2.9	7.4	6.0	6.3
San Antonio	583.4	624.9	614.5	43.0	50.0	50.7	7.4	8.0	8.3
Sherman-Denison	48.7	51.4	50.5	3.9	3.8	4.0	8.0	7.5	7.8
Texarkana	56.9	59.2	59.0	4.7	4.7	4.8	8.2	7.9	8.0
Tyler	76.5	79.6	77.4	7.3	6.9	7.1	9.5	8.7	9.1
Victoria	38.6	39.9	39.0	4.1	3.3	3.4	10.6	8.4	8.6
Waco	91.5	95.5	95.3	7.0	7.8	7.9	7.7	8.1	8.3
Wichita Falls	57.0	59.9	58.9	4.8	4.4	4.6	8.5	7.4	7.8
Utah	767.3	755.6	757.3	42.2	46.0	42.2	5.5	6.1	5.6
Provo-Orem	100.1	97.1	99.9	7.0	6.7	6.0	7.0	6.9	6.0
Salt Lake City-Ogden	505.3	500.6	499.1	24.5	27.5	25.9	4.9	5.5	5.2
Vermont	295.3	299.0	296.1	11.0	8.7	8.5	3.7	2.9	2.9
Burlington	73.3	75.9	75.4	2.4	1.8	1.8	3.3	2.4	2.4
Virginia	2,894.8	2,994.9	3,001.2	133.5	124.3	121.4	4.6	4.1	4.0
Charlottesville	64.5	62.8	64.5	2.3	1.9	1.8	3.5	3.0	2.7
Danville	51.0	49.6	50.8	4.3	3.3	2.9	8.5	6.6	5.7
Lynchburg	69.3	69.4	71.1	4.2	3.4	3.4	6.0	4.8	4.7
Norfolk-Virginia Beach-Newport News	574.4	599.3	600.2	27.2	26.8	27.1	4.7	4.5	4.5
Richmond-Petersburg	411.2	427.4	429.3	17.0	15.5	16.4	4.1	3.6	3.8
Roanoke	116.8	123.1	122.0	5.8	5.6	4.6	4.9	4.5	3.8
Washington	2,216.1	2,234.3	2,239.3	162.2	141.8	139.8	7.3	6.3	6.2
Seattle	964.3	988.7	992.4	60.0	53.0	53.3	6.2	5.4	5.4
West Virginia	735.2	739.2	740.7	75.0	67.3	67.4	10.2	9.1	9.1
Charleston	114.4	118.6	118.0	9.3	9.7	9.7	8.1	8.2	8.2
Huntington-Ashland	124.9	125.9	124.1	12.3	11.8	10.4	9.8	9.4	8.4
Parkersburg-Marietta	70.7	72.3	70.7	6.9	5.6	5.0	9.7	7.8	7.1
Wheeling	70.7	71.3	69.9	7.4	5.7	5.0	10.4	8.0	7.2
Wisconsin	2,403.2	2,507.6	2,491.9	139.0	121.3	109.2	5.8	4.8	4.4
Appleton-Oshkosh-Neenah	157.6	166.9	166.8	8.7	7.0	7.2	5.5	4.2	4.3
Eau Claire	67.5	70.6	70.8	3.6	3.3	3.0	5.3	4.7	4.3
Green Bay	101.0	105.3	104.7	5.1	4.8	4.9	5.0	4.5	4.6
Janesville-Beloit	67.9	71.1	69.7	4.5	6.5	4.1	6.7	9.1	5.9
Kenosha	50.7	52.3	56.9	6.3	4.3	2.8	12.5	8.3	5.0
La Crosse	50.1	51.3	52.8	2.6	1.9	1.8	5.1	3.7	3.4
Madison	204.3	213.8	214.2	7.5	6.6	6.2	3.7	3.1	2.9
Milwaukee	710.8	738.9	734.1	39.3	33.6	31.5	5.5	4.5	4.3
Racine	85.3	86.5	85.9	7.5	5.8	4.7	8.7	6.7	5.5
Sheboygan	52.1	56.0	54.3	2.5	2.6	2.2	4.9	4.6	4.0
Wausau	56.5	61.1	60.1	3.3	2.7	2.6	5.9	4.5	4.4
Wyoming	253.8	247.5	246.0	20.3	16.2	15.4	8.0	6.5	6.2

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 1986 have been

benchmarked to 1986 Current Population Survey annual averages. Except in the 11 States and 2 areas designated by footnote 1, estimates for 1987 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 about 59,500 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 290,000 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 14 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 59,500 occupied units are eligible for interview. About 2,500 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 59,500 occupied units, there are 11,000 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 sometime 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. The reliability of national estimates is unaffected. 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.)

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	21,000	68	500-1,000	3,000-3,500
Feb. 1954 to Apr. 1956	21,000	230	500-1,000	3,000-3,500
May 1956 to Dec. 1959	33,500	1330	1,500	6,000
Jan. 1960 to Feb. 1963	33,500	2333	1,500	6,000
Mar. 1963 to Dec. 1966	33,500	357	1,500	6,000
Jan. 1967 to July 1971	48,000	449	2,000	8,500
Aug. 1971 to July 1972	45,000	449	2,000	8,000
Aug. 1972 to Dec. 1977	45,000	461	2,000	8,000
Jan. 1978 to Dec. 1979	53,500	614	2,500	10,000
Jan. 1980 to Apr. 1981	62,200	629	2,800	12,000
May 1981 to Dec. 1984	57,800	629	2,500	11,000
Jan. 1985 to present	57,000	729	2,500	11,000

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 from the April 1, 1980, census through the latest available July 1 estimate, 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 640 of that series. A description of the age estimates methodology is available on request from the Chief of the Population Division, U.S. Bureau of the Census, Washington, D.C. 20233.

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	244	187
Employed	263	200
Unemployed	131	134
Men, 20 years and over:		
Civilian labor force	148	127
Employed	162	141
Unemployed	89	91
Women, 20 years and over:		
Civilian labor force	189	140
Employed	190	144
Unemployed	82	85
Both sexes, 16 to 19 years:		
Civilian labor force	83	91
Employed	86	97
Unemployed	57	63
Black, 16 years and over:		
Civilian labor force	82	63
Employed	92	70
Unemployed	65	67
Men, 20 years and over:		
Civilian labor force	49	43
Employed	56	50
Unemployed	43	46
Women, 20 years and over:		
Civilian labor force	67	44
Employed	67	48
Unemployed	43	46
Both sexes, 16 to 19 years:		
Civilian labor force	33	37
Employed	30	34
Unemployed	30	32

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 159,000. The 68-percent confidence interval as shown by these data is from 11,841,000 to 12,159,000. 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 118,000.

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 . . . . .	.17	.18			
Both sexes, 16 to 19 years . . . . .	.65	.77			
White workers . . . . .	.11	.12			
Black workers . . . . .	.52	.54			
Married men, spouse present . . . . .	.15	.16			
Married women, spouse present . . . . .	.21	.23			
Full-time workers . . . . .	.12	.12			
Part-time workers . . . . .	.34	.42			
Unemployed 15 weeks and over . . . . .	.06	.08			
			Occupation—Continued		
			Precision production, craft, and repair	0.32	0.35
			Machine operators, assemblers, and inspectors . . . . .	.50	.57
			Transportation and material moving . . . . .	.57	.64
			Handlers, equipment cleaners, helpers, and laborers . . . . .	.70	.80
			Farming, forestry, and fishing . . . . .	.65	.73
			Industry		
			Nonagricultural private wage and salary workers . . . . .	.13	.14
			Mining	1.37	1.56
			Construction . . . . .	.65	.74
			Manufacturing . . . . .	.27	.30
			Durable goods . . . . .	.34	.38
			Nondurable goods . . . . .	.42	.48
			Transportation, communications, and public utilities . . . . .	.41	.46
			Wholesale and retail trade . . . . .	.26	.29
			Finance and services . . . . .	.20	.22
			Government workers . . . . .	.18	.19
			Agricultural wage and salary workers	1.22	1.40
Occupation					
Executive, administrative, and managerial . . . . .	.21	.24			
Professional specialty . . . . .	.18	.20			
Technicians and related support . . . . .	.49	.55			
Sales . . . . .	.29	.32			
Administrative support, including clerical . . . . .	.24	.26			
Private household	1.07	1.20			
Protective service . . . . .	.67	.76			
Service, except private household and protective . . . . .	.38	.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 3.6 percent of a total of 90,771,000 employed persons are employed in agriculture. The standard error on an estimate of 3.6 percent with a base of 90,771,000 is obtained from table H (0.09 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 3.6 percent is then approximately $0.09 \times 1.26 = 0.1$ 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 6.9 percent, based on a total of 95,676,000 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	14	11	11	11	11	11	11	10	10
100	19	15	16	15	15	15	15	14	14
500	43	33	35	34	34	33	29	32	31
1,000	61	47	49	48	47	46	33	45	42
2,000	85	66	67	68	64	63	33	63	55
4,000	120	93	88	95	84	80		87	65
6,000	146	113	99	116	94	86		106	58
8,000		129		133	97	83		120	24
10,000		143		147	94	70		133	24
15,000		172		177	49	70		157	
20,000		195		201	49			174	
30,000				236				195	
40,000				261				202	
50,000				278				196	
60,000				288				176	
70,000				293				137	
80,000				293				137	
100,000				275					
140,000				231					

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	12	13	12	13	8	8	13	13
100	16	18	17	18	11	11	18	18
500	37	40	38	35	25	25	40	34
1,000	51	54	52	38	36	35	55	36
2,000	72	70	69	-	50	47	74	36
4,000	99	78	85		70	62	93	
6,000	118	60	87		86	70	97	
8,000	132				98	73	90	
10,000	143				109	71	90	
15,000	160				131	42	90	
20,000	165				149	42		
30,000	-				175			
40,000					194			
50,000					207			
60,000					215			
70,000					219			
80,000					219			
100,000					208			
140,000					179			

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 6.1 percent, based on a total of 94,254,000 in the civilian labor force for the month. First, the standard error on the average of the two estimates, 6.5 percent with a base of 94,965,000, is obtained from table F (0.12 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 0.12 x 1.40 = 0.17 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:

$$\sqrt{(216,000)^2 + (221,000)^2 - 2(.30) (216,000) (221,000)},$$

or about 259,000.

Table F. Standard errors for unemployment rates

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
	.	2	5	10	15	20	25	30	35	50
50	2.09	2.94	4.57	6.28	7.46	8.34	9.01	9.51	9.87	10.21
100	1.48	2.08	3.23	4.44	5.28	5.90	6.37	6.73	6.98	7.22
500 . . . . .	.66	.93	1.45	1.99	2.36	2.64	2.85	3.01	3.12	3.27
1,000 . . . . .	.47	.66	1.02	1.40	1.67	1.87	2.01	2.13	2.21	2.28
2,000 . . . . .	.33	.46	.72	.99	1.18	1.32	1.42	1.50	1.56	1.61
4,000 . . . . .	.23	.33	.51	.70	.83	.93	1.01	1.06	1.10	1.14
6,000 . . . . .	.19	.27	.42	.57	.68	.76	.82	.87	.90	.93
10,000 . . . . .	.15	.21	.32	.44	.53	.59	.64	.67	.70	.72
20,000 . . . . .	.10	.15	.23	.31	.37	.42	.45	.47	.49	.51
60,000 . . . . .	.06	.08	.13	.18	.21	.24	.26	.27	.27	.29
100,000 . . . . .	.05	.07	.10	.14	.17	.19	.20	.21	.22	.22
140,000 . . . . .	.04	.06	.09	.12	.14	.16	.17	.18	.19	.20

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

Monthly base of unemployment rate (in thousands)	Monthly unemployment rate (percent)									
	.	2	5	10	15	20	25	30	35	50
50	2.32	3.28	5.14	7.18	8.69	9.90	10.93	11.81	12.58	14.38
100	1.64	2.32	3.64	5.08	6.14	7.00	7.12	8.35	8.89	10.17
500 . . . . .	.73	1.04	1.63	2.27	2.74	3.13	3.45	3.73	3.97	4.53
1,000 . . . . .	.52	.73	1.15	1.60	1.94	2.21	2.44	2.63	2.80	3.19
2,000 . . . . .	.37	.52	.81	1.13	1.37	1.56	1.72	1.85	1.97	2.24
4,000 . . . . .	.26	.37	.57	.80	.96	1.10	1.20	1.30	1.38	1.56
6,000 . . . . .	.21	.30	.47	.65	.78	.89	.98	1.05	1.11	1.26
10,000 . . . . .	.16	.23	.36	.50	.60	.68	.75	.80	.85	.94
20,000 . . . . .	.12	.16	.25	.35	.42	.47	.51	.54	.57	
60,000 . . . . .	.07	.09	.14	.19	.22	.23	.24			
100,000 . . . . .	.05	.07	.11	.14	.15	.15				
140,000 . . . . .	.04	.06	.09							

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	2.14	3.01	4.69	6.46	7.68	8.61	9.32	9.86	10.27	10.76
100	1.51	2.13	3.32	4.57	5.43	6.09	6.59	6.97	7.26	7.61
500 . . . . .	.68	.95	1.48	2.04	2.43	2.72	2.95	3.12	3.25	3.40
1,000 . . . . .	.48	.67	1.05	1.44	1.72	1.92	2.08	2.21	2.30	2.41
2,000 . . . . .	.34	.48	.74	1.02	1.22	1.36	1.47	1.56	1.62	1.70
4,000 . . . . .	.24	.34	.52	.72	.86	.96	1.04	1.10	1.15	1.20
6,000 . . . . .	.20	.28	.43	.59	.70	.79	.85	.90	.94	.98
10,000 . . . . .	.15	.21	.33	.46	.54	.61	.66	.70	.73	.76
20,000 . . . . .	.11	.15	.23	.32	.38	.43	.47	.49	.51	.54
40,000 . . . . .	.08	.11	.17	.23	.27	.30	.33	.35	.36	.38
60,000 . . . . .	.06	.09	.14	.19	.22	.25	.27	.28	.30	.31
80,000 . . . . .	.05	.08	.12	.16	.19	.22	.23	.25	.26	.27
100,000 . . . . .	.05	.07	.10	.14	.17	.19	.21	.22	.23	.24
160,000 . . . . .	.04	.05	.08	.11	.13	.15	.16	.17	.18	.19

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

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

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

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

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

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

(In thousands)

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

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

COLLECTION

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

Federal-State cooperation

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

Shuttle schedules

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

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

CONCEPTS

Industrial classification

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

industry indicated by the principal product or activity.

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

Industry employment

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

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

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

Indexes of diffusion of changes in number of employees on nonagricultural payrolls. These indexes measure the percent of industries which posted increases in employment over the specified time span. The indexes are calculated from 185 seasonally adjusted employment series (two-digit non-manufacturing industries and three-digit manufacturing industries) covering all nonagricultural payroll employment in the private sector. A more detailed discussion of these indexes appears in "Introduction of Diffusion Indexes," in the December issue of *Employment and Earnings*.

Industry hours and earnings

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

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

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

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

Payroll covers the payroll for full- and part-time production, construction, or nonsupervisory workers who received pay for any part of the pay period which includes the 12th of the month. The payroll is reported before deductions of any kind, e.g., for old-age and unemployment insurance, group insurance, withholding tax, bonds, or union dues; also included is pay for overtime, holidays, vacation, and sick leave paid directly by the firm. Bonuses (unless earned and paid regularly each pay period); other pay not earned in the pay period reported (e.g., retroactive pay); tips; and the value of free rent, fuel, meals, or other payment in kind are excluded. "Fringe benefits" (such as health and other types of insurance, contributions to retirement, etc., paid by the employer) are also excluded.

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

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

Average weekly hours. The workweek information relates to the average hours for which pay was received and is differ-

ent from standard or scheduled hours. Such factors as unpaid absenteeism, labor turnover, part-time work, and stoppages cause average weekly hours to be lower than scheduled hours of work for an establishment. Group averages further reflect changes in the workweek of component industries.

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

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

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

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

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

Average hourly earnings, including lump-sum wage payments. This series is compiled only for aircraft manufactur-

ing, SIC 3721. The same concepts and estimation methods apply to this series as apply to the average hourly earnings series described above; the one difference between the two 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 covered by a lump-sum agreement, the reported payroll data are adjusted to include a prorated portion of the lump-sum payment. Such payments are generally made once a year and cover the following 12-month period. In order to spread the payment across this time period, a prorated portion of the payment is added to the payroll each month. This prorated portion is adjusted by an exit rate to reduce the lump-sum amount to account for persons who received the payment but left before the payment allocation period expired.

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

Railroad hours and earnings. The figures for Class I railroads (excluding switching and terminal companies) are based on monthly data summarized in the M-300 report of the Interstate Commerce Commission and relate to all employees except executives, officials, and staff assistants (ICC group I) who received pay during the month. Average hourly earnings are computed by dividing total compensation by total hours paid for. Average weekly hours are obtained by dividing the total number of hours paid for, reduced to a weekly basis, by the number of employees, as defined above. Average weekly earnings are derived by multiplying average weekly hours by average hourly earnings.

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

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

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

ESTIMATING METHODS

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

The "link relative" technique

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

Size and regional stratification

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

Benchmark adjustments

Employment estimates are compared periodically with benchmarks (comprehensive counts of employment) for the various nonagricultural industries, and appropriate adjustments are made as indicated. The industry estimates are currently projected from March 1986 levels. Normally, benchmark adjustments are made annually.

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

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

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

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

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

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

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

The estimates for the benchmark month are compared with new benchmark levels, industry by industry. If revisions are necessary, the monthly series of estimates between benchmark periods are adjusted between the new benchmark and the preceding one, and the new benchmark for each industry is then carried forward progressively to the current month by use of the sample trends. Thus, under this procedure, the benchmark is used to establish the level of employment; the sample is used to measure the month-to-month changes in the level. A comparison of the actual amounts of revisions made at the time of the March 1986 benchmark adjustment is shown in table M.

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

THE SAMPLE

Design

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

Table M. Comparison of nonagricultural employment benchmarks and estimates for March 1986

Industry	Benchmark	Estimate	Percent difference
Total	98,150	98,617	-0.5
Mining	832	842	-1.2
Construction	4,415	4,441	-.6
Manufacturing	18,945	19,148	-1.1
Transportation and public utilities	5,200	5,215	-.3
Wholesale trade	5,695	5,803	-1.9
Retail trade	17,327	17,418	-.5
Finance, insurance, and real estate	6,140	6,144	-.1
Services	22,650	22,593	.3
Government	16,946	17,013	-.4

¹Less than 0.05 percent.

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

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

Coverage

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

Table N. Approximate size and coverage of BLS employment and payrolls sample, March 1986¹

Industry	Number of establishments in sample	Employees	
		Number reported	Percent of total
Total	249,800	37,762,000	38
Mining	3,700	319,000	38
Construction	23,100	840,000	19
Manufacturing	51,100	10,018,000	53
Transportation and public utilities	11,600	2,380,000	46
Wholesale trade	21,900	978,000	17
Retail trade	42,900	3,352,000	19
Finance, insurance, and real estate	17,700	2,135,000	35
Services	53,300	5,362,000	24
Government:			
Federal ²	5,000	2,908,000	100
State	4,800	3,194,000	80
Local	14,700	6,276,000	62

¹ Since a few establishments do not report payroll and hours information, hours and earnings estimates may be based on a slightly smaller sample than employment estimates.

² National estimates of Federal employment by agency 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 62 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	2.7	1.0	1.3
Construction	1.2	.2	.5
Manufacturing . . . . .	.7	.1	.2
Durable goods . . . . .	.8	.1	.3
Nondurable goods . . . . .	.7	.1	.2
Transportation and public utilities . . . . .	.4	.7	.6
Wholesale trade . . . . .	.7	.2	.4
Retail trade	1.0	.2	.4
Finance, insurance, and real estate . . . . .	.2	.2	.4
Services . . . . .	.2	.4	.6
Government ³ . . . . .	.4	—	—

¹ The average percent revision in employment for the 1982-86 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 at 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	110,800	104,900	Nondurable goods—Continued		
Total private ¹	67,400	61,600	Chemicals and allied products	2,400	2,300
Goods producing	29,300	24,100	Petroleum and coal products	1,300	1,300
Mining	5,300	5,100	Rubber and misc. plastics products	2,100	2,000
Oil and gas extraction	4,200	4,100	Leather and leather products	2,300	2,200
Construction	18,100	14,000	Service-producing industries	100,500	98,400
General building contractors	6,500	4,900	Transportation and public utilities	15,700	13,800
Manufacturing	22,800	22,800	Transportation	18,200	17,400
Durable goods	18,500	17,500	Communication and public utilities	6,600	6,200
Lumber and wood products	3,100	2,600	Wholesale trade	9,000	8,000
Furniture and fixtures	2,000	1,800	Durable goods	5,800	5,100
Stone, clay, and glass products	2,200	2,100	Nondurable goods	5,300	4,500
Primary metal industries	6,100	5,900	Retail trade	37,500	34,600
Blast furnaces and basic steel products	4,900	4,600	General merchandise stores	20,700	18,700
Fabricated metal products	3,300	2,900	Food stores	6,400	5,800
Machinery, except electrical	7,200	6,400	Automotive dealers and service stations	3,200	3,000
Electrical and electronic equipment	5,600	6,000	Eating and drinking places	17,600	15,200
Transportation equipment	9,200	8,800	Finance, insurance, and real estate	8,400	7,400
Motor vehicles and equipment	8,100	8,600	Finance	4,500	3,800
Instruments and related products	2,100	2,200	Insurance	3,000	2,300
Miscellaneous manufacturing	2,000	2,000	Real estate	4,800	4,100
Nondurable goods	9,900	9,500	Services	33,200	30,500
Food and kindred products	6,300	6,400	Business services	12,200	10,800
Tobacco manufactures	1,700	1,600	Health services	10,600	10,400
Textile mill products	2,200	2,300	Government	73,700	68,400
Apparel and other textile products	6,300	5,600	Federal	17,400	11,300
Paper and allied products	1,500	1,300	State	24,600	23,000
Printing and publishing	2,200	2,100	Local	35,200	32,800

NOTE: Data are based on differences from December 1981 through December 1986.

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

COLLECTION

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

CONCEPTS

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

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

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

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

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

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

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

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

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

NOTES ON THE DATA

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

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

State and Area Labor Force Data (D table)

FEDERAL-STATE COOPERATIVE PROGRAM

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

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

published in the BLS bulletin, *Geographic Profile of Employment and Unemployment*.

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

ESTIMATING METHODS

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

North Carolina, and Florida; and two areas: Los Angeles—Long Beach metropolitan area and New York City, are sufficiently reliable to be used directly from the CPS. For a description of the CPS concepts, see “Household Data,” above.

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

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

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

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

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

For the third category, new entrants and reentrants into the labor force, a composite estimate is developed from equations that relate the total entrants into the labor force to the experienced unemployed and the experienced labor force. For each month, the estimate of entrants into the labor force is a function of: (a) the month of the year; (b) the level of

the experienced unemployed; (c) the level of the experienced labor force; and (d) the proportion of the working age population that is considered “youth.”

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

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

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

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

Seasonal Adjustment

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

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

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

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

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

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

Beginning in July 1980, the BLS also uses the X-11 ARIMA methodology in seasonally adjusting the establishment data, which previously had been computed using the *BLS Seasonal Factor Method*. All series are seasonally adjusted using the multiplicative models under X-11 ARIMA. Seasonal adjustment factors used in calculating the current year's estimates are based on actual data through March 1987 and projected data through March 1988. The ARIMA model options for projecting the data series for 1 year ahead have been used in seasonally adjusting the establishment series since June 1981.

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

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

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

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

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

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

The revised seasonally adjusted series for the establishment data reflect experience through March 1987. Seasonal adjustment factors to be used for current adjustment appear in the June 1987 issue of *Employment and Earnings*.

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IX ARIZONA	-Department of Economic Security, 733-A, P.O. Box 6123, Phoenix 85005
VI ARKANSAS	-Employment Security Division, Department of Labor, State Capitol Mall, P.O. Box 2981, Little Rock 72203
IX CALIFORNIA	-Employment Data and Research Div., Employment Development Depart., P.O. Box 1679, Sacramento 95808.
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