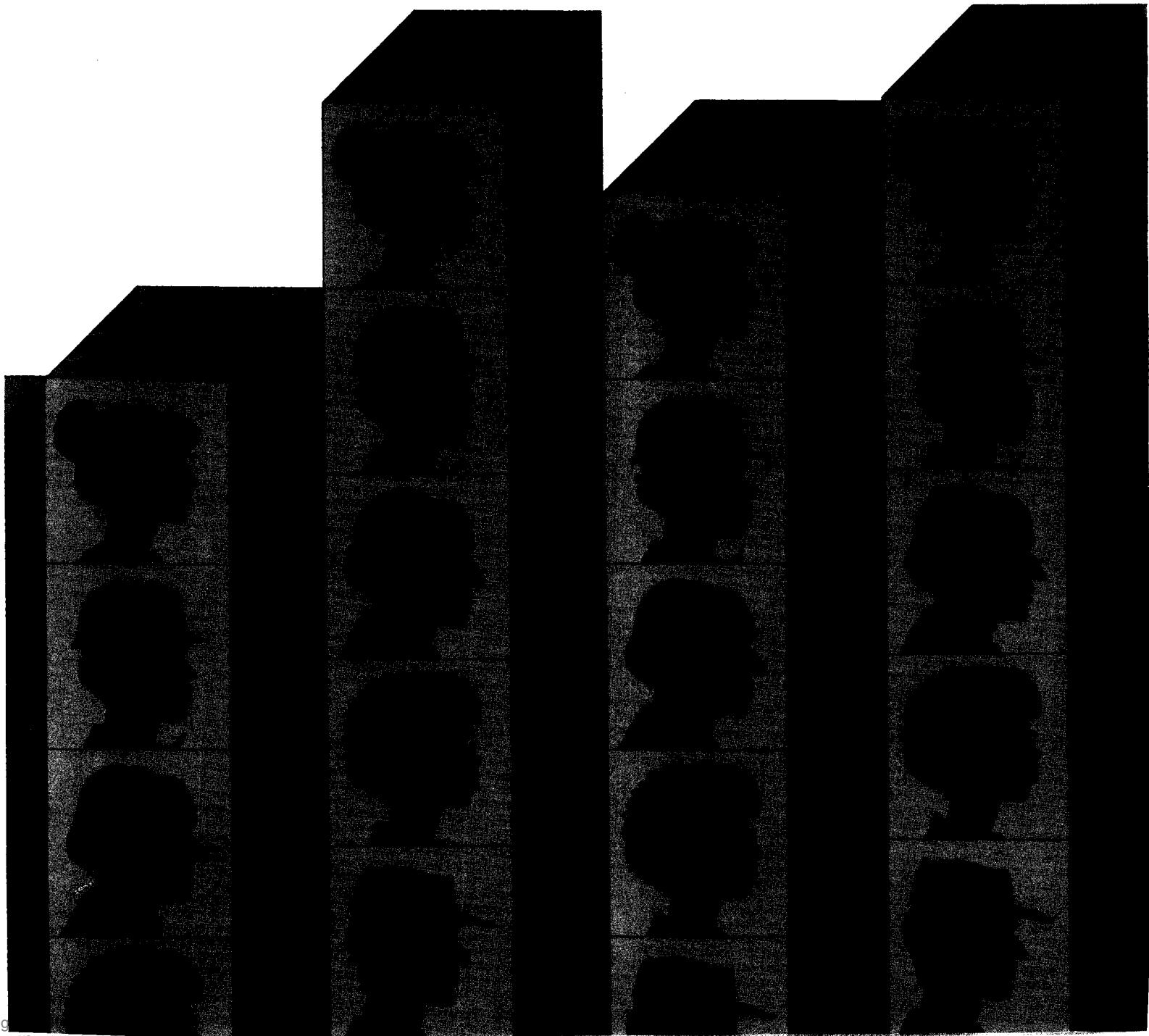


EMPLOYMENT AND EARNINGS

September 1987

U.S. Department of Labor
Bureau of Labor Statistics





U.S. DEPARTMENT OF LABOR

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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. 9 September 1987

Editors: Gloria Peterson Green, Rosalie K. Epstein

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Employment and Unemployment Developments, August 1987

Employment rose in August and unemployment was unchanged. The overall unemployment rate and the civilian worker rate remained at 5.9 and 6.0 percent, respectively. Both rates have declined by 0.7 percentage point since the beginning of this year.

Total civilian employment—as measured by the monthly survey of households—rose by 355,000 in August after seasonal adjustment. Nonfarm payroll employment—as measured by the monthly survey of establishments—was up by 155,000.

Unemployment

The number of unemployed persons was unchanged at 7.2 million in August, after seasonal adjustment, as were the jobless rates for nearly all major labor force groups. The rates for adult men (5.2 percent), adult women (5.3 percent), teenagers (16.0 percent), whites (5.1 percent), blacks (12.4 percent), and Hispanics (8.0 percent) showed little or no over-the-month change. (See tables A-33 and A-34.)

The length of unemployment was also little changed in August. The average (mean) duration of unemployment was about unchanged at 14.3 weeks, while the median duration edged down slightly to 6.4 weeks. (See table A-40.)

The number of persons employed part time for economic reasons—sometimes referred to as the partially unemployed—declined in August to 5.3 million, returning to the May-June levels. Although this figure has edged down slightly thus far in 1987, it remains relatively high by historical standards. (See table A-35.)

Civilian employment and the labor force

Civilian employment declined less than usual in August and, after seasonal adjustment, advanced by 355,000 to 113.1 million. Most of this increase occurred among teenagers. The proportion of the population that is employed rose 0.2 percentage point to a new high of 61.8 percent. (See table A-33.)

The civilian labor force increased to 120.3 million in August, after seasonal adjustment, with the labor force participation rate edging up to 65.7 percent. Over the past year, the labor force has grown by 2.1 million, with about half of the increase occurring among adult women.

Industry payroll employment

Total nonagricultural employment rose by 155,000 in August to a seasonally adjusted level of 102.3 million. Virtually all of the job growth occurred in the service-producing sector. (See table B-4.)

Within the service sector, the services industry component continued its strong job expansion, increasing by 90,000 in August. Over the year, 1 million jobs have been added in the industry. As usual, health and business services accounted for most of the over-the-month gain. Job growth continued in finance, insurance, and real estate as employment advanced by 25,000 over the month. Employment in retail and wholesale trade was about unchanged from July levels.

In the goods-producing sector, manufacturing employment was unchanged in August, following a substantial increase (90,000) in July. Employment in automobiles rose by 20,000, after declining by 30,000 in July (seasonally adjusted). Most of the recent employment fluctuations in this industry result from early plant shutdowns for model changeover and extended layoffs for inventory reductions. In contrast, employment in apparel and other textile products declined by 20,000, a return to the June level. Construction employment was unchanged at 5.0 million in August. Mining and its oil and gas extraction component continued the gradual recovery from the job losses of the 1985-86 period.

Weekly hours

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls expanded by 0.2 hour after seasonal adjustment, reaching 35.0 hours. Most of this increase occurred in retail trade and wholesale trade. Manufacturing hours remained at 41.0 for the fourth consecutive month, and overtime hours were unchanged from July at 3.8, both historically high levels. (See table C-5.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls increased 0.5 percent in August to 121.2 (1977=100), seasonally adjusted. The manufacturing index was about unchanged at 93.7. (See table C-6.)

Hourly and weekly earnings

Average hourly earnings rose 0.8 percent in August,

while average weekly earnings rose 1.4 percent, seasonally adjusted. Before seasonal adjustment, average hourly earnings rose by 4 cents to \$8.95, and average weekly earnings were up \$4.09 to \$315.94. Over the year, hourly earnings were up 25 cents and weekly earnings rose \$10.57.

The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 173.9 (1977=100)

in August, seasonally adjusted, an increase of 0.4 percent from July. For the 12 months ended in August, 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 1.4 percent during the 12-month period ended in July. (See table C-7.)

Scheduled Release Dates			
Employment and unemployment data are scheduled for initial release on the following dates:			
<i>Reference month</i>	<i>Release date</i>	<i>Reference month</i>	<i>Release date</i>
September	October 2	December	January 8
October	November 6	January	February 5
November	December 4	February	March 4

**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 ³	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:											
August	182,525	119,821	65.6	111,764	1,697	110,067	3,057	107,010	8,057	6.7	62,704
September	182,713	119,988	65.7	111,703	1,716	109,987	3,142	106,845	8,285	6.9	62,725
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

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

² The population and Armed Forces figures are not adjusted for

seasonal variation.

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

A-2. Employment status of the noninstitutional population 16 years and over by sex, 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:												
August	87,460	66,911	76.5	62,483	1,541	60,942	2,397	58,545	4,428	6.6	20,549	
September	87,556	67,128	76.7	62,528	1,560	60,968	2,495	58,473	4,600	6.9	20,428	
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	
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	880	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:												
August	95,065	52,910	55.7	49,281	156	49,125	660	48,465	3,629	6.9	42,155	
September	95,156	52,860	55.6	49,175	156	49,019	647	48,372	3,685	7.0	42,296	
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	

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:								
August	180,828	118,124	65.3	110,067	8,057	6.8	6.8	6.9
September	180,997	118,272	65.3	109,987	8,285	7.0	7.0	7.0
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

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.

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

(Numbers in thousands)

Age, sex, and race	August 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	183,002	121,614	66.5	114,527	7,088	5.8	61,388	28,752	1,766	3,143	27,727
16 to 19 years	14,649	9,415	64.3	8,141	1,274	13.5	5,233	697	694	36	3,806
16 to 17 years	7,542	4,183	55.5	3,566	617	14.8	3,359	324	366	15	2,654
18 to 19 years	7,106	5,232	73.6	4,575	657	12.6	1,875	373	329	21	1,152
20 to 24 years	18,892	15,499	82.0	14,132	1,366	8.8	3,393	1,624	505	121	1,144
25 to 54 years	99,471	81,795	82.2	77,806	3,989	4.9	17,676	12,252	546	1,142	3,737
25 to 34 years	42,373	35,341	83.4	33,281	2,060	5.8	7,032	5,082	382	271	1,298
25 to 29 years	21,396	17,843	83.4	16,737	1,105	6.2	3,553	2,466	248	130	708
30 to 34 years	20,978	17,499	83.4	16,544	954	5.5	3,479	2,615	133	140	590
35 to 44 years	33,884	28,354	83.7	27,115	1,239	4.4	5,529	3,848	124	353	1,204
35 to 39 years	18,481	15,402	83.3	14,662	739	4.8	3,079	2,190	76	166	646
40 to 44 years	15,403	12,952	84.1	12,452	499	3.9	2,450	1,658	48	187	557
45 to 54 years	23,215	18,099	78.0	17,410	690	3.8	5,115	3,321	41	517	1,235
45 to 49 years	12,310	9,918	80.6	9,531	387	3.9	2,393	1,634	28	218	513
50 to 54 years	10,904	8,182	75.0	7,879	302	3.7	2,723	1,688	14	299	722
55 to 64 years	21,799	11,724	53.8	11,353	371	3.2	10,075	5,039	14	720	4,301
55 to 59 years	11,027	7,177	65.1	6,937	240	3.4	3,850	2,239	6	351	1,253
60 to 64 years	10,772	4,547	42.2	4,417	131	2.9	6,225	2,800	7	369	3,048
65 years and over	28,191	3,182	11.3	3,094	87	2.7	25,010	9,140	6	1,123	14,740
65 to 69 years	9,781	1,922	19.7	1,863	58	3.0	7,860	3,003	2	234	4,621
70 to 74 years	7,567	804	10.6	785	19	2.4	6,762	2,505		205	4,052
75 years and over	10,842	456	4.2	445	11	2.4	10,387	3,632	4	683	6,068
Men											
16 years and over	87,023	67,426	77.5	63,730	3,696	5.5	19,598	523	850	1,723	16,501
16 to 19 years	7,355	4,910	66.8	4,184	725	14.8	2,446	79	325	21	2,021
16 to 17 years	3,844	2,184	56.8	1,822	362	16.6	1,660	52	173	6	1,429
18 to 19 years	3,512	2,726	77.6	2,362	364	13.3	786	27	152	15	592
20 to 24 years	9,146	8,164	89.3	7,480	684	8.4	982	28	266	82	605
25 to 54 years	48,592	45,572	93.8	43,559	2,013	4.4	3,019	160	251	760	1,849
25 to 34 years	20,832	19,766	94.9	18,701	1,065	5.4	1,066	50	190	177	648
25 to 29 years	10,511	9,897	94.2	9,356	541	5.5	614	30	127	96	360
30 to 34 years	10,321	9,869	95.6	9,345	523	5.3	452	20	63	81	288
35 to 44 years	16,540	15,669	94.7	15,067	602	3.8	871	58	48	238	528
35 to 39 years	9,043	8,585	94.9	8,225	360	4.2	458	20	31	117	289
40 to 44 years	7,497	7,084	94.5	6,842	241	3.4	413	38	17	120	238
45 to 54 years	11,220	10,137	90.4	9,791	347	3.4	1,082	52	13	345	673
45 to 49 years	5,960	5,514	92.5	5,310	204	3.7	447	22	7	147	271
50 to 54 years	5,259	4,624	87.9	4,481	142	3.1	636	30	6	198	402
55 to 64 years	10,254	6,823	66.5	6,606	217	3.2	3,431	66	7	430	2,927
55 to 59 years	5,246	4,157	79.2	4,013	144	3.5	1,089	29	6	207	847
60 to 64 years	5,008	2,666	53.2	2,593	73	2.7	2,342	37	1	223	2,080
65 years and over	11,677	1,957	16.8	1,901	56	2.9	9,720	190	1	430	9,098
65 to 69 years	4,435	1,187	26.8	1,147	39	3.3	3,249	68		124	3,057
70 to 74 years	3,251	475	14.6	464	11	2.3	2,775	40		85	2,651
75 years and over	3,990	295	7.4	289	6	1.9	3,696	82	1	221	3,391
Women											
16 years and over	95,979	54,189	56.5	50,797	3,392	6.3	41,790	28,229	916	1,420	11,226
16 to 19 years	7,293	4,505	61.8	3,956	549	12.2	2,788	618	370	16	1,785
16 to 17 years	3,698	1,999	54.1	1,744	256	12.8	1,699	272	193	9	1,225
18 to 19 years	3,595	2,506	69.7	2,213	293	11.7	1,089	346	177	7	560
20 to 24 years	9,746	7,335	75.3	6,652	682	9.3	2,412	1,596	239	39	538
25 to 54 years	50,879	36,223	71.2	34,247	1,976	5.5	14,657	12,092	295	382	1,888
25 to 34 years	21,541	15,576	72.3	14,580	995	6.4	5,966	5,032	191	93	650
25 to 29 years	10,885	7,946	73.0	7,381	564	7.1	2,939	2,436	121	34	348
30 to 34 years	10,657	7,630	71.6	7,199	431	5.6	3,027	2,595	70	59	302
35 to 44 years	17,343	12,685	73.1	12,048	637	5.0	4,658	3,790	76	116	676
35 to 39 years	9,438	6,817	72.2	6,437	379	5.6	2,621	2,170	45	49	357
40 to 44 years	7,906	5,868	74.2	5,610	258	4.4	2,037	1,620	31	67	319
45 to 54 years	11,995	7,962	66.4	7,619	343	4.3	4,033	3,270	28	173	562
45 to 49 years	6,350	4,404	69.4	4,221	183	4.2	1,946	1,612	21	71	242
50 to 54 years	5,645	3,558	63.0	3,398	160	4.5	2,087	1,658	8	101	320
55 to 64 years	11,545	4,901	42.5	4,748	154	3.1	6,644	4,973	7	290	1,374
55 to 59 years	5,781	3,020	52.2	2,924	96	3.2	2,761	2,210	1	144	406
60 to 64 years	5,764	1,881	32.6	1,824	57	3.0	3,883	2,763	6	146	968
65 years and over	16,515	1,225	7.4	1,194	31	2.6	15,290	8,950	5	693	5,641
65 to 69 years	5,346	735	13.7	716	19	2.6	4,611	2,935	2	110	1,564
70 to 74 years	4,316	329	7.6	321	8	2.4	3,987	2,465		120	1,401
75 years and over	6,852	161	2.3	156	5	3.4	6,691	3,550	3	462	2,677

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age, sex, and race	August 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	157,134	104,631	66.6	99,482	5,149	4.9	52,503	25,074	1,203	2,471	23,755
16 to 19 years	11,959	8,012	67.0	7,098	913	11.4	3,948	510	459	36	2,942
16 to 17 years	6,131	3,566	58.2	3,115	451	12.7	2,565	220	251	15	2,079
18 to 19 years	5,829	4,446	76.3	3,984	462	10.4	1,383	290	209	21	863
20 to 24 years	15,735	13,234	84.1	12,284	950	7.2	2,501	1,279	356	63	803
25 to 54 years	84,877	70,207	82.7	67,288	2,919	4.2	14,672	10,437	375	887	2,972
25 to 34 years	35,712	29,996	84.0	28,567	1,429	4.8	5,716	4,253	251	212	1,000
25 to 29 years	17,996	15,184	84.4	14,419	765	5.0	2,812	2,038	171	92	513
30 to 34 years	17,716	14,811	83.6	14,148	664	4.5	2,904	2,215	81	121	487
35 to 44 years	29,165	24,476	83.9	23,529	947	3.9	4,689	3,346	92	287	963
35 to 39 years	15,767	13,151	83.4	12,605	545	6.7	2,616	1,943	56	143	499
40 to 44 years	13,398	11,326	84.5	10,924	401	3.5	2,072	1,436	37	144	465
45 to 54 years	20,001	15,735	78.7	15,191	544	3.5	4,267	2,838	32	388	1,009
45 to 49 years	10,608	8,607	81.1	8,315	293	3.4	2,001	1,420	20	158	418
50 to 54 years	9,393	7,127	75.9	6,877	251	4.1	2,266	1,472	14	230	590
55 to 64 years	19,208	10,358	53.9	10,063	295	2.8	8,851	4,496	11	557	3,787
55 to 59 years	9,646	6,292	65.2	6,099	193	3.1	3,354	2,004	4	274	1,072
60 to 64 years	9,562	4,066	42.5	3,964	101	2.5	5,496	2,492	7	282	2,715
65 years and over	25,353	2,821	11.1	2,749	71	2.5	22,533	8,352	1	928	13,251
65 to 69 years	8,711	1,685	19.3	1,638	47	2.8	7,025	2,702		193	4,131
70 to 74 years	6,824	720	10.6	706	14	1.9	6,103	2,306		171	3,627
75 years and over	9,818	415	4.2	405	10	2.4	9,404	3,344	2	565	5,493
Men											
16 years and over	75,279	58,723	78.0	55,986	2,737	4.7	16,556	395	576	1,352	14,232
16 to 19 years	6,029	4,164	69.1	3,651	513	12.3	1,864	58	212	21	1,573
16 to 17 years	3,136	1,838	58.6	1,588	250	13.6	1,298	37	120	6	1,135
18 to 19 years	2,892	2,326	80.4	2,063	264	11.3	566	21	92	15	438
20 to 24 years	7,691	7,012	91.2	6,524	488	7.0	679	12	201	43	423
25 to 54 years	41,968	39,683	94.6	38,160	1,523	3.8	2,286	105	159	592	1,428
25 to 34 years	17,776	17,012	95.7	16,229	783	4.6	764	30	116	136	483
25 to 29 years	8,936	8,509	95.2	8,108	401	4.7	427	17	85	69	257
30 to 34 years	8,840	8,502	96.2	8,121	382	4.5	337	13	31	67	226
35 to 44 years	14,403	13,737	95.4	13,279	459	3.3	666	42	35	194	394
35 to 39 years	7,811	7,464	95.6	7,199	264	3.5	347	15	22	104	206
40 to 44 years	6,593	6,274	95.2	6,079	194	3.1	319	27	14	90	188
45 to 54 years	9,789	8,934	91.3	8,652	282	3.2	855	33	8	263	551
45 to 49 years	5,208	4,857	93.3	4,696	161	3.3	351	13	3	112	223
50 to 54 years	4,581	4,077	89.0	3,957	121	3.0	504	20	6	151	328
55 to 64 years	9,086	6,102	67.2	5,935	167	2.7	2,984	53	4	340	2,587
55 to 59 years	4,623	3,711	80.3	3,595	116	3.1	912	24	3	160	726
60 to 64 years	4,463	2,391	53.6	2,340	51	2.1	2,072	29	1	180	1,861
65 years and over	10,504	1,761	16.8	1,716	45	2.6	8,743	168		356	8,220
65 to 69 years	3,971	1,048	26.4	1,018	30	2.8	2,923	62		99	2,762
70 to 74 years	2,934	440	15.0	431	9	2.0	2,493	33		76	2,385
75 years and over	3,599	273	7.6	267	6	2.1	3,327	72		181	3,073
Women											
16 years and over	81,855	45,908	56.1	43,496	2,412	5.3	35,947	24,679	627	1,119	9,523
16 to 19 years	5,931	3,847	64.9	3,447	400	10.4	2,084	452	247	15	1,369
16 to 17 years	2,995	1,728	57.7	1,526	201	11.7	1,267	184	131	9	944
18 to 19 years	2,936	2,120	72.2	1,921	199	9.4	816	269	117	6	425
20 to 24 years	8,044	6,222	77.3	5,760	462	7.4	1,822	1,267	155	20	380
25 to 54 years	42,909	30,524	71.1	29,128	1,396	4.6	12,386	10,332	216	295	1,544
25 to 34 years	17,936	12,984	72.4	12,338	646	5.0	4,952	4,223	135	76	517
25 to 29 years	9,060	6,675	73.7	6,311	364	5.5	2,385	2,021	86	23	256
30 to 34 years	8,876	6,309	71.1	6,027	282	4.5	2,567	2,202	50	54	261
35 to 44 years	14,761	10,738	72.7	10,250	488	4.5	4,023	3,304	57	93	569
35 to 39 years	7,956	5,687	71.5	5,406	281	4.9	2,269	1,904	34	39	293
40 to 44 years	6,805	5,052	74.2	4,845	207	4.1	1,753	1,400	23	54	277
45 to 54 years	10,212	6,801	66.6	6,538	262	3.9	3,412	2,805	24	125	457
45 to 49 years	5,400	3,750	69.5	3,619	132	3.5	1,650	1,392	17	46	195
50 to 54 years	4,812	3,050	63.4	2,920	130	4.3	1,762	1,413	8	79	262
55 to 64 years	10,122	4,256	42.0	4,128	128	3.0	5,866	4,443	7	217	1,200
55 to 59 years	5,023	2,581	51.4	2,503	78	3.0	2,442	1,980	1	114	346
60 to 64 years	5,099	1,675	32.8	1,624	50	3.0	3,425	2,463	6	102	854
65 years and over	14,849	1,060	7.1	1,033	26	2.5	13,789	8,185	2	573	5,030
65 to 69 years	4,740	637	13.4	620	17	2.7	4,102	2,640		94	1,369
70 to 74 years	3,890	280	7.2	275	5	1.8	3,610	2,273		95	1,242
75 years and over	6,219	142	2.3	138	4	3.1	6,077	3,272	2	384	2,420

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

(Numbers in thousands)

Age, sex, and race	August 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	20,396	13,393	65.7	11,721	1,671	12.5	7,003	2,796	365	604	3,239
16 to 19 years	2,169	1,154	53.2	852	302	26.2	1,016	165	177	-	674
16 to 17 years	1,129	497	44.0	360	137	27.6	632	94	94	-	445
18 to 19 years	1,040	657	63.2	492	165	25.1	383	71	83	-	230
20 to 24 years	2,571	1,854	72.1	1,486	368	19.9	717	280	100	53	284
25 to 54 years	11,200	8,996	80.3	8,080	916	10.2	2,204	1,263	81	221	638
25 to 34 years	5,153	4,212	81.7	3,654	558	13.2	941	585	60	50	245
25 to 29 years	2,657	2,114	79.6	1,828	286	13.5	543	311	39	34	160
30 to 34 years	2,496	2,097	84.0	1,827	271	12.9	398	275	21	17	85
35 to 44 years	3,581	2,971	83.0	2,732	239	8.0	610	339	19	56	196
35 to 39 years	2,057	1,739	84.5	1,583	156	9.0	318	171	11	17	118
40 to 44 years	1,524	1,232	80.8	1,150	83	6.7	293	168	8	39	78
45 to 54 years	2,466	1,813	73.5	1,694	119	6.6	653	339	2	115	197
45 to 49 years	1,308	1,016	77.7	938	78	7.7	292	153	3	51	87
50 to 54 years	1,158	797	68.8	756	42	5.3	360	186	-	65	110
55 to 64 years	2,099	1,090	51.9	1,020	69	6.4	1,009	438	3	146	423
55 to 59 years	1,099	707	64.3	664	43	6.1	392	180	3	64	145
60 to 64 years	1,000	383	38.3	356	26	6.8	617	258	-	82	278
65 years and over	2,356	299	12.7	283	16	5.2	2,057	650	4	184	1,220
65 to 69 years	860	186	21.6	175	11	5.9	675	235	2	42	396
70 years and over	1,495	113	7.6	108	4	3.5	1,383	414	2	143	824
Men											
16 years and over	9,148	6,742	73.7	5,937	804	11.9	2,407	87	153	325	1,843
16 to 19 years	1,068	621	58.1	447	174	28.1	448	21	90	-	338
16 to 17 years	569	289	50.8	193	96	33.3	280	15	45	-	221
18 to 19 years	499	332	66.5	254	78	23.5	167	6	45	-	118
20 to 24 years	1,170	939	80.2	773	166	17.7	231	11	34	35	151
25 to 54 years	5,016	4,446	88.6	4,037	408	9.2	570	32	26	146	366
25 to 34 years	2,327	2,110	90.7	1,863	248	11.7	217	12	23	39	141
25 to 29 years	1,200	1,063	88.6	948	115	10.9	137	9	16	27	86
30 to 34 years	1,127	1,047	92.9	915	132	12.6	80	4	8	13	55
35 to 44 years	1,594	1,437	90.1	1,331	106	7.4	158	5	3	37	114
35 to 39 years	916	834	91.1	766	68	8.2	82	-	3	10	69
40 to 44 years	678	603	88.8	565	38	6.3	76	5	-	27	44
45 to 54 years	1,095	899	82.1	845	54	6.0	196	15	-	70	111
45 to 49 years	581	501	86.2	465	36	7.1	80	7	1	28	45
50 to 54 years	514	398	77.6	380	19	4.7	115	8	-	42	66
55 to 64 years	945	580	61.4	535	45	7.8	365	9	3	74	279
55 to 59 years	497	363	73.0	335	27	7.5	134	2	3	35	95
60 to 64 years	448	217	48.5	199	18	8.2	231	8	-	39	184
65 years and over	948	155	16.4	145	10	6.7	793	14	-	70	709
65 to 69 years	374	105	28.1	96	9	8.5	269	2	-	25	242
70 years and over	574	50	8.8	49	1	(¹)	524	12	-	45	467
Women											
16 years and over	11,247	6,651	59.1	5,784	867	13.0	4,596	2,708	212	280	1,396
16 to 19 years	1,101	533	48.4	405	128	24.0	568	144	87	-	336
16 to 17 years	560	208	37.1	167	41	19.6	352	79	49	-	224
18 to 19 years	541	325	60.1	238	87	26.8	216	65	38	-	112
20 to 24 years	1,401	915	65.3	713	202	22.1	486	269	66	18	133
25 to 54 years	6,184	4,550	73.6	4,043	508	11.2	1,634	1,231	55	75	272
25 to 34 years	2,826	2,102	74.4	1,792	310	14.8	724	573	37	11	104
25 to 29 years	1,457	1,051	72.1	880	171	16.3	406	302	23	7	74
30 to 34 years	1,369	1,050	76.7	912	139	13.2	318	271	13	4	30
35 to 44 years	1,987	1,534	77.2	1,402	133	8.7	452	334	16	19	82
35 to 39 years	1,141	905	79.3	817	88	9.7	236	171	8	7	49
40 to 44 years	846	629	74.4	585	45	7.1	217	163	8	12	34
45 to 54 years	1,371	914	66.7	849	65	7.1	457	324	2	45	86
45 to 49 years	727	515	70.8	473	42	8.2	212	146	2	23	42
50 to 54 years	644	399	62.0	376	23	5.7	245	178	-	23	44
55 to 64 years	1,154	510	44.2	485	24	4.8	644	429	72	144	50
55 to 59 years	602	344	57.2	328	16	4.7	258	178	30	50	50
60 to 64 years	552	166	30.0	157	8	5.0	386	250	-	43	94
65 years and over	1,408	144	10.2	138	5	3.6	1,264	636	4	114	511
65 to 69 years	486	81	16.6	79	2	2.3	406	233	2	17	154
70 years and over	921	63	6.8	59	3	(¹)	859	402	2	98	357

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Age and sex	August 1987								Not in labor force	
	Civilian noninstitutional population	Civilian labor force						Percent of labor force		
		Total	Percent of population	Employed			Unemployed			
				Total	Agriculture	Nonagricultural industries	Number			Percent of labor force
TOTAL										
16 years and over	25,868	16,984	65.7	15,045	265	14,780	1,939	11.4	8,884	
16 to 19 years	2,689	1,404	52.2	1,043	23	1,020	361	25.7	1,286	
16 to 17 years	1,411	618	43.8	451	12	440	166	26.9	793	
18 to 19 years	1,278	786	61.5	591	11	580	195	24.8	492	
20 to 24 years	3,157	2,264	71.7	1,848	34	1,814	416	18.4	893	
25 to 54 years	14,593	11,587	79.4	10,519	151	10,368	1,069	9.2	3,006	
25 to 34 years	6,661	5,345	80.2	4,714	54	4,660	631	11.8	1,316	
25 to 29 years	3,399	2,658	78.2	2,318	20	2,297	340	12.8	741	
30 to 34 years	3,262	1,440	44.2	2,396	33	2,363	291	20.2	575	
35 to 44 years	4,719	3,878	82.2	3,586	51	3,535	293	7.5	841	
35 to 39 years	2,715	2,252	82.9	2,058	30	2,026	194	8.6	463	
40 to 44 years	2,004	1,627	81.2	1,529	21	1,508	98	6.0	378	
45 to 54 years	3,213	2,365	73.6	2,219	46	2,173	146	6.2	849	
45 to 49 years	1,703	1,311	77.0	1,216	23	1,193	94	7.2	392	
50 to 54 years	1,511	1,054	69.8	1,003	22	980	51	4.8	457	
55 to 64 years	2,591	1,367	52.8	1,291	36	1,255	76	5.6	1,224	
55 to 59 years	1,381	885	64.1	838	15	823	47	5.3	495	
60 to 64 years	1,210	481	39.8	452	21	432	29	6.0	729	
65 years and over	2,838	361	12.7	345	21	324	16	4.4	2,477	
65 to 69 years	1,072	237	22.1	225	15	210	11	4.6	835	
70 to 74 years	743	84	11.3	79	3	76	3	3.6	659	
75 years and over	1,024	41	4.0	40	3	37	1	(¹)	983	
Men										
16 years and over	11,745	8,703	74.1	7,744	231	7,513	959	11.0	3,042	
16 to 19 years	1,327	746	56.2	533	22	512	212	28.4	581	
16 to 17 years	708	346	48.9	234	11	223	112	32.3	362	
18 to 19 years	619	400	64.6	299	11	288	100	25.1	219	
20 to 24 years	1,455	1,152	79.2	956	32	924	196	17.0	303	
25 to 54 years	6,623	5,888	88.9	5,399	123	5,276	489	8.3	735	
25 to 34 years	3,055	2,754	90.1	2,472	45	2,427	282	10.2	302	
25 to 29 years	1,574	1,388	88.1	1,248	15	1,232	140	10.1	187	
30 to 34 years	1,481	1,366	92.2	1,224	29	1,195	142	10.4	115	
35 to 44 years	2,137	1,932	90.4	1,788	40	1,748	143	7.4	205	
35 to 39 years	1,233	1,122	91.0	1,026	20	1,005	96	8.6	111	
40 to 44 years	904	810	89.6	763	20	743	47	5.8	94	
45 to 54 years	1,431	1,203	84.1	1,139	38	1,101	65	5.4	227	
45 to 49 years	753	657	87.3	614	19	595	43	6.5	96	
50 to 54 years	678	546	80.6	525	19	505	22	4.0	132	
55 to 64 years	1,168	722	61.8	671	33	638	51	7.0	446	
55 to 59 years	623	447	71.7	418	14	405	29	6.4	176	
60 to 64 years	545	275	50.4	253	20	233	22	8.0	270	
65 years and over	1,172	196	16.7	185	21	163	11	5.6	977	
65 to 69 years	465	139	29.9	129	15	114	9	6.8	326	
70 to 74 years	317	35	11.0	33	3	30	1	(¹)	282	
75 years and over	391	22	5.6	22	3	19		(¹)	369	
Women										
16 years and over	14,123	8,281	58.6	7,301	34	7,267	980	11.8	5,842	
16 to 19 years	1,362	658	48.3	509	1	508	149	22.6	704	
16 to 17 years	703	272	38.6	217	1	216	54	20.0	432	
18 to 19 years	659	386	58.6	292	-	292	94	24.4	273	
20 to 24 years	1,702	1,113	65.4	892	2	890	221	19.8	589	
25 to 54 years	7,970	5,699	71.5	5,120	28	5,092	580	10.2	2,271	
25 to 34 years	3,605	2,591	71.9	2,242	9	2,233	349	13.5	1,014	
25 to 29 years	1,825	1,270	69.6	1,070	5	1,065	200	15.8	554	
30 to 34 years	1,781	1,321	74.2	1,172	4	1,168	149	11.3	460	
35 to 44 years	2,582	1,947	75.4	1,797	11	1,786	149	7.7	635	
35 to 39 years	1,482	1,130	76.3	1,032	10	1,021	98	8.7	352	
40 to 44 years	1,100	817	74.2	766	1	765	51	6.2	284	
45 to 54 years	1,783	1,161	65.1	1,080	8	1,073	81	7.0	621	
45 to 49 years	950	654	68.8	602	4	598	51	7.9	296	
50 to 54 years	833	508	61.0	478	3	475	29	5.8	325	
55 to 64 years	1,423	645	45.3	620	3	617	25	3.9	778	
55 to 59 years	758	439	57.9	420	2	419	18	4.2	319	
60 to 64 years	665	206	31.0	199	1	199	7	3.4	458	
65 years and over	1,666	165	9.9	160		160	5	3.1	1,500	
65 to 69 years	607	98	16.1	96		96	2	1.9	509	
70 to 74 years	426	49	11.5	46		46	2	(¹)	377	
75 years and over	633	19	3.0	18		18	1	(¹)	614	

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

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

(Numbers in thousands)

Employment status and race	Total		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
TOTAL								
Civilian noninstitutional population	180,828	183,002	78,634	79,668	87,689	88,685	14,505	14,649
Civilian labor force	119,471	121,614	61,689	62,516	48,653	49,683	9,129	9,415
Percent of population	66.1	66.5	78.5	78.5	55.5	56.0	62.9	64.3
Employed	111,515	114,527	58,344	59,546	45,439	46,840	7,732	8,141
Agriculture	3,440	3,452	2,355	2,416	702	680	383	356
Nonagricultural industries	108,075	111,075	55,989	57,130	44,737	46,161	7,349	7,785
Unemployed	7,955	7,088	3,345	2,970	3,214	2,843	1,397	1,274
Unemployment rate	6.7	5.8	5.4	4.8	6.6	5.7	15.3	13.5
Not in labor force	61,357	61,388	16,945	17,152	39,036	39,002	5,376	5,233
White								
Civilian noninstitutional population	155,604	157,134	68,496	69,250	75,225	75,925	11,883	11,959
Civilian labor force	103,214	104,631	53,996	54,558	41,320	42,061	7,898	8,012
Percent of population	66.3	66.6	78.8	78.8	54.9	55.4	66.5	67.0
Employed	97,410	99,482	51,531	52,335	38,984	40,049	6,895	7,098
Agriculture	3,227	3,187	2,211	2,207	656	647	360	333
Nonagricultural industries	94,183	96,295	49,320	50,128	38,327	39,401	6,535	6,765
Unemployed	5,805	5,149	2,466	2,224	2,336	2,012	1,003	913
Unemployment rate	5.6	4.9	4.6	4.1	5.7	4.8	12.7	11.4
Not in labor force	52,389	52,503	14,499	14,692	33,905	33,864	3,985	3,948
Black								
Civilian noninstitutional population	20,028	20,396	7,926	8,080	9,968	10,147	2,134	2,169
Civilian labor force	12,767	13,393	5,923	6,121	5,849	6,118	996	1,154
Percent of population	63.7	65.7	74.7	75.8	58.7	60.3	46.7	53.2
Employed	10,878	11,721	5,166	5,491	5,067	5,379	645	852
Agriculture	159	205	108	163	32	23	20	20
Nonagricultural industries	10,719	11,516	5,058	5,328	5,036	5,356	625	832
Unemployed	1,889	1,671	756	630	782	739	351	302
Unemployment rate	14.8	12.5	12.8	10.3	13.4	12.1	35.3	26.2
Not in labor force	7,260	7,003	2,003	1,959	4,119	4,028	1,138	1,016

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	August 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 ENROLLED										
Total, 16 to 24 years	3,082	1,684	54.7	1,507	710	797	177	70	108	10.5
16 to 19 years	1,630	792	48.6	682	268	414	110	26	84	13.9
20 to 24 years	1,452	893	61.5	825	442	384	67	44	24	7.6
High school	854	351	41.1	279	87	192	71	18	53	20.4
College	2,228	1,334	59.9	1,228	623	605	106	52	54	7.9
Full-time students	1,720	887	51.6	814	371	443	73	31	42	8.2
Part-time students	509	447	87.8	414	252	162	33	21	12	7.4
Men, 16 to 24 years	1,475	810	54.9	730	379	351	80	28	51	9.8
16 to 19 years	754	370	49.1	318	139	178	53	11	42	14.3
20 to 24 years	721	439	60.9	412	240	172	27	17	9	6.1
High school	410	172	42.0	140	49	90	32	8	25	18.8
College	1,066	638	59.9	591	330	261	47	21	27	7.4
Full-time students	849	448	52.8	412	220	193	36	14	22	8.0
Part-time students	216	189	87.5	178	110	68	11	6	5	5.9
Women, 16 to 24 years	1,607	875	54.4	777	331	446	98	41	56	11.2
16 to 19 years	876	421	48.1	364	129	235	57	15	42	13.5
20 to 24 years	731	454	62.1	413	202	211	41	26	14	9.0
High school	444	179	40.2	140	38	102	39	11	28	21.9
College	1,163	696	59.9	638	293	345	59	31	28	8.4
Full-time students	870	439	50.4	402	152	250	37	16	21	8.4
Part-time students	292	257	88.0	236	141	94	22	14	7	8.4
White										
Total, 16 to 24 years	2,454	1,425	58.1	1,304	638	666	121	44	78	8.5
16 to 19 years	1,276	673	52.8	593	241	352	81	18	63	12.0
20 to 24 years	1,178	752	63.8	711	397	315	41	26	15	5.4
Men	1,191	690	57.9	635	345	290	55	19	36	7.9
Women	1,263	735	58.2	669	293	376	66	25	42	9.0
High school	627	273	43.5	226	69	157	46	13	33	17.0
College	1,827	1,153	63.1	1,078	568	509	75	30	45	6.5
Full-time students	1,395	777	55.7	724	342	382	53	18	35	6.9
Part-time students	431	375	86.9	354	226	127	21	12	9	5.7
Black										
Total, 16 to 24 years	462	196	42.5	149	60	89	47	22	25	24.0
16 to 19 years	282	96	34.0	71	26	45	25	7	18	26.4
20 to 24 years	180	100	55.7	78	35	44	22	15	6	21.8
Men	200	94	46.9	76	24	51	18	7	12	19.6
Women	261	102	39.1	73	36	37	29	16	13	28.1
High school	195	63	32.4	41	17	24	22	4	18	(²)
College	267	133	49.9	108	44	64	25	18	7	19.0
Full-time students	216	82	38.0	66	25	42	16	9	7	19.2
Part-time students	51	51	100.3	41	19	23	9	9	1	(²)
Hispanic origin										
Total, 16 to 24 years	308	125	40.7	119	61	58	6		8	5.1
16 to 19 years	179	56	31.1	51	20	31	5		6	(²)
20 to 24 years	129	70	54.1	68	41	27	1		2	(²)
Men	190	87	45.8	79	38	41	8		8	9.1
Women	118	38	32.5	40	23	16				(²)
High school	121	26	21.4	21	3	17	5		5	(²)
College	187	100	53.2	98	58	40	1		2	1.4
Full-time students	140	55	39.1	55	25	30				(²)
Part-time students	48	45	94.6	43	33	10	2		2	(²)

See footnotes at end of table.

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

(Numbers in thousands)

Employment status, years of school completed, race, and Hispanic origin	August 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	30,458	23,229	76.3	20,766	15,177	5,589	2,463	1,785	679	10.6
16 to 19 years	13,019	8,623	66.2	7,459	3,789	3,670	1,165	637	527	13.5
20 to 24 years	17,440	14,606	83.7	13,307	11,388	1,919	1,299	1,147	152	8.9
Less than 4 years of high school	10,815	6,530	60.4	5,381	2,842	2,539	1,149	725	423	17.6
4 years of high school	11,477	9,502	82.8	8,577	6,857	1,720	925	761	164	9.7
1 to 3 years of college	6,152	5,334	86.7	5,076	3,918	1,158	258	175	83	4.8
4 years of college or more	2,015	1,864	92.5	1,732	1,561	171	132	123	9	7.1
Men, 16 to 24 years	15,026	12,264	81.6	10,934	8,484	2,450	1,330	984	346	10.8
16 to 19 years	6,601	4,539	68.8	3,867	2,157	1,709	673	398	274	14.8
20 to 24 years	8,425	7,725	91.7	7,068	6,327	741	657	585	72	8.5
Less than 4 years of high school	5,692	3,823	67.2	3,148	1,916	1,233	675	447	228	17.6
4 years of high school	5,525	5,006	90.6	4,538	3,880	658	468	399	69	9.3
1 to 3 years of college	2,874	2,564	89.2	2,441	1,959	482	123	78	45	4.8
4 years of college or more	935	871	93.2	807	729	78	64	60	4	7.4
Women, 16 to 24 years	15,432	10,965	71.1	9,831	6,693	3,139	1,134	801	333	10.3
16 to 19 years	6,417	4,084	63.6	3,592	1,632	1,960	492	239	253	12.0
20 to 24 years	9,015	6,881	76.3	6,239	5,061	1,178	642	562	80	9.3
Less than 4 years of high school	5,124	2,707	52.8	2,233	926	1,307	474	279	196	17.5
4 years of high school	5,951	4,496	75.6	4,039	2,976	1,062	457	362	95	10.2
1 to 3 years of college	3,277	2,769	84.5	2,635	1,958	676	135	97	38	4.9
4 years of college or more	1,080	993	91.9	925	832	93	68	63	4	6.8
White										
Total, 16 to 24 years	25,240	19,820	78.5	18,078	13,304	4,775	1,742	1,258	484	8.8
16 to 19 years	10,684	7,338	68.7	6,506	3,330	3,176	833	460	373	11.3
20 to 24 years	14,557	12,482	85.7	11,573	9,974	1,599	909	798	111	7.3
Men	12,529	10,487	83.7	9,540	7,469	2,071	947	704	242	9.0
Women	12,711	9,334	73.4	8,538	5,835	2,703	795	554	242	8.5
Less than 4 years of high school	8,653	5,457	63.1	4,644	2,486	2,157	813	520	293	14.9
4 years of high school	9,601	8,130	84.7	7,481	6,016	1,465	648	521	127	8.0
1 to 3 years of college	5,183	4,557	87.9	4,392	3,391	1,001	165	109	55	3.6
4 years of college or more	1,804	1,677	93.0	1,561	1,410	151	116	108	8	6.9
Black										
Total, 16 to 24 years	4,279	2,812	65.7	2,188	1,530	658	623	472	151	22.2
16 to 19 years	1,888	1,058	56.0	781	375	406	277	152	125	26.2
20 to 24 years	2,392	1,754	73.3	1,407	1,155	252	347	320	26	19.8
Men	2,039	1,466	71.9	1,144	837	308	322	248	73	22.0
Women	2,240	1,346	60.1	1,044	693	351	302	224	78	22.4
Less than 4 years of high school	1,793	907	50.6	612	291	320	295	186	109	32.6
4 years of high school	1,584	1,152	72.7	916	709	206	237	212	24	20.5
1 to 3 years of college	758	621	81.9	542	424	118	79	62	17	12.8
4 years of college or more	144	131	91.3	119	106	13	12	12		9.2
Hispanic origin										
Total, 16 to 24 years	2,964	2,027	68.4	1,753	1,353	400	274	229	46	13.5
16 to 19 years	1,156	616	53.3	472	280	192	145	106	39	23.5
20 to 24 years	1,808	1,411	78.0	1,281	1,073	208	130	123	6	9.2
Men	1,487	1,207	81.2	1,054	875	179	153	124	29	12.7
Women	1,477	820	55.5	699	478	221	121	105	17	14.8
Less than 4 years of high school	1,561	894	57.3	724	543	181	170	149	21	19.0
4 years of high school	937	741	79.1	649	537	113	92	72	19	12.4
1 to 3 years of college	400	335	83.9	325	226	99	11	6	5	3.2
4 years of college or more	67	57	(²)	55	48	8	2	2		(²)

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

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

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

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
	Aug. 1986	Aug. 1987	Total		Employed		Unemployed			
			Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Number		Percent of labor force	
							Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
VIETNAM-ERA VETERANS										
Total, 30 years and over	7,760	7,847	7,166	7,241	6,884	6,934	282	307	3.9	4.2
30 to 44 years	6,370	6,184	6,063	5,904	5,806	5,655	257	249	4.2	4.2
30 to 34 years	1,120	895	1,044	839	984	777	60	62	5.7	7.4
35 to 39 years	3,009	2,552	2,863	2,428	2,741	2,310	122	118	4.3	4.9
40 to 44 years	2,241	2,737	2,156	2,637	2,081	2,568	75	69	3.5	2.6
45 years and over	1,390	1,663	1,103	1,337	1,078	1,279	25	58	2.3	4.3
NONVETERANS										
Total, 30 to 44 years	18,529	19,585	17,579	18,601	16,672	17,788	907	813	5.2	4.4
30 to 34 years	8,600	8,910	8,183	8,549	7,749	8,132	434	417	5.3	4.9
35 to 39 years	5,765	6,252	5,476	5,921	5,175	5,692	301	229	5.5	3.9
40 to 44 years	4,164	4,423	3,920	4,131	3,748	3,964	172	167	4.4	4.0

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

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

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

(In thousands)

Sex, age, and race	August 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	96,575	94,854	1,721	17,951	13,978	3,973	5,735	1,353
16 to 19 years	4,057	3,847	210	4,083	2,938	1,145	664	611
16 to 17 years	1,228	1,164	64	2,338	1,802	536	210	407
18 to 19 years	2,829	2,683	146	1,746	1,136	610	453	204
20 years and over	92,518	91,007	1,511	13,868	11,040	2,828	5,071	742
20 to 24 years	11,830	11,545	285	2,302	1,616	686	1,191	175
25 years and over	80,689	79,463	1,226	11,566	9,424	2,142	3,880	567
25 to 54 years	69,556	68,498	1,058	8,250	6,455	1,795	3,560	428
55 years and over	11,133	10,965	168	3,316	2,969	347	320	139
Men, 16 years and over	57,904	56,925	979	5,826	4,072	1,754	3,166	530
16 to 19 years	2,296	2,182	114	1,888	1,307	581	409	316
20 years and over	55,608	54,743	865	3,938	2,765	1,173	2,756	214
20 to 24 years	6,567	6,397	170	913	609	304	603	81
25 years and over	49,040	48,346	694	3,024	2,156	868	2,153	133
25 to 54 years	41,958	41,353	605	1,601	885	716	1,943	70
55 years and over	7,082	6,993	89	1,423	1,271	152	210	64
Women, 16 years and over	38,671	37,929	742	12,126	9,906	2,220	2,569	823
16 to 19 years	1,761	1,665	96	2,195	1,631	564	254	295
20 years and over	36,910	36,264	646	9,930	8,275	1,655	2,315	528
20 to 24 years	5,263	5,148	115	1,390	1,008	382	588	94
25 years and over	31,647	31,116	531	8,541	7,267	1,274	1,727	434
25 to 54 years	27,598	27,145	453	6,649	5,570	1,079	1,617	359
55 years and over	4,049	3,971	78	1,892	1,697	195	109	75
White								
Men, 16 years and over	50,984	50,137	847	5,002	3,576	1,426	2,349	388
16 to 19 years	2,040	1,950	90	1,610	1,120	490	298	215
20 years and over	48,944	48,187	757	3,390	2,455	935	2,051	173
20 to 24 years	5,774	5,620	154	750	506	244	425	63
25 years and over	43,170	42,567	603	2,640	1,949	691	1,627	110
25 to 54 years	36,820	36,299	521	1,339	772	567	1,465	59
55 years and over	6,350	6,268	82	1,301	1,177	124	161	50
Women, 16 years and over	32,698	32,085	613	10,797	9,000	1,797	1,777	635
16 to 19 years	1,531	1,446	85	1,917	1,440	477	180	220
20 years and over	31,168	30,640	528	8,881	7,560	1,321	1,597	415
20 to 24 years	4,596	4,500	96	1,164	861	303	399	63
25 years and over	26,571	26,139	432	7,717	6,700	1,017	1,199	352
25 to 54 years	23,080	22,713	367	6,046	5,171	875	1,105	291
55 years and over	3,491	3,426	65	1,671	1,529	142	93	61
Black								
Men, 16 years and over	5,273	5,161	112	664	397	267	701	103
16 to 19 years	209	185	24	238	164	74	98	76
20 years and over	5,064	4,976	88	427	233	194	603	27
20 to 24 years	652	642	10	122	70	52	157	9
25 years and over	4,414	4,335	79	306	164	142	446	18
25 to 54 years	3,837	3,763	74	203	80	123	400	9
55 years and over	577	572	5	103	84	19	46	9
Women, 16 years and over	4,752	4,644	108	1,032	669	363	704	164
16 to 19 years	191	180	11	214	136	78	61	67
20 years and over	4,560	4,464	96	818	533	285	643	97
20 to 24 years	538	524	14	174	103	71	179	24
25 years and over	4,023	3,940	83	644	431	213	464	73
25 to 54 years	3,593	3,522	71	450	280	170	449	58
55 years and over	429	418	11	194	151	43	15	15

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

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Family relationship	August 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	99,391	67.1	93,519	5,872	5.9	48,726	23,571	1,549	2,241	21,365
Husbands	39,736	78.4	38,491	1,245	3.1	10,942	172	120	840	9,810
With employed wife	24,610	91.9	23,867	743	3.0	2,179	52	62	298	1,767
With unemployed wife	1,165	92.4	1,037	128	11.0	95	4	1	15	75
With wife not in labor force	13,961	61.7	13,587	374	2.7	8,667	116	57	526	7,968
Wives	28,050	55.3	26,789	1,261	4.5	22,628	18,351	139	360	3,778
With employed husband	24,904	64.7	23,867	1,037	4.2	13,587	11,924	116	115	1,432
With unemployed husband	871	70.0	743	128	14.7	374	329	3	4	38
With husband not in labor force	2,275	20.8	2,179	95	4.2	8,667	6,099	20	240	2,308
Relatives in married-couple families	15,215	71.0	13,759	1,456	9.6	6,214	928	784	389	4,112
16 to 19 years	6,393	65.8	5,685	708	11.1	3,330	256	429	29	2,616
20 to 24 years	5,369	84.0	4,930	439	8.2	1,024	147	286	54	536
25 years and over	3,453	65.0	3,144	309	8.9	1,860	525	69	306	960
Women who maintain families	6,610	62.1	5,961	649	9.8	4,033	2,848	97	208	880
Relatives in families maintained by women	5,910	64.3	4,987	922	15.6	3,277	829	338	282	1,827
16 to 19 years	1,718	59.0	1,335	384	22.3	1,195	154	207	5	828
20 to 24 years	1,696	78.1	1,465	231	13.6	476	123	80	35	239
25 years and over	2,494	60.8	2,187	307	12.3	1,606	552	51	242	760
Men who maintain families	2,095	76.7	1,966	130	6.2	638	37	15	89	497
Relatives in families maintained by men	1,776	64.1	1,565	211	11.9	995	406	56	73	460
16 to 19 years	337	57.3	282	55	16.3	251	43	30	1	177
20 to 24 years	481	80.8	412	69	14.3	114	48	16	1	50
25 years and over	958	60.3	871	87	9.1	630	315	10	71	233

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

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

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

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

Marital status, race, and age	Men				Women			
	Thousands of persons		Unemployment rates		Thousands of persons		Unemployment rates	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total, 16 years and over	4,097	3,696	6.2	5.5	3,858	3,392	7.3	6.3
Married, spouse present	1,548	1,361	3.7	3.2	1,602	1,362	5.6	4.7
Widowed, divorced, or separated ..	513	433	8.2	6.6	820	769	8.0	7.4
Single (never married) ..	2,036	1,901	10.9	10.0	1,437	1,260	10.0	8.5
White, 16 years and over ..	3,017	2,737	5.2	4.7	2,788	2,412	6.2	5.3
Married, spouse present	1,240	1,133	3.3	3.0	1,298	1,121	5.2	4.4
Widowed, divorced, or separated ..	386	282	7.3	5.2	599	535	7.3	6.5
Single (never married) ..	1,390	1,322	8.9	8.3	890	757	7.6	6.3
Black, 16 years and over ..	929	804	14.4	11.9	960	867	15.2	13.0
Married, spouse present	243	187	7.8	5.8	242	191	10.6	8.0
Widowed, divorced, or separated ..	118	134	13.4	14.0	209	217	11.8	11.6
Single (never married) ..	569	482	23.1	18.8	509	460	22.5	19.2
Total, 25 years and over ..	2,562	2,286	4.8	4.2	2,423	2,161	5.9	5.1
Married, spouse present	1,405	1,240	3.6	3.1	1,301	1,115	5.0	4.2
Widowed, divorced, or separated ..	486	408	8.0	6.5	732	712	7.6	7.2
Single (never married) ..	673	639	8.6	7.9	392	334	7.0	5.7
White, 25 years and over ..	1,945	1,736	4.2	3.7	1,809	1,550	5.2	4.3
Married, spouse present	1,121	1,031	3.2	2.9	1,062	911	4.6	3.9
Widowed, divorced, or separated ..	362	262	7.1	5.0	525	492	6.8	6.3
Single (never married) ..	463	442	7.2	6.7	222	147	5.1	3.3
Black, 25 years and over ..	518	464	10.5	8.9	545	537	11.2	10.3
Married, spouse present	221	168	7.5	5.5	187	156	9.0	7.1
Widowed, divorced, or separated ..	117	128	13.5	13.6	197	202	11.4	11.2
Single (never married) ..	180	166	16.0	14.0	161	178	15.0	14.9

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

Occupation	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total, 16 years and over	7,955	7,088	6.7	5.8	6.2	5.5	7.3	6.3
Managerial and professional specialty	731	672	2.7	2.4	2.3	2.1	3.3	2.7
Executive, administrative, and managerial	319	312	2.4	2.2	2.0	2.0	3.1	2.6
Professional specialty	411	360	3.0	2.5	2.6	2.2	3.4	2.8
Technical, sales, and administrative support	1,742	1,622	4.8	4.4	3.9	3.6	5.2	4.8
Technicians and related support	115	112	3.3	3.1	3.6	2.7	3.0	3.6
Sales occupations	763	696	5.4	4.8	3.4	3.1	7.4	6.6
Administrative support, including clerical	864	813	4.6	4.3	4.9	5.0	4.5	4.1
Service occupations	1,335	1,257	8.2	7.6	7.6	7.1	8.6	7.9
Private household	78	63	7.2	6.2	(¹)	(¹)	7.6	6.4
Protective service	60	75	3.2	3.7	3.0	4.0	4.5	2.4
Service, except private household and protective	1,196	1,119	9.0	8.3	9.3	8.3	8.8	8.3
Precision production, craft, and repair	892	770	6.0	5.2	5.8	4.9	8.1	8.1
Mechanics and repairers	214	188	4.6	3.9	4.6	3.9	4.3	2.8
Construction trades	396	360	6.9	6.3	7.0	6.0	4.4	22.8
Other precision production, craft, and repair	282	222	6.4	5.1	5.5	4.6	9.2	7.0
Operators, fabricators, and laborers	1,874	1,609	9.5	8.1	8.5	7.9	12.4	8.8
Machine operators, assemblers, and inspectors	877	709	9.7	7.8	8.0	7.2	12.1	8.7
Transportation and material moving occupations	340	306	6.9	6.1	6.6	6.0	10.8	6.6
Handlers, equipment cleaners, helpers, and laborers	657	594	11.5	10.5	10.9	10.6	14.4	9.9
Construction laborers	142	120	13.5	11.3	13.3	11.2	(¹)	(¹)
Other handlers, equipment cleaners, helpers, and laborers	514	474	11.0	10.3	10.3	10.4	14.1	9.7
Farming, forestry, and fishing	249	242	6.0	5.7	5.2	5.7	9.6	5.9
No previous work experience	1,093	890						
16 to 19 years	724	582						
20 to 24 years	215	185						
25 years and over	154	124						

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

A-13. Unemployed persons by industry and sex

Industry	Thousands of persons		Unemployment rates					
	Total		Total		Men		Women	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total, 16 years and over	7,955	7,088	6.7	5.8	6.2	5.5	7.3	6.3
Nonagricultural private wage and salary workers	5,884	5,112	6.6	5.6	6.2	5.5	7.0	5.7
Mining	141	71	14.6	7.9	16.7	8.4	4.5	5.0
Construction	597	556	9.3	8.4	9.6	8.4	6.7	9.0
Manufacturing	1,477	1,169	6.6	5.3	5.5	5.0	8.9	5.9
Durable goods	902	703	6.8	5.4	5.9	5.5	9.0	5.0
Lumber and wood products	61	38	8.0	5.0	6.9	4.8	15.6	5.9
Furniture and fixtures	54	33	7.9	5.1	7.9	6.3	8.0	2.1
Stone, clay, and glass products	46	35	6.8	5.4	6.0	6.6	9.9	1.2
Primary metal industries	89	46	10.5	5.6	11.1	5.7	7.2	5.5
Fabricated metal products	106	74	7.3	5.5	7.1	5.9	7.9	4.5
Machinery, except electrical	147	126	5.7	4.9	5.5	4.9	6.4	5.0
Electrical machinery, equipment, and supplies	171	110	7.2	4.9	4.6	5.0	11.2	4.8
Transportation equipment	153	187	5.5	6.7	4.7	6.3	8.5	8.1
Automobiles	94	139	7.1	10.8	5.0	9.4	14.4	16.8
Other transportation equipment	59	48	4.0	3.2	4.4	3.6	2.6	1.5
Professional and photographic equipment	30	17	4.5	2.3	2.6	1.0	7.3	4.0
Other durable goods industries	44	37	9.0	7.4	7.3	10.1	11.2	4.0
Nondurable goods	574	466	6.4	5.1	4.7	3.9	8.8	6.8
Food and kindred products	166	127	8.4	6.6	6.4	5.5	12.2	8.7
Textile mill products	54	32	7.6	4.4	6.7	3.0	8.6	5.7
Apparel and other textile products	121	99	9.4	7.7	4.3	3.4	11.0	9.0
Paper and allied products	12	30	1.7	3.9	1.5	3.2	2.5	6.1
Printing and publishing	72	64	4.0	3.5	3.2	3.0	5.1	4.2
Chemicals and allied products	63	45	4.9	3.5	4.2	3.1	6.5	4.5
Rubber and miscellaneous plastics products	52	39	6.7	4.5	5.7	4.5	8.4	4.6
Other nondurable goods industries	35	32	8.3	7.6	5.4	4.8	13.1	12.2
Transportation and public utilities	288	258	4.7	4.1	4.7	4.1	4.6	4.1
Transportation	220	185	6.3	5.0	6.1	5.1	6.8	4.7
Communications and other public utilities	68	73	2.5	2.8	2.5	2.5	2.6	3.4
Wholesale and retail trade	1,606	1,534	7.0	6.6	5.7	5.9	8.4	7.3
Wholesale trade	189	204	4.3	4.5	3.8	4.1	5.3	5.5
Retail trade	1,417	1,330	7.6	7.1	6.3	6.5	8.8	7.6
Finance, insurance, and real estate	283	197	4.0	2.7	3.3	2.9	4.4	2.5
Service industries	1,492	1,328	6.2	5.4	6.3	5.5	6.2	5.3
Professional services	580	531	4.5	4.0	4.3	3.7	4.6	4.1
Other service industries	912	797	8.3	7.0	7.8	6.8	8.8	7.2
Agricultural wage and salary workers	212	175	10.9	8.9	9.8	7.8	15.1	12.7
Government, self-employed, and unpaid family workers	766	911	2.9	3.3	2.5	2.7	3.3	4.2
No previous work experience	1,093	890	-	-	-	-	-	-

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Reason for unemployment	Total unemployed		Men, 20 years and over		Women, 20 years and over		Both sexes, 16 to 19 years		White		Black	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
NUMBER OF UNEMPLOYED												
Total unemployed	7,955	7,088	3,345	2,970	3,214	2,843	1,397	1,274	5,805	5,149	1,889	1,671
Job losers	3,624	3,145	2,213	1,937	1,192	1,021	219	187	2,699	2,325	823	744
On layoff	884	730	515	429	324	270	46	30	701	587	153	133
Other job losers	2,740	2,415	1,698	1,508	868	751	173	157	1,998	1,738	671	611
Job leavers	1,043	1,062	413	422	469	456	161	184	855	871	162	162
Reentrants	2,196	1,991	570	518	1,332	1,152	293	322	1,568	1,404	552	493
New entrants	1,093	890	148	94	221	214	724	581	683	549	351	272
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	45.5	44.4	66.2	65.3	37.1	35.9	15.7	14.7	46.5	45.2	43.6	44.5
On layoff	11.1	10.3	15.4	14.5	10.1	9.5	3.3	2.4	12.1	11.4	8.1	8.0
Other job losers	34.4	34.1	50.8	50.8	27.0	26.4	12.4	12.3	34.4	33.8	35.5	36.5
Job leavers	13.1	15.0	12.3	14.2	14.6	16.1	11.5	14.4	14.7	16.9	8.6	9.7
Reentrants	27.6	28.1	17.1	17.4	41.4	40.5	21.0	25.3	27.0	27.3	29.2	29.5
New entrants	13.7	12.6	4.4	3.2	6.9	7.5	51.9	45.6	11.8	10.7	18.6	16.3
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE												
Job losers	3.0	2.6	3.6	3.1	2.5	2.0	2.4	2.0	2.6	2.3	6.4	5.6
Job leavers .....	.9	.9	.7	.7	1.0	.9	1.8	2.0	.8	.8	1.3	1.2
Reentrants	1.8	1.6	.9	.8	2.7	2.3	3.2	3.4	1.5	1.3	4.3	3.7
New entrants .....	.9	.7	.2	.2	.5	.4	7.9	6.2	.7	.5	2.8	2.0

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

(Percent distribution)

Reason, sex, and age	August 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	7,088	100.0	43.8	32.5	23.7	9.1	14.7
Job losers ..	3,145	100.0	35.5	31.6	32.9	12.9	20.0
On layoff	730	100.0	47.3	35.1	17.6	9.6	7.9
Other job losers ..	2,415	100.0	31.9	30.5	37.6	13.9	23.7
Job leavers ..	1,062	100.0	51.3	31.2	17.4	4.6	12.9
Reentrants ..	1,991	100.0	51.5	30.6	17.9	6.5	11.4
New entrants ..	890	100.0	46.6	41.7	11.7	6.5	5.2
Men, 20 years and over ..	2,970	100.0	36.1	30.3	33.5	11.4	22.1
Job losers ..	1,937	100.0	32.9	28.8	38.2	13.6	24.7
On layoff	429	100.0	46.5	34.2	19.3	9.9	9.4
Other job losers ..	1,508	100.0	29.1	27.3	43.6	14.6	29.0
Job leavers ..	422	100.0	42.2	32.4	25.5	7.0	18.5
Reentrants ..	518	100.0	45.6	30.2	24.2	6.5	17.7
New entrants ..	94	100.0	23.2	52.2	24.6	14.5	10.1
Women, 20 years and over ..	2,843	100.0	47.1	31.9	21.0	8.8	12.2
Job losers ..	1,021	100.0	35.6	36.9	27.5	13.6	13.9
On layoff	270	100.0	46.1	37.2	16.7	10.3	6.4
Other job losers ..	751	100.0	31.8	36.8	31.4	14.8	16.6
Job leavers ..	456	100.0	54.4	29.5	16.2	3.6	12.5
Reentrants ..	1,152	100.0	53.1	28.9	18.1	7.1	11.0
New entrants ..	214	100.0	54.8	29.6	15.6	5.6	10.1
Both sexes, 16 to 19 years ..	1,274	100.0	54.0	39.0	7.0	4.2	2.8
Job losers ..	187	100.0	62.1	30.4	7.5	2.2	5.3
On layoff	30	100.0	(¹)	(¹)	(¹)	(¹)	(¹)
Other job losers ..	157	100.0	60.4	30.8	8.9	2.5	6.3
Job leavers ..	184	100.0	64.7	33.1	2.2	1.3	.8
Reentrants ..	322	100.0	55.2	37.5	7.3	4.6	2.8
New entrants ..	581	100.0	47.4	44.5	8.2	5.5	2.7

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

A-16. Unemployed persons by duration of unemployment

Duration of unemployment	Total				Full-time workers			
	Thousands of persons		Percent distribution		Thousands of persons		Percent distribution	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total, 16 years and over ..	7,955	7,088	100.0	100.0	6,473	5,735	100.0	100.0
Less than 5 weeks ..	3,348	3,101	42.1	43.8	2,475	2,315	38.2	40.4
5 to 14 weeks ..	2,576	2,305	32.4	32.5	2,136	1,880	33.0	32.8
5 to 10 weeks ..	1,747	1,683	22.0	23.7	1,441	1,356	22.3	23.6
11 to 14 weeks ..	829	622	10.4	8.8	695	524	10.7	9.1
15 weeks and over ..	2,031	1,682	25.5	23.7	1,862	1,539	28.8	26.8
15 to 26 weeks ..	862	642	10.8	9.1	784	566	12.1	9.9
27 weeks and over ..	1,170	1,040	14.7	14.7	1,077	973	16.6	17.0
27 to 51 weeks ..	471	471	5.9	6.6	439	447	6.8	7.8
52 weeks and over ..	699	569	8.8	8.0	638	526	9.9	9.2
Average (mean) duration, in weeks ..	15.3	14.2			16.7	15.6		
Median duration, in weeks ..	7.1	6.4			8.2	7.1		

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Sex, age, race, and marital status	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
								Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
	August 1987										
Total, 16 years and over	7,088	3,101	2,305	642	1,040	14.2	6.4	42.1	43.8	25.5	23.7
16 to 19 years	1,274	688	497	53	36	7.0	4.6	52.4	54.0	9.3	7.0
20 to 24 years	1,366	684	424	119	139	11.4	5.0	48.7	50.1	21.3	18.9
25 to 34 years	2,060	835	713	192	320	15.1	7.2	39.5	40.5	26.6	24.9
35 to 44 years	1,239	493	376	128	242	16.7	7.3	36.5	39.8	32.8	29.9
45 to 54 years	690	249	180	85	175	20.6	9.0	31.8	36.1	36.4	37.8
55 to 64 years	371	113	98	59	102	22.2	10.5	32.3	30.4	45.5	43.2
65 years and over	87	39	17	5	27	20.7	7.0	53.1	44.3	25.9	36.3
Men, 16 years and over	3,696	1,442	1,197	369	688	16.8	7.6	38.0	39.0	29.6	28.6
16 to 19 years	725	369	297	30	30	7.9	4.9	50.9	50.8	10.5	8.3
20 to 24 years	684	294	227	72	91	13.9	6.5	46.2	43.0	25.7	23.9
25 to 34 years	1,065	414	340	100	210	17.6	7.7	32.6	38.9	30.8	29.1
35 to 44 years	602	182	184	72	163	21.6	10.2	30.8	30.3	37.3	39.1
45 to 54 years	347	106	83	52	105	23.7	12.5	31.2	30.6	42.5	45.4
55 to 64 years	217	48	59	41	70	26.8	15.7	27.9	21.9	50.1	51.2
65 years and over	56	29	8	2	17	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,392	1,659	1,108	273	352	11.3	5.2	46.4	48.9	21.3	18.4
16 to 19 years	549	319	201	23	6	5.8	4.3	54.2	58.2	7.8	5.3
20 to 24 years	682	390	197	48	47	8.9	4.4	51.2	57.2	16.9	13.9
25 to 34 years	995	421	372	92	110	12.5	6.7	46.3	42.3	22.4	20.3
35 to 44 years	637	311	192	56	79	12.2	5.3	43.0	48.8	27.7	21.1
45 to 54 years	343	143	97	33	70	17.6	7.2	32.3	41.7	30.7	30.0
55 to 64 years	154	65	39	18	31	15.7	6.5	39.0	42.4	38.4	32.0
65 years and over	31	9	9	3	10	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,149	2,342	1,610	456	741	13.9	6.0	43.2	45.5	24.7	23.2
Men	2,737	1,110	841	272	513	16.8	7.2	38.2	40.6	29.7	28.7
Women	2,412	1,232	770	183	227	10.6	4.9	48.6	51.1	19.3	17.0
Black, 16 years and over	1,671	616	625	168	262	15.5	7.9	38.9	36.9	28.0	25.7
Men	804	254	315	83	151	17.4	9.1	37.4	31.6	29.5	29.2
Women	867	362	310	84	111	13.7	6.7	40.3	41.7	26.6	22.5
Men, 16 years and over:											
Married, spouse present	1,361	447	410	170	335	20.3	9.8	31.1	32.8	39.1	37.1
Widowed, divorced, or separated	433	141	119	56	118	22.0	11.1	35.3	32.6	38.1	40.0
Single (never married)	1,901	854	669	144	235	13.2	6.1	43.9	44.9	20.1	19.9
Women, 16 years and over:											
Married, spouse present	1,362	663	442	133	125	10.8	5.3	49.5	48.6	21.3	18.9
Widowed, divorced, or separated	769	345	233	62	130	14.5	6.1	34.7	44.8	29.0	24.9
Single (never married)	1,260	651	433	79	97	10.0	4.8	49.7	51.7	16.8	14.0

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

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

Occupation and industry	Thousands of persons					Weeks		Percent of unemployed in group			
	Total	Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 weeks and over	Average (mean) duration	Median duration	Unemployed less than 5 weeks		Unemployed 15 weeks and over	
								Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
	August 1987										
OCCUPATION											
Managerial and professional specialty	672	254	226	100	92	13.6	7.8	37.5	37.7	26.2	28.6
Technical, sales, and administrative support ..	1,622	712	536	149	224	12.8	6.2	43.5	43.9	23.4	23.0
Service occupations	1,257	611	384	90	172	13.8	5.3	46.8	48.6	24.6	20.8
Precision production, craft, and repair	770	314	205	82	169	18.5	8.1	34.5	40.8	32.4	32.6
Operators, fabricators, and laborers	1,609	662	497	157	294	16.7	6.8	40.2	41.1	33.2	28.0
Farming, forestry, and fishing	242	121	77	7	37	13.6	5.0	55.8	50.0	14.4	18.0
INDUSTRY¹											
Agriculture	175	101	55	3	16	8.1	4.3	57.4	58.0	14.7	10.8
Construction	579	259	176	57	87	13.5	6.5	40.8	44.7	27.0	24.8
Manufacturing	1,173	455	338	148	231	18.4	7.9	36.2	38.8	35.5	32.4
Durable goods	703	273	203	88	140	19.0	7.9	36.2	38.9	36.8	32.3
Nondurable goods	470	182	136	60	92	17.4	8.0	36.2	38.7	33.5	32.4
Transportation and public utilities ..	307	112	110	48	38	13.4	7.9	42.2	36.4	27.8	27.8
Wholesale and retail trade	1,547	658	513	150	226	14.6	6.4	45.4	42.5	23.9	24.3
Finance and service industries	1,932	894	630	140	269	13.0	5.9	42.8	46.3	24.0	21.2
Public administration	219	88	64	23	44	16.5	7.1	43.3	40.2	30.5	30.7
No previous work experience	890	414	371	58	47	9.8	5.8	42.9	46.6	13.7	11.7

¹ Includes wage and salary workers only.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Sex, age, and race	August 1987								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	7,088	6,108	22.5	6.8	74.2	37.6	17.7	4.2	1.63
16 to 19 years	1,274	1,217	14.1	2.5	79.5	26.2	15.3	2.5	1.40
20 to 24 years	1,366	1,198	26.0	5.0	74.5	41.0	18.2	3.0	1.68
25 to 34 years	2,060	1,708	21.0	7.3	75.4	40.9	16.7	4.9	1.66
35 to 44 years	1,239	1,039	27.5	10.0	72.5	37.6	18.7	4.5	1.71
45 to 54 years	690	565	26.5	11.7	68.0	42.1	21.6	5.5	1.75
55 to 64 years	371	311	28.0	9.0	68.5	40.2	21.5	9.0	1.76
65 years and over	87	70	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Men, 16 years and over	3,696	3,127	23.2	7.1	75.9	36.5	21.1	4.5	1.68
16 to 19 years	725	680	14.3	3.1	80.3	27.1	17.9	2.2	1.45
20 to 24 years	684	591	26.4	5.6	76.0	39.9	22.0	1.7	1.72
25 to 34 years	1,065	863	20.9	6.7	76.8	40.9	20.5	5.6	1.71
35 to 44 years	602	478	31.0	11.3	74.7	35.8	22.6	4.8	1.80
45 to 54 years	347	278	29.5	13.7	71.2	37.1	23.7	7.2	1.82
55 to 64 years	217	192	30.7	7.8	69.8	39.1	27.6	12.5	1.87
65 years and over	56	44	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Women, 16 years and over	3,392	2,981	21.7	6.6	72.5	38.7	14.1	4.0	1.58
16 to 19 years	549	536	13.8	1.7	78.5	25.4	11.8	2.8	1.34
20 to 24 years	682	607	25.4	4.4	73.1	42.2	14.5	4.3	1.64
25 to 34 years	995	845	21.2	7.8	74.0	40.8	12.8	4.3	1.61
35 to 44 years	637	561	24.6	8.7	70.6	39.2	15.3	4.3	1.63
45 to 54 years	343	286	23.8	9.8	65.0	46.9	19.6	4.2	1.69
55 to 64 years	154	119	23.5	10.9	66.4	42.0	11.8	2.5	1.57
65 years and over	31	26	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
White, 16 years and over	5,149	4,337	22.0	7.5	74.3	39.8	17.6	4.4	1.65
Men	2,737	2,269	23.2	7.7	75.5	39.0	21.9	4.6	1.72
Women	2,412	2,068	20.7	7.3	72.9	40.6	12.8	4.1	1.58
Black, 16 years and over	1,671	1,526	24.7	5.1	74.0	32.2	17.0	3.9	1.57
Men	804	716	24.0	4.9	78.4	27.1	18.0	3.6	1.56
Women	867	810	25.3	5.3	70.2	36.8	16.2	4.2	1.58

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

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

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

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

Sex and reason	August 1987								
	Thousands of persons		Methods used as a percent of total jobseekers						Average number of methods used
	Total unemployed	Total job-seekers	Public employment agency	Private employment agency	Employer directly	Placed or answered ads	Friends or relatives	Other	
Total, 16 years and over	7,088	6,108	22.5	6.8	74.2	37.6	17.7	4.2	1.63
Job losers ¹	3,145	2,392	27.4	9.2	76.2	37.7	20.3	4.1	1.75
Job leavers	1,062	1,035	24.3	7.1	74.0	45.5	18.6	3.3	1.73
Reentrants	1,991	1,820	18.4	5.4	71.6	38.0	14.3	5.6	1.53
New entrants	890	860	15.5	3.0	74.7	27.0	16.4	2.8	1.39
Men, 16 years and over	3,696	3,127	23.2	7.1	75.9	36.5	21.1	4.5	1.68
Job losers ¹	2,081	1,612	26.3	9.2	78.5	36.4	21.7	4.7	1.77
Job leavers	527	515	26.4	5.2	72.6	46.4	21.6	2.3	1.75
Reentrants	700	616	18.0	5.5	71.1	34.9	20.0	7.3	1.57
New entrants	387	384	14.3	3.6	77.1	26.3	20.6	2.1	1.44
Women, 16 years and over	3,392	2,981	21.7	6.6	72.5	38.7	14.1	4.0	1.58
Job losers ¹	1,063	781	29.6	9.2	71.3	40.3	17.4	3.1	1.71
Job leavers	535	520	22.3	9.0	75.4	44.6	16.0	4.2	1.72
Reentrants	1,291	1,204	18.4	5.4	71.8	39.5	11.5	4.8	1.51
New entrants	502	476	16.6	2.5	72.7	27.5	13.0	3.4	1.36

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

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

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

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

(In thousands)

Industry and age	Total		Men		Women	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
All industries	111,515	114,527	62,372	63,730	49,143	50,797
16 to 19 years	7,732	8,141	4,028	4,184	3,704	3,956
16 to 17 years	3,274	3,566	1,714	1,822	1,560	1,744
18 to 19 years	4,458	4,575	2,314	2,362	2,144	2,213
20 to 24 years	14,310	14,132	7,613	7,480	6,698	6,652
25 to 54 years	75,095	77,806	42,361	43,559	32,733	34,247
25 to 34 years	32,329	33,281	18,332	18,701	13,998	14,580
35 to 44 years	25,898	27,115	14,423	15,067	11,475	12,048
45 to 54 years	16,868	17,410	9,607	9,791	7,261	7,619
55 to 64 years	11,490	11,353	6,658	6,606	4,832	4,748
55 to 59 years	6,922	6,937	3,989	4,013	2,934	2,924
60 to 64 years	4,568	4,417	2,669	2,593	1,899	1,824
65 years and over	2,888	3,094	1,712	1,901	1,175	1,194
Agriculture	3,440	3,452	2,674	2,700	766	752
16 to 19 years	383	356	319	284	64	72
16 to 17 years	208	213	168	168	40	45
18 to 19 years	175	143	151	116	24	27
20 to 24 years	440	398	363	327	78	71
25 to 54 years	1,847	1,865	1,369	1,424	478	441
25 to 34 years	810	810	621	646	189	164
35 to 44 years	561	595	399	442	162	152
45 to 54 years	476	461	349	335	127	125
55 to 64 years	469	507	362	388	107	120
55 to 59 years	265	250	198	186	67	64
60 to 64 years	204	258	165	202	40	56
65 years and over	300	325	261	277	39	48
Nonagricultural industries	108,075	111,075	59,698	61,030	48,377	50,045
16 to 19 years	7,349	7,785	3,709	3,900	3,640	3,884
16 to 17 years	3,066	3,353	1,546	1,654	1,520	1,698
18 to 19 years	4,283	4,432	2,163	2,246	2,119	2,186
20 to 24 years	13,870	13,735	7,250	7,153	6,620	6,582
25 to 54 years	73,249	75,941	40,992	42,135	32,256	33,806
25 to 34 years	31,520	32,471	17,711	18,054	13,809	14,417
35 to 44 years	25,336	26,520	14,024	14,625	11,312	11,896
45 to 54 years	16,392	16,949	9,258	9,455	7,134	7,494
55 to 64 years	11,021	10,846	6,295	6,218	4,725	4,628
55 to 59 years	6,657	6,687	3,791	3,827	2,866	2,860
60 to 64 years	4,363	4,159	2,505	2,391	1,859	1,768
65 years and over	2,587	2,769	1,451	1,624	1,136	1,145

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Occupation	Total		Men				Women			
	16 years and over		16 years and over		20 years and over		16 years and over		20 years and over	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total	111,515	114,527	62,372	63,730	58,344	59,546	49,143	50,797	45,439	46,840
Managerial and professional specialty	26,183	27,750	14,924	15,524	14,841	15,415	11,259	12,225	11,127	12,088
Executive, administrative, and managerial	12,753	13,791	7,989	8,514	7,948	8,468	4,763	5,277	4,719	5,218
Officials and administrators, public administration ..	578	495	317	300	317	299	262	195	261	195
Other executive, administrative, and managerial	8,852	9,529	5,918	6,305	5,879	6,260	2,934	3,225	2,897	3,178
Management-related occupations	3,322	3,767	1,755	1,910	1,752	1,908	1,567	1,857	1,561	1,844
Professional specialty	13,431	13,958	6,935	7,010	6,893	6,947	6,496	6,948	6,407	6,871
Engineers	1,812	1,750	1,723	1,624	1,722	1,624	88	125	88	125
Mathematical and computer scientists	656	667	406	466	404	464	250	201	248	200
Natural scientists	401	422	306	311	306	310	95	111	94	110
Health diagnosing occupations	724	807	622	670	621	670	102	137	99	137
Health assessment and treating occupations ..	2,005	2,156	274	293	274	289	1,731	1,863	1,729	1,863
Teachers, college and university	500	503	317	294	317	294	183	209	180	207
Teachers, except college and university	3,001	3,074	801	764	793	749	2,200	2,311	2,178	2,281
Lawyers and judges	645	730	528	582	526	583	116	148	116	147
Other professional specialty occupations ..	3,688	3,849	1,958	2,007	1,930	1,965	1,730	1,843	1,674	1,800
Technical, sales, and administrative support	34,784	35,285	12,258	12,528	11,577	11,772	22,526	22,757	20,687	20,809
Technicians and related support	3,387	3,470	1,748	1,822	1,706	1,792	1,639	1,648	1,611	1,628
Health technologists and technicians ..	1,135	1,190	184	215	180	209	951	975	943	966
Engineering and science technicians	1,155	1,112	923	903	899	889	232	209	224	204
Technicians, except health, engineering, and science ..	1,097	1,167	641	704	628	694	456	464	444	459
Sales occupations	13,446	13,708	6,968	7,060	6,554	6,618	6,477	6,648	5,451	5,533
Supervisors and proprietors	3,548	3,598	2,459	2,442	2,436	2,417	1,089	1,156	1,075	1,130
Sales representatives, finance and business services ..	2,268	2,363	1,308	1,428	1,298	1,404	961	935	925	901
Sales representatives, commodities, except retail ..	1,551	1,619	1,246	1,318	1,236	1,305	305	300	294	292
Sales workers, retail and personal services ..	6,016	6,060	1,939	1,853	1,569	1,473	4,077	4,207	3,122	3,165
Sales-related occupations	61	68	16	19	15	19	45	50	35	44
Administrative support, including clerical ..	17,952	18,107	3,542	3,646	3,317	3,362	14,410	14,461	13,625	13,648
Supervisors	750	701	316	281	316	278	434	421	428	420
Computer equipment operators	902	976	301	328	282	299	601	648	552	609
Secretaries, stenographers, and typists ..	5,041	5,068	104	119	94	109	4,937	4,948	4,697	4,675
Financial records processing	2,493	2,402	223	219	218	219	2,271	2,183	2,227	2,131
Mail and message distributing	908	949	586	640	564	598	323	310	310	300
Other administrative support, including clerical ..	7,857	8,011	2,012	2,059	1,844	1,859	5,845	5,952	5,411	5,511
Service occupations	14,935	15,277	5,853	5,913	4,780	4,834	9,081	9,364	7,724	7,879
Private household	1,007	956	50	45	34	34	957	911	738	647
Protective service	1,829	1,932	1,594	1,627	1,515	1,550	235	304	189	237
Service, except private household and protective ..	12,098	12,389	4,209	4,240	3,231	3,250	7,889	8,149	6,796	6,995
Food service	5,196	5,247	1,950	1,979	1,275	1,274	3,246	3,268	2,487	2,481
Health service	1,845	1,871	179	172	173	157	1,666	1,698	1,560	1,619
Cleaning and building service ..	2,935	2,928	1,666	1,640	1,433	1,458	1,270	1,288	1,187	1,200
Personal service	2,121	2,344	414	449	350	361	1,707	1,894	1,563	1,695
Precision production, craft, and repair ..	13,903	14,073	12,682	12,919	12,262	12,522	1,221	1,154	1,163	1,125
Mechanics and repairers	4,444	4,627	4,289	4,495	4,150	4,373	155	133	152	131
Construction trades	5,329	5,323	5,209	5,225	4,978	4,995	120	99	112	95
Other precision production, craft, and repair ..	4,130	4,122	3,184	3,199	3,133	3,154	946	923	898	899
Operators, fabricators, and laborers	17,809	18,161	13,414	13,522	12,115	12,166	4,396	4,639	4,159	4,370
Machine operators, assemblers, and inspectors ..	8,155	8,346	4,855	4,924	4,652	4,693	3,300	3,422	3,175	3,293
Manufacturing industries	6,744	7,007	3,982	4,076	3,847	3,906	2,763	2,931	2,671	2,833
Durable goods	3,734	3,873	2,605	2,671	2,529	2,573	1,130	1,203	1,097	1,166
Nondurable goods	3,010	3,134	1,377	1,405	1,318	1,333	1,633	1,728	1,574	1,667
Nonmanufacturing industries	1,411	1,339	873	848	805	787	537	491	505	460
Transportation and material moving occupations ..	4,579	4,750	4,230	4,403	4,078	4,249	350	347	337	336
Motor vehicle operators	3,342	3,459	3,024	3,159	2,902	3,036	318	300	305	289
Other transportation and material moving occupations ..	1,237	1,291	1,206	1,244	1,176	1,213	32	46	32	47
Handlers, equipment cleaners, helpers, and laborers ..	5,075	5,065	4,329	4,195	3,385	3,224	746	870	647	742
Construction laborers	912	935	883	896	734	734	30	40	26	33
Other handlers, equipment cleaners, helpers, and laborers ..	4,162	4,130	3,446	3,299	2,652	2,490	716	830	621	709
Farming, forestry, and fishing	3,901	3,981	3,241	3,324	2,770	2,836	660	657	580	568
Farm operators and managers	1,394	1,319	1,162	1,123	1,148	1,117	232	196	227	191
Other farming, forestry, and fishing occupations ..	2,507	2,663	2,080	2,201	1,622	1,720	428	461	353	378

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

(Percent distribution)

Occupation and race	Total		Men		Women	
	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
TOTAL						
Total, 16 years and over (thousands)	111,515	114,527	62,372	63,730	49,143	50,797
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	23.5	24.2	23.9	24.4	22.9	24.1
Executive, administrative, and managerial	11.4	12.0	12.8	13.4	9.7	10.4
Professional specialty	12.0	12.2	11.1	11.0	13.2	13.7
Technical, sales, and administrative support	31.2	30.8	19.7	19.7	45.8	44.8
Technicians and related support	3.0	3.0	2.8	2.9	3.3	3.2
Sales occupations	12.1	12.0	11.2	11.1	13.2	13.1
Administrative support, including clerical	16.1	15.8	5.7	5.7	29.3	28.5
Service occupations	13.4	13.3	9.4	9.3	18.5	18.4
Private household .....	.9	.8	.1	.1	1.9	1.8
Protective service	1.6	1.7	2.6	2.6	.5	.6
Service, except private household and protective	10.8	10.8	6.7	6.7	16.1	16.0
Precision production, craft, and repair	12.5	12.3	20.3	20.3	2.5	2.3
Operators, fabricators, and laborers	16.0	15.9	21.5	21.2	8.9	9.1
Machine operators, assemblers, and inspectors	7.3	7.3	7.8	7.7	6.7	6.7
Transportation and material moving occupations	4.1	4.1	6.8	6.9	.7	.7
Handlers, equipment cleaners, helpers, and laborers	4.6	4.4	6.9	6.6	1.5	1.7
Farming, forestry, and fishing	3.5	3.5	5.2	5.2	1.3	1.3
White						
Total, 16 years and over (thousands)	97,410	99,482	55,107	55,986	42,303	43,496
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.5	25.2	25.0	25.4	23.9	24.9
Executive, administrative, and managerial	12.1	12.7	13.6	14.1	10.2	10.8
Professional specialty	12.3	12.5	11.3	11.2	13.7	14.1
Technical, sales, and administrative support	31.7	31.3	20.0	20.0	47.0	45.8
Technicians and related support	3.1	3.0	2.9	2.9	3.3	3.2
Sales occupations	12.7	12.5	11.8	11.7	13.8	13.6
Administrative support, including clerical	16.0	15.8	5.4	5.5	29.9	29.1
Service occupations	12.2	12.1	8.4	8.3	17.2	17.1
Private household .....	.8	.7	.1	.1	1.6	1.6
Protective service	1.6	1.6	2.4	2.4	.5	.5
Service, except private household and protective	9.9	9.9	5.9	5.8	15.1	15.0
Precision production, craft, and repair	12.9	12.8	20.9	21.0	2.4	2.3
Operators, fabricators, and laborers	15.0	14.9	20.3	20.0	8.1	8.4
Machine operators, assemblers, and inspectors	6.8	6.8	7.4	7.4	6.0	6.1
Transportation and material moving occupations	4.0	4.0	6.5	6.5	.7	.7
Handlers, equipment cleaners, helpers, and laborers	4.2	4.1	6.4	6.1	1.4	1.6
Farming, forestry, and fishing	3.7	3.6	5.4	5.3	1.4	1.4
Black						
Total, 16 years and over (thousands)	10,878	11,721	5,519	5,937	5,359	5,784
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	14.0	15.3	12.5	13.2	15.6	17.4
Executive, administrative, and managerial	5.5	6.7	5.4	6.5	5.7	7.0
Professional specialty	8.5	8.5	7.1	6.7	9.9	10.4
Technical, sales, and administrative support	26.6	26.6	15.4	15.1	38.2	38.3
Technicians and related support	2.4	2.8	1.7	2.1	3.1	3.5
Sales occupations	7.1	7.3	5.5	5.1	8.8	9.6
Administrative support, including clerical	17.1	16.4	8.2	7.9	26.3	25.2
Service occupations	23.1	23.1	17.6	17.9	28.8	28.5
Private household	2.2	1.8	.1	.1	4.5	3.6
Protective service	2.4	3.0	4.2	4.7	.7	1.2
Service, except private household and protective	18.5	18.3	13.4	13.1	23.7	23.7
Precision production, craft, and repair	9.5	8.5	16.1	15.1	2.7	1.8
Operators, fabricators, and laborers	24.3	23.8	34.3	33.9	14.0	13.4
Machine operators, assemblers, and inspectors	11.1	10.6	11.2	10.9	11.1	10.3
Transportation and material moving occupations	5.9	6.0	10.7	11.1	.9	.8
Handlers, equipment cleaners, helpers, and laborers	7.3	7.2	12.4	11.9	2.0	2.3
Farming, forestry, and fishing	2.3	2.7	4.0	4.7	.6	.6

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Age and sex	August 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	102,422	1,273	16,140	85,008	8,397	256	1,781	1,472	198
16 to 19 years	7,679	372	519	6,788	82	23	272	42	43
16 to 17 years	3,302	264	237	2,801	33	18	161	31	20
18 to 19 years	4,377	108	282	3,987	49	5	110	11	22
20 to 24 years	13,372	138	1,093	12,140	343	20	318	54	26
25 to 34 years	30,400	158	4,150	26,091	2,020	51	520	263	27
35 to 44 years	23,953	181	4,814	18,958	2,517	51	290	283	21
45 to 54 years	15,276	160	3,201	11,915	1,616	57	187	253	21
55 to 64 years	9,550	162	1,997	7,392	1,254	41	126	346	35
55 to 59 years	5,894	92	1,295	4,507	767	26	64	170	15
60 to 64 years	3,656	70	701	2,885	487	15	62	176	19
65 years and over	2,191	101	366	1,724	565	13	68	231	26
Men, 16 years and over	55,443	232	7,881	47,330	5,528	59	1,387	1,235	78
16 to 19 years	3,834	100	266	3,469	45	21	216	36	32
16 to 17 years	1,620	70	123	1,428	18	16	127	26	15
18 to 19 years	2,214	30	143	2,040	27	5	89	9	18
20 to 24 years	6,917	37	527	6,352	222	14	260	47	20
25 to 34 years	16,759	35	1,952	14,772	1,288	7	402	234	11
35 to 44 years	13,007	25	2,294	10,687	1,616	2	219	222	1
45 to 54 years	8,362	12	1,610	6,740	1,087	6	137	199	-
55 to 64 years	5,338	18	1,028	4,292	879	1	95	290	2
55 to 59 years	3,294	11	670	2,613	533	-	48	136	2
60 to 64 years	2,044	7	358	1,679	346	1	48	154	-
65 years and over	1,226	6	203	1,016	390	7	57	208	12
Women, 16 years and over	46,979	1,041	8,259	37,679	2,869	197	394	237	120
16 to 19 years	3,845	273	253	3,319	37	2	55	6	10
16 to 17 years	1,682	194	115	1,373	15	2	34	5	6
18 to 19 years	2,164	78	139	1,947	22	-	21	1	4
20 to 24 years	6,455	101	566	5,788	120	6	57	7	6
25 to 34 years	13,641	124	2,198	11,319	732	44	119	29	16
35 to 44 years	10,947	157	2,520	8,270	900	49	71	61	21
45 to 54 years	6,914	148	1,591	5,175	529	51	50	54	21
55 to 64 years	4,212	144	969	3,100	375	40	31	56	32
55 to 59 years	2,600	81	625	1,894	234	26	17	34	13
60 to 64 years	1,612	63	343	1,206	141	14	14	22	19
65 years and over	965	95	162	707	175	6	11	24	14

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

A-25. Employed civilians by industry and occupation

(In thousands)

Industry	August 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	3,452	57	77	20	20	96		16	48	10	49	25	3,034
Mining	849	107	97	39	4	102		11	294	26	125	43	-
Construction	8,141	1,018	120	51	76	494		39	4,578	111	573	1,060	23
Manufacturing	21,440	2,395	1,731	709	683	2,478		327	3,958	7,007	819	1,242	90
Durable goods	12,683	1,423	1,208	477	269	1,451		192	2,715	3,873	409	595	71
Nondurable goods	8,757	972	523	231	414	1,028		135	1,243	3,134	410	648	19
Transportation and public utilities	7,972	857	458	234	308	2,178		288	1,308	106	1,759	461	14
Wholesale and retail trade	23,865	2,032	423	112	9,855	2,357		4,451	1,591	285	932	1,754	72
Wholesale trade	4,678	499	82	47	1,879	828		33	342	144	485	322	17
Retail trade	19,187	1,533	341	65	7,976	1,530		4,418	1,249	141	447	1,432	56
Finance, insurance, and real estate	8,032	1,991	179	142	1,898	3,212	-	284	183	24	8	23	88
Services	35,486	4,253	10,160	1,924	828	5,744	956	7,651	1,837	741	419	405	568
Private households	1,276	3	9	3	1	7	956	104	13	1	14	14	152
Other service industries	34,210	4,251	10,151	1,921	827	5,737	-	7,548	1,824	739	405	391	415
Professional services	21,906	2,298	8,924	1,571	125	4,002		3,982	407	167	196	108	126
Public administration	5,288	1,081	714	239	35	1,445		1,254	277	36	64	51	93

¹ Includes protective service, not shown separately.

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

(In thousands)

Reason not working and sex	All industries		Nonagricultural industries					
	Aug. 1986	Aug. 1987	Total		Wage and salary workers ¹			
			Aug. 1986	Aug. 1987	Paid absences		Unpaid absences	
					Aug. 1986	Aug. 1987	Aug. 1986	Aug. 1987
Total, 16 years and over	11,433	11,522	11,257	11,346	6,223	6,482	4,271	4,109
Vacation	8,989	9,113	8,874	9,025	5,545	5,758	2,824	2,782
Illness	1,193	1,267	1,170	1,228	441	479	648	667
Bad weather	50	35	33	19	(²)	(²)	(²)	(²)
Industrial dispute	101	32	101	32	(²)	(²)	(²)	(²)
All other reasons	1,101	1,074	1,079	1,042	237	245	799	659
Men, 16 years and over	5,074	4,985	4,931	4,859	3,130	3,186	1,385	1,291
Vacation	3,897	3,843	3,805	3,779	2,799	2,818	744	743
Illness	616	686	598	651	232	268	315	336
All other reasons ³	562	456	529	428	99	101	326	212
Women, 16 years and over	6,359	6,537	6,326	6,487	3,094	3,294	2,887	2,818
Vacation	5,092	5,270	5,069	5,245	2,746	2,941	2,079	2,039
Illness	577	581	573	577	210	210	334	331
All other reasons ³	689	686	684	664	138	144	474	448

¹ Excludes private household workers.

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

³ Includes bad weather and industrial dispute, not shown separately.

NOTE: Estimates for "all other reasons" by pay status may be biased because of high response variance; data should be used with caution.

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

Hours of work	August 1987					
	Thousands of persons			Percent distribution		
	All industries	Agriculture	Nonagricultural industries	All industries	Agriculture	Nonagricultural industries
Total, 16 years and over	103,005	3,276	99,729	100.0	100.0	100.0
1 to 34 hours	22,873	931	21,942	22.2	28.4	22.0
1 to 4 hours	625	61	564	.6	1.9	.6
5 to 14 hours	3,438	181	3,257	3.3	5.5	3.3
15 to 29 hours	11,518	434	11,084	11.2	13.3	11.1
30 to 34 hours	7,292	255	7,037	7.1	7.8	7.1
35 hours and over	80,132	2,344	77,787	77.8	71.6	78.0
35 to 39 hours	6,926	131	6,795	6.7	4.0	6.8
40 hours	42,610	645	41,964	41.4	19.7	42.1
41 hours and over	30,596	1,568	29,028	29.7	47.9	29.1
41 to 48 hours	10,824	270	10,554	10.5	8.2	10.6
49 to 59 hours	11,108	480	10,628	10.8	14.7	10.7
60 hours and over	8,664	818	7,846	8.4	25.0	7.9
Average hours, total at work	39.9	44.8	39.7			
Average hours, workers on full-time schedules	43.7	52.6	43.4			

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

(Numbers in thousands)

Reason for working less than 35 hours	August 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	22,873	7,310	15,563	21,942	7,044	14,897
Economic reasons	5,694	1,721	3,973	5,373	1,611	3,762
Slack work	2,417	1,344	1,073	2,207	1,248	959
Material shortages or repairs to plant and equipment	54	54	-	47	47	-
New job started during week	230	230	-	227	227	-
Job terminated during week	92	92	-	88	88	-
Could find only part-time work	2,900	-	2,900	2,803	-	2,803
Other reasons	17,179	5,589	11,590	16,571	5,435	11,136
Does not want, or unavailable for, full-time work	9,331	-	9,331	8,987	-	8,987
Vacation	2,544	2,544	-	2,516	2,516	-
Illness	1,295	1,147	148	1,258	1,127	131
Bad weather	233	233	-	201	201	-
Industrial dispute	5	5	-	5	5	-
Legal or religious holiday	70	70	-	70	70	-
Full time for this job	1,438	-	1,438	1,397	-	1,397
All other reasons	2,263	1,590	673	2,135	1,514	621
Average hours:						
Economic reasons	22.2	24.3	21.3	22.3	24.4	21.4
Other reasons	22.1	25.6	20.5	22.2	25.6	20.6
Worked 30 to 34 hours:						
Economic reasons	1,853	798	1,055	1,768	766	1,002
Other reasons	5,439	2,782	2,657	5,269	2,720	2,549

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

(Numbers in thousands)

Industry	August 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	99,729	5,373	11,136	83,220	54,192	10,554	18,474	39.7	43.4
Wage and salary workers	91,769	4,769	9,814	77,186	51,518	9,936	15,732	39.6	43.0
Mining	759	27	11	721	379	102	240	46.1	47.1
Construction	6,258	376	286	5,596	3,623	672	1,301	41.2	43.5
Manufacturing	19,611	467	522	18,622	12,108	2,859	3,655	42.1	43.2
Durable goods	11,599	163	237	11,199	7,241	1,775	2,183	42.4	43.1
Nondurable goods	8,012	305	285	7,422	4,865	1,084	1,473	41.8	43.3
Transportation and public utilities	6,921	212	296	6,413	4,136	861	1,416	42.1	43.7
Wholesale and retail trade	20,439	1,843	3,882	14,714	8,889	2,183	3,642	37.9	44.0
Finance, insurance, and real estate	6,815	146	584	6,085	4,347	700	1,038	39.9	42.0
Service industries	26,202	1,628	4,058	20,516	14,578	2,122	3,816	37.5	42.3
Private households	1,215	235	519	461	322	40	99	26.2	44.5
All other industries	24,987	1,393	3,539	20,055	14,256	2,082	3,717	38.1	42.3
Public administration	4,764	69	176	4,519	3,460	437	622	40.6	41.6
Self-employed workers	7,704	594	1,241	5,869	2,571	610	2,688	41.4	48.4
Unpaid family workers	256	10	80	166	103	8	55	36.8	45.6

**HOUSEHOLD DATA
NOT SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Sex, age, race, and marital status	August 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	99,729	5,373	11,136	83,220	54,192	29,028	39.7	43.4
16 to 19 years	7,373	1,298	2,592	3,483	2,717	766	30.2	40.7
16 to 17 years	3,170	564	1,589	1,017	819	198	26.3	40.1
18 to 19 years	4,203	734	1,002	2,467	1,900	567	33.1	41.0
20 years and over	92,356	4,075	8,544	79,737	51,476	28,261	40.5	43.5
20 to 24 years	13,065	923	1,399	10,743	7,467	3,276	39.1	42.6
25 years and over	79,292	3,152	7,145	68,995	44,008	24,987	40.7	43.7
25 to 44 years	52,720	2,165	3,827	46,728	29,300	17,428	41.3	43.8
45 to 64 years	24,196	901	2,189	21,106	13,911	7,195	40.5	43.5
65 years and over	2,376	86	1,130	1,160	794	366	29.8	42.7
Men, 16 years and over	56,171	2,481	3,194	50,496	29,445	21,051	42.5	44.9
16 to 19 years	3,698	647	1,116	1,935	1,425	510	31.6	41.4
16 to 17 years	1,572	291	711	570	437	133	27.3	40.4
18 to 19 years	2,126	355	405	1,366	988	378	34.8	41.8
20 years and over	52,473	1,835	2,078	48,560	28,020	20,540	43.3	45.0
20 to 24 years	6,870	434	521	5,915	3,727	2,188	41.0	43.9
25 years and over	45,602	1,402	1,556	42,644	24,294	18,350	43.7	45.2
25 to 44 years	30,147	948	513	28,686	15,954	12,732	44.3	45.3
45 to 64 years	14,036	409	429	13,198	7,847	5,351	43.4	44.9
65 years and over	1,421	44	616	761	493	268	31.6	43.7
Women, 16 years and over	43,558	2,892	7,941	32,725	24,747	7,978	36.1	41.2
16 to 19 years	3,675	651	1,475	1,549	1,294	255	28.8	39.8
16 to 17 years	1,598	273	878	447	382	65	25.4	39.7
18 to 19 years	2,077	378	597	1,102	911	191	31.4	39.9
20 years and over	39,883	2,241	6,466	31,176	23,454	7,722	36.8	41.2
20 to 24 years	6,195	489	877	4,829	3,742	1,087	37.0	41.1
25 years and over	33,687	1,750	5,589	26,348	19,713	6,635	36.8	41.3
25 to 44 years	22,573	1,216	3,314	18,043	13,348	4,695	37.3	41.3
45 to 64 years	10,161	492	1,760	7,909	6,066	1,843	36.5	41.1
65 years and over	954	42	514	398	301	97	27.0	40.8
RACE								
White, 16 years and over	86,414	4,416	10,021	71,977	45,534	26,443	39.9	43.6
Men	49,219	2,071	2,797	44,351	25,059	19,292	42.8	45.1
Women	37,195	2,344	7,223	27,628	20,477	7,151	36.0	41.3
Black, 16 years and over	10,282	807	835	8,640	6,805	1,835	38.3	41.6
Men	5,304	338	316	4,650	3,403	1,247	40.0	42.7
Women	4,978	468	519	3,991	3,404	587	36.6	40.3
MARITAL STATUS								
Men, 16 years and over:								
Married, spouse present	35,406	842	1,089	33,475	18,699	14,776	44.0	45.3
Widowed, divorced, or separated	5,430	277	207	4,946	2,846	2,100	43.3	45.5
Single (never married)	15,335	1,362	1,898	12,075	7,901	4,174	38.8	43.5
Women, 16 years and over:								
Married, spouse present	22,837	1,192	4,643	17,002	12,973	4,029	35.8	41.0
Widowed, divorced, or separated	8,390	475	965	6,950	5,070	1,880	38.0	41.6
Single (never married)	12,331	1,224	2,333	8,774	6,704	2,070	35.5	41.2

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

(Numbers in thousands)

Occupation and sex	August 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	99,225	5,268	11,034	82,923	53,902	10,536	18,485	39.8	43.4
Managerial and professional specialty	23,198	413	1,709	21,075	11,949	2,573	6,553	42.6	44.9
Executive, administrative, and managerial	12,653	139	576	11,939	6,334	1,471	4,133	44.5	45.9
Professional specialty	10,544	275	1,134	9,136	5,615	1,102	2,419	40.4	43.6
Technical, sales, and administrative support	32,316	1,505	4,661	26,151	18,304	3,147	4,700	38.4	42.4
Technicians and related support	3,207	56	271	2,880	2,088	353	440	39.8	41.8
Sales occupations	12,663	875	2,220	9,568	5,234	1,283	3,051	39.6	45.3
Administrative support, including clerical	16,446	574	2,170	13,703	10,982	1,512	1,209	37.2	40.5
Service occupations	13,837	1,660	3,222	8,956	6,495	950	1,512	34.8	42.6
Private household	908	157	400	351	258	35	57	26.2	42.5
Protective service	1,728	68	97	1,564	962	222	380	43.2	45.6
Service, except private household and protective	11,201	1,435	2,724	7,042	5,275	692	1,075	34.2	42.0
Precision production, craft, and repair	13,017	613	385	12,020	7,500	1,699	2,820	42.3	44.0
Operators, fabricators, and laborers	16,856	1,077	1,057	14,721	9,654	2,167	2,901	40.7	43.3
Machine operators, assemblers, and inspectors	7,814	372	280	7,161	5,059	1,099	1,003	40.6	42.1
Transportation and material moving occupations	4,313	206	196	3,911	1,995	549	1,367	44.3	46.7
Handlers, equipment cleaners, helpers, and laborers	4,729	499	581	3,649	2,600	518	531	37.6	42.1
Men, 16 years and over ¹	55,575	2,377	3,064	50,134	29,110	6,846	14,178	42.6	44.9
Managerial and professional specialty	13,821	177	487	13,157	6,644	1,598	4,915	45.2	46.4
Executive, administrative, and managerial	7,840	71	225	7,545	3,527	902	3,115	46.3	47.4
Professional specialty	5,981	106	262	5,612	3,116	697	1,799	43.7	45.2
Technical, sales, and administrative support	11,679	373	806	10,500	5,880	1,447	3,173	42.8	45.2
Technicians and related support	1,691	32	53	1,606	1,108	196	302	41.8	42.9
Sales occupations	6,602	220	496	5,886	2,689	804	2,393	44.5	47.3
Administrative support, including clerical	3,385	121	257	3,007	2,083	446	478	40.0	42.3
Service occupations	5,453	546	815	4,092	2,740	495	856	38.4	44.0
Private household	45	22	7	16	12	4	1	(²)	(²)
Protective service	1,462	58	66	1,337	801	181	356	43.9	46.0
Service, except private household and protective	3,946	466	742	2,738	1,928	310	500	36.5	43.1
Precision production, craft, and repair	12,010	552	277	11,181	6,904	1,589	2,689	42.6	44.1
Operators, fabricators, and laborers	12,613	728	680	11,205	6,942	1,716	2,546	41.6	44.0
Machine operators, assemblers, and inspectors	4,610	161	97	4,352	2,875	732	745	41.8	42.9
Transportation and material moving occupations	4,077	170	143	3,763	1,902	529	1,332	44.8	46.8
Handlers, equipment cleaners, helpers, and laborers	3,926	397	440	3,089	2,165	456	469	38.0	42.3
Women, 16 years and over ¹	43,650	2,892	7,969	32,789	24,792	3,690	4,307	36.1	41.2
Managerial and professional specialty	9,377	236	1,222	7,918	5,305	975	1,638	38.9	42.3
Executive, administrative, and managerial	4,813	68	351	4,394	2,807	569	1,018	41.5	43.4
Professional specialty	4,564	169	871	3,524	2,498	405	620	36.1	40.9
Technical, sales, and administrative support	20,638	1,132	3,855	15,651	12,424	1,700	1,527	35.9	40.5
Technicians and related support	1,516	24	218	1,274	979	156	138	37.5	40.5
Sales occupations	6,061	655	1,724	3,682	2,545	479	658	34.2	42.2
Administrative support, including clerical	13,061	453	1,913	10,695	8,899	1,065	731	36.5	39.9
Service occupations	8,385	1,114	2,407	4,864	3,754	455	655	32.5	41.4
Private household	863	135	393	335	246	32	56	26.2	42.6
Protective service	266	9	31	226	161	41	24	39.6	42.7
Service, except private household and protective	7,256	970	1,983	4,303	3,347	382	575	33.0	41.3
Precision production, craft, and repair	1,007	61	108	838	596	110	132	38.7	42.1
Operators, fabricators, and laborers	4,243	349	377	3,517	2,712	450	355	37.9	41.1
Machine operators, assemblers, and inspectors	3,204	211	183	2,809	2,184	368	258	38.7	40.9
Transportation and material moving occupations	236	36	52	148	93	20	35	35.4	43.5
Handlers, equipment cleaners, helpers, and laborers	803	102	142	559	435	63	62	35.6	41.3

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Noninstitutional population ¹	182,525	182,713	182,935	183,114	183,297	183,575	183,738	183,915	184,079	184,259	184,421	184,605	184,738
Labor force ¹	119,821	119,988	120,163	120,426	120,336	120,782	121,089	120,958	121,070	121,719	121,235	121,672	122,038
Percent of population ²	65.6	65.7	65.7	65.8	65.7	65.8	65.9	65.8	65.8	66.1	65.7	65.9	66.1
Total employed ¹	111,764	111,703	111,941	112,183	112,387	112,759	113,122	113,104	113,570	114,173	113,975	114,447	114,817
Employment-population ratio ³	61.2	61.1	61.2	61.3	61.3	61.4	61.6	61.5	61.7	62.0	61.8	62.0	62.2
Resident Armed Forces	1,697	1,716	1,749	1,751	1,750	1,748	1,740	1,736	1,735	1,726	1,718	1,720	1,736
Civilian employed	110,067	109,987	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081
Agriculture	3,057	3,142	3,162	3,215	3,161	3,145	3,236	3,284	3,290	3,335	3,178	3,219	3,092
Nonagricultural industries	107,010	106,845	107,030	107,217	107,476	107,866	108,146	108,084	108,545	109,112	109,079	109,508	109,989
Unemployed	8,057	8,285	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221
Unemployment rate ⁴	6.7	6.9	6.8	6.8	6.6	6.6	6.6	6.5	6.2	6.2	6.0	5.9	5.9
Not in labor force	62,704	62,725	62,772	62,688	62,961	62,793	62,649	62,957	63,009	62,540	63,187	62,933	62,700
Men													
Noninstitutional population ¹	87,460	87,556	87,682	87,773	87,868	88,020	88,099	88,186	88,271	88,361	88,442	88,534	88,598
Labor force ¹	66,911	67,128	67,130	67,407	67,425	67,672	67,764	67,644	67,603	67,816	67,556	67,656	67,925
Percent of population ²	76.5	76.7	76.6	76.8	76.7	76.9	76.9	76.7	76.6	76.7	76.4	76.4	76.7
Total employed ¹	62,483	62,528	62,565	62,833	62,986	63,187	63,335	63,282	63,417	63,562	63,471	63,715	63,918
Employment-population ratio ³	71.4	71.4	71.4	71.6	71.7	71.8	71.9	71.8	71.8	71.9	71.8	72.0	72.1
Resident Armed Forces	1,541	1,560	1,590	1,592	1,593	1,591	1,584	1,575	1,575	1,566	1,559	1,561	1,575
Civilian employed	60,942	60,968	60,975	61,241	61,393	61,596	61,751	61,707	61,842	61,996	61,912	62,154	62,343
Unemployed	4,428	4,600	4,565	4,574	4,439	4,484	4,429	4,362	4,186	4,254	4,085	3,941	4,007
Unemployment rate ⁴	6.6	6.9	6.8	6.8	6.6	6.6	6.5	6.4	6.2	6.3	6.0	5.8	5.9
Not in labor force	20,549	20,428	20,552	20,366	20,443	20,348	20,335	20,542	20,668	20,545	20,886	20,878	20,673
Women													
Noninstitutional population ¹	95,065	95,156	95,253	95,341	95,429	95,556	95,639	95,729	95,808	95,898	95,979	96,071	96,140
Labor force ¹	52,910	52,860	53,033	53,019	52,911	53,110	53,325	53,314	53,467	53,903	53,679	54,016	54,113
Percent of population ²	55.7	55.6	55.7	55.6	55.4	55.6	55.8	55.7	55.8	56.2	55.9	56.2	56.3
Total employed ¹	49,281	49,175	49,376	49,350	49,401	49,572	49,787	49,822	50,153	50,611	50,504	50,733	50,899
Employment-population ratio ³	51.8	51.7	51.8	51.8	51.8	51.9	52.1	52.0	52.3	52.8	52.6	52.8	52.9
Resident Armed Forces	156	156	159	159	157	157	156	161	160	160	159	159	161
Civilian employed	49,125	49,019	49,217	49,191	49,244	49,415	49,631	49,661	49,993	50,451	50,345	50,574	50,738
Unemployed	3,629	3,685	3,657	3,669	3,510	3,538	3,538	3,492	3,314	3,292	3,175	3,283	3,213
Unemployment rate ⁴	6.9	7.0	6.9	6.9	6.6	6.7	6.6	6.6	6.2	6.1	5.9	6.1	5.9
Not in labor force	42,155	42,296	42,220	42,322	42,518	42,446	42,314	42,415	42,341	41,995	42,300	42,055	42,027

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL													
Civilian noninstitutional population ¹	180,828	180,997	181,186	181,363	181,547	181,827	181,998	182,179	182,344	182,533	182,703	182,885	183,002
Civilian labor force	118,124	118,272	118,414	118,675	118,586	119,034	119,349	119,222	119,335	119,993	119,517	119,952	120,302
Percent of population	65.3	65.3	65.4	65.4	65.3	65.5	65.6	65.4	65.4	65.7	65.4	65.6	65.7
Employed	110,067	109,987	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081
Employment-population ratio ²	60.9	60.8	60.8	60.9	60.9	61.1	61.2	61.1	61.3	61.6	61.4	61.6	61.8
Unemployed	8,057	8,285	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221
Unemployment rate	6.8	7.0	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0
Men, 20 years and over													
Civilian noninstitutional population ¹	78,634	78,722	78,802	78,874	78,973	79,132	79,216	79,303	79,387	79,474	79,536	79,625	79,668
Civilian labor force	61,219	61,412	61,409	61,703	61,826	61,948	61,973	61,983	61,976	62,156	62,057	62,116	62,053
Percent of population	77.9	78.0	77.9	78.2	78.3	78.3	78.2	78.2	78.1	78.2	78.0	78.0	77.9
Employed	57,585	57,607	57,595	57,883	58,101	58,227	58,325	58,410	58,567	58,721	58,620	58,793	58,818
Employment-population ratio ²	73.2	73.2	73.1	73.4	73.6	73.6	73.6	73.7	73.8	73.9	73.7	73.8	73.8
Agriculture	2,185	2,286	2,297	2,303	2,289	2,254	2,300	2,411	2,411	2,441	2,307	2,343	2,254
Nonagricultural industries	55,400	55,321	55,298	55,580	55,812	55,974	56,024	55,999	56,155	56,280	56,313	56,450	56,564
Unemployed	3,634	3,805	3,814	3,820	3,725	3,720	3,648	3,573	3,409	3,436	3,437	3,323	3,235
Unemployment rate	5.9	6.2	6.2	6.2	6.0	6.0	5.9	5.8	5.5	5.5	5.5	5.4	5.2
Not in labor force	17,415	17,310	17,393	17,171	17,147	17,184	17,243	17,320	17,411	17,318	17,479	17,509	17,615
Women, 20 years and over													
Civilian noninstitutional population ¹	87,689	87,779	87,856	87,933	88,016	88,150	88,237	88,321	88,395	88,464	88,546	88,632	88,685
Civilian labor force	48,950	48,920	49,014	49,043	48,923	49,161	49,348	49,355	49,466	49,774	49,714	49,971	49,989
Percent of population	55.8	55.7	55.8	55.8	55.6	55.8	55.9	55.9	56.0	56.3	56.1	56.4	56.4
Employed	45,956	45,905	46,020	46,067	46,058	46,261	46,475	46,498	46,751	47,094	47,126	47,288	47,324
Employment-population ratio ²	52.4	52.3	52.4	52.4	52.3	52.5	52.7	52.6	52.9	53.2	53.2	53.4	53.4
Agriculture	622	614	612	675	621	628	641	589	587	634	615	619	603
Nonagricultural industries	45,334	45,291	45,408	45,392	45,437	45,633	45,835	45,909	46,164	46,460	46,512	46,669	46,722
Unemployed	2,994	3,015	2,994	2,976	2,865	2,900	2,873	2,857	2,715	2,680	2,588	2,683	2,664
Unemployment rate	6.1	6.2	6.1	6.1	5.9	5.9	5.8	5.8	5.5	5.4	5.2	5.4	5.3
Not in labor force	38,739	38,859	38,842	38,890	39,093	38,989	38,889	38,966	38,929	38,690	38,832	38,661	38,696
Both sexes, 16 to 19 years													
Civilian noninstitutional population ¹	14,505	14,496	14,527	14,557	14,558	14,545	14,546	14,555	14,562	14,595	14,621	14,628	14,649
Civilian labor force	7,955	7,940	7,991	7,929	7,837	7,926	8,028	7,884	7,894	8,063	7,746	7,865	8,260
Percent of population	54.8	54.8	55.0	54.5	53.8	54.5	55.2	54.2	54.2	55.2	53.0	53.8	56.4
Employed	6,526	6,475	6,577	6,482	6,478	6,524	6,582	6,460	6,518	6,633	6,511	6,647	6,939
Employment-population ratio ²	45.0	44.7	45.3	44.5	44.5	44.9	45.2	44.4	44.8	45.4	44.5	45.4	47.4
Agriculture	250	242	253	237	251	264	295	284	292	261	257	258	236
Nonagricultural industries	6,276	6,233	6,324	6,245	6,227	6,260	6,287	6,176	6,226	6,372	6,254	6,389	6,703
Unemployed	1,429	1,465	1,414	1,447	1,359	1,402	1,446	1,424	1,376	1,430	1,235	1,218	1,321
Unemployment rate	18.0	18.5	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0
Not in labor force	6,550	6,556	6,536	6,628	6,721	6,619	6,518	6,671	6,668	6,532	6,875	6,763	6,389

¹ The population figures are not adjusted for seasonal variation.

population.

² Civilian employment as a percent of the civilian noninstitutional

**HOUSEHOLD DATA
SEASONALLY ADJUSTED**

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

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
WHITE													
Civilian noninstitutional population ¹	155,604	155,723	155,856	155,979	156,111	156,313	156,431	156,561	156,676	156,811	156,930	157,058	157,134
Civilian labor force	102,122	102,158	102,297	102,455	102,503	102,746	102,893	102,797	102,894	103,573	103,106	103,272	103,614
Percent of population	65.6	65.6	65.6	65.7	65.7	65.7	65.8	65.7	65.7	66.1	65.7	65.8	65.9
Employed	96,177	96,000	96,147	96,281	96,533	96,717	96,995	96,998	97,340	98,050	97,716	97,958	98,299
Employment-population ratio ²	61.8	61.6	61.7	61.7	61.8	61.9	62.0	62.0	62.1	62.5	62.3	62.4	62.6
Unemployed	5,945	6,158	6,150	6,174	5,970	6,029	5,898	5,799	5,554	5,524	5,390	5,314	5,315
Unemployment rate	5.8	6.0	6.0	6.0	5.8	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.1
Men, 20 years and over													
Civilian labor force	53,583	53,727	53,757	54,015	54,172	54,182	54,175	54,107	54,051	54,314	54,213	54,214	54,164
Percent of population	78.2	78.4	78.3	78.7	78.8	78.7	78.6	78.4	78.3	78.6	78.4	78.3	78.2
Employed	50,877	50,845	50,845	51,089	51,286	51,297	51,362	51,364	51,462	51,755	51,581	51,682	51,714
Employment-population ratio ²	74.3	74.2	74.1	74.4	74.6	74.5	74.5	74.6	74.9	74.6	74.6	74.7	74.7
Unemployed	2,706	2,882	2,912	2,926	2,886	2,885	2,813	2,743	2,589	2,558	2,632	2,532	2,449
Unemployment rate	5.1	5.4	5.4	5.4	5.3	5.3	5.2	5.1	4.8	4.7	4.9	4.7	4.5
Women, 20 years and over													
Civilian labor force	41,640	41,547	41,598	41,540	41,514	41,680	41,762	41,828	41,982	42,239	42,159	42,280	42,418
Percent of population	55.4	55.2	55.2	55.1	55.0	55.2	55.2	55.3	55.5	55.8	55.6	55.7	55.9
Employed	39,466	39,365	39,431	39,399	39,456	39,568	39,735	39,839	40,041	40,343	40,318	40,379	40,535
Employment-population ratio ²	52.5	52.3	52.3	52.3	52.3	52.4	52.6	52.7	52.9	53.2	53.2	53.2	53.4
Unemployed	2,174	2,182	2,167	2,141	2,058	2,111	2,028	1,989	1,941	1,895	1,841	1,902	1,882
Unemployment rate	5.2	5.3	5.2	5.2	5.0	5.1	4.9	4.8	4.6	4.5	4.4	4.5	4.4
Both sexes, 16 to 19 years													
Civilian labor force	6,899	6,884	6,942	6,900	6,817	6,885	6,955	6,862	6,861	7,021	6,734	6,778	7,033
Percent of population	58.1	57.9	58.4	58.0	57.3	57.8	58.4	57.5	57.4	58.7	56.3	56.6	58.8
Employed	5,834	5,790	5,871	5,793	5,791	5,852	5,898	5,795	5,837	5,951	5,817	5,898	6,049
Employment-population ratio ²	49.1	48.7	49.4	48.7	48.7	49.2	49.5	48.5	48.9	49.8	48.6	49.3	50.6
Unemployed	1,065	1,094	1,071	1,107	1,026	1,033	1,057	1,067	1,024	1,070	917	880	984
Unemployment rate	15.4	15.9	15.4	16.0	15.1	15.0	15.2	15.5	14.9	15.2	13.6	13.0	14.0
Men	16.6	16.6	15.7	16.3	15.5	16.1	16.0	17.1	16.7	17.3	14.5	13.0	15.4
Women	14.2	15.1	15.2	15.7	14.6	13.8	14.3	13.9	13.1	13.1	12.7	13.0	12.5
BLACK													
Civilian noninstitutional population ¹	20,028	20,056	20,089	20,120	20,152	20,187	20,218	20,249	20,279	20,312	20,341	20,373	20,396
Civilian labor force	12,553	12,652	12,720	12,719	12,707	12,831	12,957	12,844	12,743	12,860	12,863	13,047	13,194
Percent of population	62.7	63.1	63.3	63.2	63.1	63.6	64.1	63.4	62.8	63.3	63.2	64.0	64.7
Employed	10,716	10,799	10,895	10,910	10,968	10,997	11,101	11,053	11,090	11,080	11,223	11,401	11,563
Employment-population ratio ²	53.5	53.8	54.2	54.2	54.4	54.5	54.9	54.6	54.7	54.6	55.2	56.0	56.7
Unemployed	1,837	1,853	1,825	1,809	1,739	1,833	1,855	1,791	1,653	1,779	1,640	1,647	1,630
Unemployment rate	14.6	14.6	14.3	14.2	13.7	14.3	14.3	13.9	13.0	13.8	12.7	12.6	12.4
Men, 20 years and over													
Civilian labor force	5,885	5,906	5,932	5,934	5,947	5,986	6,012	5,997	5,980	6,033	6,001	6,089	6,079
Percent of population	74.2	74.4	74.6	74.5	74.5	74.9	75.1	74.8	74.4	75.0	74.5	75.4	75.2
Employed	5,110	5,116	5,153	5,171	5,244	5,256	5,288	5,305	5,328	5,279	5,311	5,404	5,431
Employment-population ratio ²	64.5	64.5	64.8	65.0	65.7	65.7	66.0	66.1	66.3	65.6	65.9	66.9	67.2
Unemployed	775	790	779	763	703	730	724	692	652	754	690	686	647
Unemployment rate	13.2	13.4	13.1	12.9	11.8	12.2	12.0	11.5	10.9	12.5	11.5	11.3	10.7
Women, 20 years and over													
Civilian labor force	5,841	5,872	5,909	5,943	5,907	5,984	6,030	5,987	5,918	5,970	6,017	6,125	6,120
Percent of population	58.6	58.8	59.1	59.3	58.9	59.6	59.9	59.4	58.7	59.1	59.5	60.4	60.3
Employed	5,112	5,145	5,178	5,200	5,182	5,221	5,255	5,211	5,238	5,278	5,349	5,426	5,428
Employment-population ratio ²	51.3	51.5	51.8	51.9	51.7	52.0	52.2	51.7	51.9	52.2	52.9	53.5	53.5
Unemployed	729	727	731	743	725	763	775	776	680	691	669	699	692
Unemployment rate	12.5	12.4	12.4	12.5	12.3	12.8	12.9	13.0	11.5	11.6	11.1	11.4	11.3

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
BLACK—Continued													
Both sexes, 16 to 19 years													
Civilian labor force	827	874	879	842	853	860	915	861	845	857	844	833	995
Percent of population ..	38.8	40.9	41.1	39.3	39.8	40.1	42.6	40.0	39.2	39.7	39.0	38.4	45.9
Employed	494	538	564	539	542	520	559	537	524	523	563	571	704
Employment-population ratio ² ..	23.1	25.2	26.3	25.1	25.3	24.2	26.0	24.9	24.3	24.2	26.0	26.3	32.5
Unemployed	333	336	315	303	311	340	356	324	321	334	281	262	291
Unemployment rate ..	40.3	38.4	35.8	36.0	36.5	39.5	38.9	37.6	38.0	39.0	33.3	31.5	29.2
Men	38.8	38.6	37.8	35.0	36.1	36.5	38.3	36.5	39.3	40.3	31.5	31.5	32.6
Women ..	41.9	38.3	33.8	37.0	36.9	43.2	39.5	38.8	36.5	37.6	35.1	31.4	25.3
HISPANIC ORIGIN													
Civilian noninstitutional population ¹	12,397	12,432	12,469	12,505	12,540	12,653	12,692	12,732	12,770	12,809	12,848	12,887	12,925
Civilian labor force	8,130	8,179	8,200	8,226	8,320	8,431	8,457	8,392	8,484	8,586	8,452	8,411	8,544
Percent of population ..	65.6	65.8	65.8	65.8	66.3	66.6	66.6	65.9	66.4	67.0	65.8	65.3	66.1
Employed	7,248	7,286	7,345	7,437	7,446	7,538	7,644	7,639	7,701	7,838	7,730	7,744	7,864
Employment-population ratio ² ..	58.5	58.6	58.9	59.5	59.4	59.6	60.2	60.0	60.3	61.2	60.2	60.1	60.8
Unemployed	882	893	855	789	874	893	813	753	783	748	722	667	680
Unemployment rate ..	10.8	10.9	10.4	9.6	10.5	10.6	9.6	9.0	9.2	8.7	8.5	7.9	8.0

¹ The population figures are not adjusted for seasonal variation.

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

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

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

(In thousands)

Category	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total	110,067	109,987	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081
Married men, spouse present	39,735	39,691	39,780	39,952	40,093	40,102	39,913	40,100	39,967	40,029	40,057	40,241	40,260
Married women, spouse present ..	27,388	27,249	27,323	27,333	27,400	27,525	27,817	27,965	28,213	28,495	28,458	28,426	28,196
Women who maintain families	5,832	5,926	6,016	6,041	6,005	5,985	5,906	5,933	5,972	5,921	5,939	6,013	6,108
MAJOR INDUSTRY AND CLASS OF WORKER													
Agriculture:													
Wage and salary workers ..	1,509	1,521	1,562	1,582	1,621	1,650	1,647	1,739	1,589	1,695	1,614	1,619	1,566
Self-employed workers ..	1,387	1,460	1,451	1,425	1,400	1,370	1,454	1,418	1,505	1,442	1,386	1,429	1,363
Unpaid family workers ..	174	159	164	198	152	136	126	150	175	170	165	154	159
Nonagricultural industries:													
Wage and salary workers ..	98,586	98,692	98,846	98,869	99,164	99,550	99,748	99,834	100,112	100,834	100,420	100,838	101,334
Government	16,446	16,333	16,264	16,457	16,443	16,412	16,532	16,568	16,484	16,710	16,956	16,931	16,760
Private industries	82,140	82,359	82,582	82,412	82,721	83,138	83,216	83,265	83,628	84,124	83,464	83,907	84,574
Private households ..	1,247	1,229	1,216	1,183	1,189	1,269	1,204	1,227	1,266	1,266	1,146	1,224	1,172
Other industries	80,893	81,130	81,366	81,229	81,532	81,869	82,012	82,038	82,362	82,858	82,318	82,683	83,402
Self-employed workers ..	7,956	7,939	7,993	8,179	8,056	8,192	8,187	8,050	8,117	8,142	8,328	8,205	8,216
Unpaid family workers ..	271	275	265	252	239	246	255	273	268	275	274	268	250
PERSONS AT WORK PART TIME¹													
All industries:													
Part time for economic reasons ..	5,471	5,544	5,740	5,563	5,596	5,505	5,780	5,456	5,391	5,282	5,184	5,508	5,262
Slack work	2,417	2,472	2,481	2,510	2,444	2,473	2,535	2,440	2,322	2,223	2,317	2,456	2,515
Could only find part-time work ..	2,741	2,772	2,826	2,714	2,867	2,695	2,828	2,698	2,746	2,665	2,579	2,722	2,494
Voluntary part time ..	13,981	13,922	14,178	14,021	13,877	14,170	14,061	14,167	13,862	14,573	15,054	14,422	14,634
Nonagricultural industries:													
Part time for economic reasons ..	5,269	5,303	5,450	5,319	5,342	5,201	5,459	5,164	5,110	5,029	4,918	5,235	4,998
Slack work	2,283	2,314	2,314	2,366	2,286	2,281	2,340	2,218	2,137	2,071	2,155	2,295	2,306
Could only find part-time work ..	2,678	2,710	2,739	2,626	2,765	2,599	2,742	2,595	2,662	2,594	2,477	2,634	2,433
Voluntary part time ..	13,606	13,520	13,736	13,567	13,455	13,750	13,597	13,682	13,399	14,069	14,485	13,946	14,168

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	110,067	109,987	110,192	110,432	110,637	111,011	111,382	111,368	111,835	112,447	112,257	112,727	113,081
16 to 24 years	20,281	20,163	20,263	20,201	20,093	20,237	20,293	20,113	20,111	20,215	19,988	20,197	20,549
16 to 19 years	6,526	6,475	6,577	6,482	6,478	6,524	6,582	6,460	6,518	6,633	6,511	6,647	6,939
16 to 17 years	2,593	2,670	2,714	2,648	2,717	2,713	2,727	2,688	2,619	2,689	2,661	2,774	2,898
18 to 19 years	3,903	3,804	3,877	3,843	3,771	3,816	3,844	3,809	3,876	3,932	3,843	3,858	4,019
20 to 24 years	13,755	13,688	13,686	13,719	13,615	13,713	13,711	13,652	13,593	13,582	13,477	13,550	13,610
25 years and over	89,792	89,796	89,899	90,221	90,524	90,725	91,104	91,290	91,660	92,257	92,319	92,615	92,602
25 to 54 years	75,405	75,582	75,714	75,889	76,247	76,281	76,680	76,844	77,338	77,663	77,766	78,077	78,155
55 years and over	14,445	14,269	14,223	14,341	14,349	14,450	14,363	14,426	14,345	14,450	14,574	14,473	14,510
Men, 16 years and over	60,942	60,968	60,975	61,241	61,393	61,596	61,751	61,707	61,842	61,996	61,912	62,154	62,343
16 to 24 years	10,567	10,528	10,587	10,546	10,449	10,526	10,608	10,452	10,427	10,369	10,288	10,452	10,628
16 to 19 years	3,357	3,361	3,380	3,358	3,292	3,369	3,426	3,297	3,275	3,276	3,292	3,360	3,525
16 to 17 years	1,325	1,399	1,391	1,353	1,373	1,395	1,425	1,355	1,336	1,350	1,355	1,434	1,442
18 to 19 years	2,005	1,965	2,003	2,009	1,933	1,974	2,000	1,945	1,936	1,919	1,930	1,916	2,055
20 to 24 years	7,210	7,167	7,207	7,188	7,157	7,156	7,182	7,155	7,152	7,094	6,996	7,092	7,103
25 years and over	50,393	50,419	50,348	50,705	50,943	51,053	51,207	51,278	51,396	51,648	51,598	51,729	51,747
25 to 54 years	42,050	42,124	42,049	42,278	42,485	42,569	42,702	42,729	42,925	42,997	43,065	43,180	43,260
55 years and over	8,357	8,323	8,329	8,428	8,507	8,458	8,470	8,546	8,476	8,561	8,573	8,510	8,499
Women, 16 years and over	49,125	49,019	49,217	49,191	49,244	49,415	49,631	49,661	49,993	50,451	50,345	50,574	50,738
16 to 24 years	9,714	9,635	9,676	9,655	9,644	9,711	9,685	9,661	9,683	9,845	9,700	9,744	9,921
16 to 19 years	3,169	3,114	3,197	3,124	3,186	3,154	3,155	3,163	3,242	3,357	3,219	3,286	3,414
16 to 17 years	1,268	1,271	1,323	1,295	1,344	1,318	1,302	1,333	1,283	1,339	1,306	1,340	1,456
18 to 19 years	1,898	1,839	1,874	1,834	1,838	1,842	1,844	1,864	1,940	2,013	1,913	1,942	1,964
20 to 24 years	6,545	6,521	6,479	6,531	6,458	6,557	6,529	6,498	6,441	6,489	6,482	6,458	6,507
25 years and over	39,399	39,377	39,551	39,516	39,581	39,672	39,897	40,012	40,264	40,609	40,721	40,886	40,856
25 to 54 years	33,355	33,458	33,665	33,611	33,762	33,712	33,978	34,116	34,412	34,666	34,700	34,896	34,895
55 years and over	6,088	5,946	5,894	5,913	5,842	5,992	5,893	5,879	5,869	5,888	6,000	5,963	6,011

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

(In thousands)

Sex and age	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	8,057	8,285	8,222	8,243	7,949	8,023	7,967	7,854	7,500	7,546	7,260	7,224	7,221
16 to 24 years	3,001	3,173	3,022	3,005	2,986	3,045	3,049	2,969	2,901	2,912	2,768	2,686	2,685
16 to 19 years	1,429	1,465	1,414	1,447	1,359	1,402	1,446	1,424	1,376	1,430	1,235	1,218	1,321
16 to 17 years	641	668	647	686	629	683	693	670	623	734	617	573	636
18 to 19 years	787	790	766	768	737	735	765	753	756	696	609	623	691
20 to 24 years	1,572	1,708	1,608	1,558	1,627	1,643	1,603	1,545	1,525	1,482	1,533	1,468	1,364
25 years and over	5,087	5,130	5,197	5,230	4,961	5,024	4,912	4,872	4,588	4,621	4,454	4,532	4,564
25 to 54 years	4,525	4,523	4,597	4,630	4,422	4,552	4,459	4,363	4,079	4,102	4,013	4,090	4,072
55 years and over	561	587	603	571	527	477	452	509	512	548	474	457	479
Men, 16 years and over	4,428	4,600	4,565	4,574	4,439	4,484	4,429	4,362	4,186	4,254	4,085	3,941	4,007
16 to 24 years	1,625	1,761	1,615	1,635	1,623	1,626	1,673	1,589	1,583	1,604	1,485	1,406	1,498
16 to 19 years	794	795	751	754	714	764	781	789	777	818	648	618	772
16 to 17 years	350	373	344	366	325	380	383	344	366	407	312	285	374
18 to 19 years	441	416	409	388	395	401	410	444	411	412	324	307	400
20 to 24 years	831	966	864	881	909	862	892	800	806	786	837	788	726
25 years and over	2,835	2,857	2,945	2,931	2,809	2,901	2,760	2,758	2,597	2,636	2,563	2,530	2,543
25 to 54 years	2,471	2,472	2,558	2,568	2,462	2,578	2,461	2,435	2,276	2,299	2,285	2,244	2,232
55 years and over	356	364	385	361	351	310	293	316	330	363	305	299	300
Women, 16 years and over	3,629	3,685	3,657	3,669	3,510	3,538	3,538	3,492	3,314	3,292	3,175	3,283	3,213
16 to 24 years	1,376	1,412	1,407	1,370	1,363	1,419	1,375	1,380	1,319	1,308	1,284	1,280	1,187
16 to 19 years	635	670	663	693	645	638	665	635	599	612	587	600	549
16 to 17 years	291	295	303	320	304	303	310	326	257	327	305	288	262
18 to 19 years	346	374	357	380	342	334	355	309	345	284	285	316	291
20 to 24 years	741	742	744	677	718	781	710	745	720	696	697	680	638
25 years and over	2,252	2,273	2,252	2,299	2,152	2,124	2,152	2,113	1,991	1,985	1,891	2,002	2,022
25 to 54 years	2,054	2,051	2,039	2,062	1,960	1,974	1,998	1,928	1,803	1,803	1,729	1,846	1,839
55 years and over	205	223	218	210	176	167	158	193	183	185	170	158	179

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

(Civilian workers)

Sex and age	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over ..	6.8	7.0	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0
16 to 24 years	12.9	13.6	13.0	12.9	12.9	13.1	13.1	12.9	12.6	12.6	12.2	11.7	11.6
16 to 19 years	18.0	18.5	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0
16 to 17 years ..	19.8	20.0	19.3	20.6	18.8	20.1	20.3	20.0	19.2	21.4	18.8	17.1	18.0
18 to 19 years ..	16.8	17.2	16.5	16.7	16.3	16.2	16.6	16.5	16.3	15.0	13.7	13.9	14.7
20 to 24 years	10.3	11.1	10.5	10.2	10.7	10.7	10.5	10.2	10.1	9.8	10.2	9.8	9.1
25 years and over ..	5.4	5.4	5.5	5.5	5.2	5.2	5.1	5.1	4.8	4.8	4.6	4.7	4.7
25 to 54 years	5.7	5.6	5.7	5.8	5.5	5.6	5.5	5.4	5.0	5.0	4.9	5.0	5.0
55 years and over ..	3.7	4.0	4.1	3.8	3.5	3.2	3.0	3.4	3.4	3.7	3.2	3.1	3.2
Men, 16 years and over ..	6.8	7.0	7.0	6.9	6.7	6.8	6.7	6.6	6.3	6.4	6.2	6.0	6.0
16 to 24 years	13.3	14.3	13.2	13.4	13.4	13.4	13.6	13.2	13.2	13.4	12.6	11.9	12.4
16 to 19 years	19.1	19.1	18.2	18.3	17.8	18.5	18.6	19.3	19.2	20.0	16.4	15.5	18.0
16 to 17 years ..	20.9	21.0	19.8	21.3	19.1	21.4	21.2	20.2	21.5	23.2	18.7	16.6	20.6
18 to 19 years ..	18.0	17.5	17.0	16.2	17.0	16.9	17.0	18.6	17.5	17.7	14.4	13.8	16.3
20 to 24 years	10.3	11.9	10.7	10.9	11.3	10.7	11.1	10.1	10.1	10.0	10.7	10.0	9.3
25 years and over ..	5.3	5.4	5.5	5.5	5.2	5.4	5.1	5.1	4.8	4.9	4.7	4.7	4.7
25 to 54 years	5.6	5.5	5.7	5.7	5.5	5.7	5.4	5.4	5.0	5.1	5.0	4.9	4.9
55 years and over ..	4.1	4.2	4.4	4.1	4.0	3.5	3.3	3.6	3.7	4.1	3.4	3.4	3.4
Women, 16 years and over ..	6.9	7.0	6.9	6.9	6.7	6.7	6.7	6.6	6.2	6.1	5.9	6.1	6.0
16 to 24 years	12.4	12.8	12.7	12.4	12.4	12.7	12.4	12.5	12.0	11.7	11.7	11.6	10.7
16 to 19 years	16.7	17.7	17.2	18.2	16.8	16.8	17.4	16.7	15.6	15.4	15.4	15.4	13.9
16 to 17 years ..	18.7	18.8	18.6	19.8	18.4	18.7	19.2	19.7	16.7	19.6	18.9	17.7	15.3
18 to 19 years ..	15.4	16.9	16.0	17.2	15.7	15.3	16.1	14.2	15.1	12.4	13.0	14.0	12.9
20 to 24 years	10.2	10.2	10.3	9.4	10.0	10.6	9.8	10.3	10.1	9.7	9.7	9.5	8.9
25 years and over ..	5.4	5.5	5.4	5.5	5.2	5.1	5.1	5.0	4.7	4.7	4.4	4.7	4.7
25 to 54 years	5.8	5.8	5.7	5.8	5.5	5.5	5.6	5.4	5.0	4.9	4.7	5.0	5.0
55 years and over ..	3.3	3.6	3.6	3.4	2.9	2.7	2.6	3.2	3.0	3.0	2.8	2.6	2.9

A-39. Selected unemployment indicators, seasonally adjusted

(Unemployment rates)

Category	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC													
Total (all civilian workers) ..	6.8	7.0	6.9	6.9	6.7	6.7	6.7	6.6	6.3	6.3	6.1	6.0	6.0
Men, 20 years and over	5.9	6.2	6.2	6.2	6.0	6.0	5.9	5.8	5.5	5.5	5.5	5.4	5.2
Women, 20 years and over ..	6.1	6.2	6.1	6.1	5.9	5.9	5.8	5.8	5.5	5.4	5.2	5.4	5.3
Both sexes, 16 to 19 years ..	18.0	18.5	17.7	18.2	17.3	17.7	18.0	18.1	17.4	17.7	15.9	15.5	16.0
White	5.8	6.0	6.0	6.0	5.8	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.1
Black and other	13.1	13.1	12.7	12.7	12.3	12.7	12.8	12.5	11.7	12.2	11.4	11.3	11.3
Black	14.6	14.6	14.3	14.2	13.7	14.3	14.3	13.9	13.0	13.8	12.7	12.6	12.4
Hispanic origin ..	10.8	10.9	10.4	9.6	10.5	10.6	9.6	9.0	9.2	8.7	8.5	7.9	8.0
Married men, spouse present	4.2	4.3	4.6	4.5	4.3	4.2	4.2	4.1	4.1	3.9	4.0	3.8	3.7
Married women, spouse present ..	5.1	5.1	5.0	5.0	4.8	4.8	4.8	4.5	4.4	4.1	4.0	4.2	4.3
Women who maintain families ..	10.1	9.8	8.9	9.7	9.8	9.8	9.5	9.7	9.3	9.6	9.7	9.4	9.0
Full-time workers ...	6.4	6.6	6.6	6.6	6.3	6.4	6.3	6.2	5.9	5.9	5.9	5.7	5.6
Part-time workers	9.3	9.3	9.2	9.1	8.8	9.0	8.7	9.2	8.6	8.7	6.9	7.9	8.2
Unemployed 15 weeks and over ¹ ..	1.9	2.0	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.8	1.7	1.6	1.6
Labor force time lost ² ..	7.7	7.9	7.8	7.7	7.6	7.6	7.6	7.4	7.3	7.2	7.1	6.9	6.8
INDUSTRY													
Nonagricultural private wage and salary workers ..	6.9	7.0	7.0	7.0	6.8	6.7	6.6	6.5	6.2	6.3	6.2	6.1	5.9
Mining	16.6	13.9	14.5	14.5	14.1	14.0	12.4	9.3	11.1	12.9	10.8	7.8	8.9
Construction	12.4	12.9	13.8	15.1	13.7	12.2	11.6	12.5	11.9	12.1	11.6	10.7	11.2
Manufacturing	6.9	7.0	7.3	7.1	6.9	6.8	6.8	6.9	6.2	6.4	5.6	6.0	5.5
Durable goods	6.8	6.5	7.2	6.6	6.4	6.8	6.8	6.7	6.2	6.3	5.3	6.1	5.5
Nondurable goods	6.9	7.7	7.3	7.9	7.7	6.8	6.9	7.3	6.2	6.6	6.0	5.9	5.5
Transportation and public utilities ..	4.8	4.7	5.2	4.4	4.6	4.8	4.0	4.6	4.8	4.4	5.0	4.4	4.3
Wholesale and retail trade	7.5	7.6	7.4	7.2	7.2	7.5	7.2	7.3	7.0	6.9	7.2	6.8	7.0
Finance and service industries	5.6	5.6	5.4	5.4	5.1	5.2	5.4	4.9	4.7	4.8	4.8	5.1	4.6
Agricultural wage and salary workers ..	13.3	12.9	11.9	10.1	11.5	11.6	11.2	10.7	9.0	8.7	8.8	11.3	10.8

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
DURATION													
Less than 5 weeks	3,436	3,415	3,418	3,382	3,355	3,416	3,361	3,383	3,143	3,349	3,085	3,168	3,197
5 to 14 weeks	2,407	2,524	2,563	2,613	2,389	2,530	2,477	2,447	2,232	2,118	2,114	2,141	2,170
15 weeks and over	2,272	2,373	2,168	2,217	2,171	2,200	2,131	2,050	2,075	2,101	2,055	1,907	1,884
15 to 26 weeks	1,068	1,110	950	1,045	1,023	1,022	1,008	945	1,025	1,003	998	945	814
27 weeks and over	1,204	1,263	1,218	1,172	1,148	1,178	1,123	1,105	1,049	1,098	1,057	962	1,070
Average (mean) duration, in weeks	15.6	15.5	15.2	14.8	15.0	15.0	14.6	14.9	14.9	14.9	14.8	14.0	14.3
Median duration, in weeks	7.1	7.1	7.0	7.0	7.1	7.0	6.6	6.6	7.0	6.5	6.7	6.7	6.4
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	42.3	41.1	41.9	41.2	42.4	41.9	42.2	42.9	42.2	44.3	42.5	43.9	44.1
5 to 14 weeks	29.7	30.4	31.5	31.8	30.2	31.1	31.1	31.1	30.0	28.0	29.1	29.7	29.9
15 weeks and over	28.0	28.5	26.6	27.0	27.4	27.0	26.7	26.0	27.9	27.8	28.3	26.4	26.0
15 to 26 weeks	13.2	13.4	11.7	12.7	12.9	12.5	12.7	12.0	13.8	13.2	13.8	13.1	11.2
27 weeks and over	14.8	15.2	14.9	14.3	14.5	14.5	14.1	14.0	14.1	14.5	14.6	13.3	14.8

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

(Numbers in thousands)

Reasons for unemployment	1986					1987							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
NUMBER OF UNEMPLOYED													
Job losers	3,824	4,044	3,984	3,947	3,890	3,971	3,839	3,822	3,732	3,611	3,565	3,522	3,339
On layoff	1,017	1,029	1,072	1,073	1,078	1,118	998	1,011	958	906	901	918	850
Other job losers	2,807	3,015	2,912	2,874	2,812	2,854	2,842	2,811	2,774	2,705	2,664	2,604	2,489
Job leavers	990	1,041	1,027	1,056	1,036	891	1,046	1,000	923	906	949	1,007	1,006
Reentrants	2,199	2,145	2,190	2,119	2,019	2,054	2,042	2,111	1,940	2,018	1,969	1,913	1,997
New entrants	1,014	1,038	972	1,076	1,015	1,084	1,040	956	911	1,018	798	801	829
PERCENT DISTRIBUTION													
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	47.6	48.9	48.7	48.1	48.9	49.6	48.2	48.4	49.7	47.8	49.0	48.6	46.6
On layoff	12.7	12.4	13.1	13.1	13.5	14.0	12.5	12.8	12.8	12.0	12.4	12.7	11.9
Other job losers	35.0	36.5	35.6	35.1	35.3	35.7	35.7	35.6	37.0	35.8	36.6	36.0	34.7
Job leavers	12.3	12.6	12.6	12.9	13.0	11.1	13.1	12.7	12.3	12.0	13.0	13.9	14.0
Reentrants	27.4	25.9	26.8	25.8	25.4	25.7	25.6	26.8	25.8	26.7	27.0	26.4	27.9
New entrants	12.6	12.6	11.9	13.1	12.8	13.6	13.1	12.1	12.1	13.5	11.0	11.1	11.6
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Job losers	3.2	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.9	2.8
Job leavers .....	.8	.9	.9	.9	.9	.7	.9	.8	.8	.8	.8	.8	.8
Reentrants	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.6	1.7	1.6	1.6	1.7
New entrants .....	.9	.9	.8	.9	.9	.9	.9	.8	.8	.8	.7	.7	.7

**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	Government		
													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:															
August	99,772	83,125	24,639	748	4,946	18,945	75,133	5,202	5,736	17,913	6,351	23,284	2,882	3,881	9,884
September	100,039	83,241	24,620	739	4,948	18,933	75,419	5,255	5,736	17,939	6,374	23,317	2,902	3,890	10,006
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	84,877	24,752	735	4,999	19,018	76,956	5,344	5,775	18,205	6,578	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 ^p	102,114	85,089	24,857	743	5,008	19,106	77,257	5,360	5,796	18,271	6,607	24,198	2,930	3,950	10,145
August ^p	102,270	85,196	24,857	749	5,007	19,101	77,413	5,376	5,798	18,248	6,630	24,287	2,944	3,951	10,179

¹ Not available.

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

^p = preliminary.

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

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

B-2. Employees on nonagricultural payrolls by detailed industry

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Total		99,440	99,641	102,704	101,934	102,148					
Total private		83,629	83,967	85,610	85,734	86,076	67,688	68,018	69,339	69,372	69,670
Mining		770	753	741	748	753	536	528	530	535	539
Metal mining		41.6	38.8	43.8	44.0		30.9	28.6	33.0	32.9	
Iron ores	101	9.2	6.9	9.3	9.2		7.2	5.1	7.1	6.9	
Copper ores	102	10.8	10.8	12.6	12.7		8.3	8.3	10.0	10.1	
Coal mining	11,12	175.7	173.7	161.7	160.4		143.2	141.7	131.8	130.6	
Bituminous coal and lignite mining	12	173.1	171.2	159.5	158.2		141.1	139.7	130.0	128.8	
Oil and gas extraction	13	437.9	426.7	420.7	427.3	432.0	273.9	269.3	276.0	281.6	
Crude petroleum, natural gas, and natural gas liquids ...	131,2	225.4	218.7	204.2	205.1	-	107.6	106.6	100.5	100.8	
Oil and gas field services	138	212.5	208.0	216.5	222.2		166.3	162.7	175.5	180.8	
Nonmetallic minerals, except fuels	14	114.4	113.9	115.1	116.1		88.0	88.1	89.1	89.8	
Crushed and broken stone	142	41.3	41.3	41.7	42.1		33.5	33.6	33.5	33.8	
Sand and gravel	144	35.6	35.5	35.4	35.8		-	-	-	-	
Chemical and fertilizer minerals	147	18.1	17.7	18.0	18.3						
Construction		5,227	5,301	5,208	5,313	5,368	4,148	4,222	4,082	4,180	4,238
General building contractors	15	1,368.6	1,380.9	1,312.0	1,339.1	1,346.9	1,022.9	1,037.1	962.2	989.0	
Residential building construction	152	701.0	709.0	691.9	703.7	-	512.6	520.9	494.2	506.5	
Operative builders	153	60.3	59.2	56.0	56.1		32.1	32.3	28.7	28.5	
Nonresidential building construction	154	607.3	612.7	564.1	579.3		478.2	483.9	439.3	454.0	
Heavy construction contractors	16	841.9	849.5	833.0	846.8		710.4	718.3	704.9	717.6	
Highway and street construction	161	319.1	325.9	332.3	341.4		273.9	279.6	283.0	291.7	
Heavy construction, except highway	162	522.8	523.6	500.7	505.4		436.5	438.7	421.9	425.9	
Special trade contractors	17	3,016.3	3,070.3	3,062.6	3,126.8		2,414.2	2,466.7	2,415.0	2,473.5	
Plumbing, heating, and air conditioning	171	645.2	652.0	665.4	677.5		479.4	486.7	493.1	503.6	
Painting, paper hanging, and decorating	172	181.6	183.9	178.8	184.3		153.9	156.6	151.0	155.9	
Electrical work	173	535.5	546.4	542.1	556.5		417.7	428.4	417.6	431.0	
Masonry, stonework, and plastering	174	495.2	508.9	508.4	515.4		426.5	439.8	433.0	438.8	
Carpentering and flooring	175	189.1	191.3	179.3	184.8		148.3	150.1	137.7	142.0	
Roofing and sheet metal work	176	221.7	226.9	217.9	226.8		181.6	186.7	173.5	182.4	
Manufacturing		18,867	19,042	19,139	19,023	19,198	12,742	12,925	13,053	12,915	13,090
Durable goods		11,153	11,198	11,253	11,141	11,211	7,319	7,373	7,479	7,352	7,430
Lumber and wood products	24	722.5	737.0	753.1	759.2	761.7	608.2	622.2	630.7	637.4	639.5
Logging camps and logging contractors	241	85.6	89.9	83.0	87.3	-	72.4	76.8	69.2	73.7	-
Sawmills and planing mills	242	192.4	198.6	204.5	205.0		170.5	176.1	180.4	180.9	
Sawmills and planing mills, general	2421	157.5	162.9	166.3	167.6		139.9	144.8	146.7	148.0	
Hardwood dimension and flooring	2426	32.0	32.8	35.3	34.5		28.1	28.8	31.1	30.3	
Millwork, plywood, and structural members	243	253.7	255.9	269.2	270.6		211.3	213.2	223.2	224.8	
Millwork	2431	98.1	98.5	105.9	106.9		80.1	80.4	86.6	87.7	
Wood kitchen cabinets	2434	67.3	68.2	71.8	71.9		54.7	55.4	57.8	57.9	
Hardwood veneer and plywood	2435	23.0	23.7	24.6	24.6		20.1	20.7	21.5	21.5	
Softwood veneer and plywood	2436	37.8	37.3	39.2	39.3		34.8	34.4	35.7	35.7	
Wood containers	244	42.2	41.6	41.6	41.2		35.9	35.4	35.6	35.3	
Wood buildings and mobile homes	245	71.4	73.0	74.1	75.0		54.5	55.8	56.1	57.1	
Mobile homes	2451	48.3	49.8	50.0	50.7		38.7	40.1	40.3	41.1	
Miscellaneous wood products	249	77.2	78.0	80.7	80.1		63.6	64.9	66.2	65.6	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Durable goods—Continued											
Furniture and fixtures	25	484.5	497.2	509.4	505.8	517.6	384.5	396.5	406.8	403.7	414.9
Household furniture	251	282.0	291.5	303.0	297.9	-	235.3	244.5	255.7	251.6	-
Wood household furniture	2511	125.4	130.3	134.4	132.4	-	108.6	113.6	117.5	115.9	-
Upholstered household furniture	2512	91.1	94.1	97.9	97.0	-	75.3	78.1	81.5	81.1	-
Metal household furniture	2514	23.3	23.1	27.2	24.6	-	18.5	18.3	22.5	20.0	-
Mattresses and bedsprings	2515	28.8	30.0	31.0	30.6	-	21.9	22.9	23.7	23.3	-
Office furniture	252	66.3	67.3	67.3	68.2	-	50.9	51.7	50.5	51.3	-
Public building and related furniture	253	26.9	27.2	28.6	28.9	-	20.4	20.5	21.8	22.0	-
Partitions and fixtures	254	71.7	73.4	73.7	74.4	-	52.0	53.7	53.1	53.5	-
Miscellaneous furniture and fixtures	259	37.6	37.8	36.8	36.4	-	25.9	26.1	25.7	25.3	-
Stone, clay, and glass products	32	595.2	598.4	595.5	592.6	598.6	459.5	462.4	462.9	458.9	465.5
Flat glass	321	15.4	15.4	15.3	15.3	-	12.1	12.0	12.0	12.0	-
Glass and glassware, pressed or blown	322	88.4	90.4	89.0	87.1	-	75.2	77.1	76.5	74.5	-
Glass containers	3221	45.8	46.7	45.3	45.1	-	41.2	42.1	40.7	40.5	-
Pressed and blown glass, nec	3229	42.6	43.7	43.7	42.0	-	34.0	35.0	35.8	34.0	-
Products of purchased glass	323	50.6	50.6	51.2	51.4	-	35.5	35.5	36.2	36.2	-
Cement, hydraulic	324	23.2	23.0	22.3	22.3	-	18.2	18.0	17.3	17.4	-
Structural clay products	325	37.2	37.7	38.9	38.5	-	28.9	29.3	30.6	30.1	-
Pottery and related products	326	36.7	35.7	36.1	35.1	-	28.8	28.3	28.8	27.5	-
Concrete, gypsum, and plaster products	327	218.3	219.4	219.0	220.1	-	171.1	172.0	171.1	171.7	-
Concrete block and brick	3271	19.9	20.1	20.8	20.9	-	13.4	13.5	14.0	14.1	-
Concrete products, nec	3272	71.4	72.0	70.9	70.9	-	54.9	55.4	54.3	54.3	-
Ready-mixed concrete	3273	106.9	107.4	107.7	108.6	-	87.1	87.7	87.7	88.2	-
Misc. nonmetallic mineral products	329	113.2	113.5	110.4	110.1	-	80.2	80.3	80.0	79.7	-
Abrasive products	3291	20.6	20.6	20.5	20.3	-	13.8	13.6	13.9	13.7	-
Asbestos products	3292	8.8	9.2	9.5	9.3	-	6.6	7.0	7.4	7.2	-
Mineral wool	3296	27.9	27.7	24.5	24.5	-	-	-	-	-	-
Primary metal industries	33	738.6	734.6	753.4	741.1	750.3	552.0	548.5	566.2	555.3	565.0
Blast furnaces and basic steel products	331	279.4	265.4	278.0	277.3	278.9	214.7	201.9	209.8	209.5	211.1
Blast furnaces and steel mills	3312	213.3	199.0	211.1	211.2	-	166.2	153.0	160.6	161.1	-
Steel pipe and tubes	3317	23.1	23.3	23.3	23.3	-	16.5	16.8	16.8	16.9	-
Iron and steel foundries	332	126.5	128.4	131.1	128.4	-	98.5	100.5	103.1	100.2	-
Gray iron foundries	3321	78.7	81.0	81.6	78.7	-	63.5	65.6	66.3	63.2	-
Malleable iron foundries	3322	8.1	8.9	8.6	8.5	-	5.9	6.5	6.1	6.0	-
Steel foundries, nec	3325	26.7	25.5	26.8	27.2	-	19.3	18.5	20.0	20.3	-
Primary nonferrous metals	333	35.9	36.0	40.4	40.9	-	23.5	23.6	28.5	29.0	-
Primary aluminum	3334	17.9	18.1	22.4	22.7	-	11.1	11.4	15.9	16.1	-
Nonferrous rolling and drawing	335	173.5	179.3	176.3	172.2	-	119.9	124.7	125.6	122.1	-
Copper rolling and drawing	3351	22.6	23.0	22.8	22.1	-	17.5	17.9	17.7	17.1	-
Aluminum sheet, plate, and foil	3353	26.2	27.5	27.8	27.5	-	18.0	19.1	20.6	20.3	-
Nonferrous wire drawing and insulating	3357	73.6	76.2	74.3	71.9	-	50.0	52.4	51.9	49.8	-
Nonferrous foundries	336	82.3	85.0	85.9	81.3	-	65.3	67.9	68.7	64.4	-
Aluminum foundries	3361	51.2	52.2	52.6	49.5	-	41.4	42.4	42.8	39.7	-
Fabricated metal products	34	1,407.4	1,422.0	1,430.8	1,408.9	1,421.4	1,034.1	1,048.5	1,061.8	1,040.7	1,053.9
Metal cans and shipping containers	341	58.4	58.6	57.3	56.9	-	49.8	50.4	49.0	48.6	-
Metal cans	3411	47.2	47.5	46.1	45.8	-	41.2	41.7	40.1	39.8	-
Cutlery, hand tools, and hardware	342	132.6	134.0	133.2	130.7	-	96.8	97.9	98.1	95.6	-
Hand and edge tools, and hand saws and blades	3423,5	44.1	45.1	47.8	47.7	-	32.1	32.9	35.1	34.8	-
Hardware, nec	3429	76.5	76.6	74.5	72.6	-	56.7	56.8	55.7	54.0	-
Plumbing and heating, except electric	343	58.4	60.2	61.5	60.4	-	41.0	43.2	44.0	42.9	-
Plumbing fittings and brass goods	3432	23.8	23.7	24.6	24.6	-	17.2	17.2	17.9	17.8	-
Heating equipment, except electric	3433	25.0	26.5	26.3	26.0	-	16.8	18.4	17.9	17.6	-
Fabricated structural metal products	344	439.9	442.9	438.9	438.6	-	309.6	312.9	311.5	311.9	-
Fabricated structural metal	3441	79.1	79.2	77.5	77.3	-	56.2	56.2	55.2	55.2	-
Metal doors, sash, and trim	3442	95.3	95.2	97.5	98.2	-	71.7	71.4	72.9	73.6	-
Fabricated plate work (boiler shops)	3443	93.5	93.4	90.2	88.9	-	57.1	57.7	56.8	55.5	-
Sheet metal work	3444	108.8	111.1	111.0	110.9	-	81.0	83.0	83.0	83.5	-
Architectural metal work	3446	29.1	29.5	29.4	29.5	-	21.1	21.4	21.5	21.7	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Durable goods—Continued											
Fabricated metal products—Continued											
Screw machine products, bolts, etc	345	90.5	92.1	94.8	92.9		68.5	70.0	72.5	70.4	
Screw machine products	3451	42.7	43.5	45.2	44.6		34.5	35.3	36.9	36.3	
Bolts, nuts, rivets, and washers	3452	47.8	48.6	49.6	48.3		34.0	34.7	35.6	34.1	
Metal forgings and stampings	346	235.3	236.7	236.7	227.1		187.0	188.2	188.9	179.5	
Iron and steel forgings	3462	31.3	31.0	30.5	29.7		23.7	23.6	23.5	22.6	
Automotive stampings	3465	100.8	99.4	99.7	92.7		85.3	84.0	84.9	78.6	
Metal stampings, nec	3469	92.2	95.2	95.9	94.2		70.0	72.5	72.8	70.8	
Metal services, nec	347	104.7	109.5	115.2	113.3		83.1	87.6	91.9	90.1	
Plating and polishing	3471	68.2	71.7	74.4	72.8		54.4	57.8	59.8	58.2	
Metal coating and allied services	3479	36.5	37.8	40.8	40.5		28.7	29.8	32.1	31.9	
Ordnance and accessories, nec	348	76.5	75.4	81.3	79.3		47.7	46.1	51.7	49.7	
Ammunition, except for small arms, nec	3483	43.9	44.7	47.2	44.9		26.9	27.6	28.6	26.2	
Misc. fabricated metal products	349	211.1	212.6	211.9	209.7		150.6	152.2	154.2	152.0	
Valves and pipe fittings	3494	78.4	78.1	76.3	75.9		51.3	51.1	51.4	51.0	
Misc. fabricated wire products	3496	50.8	51.4	51.5	50.8		38.3	38.8	39.1	38.2	
Machinery, except electrical	35	2,047.7	2,038.3	2,036.5	2,023.7	2,028.6	1,211.5	1,206.0	1,214.9	1,199.5	1,207.9
Engines and turbines	351	100.5	100.0	97.4	97.1	-	62.1	61.2	61.8	61.5	-
Turbines and turbine generator sets	3511	33.2	32.8	29.6	28.5		17.7	17.5	16.0	15.1	
Internal combustion engines, nec	3519	67.3	67.2	67.8	68.6		44.4	43.7	45.8	46.4	
Farm and garden machinery	352	89.7	85.9	101.2	99.0		59.9	55.9	67.8	65.2	
Farm machinery and equipment	3523	68.0	64.7	74.8	75.6		43.8	40.6	47.7	48.4	
Construction and related machinery	353	224.2	222.9	218.0	218.2		135.6	135.4	129.6	129.7	
Construction machinery	3531	81.5	81.0	78.9	79.4		49.8	49.9	46.7	47.4	
Mining machinery	3532	19.4	19.5	19.7	19.5		12.1	12.2	11.9	11.8	
Oil field machinery	3533	44.8	43.8	41.6	41.1		26.1	25.5	24.5	24.2	
Conveyors and conveying equipment	3535	30.1	29.9	29.8	29.7		15.9	15.7	15.5	15.4	
Industrial trucks and tractors	3537	25.5	25.8	25.5	25.9		18.0	18.4	17.8	17.7	
Metalworking machinery	354	300.4	301.6	298.2	294.4		213.3	214.0	213.6	210.1	
Machine tools, metal cutting types	3541	49.6	49.3	45.2	44.9		31.1	30.9	28.4	28.1	
Machine tools, metal forming types	3542	19.2	19.3	19.1	18.8		11.7	11.7	11.9	11.7	
Special dies, tools, jigs, and fixtures	3544	140.0	141.0	142.5	140.5		108.1	108.6	109.2	107.1	
Machine tool accessories	3545	53.3	53.5	53.5	53.0		36.9	37.0	37.9	37.4	
Power driven hand tools	3546	20.8	21.1	21.4	21.0		14.9	15.2	15.9	15.6	
Special industry machinery	355	157.5	156.4	158.9	157.7		92.4	91.9	94.5	93.2	
Food products machinery	3551	37.0	36.7	37.6	37.7		22.2	22.0	22.8	22.8	
Textile machinery	3552	17.9	18.4	20.4	19.5		11.8	12.2	13.7	12.8	
Printing trades machinery	3555	27.4	27.1	26.4	26.7		15.9	15.7	15.4	15.6	
General industrial machinery	356	252.8	251.9	253.8	252.4		159.9	159.8	162.7	161.2	
Pumps and pumping equipment	3561	43.7	43.2	44.4	44.1		25.2	25.0	25.5	25.5	
Ball and roller bearings	3562	43.0	42.8	43.5	43.3		32.0	32.0	33.4	33.3	
Air and gas compressors	3563	22.4	22.4	21.7	21.3		12.6	12.8	12.4	11.9	
Blowers and fans	3564	30.3	30.4	30.7	30.8		19.2	19.3	19.9	19.9	
Speed changers, drives, and gears	3566	19.5	19.8	20.2	20.1		13.3	13.5	13.8	13.6	
Power transmission equipment, nec	3568	16.4	16.2	15.9	16.3		10.9	10.7	10.4	10.6	
Office and computing machines	357	477.3	475.3	456.9	456.9		161.5	161.8	150.0	148.0	
Electronic computing equipment	3573	420.5	419.1	401.2	401.1		137.9	138.3	126.3	124.2	
Refrigeration and service machinery	358	171.7	169.9	176.7	174.9		120.0	118.7	126.6	124.4	
Refrigeration and heating equipment	3585	122.9	121.5	127.2	125.9		88.1	86.8	93.3	91.8	
Misc. machinery, except electrical	359	273.6	274.4	275.4	273.1		206.8	207.3	208.3	206.2	
Carburetors, pistons, rings, and valves	3592	34.6	35.9	35.3	34.8		27.8	29.3	28.8	28.3	
Machinery, except electrical, nec	3599	239.0	238.5	240.1	238.3		179.0	178.0	179.5	177.9	
Electrical and electronic equipment	36	2,117.8	2,123.4	2,088.3	2,078.3	2,089.1	1,213.0	1,224.5	1,214.7	1,203.3	1,215.3
Electric distributing equipment	361	107.1	106.9	105.3	105.0	-	77.8	77.6	76.3	75.9	-
Transformers	3612	50.6	51.0	49.8	49.9		37.6	37.9	36.5	36.5	
Switchgear and switchboard apparatus	3613	56.5	55.9	55.5	55.1		40.2	39.7	39.8	39.4	
Electrical industrial apparatus	362	187.5	186.1	184.5	183.2		129.8	128.7	126.4	125.4	
Motors and generators	3621	90.7	89.7	90.1	89.3		69.9	69.0	68.5	68.0	
Industrial controls	3622	61.2	61.0	58.3	57.8		35.9	35.8	33.4	32.9	
Household appliances	363	133.2	136.2	136.9	134.6		102.7	106.0	108.3	106.8	
Household refrigerators and freezers	3632	29.1	26.4	28.7	28.5		23.1	20.7	23.5	23.4	
Household laundry equipment	3633	22.7	23.4	23.1	22.9		17.4	18.2	18.2	18.1	
Electric housewares and fans	3634	34.2	37.7	35.6	34.2		25.0	28.3	27.2	25.8	

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				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Durable goods—Continued											
Electrical and electronic equipment—Continued											
Electric lighting and wiring equipment	364	193.6	193.8	190.1	187.3		138.8	139.1	138.3	135.3	
Electric lamps	3641	27.3	27.3	27.0	27.2		23.3	23.3	23.1	23.2	
Current-carrying wiring devices	3643	76.8	75.8	74.0	72.4		49.5	48.5	49.2	47.7	
Noncurrent-carrying wiring devices	3644	17.1	16.9	16.4	15.9		12.0	11.9	11.9	11.2	
Residential lighting fixtures	3645	26.8	27.7	26.0	25.6		20.2	21.1	19.5	19.1	
Radio and TV receiving equipment	365	80.8	81.9	78.2	75.9		54.0	55.6	52.6	50.3	
Radio and TV receiving sets	3651	64.1	64.7	60.2	57.9		42.7	43.5	39.6	37.3	
Communication equipment	366	638.1	635.4	613.4	612.0		264.7	265.1	255.2	253.8	
Telephone and telegraph apparatus	3661	129.3	127.8	114.9	114.5		74.8	74.2	66.7	65.9	
Radio and TV communication equipment	3662	508.8	507.6	498.5	497.5		189.9	190.9	188.5	187.9	
Electronic components and accessories	367	627.7	631.5	630.9	632.2		342.8	348.5	353.7	352.9	
Electronic tubes	3671-3	39.2	39.9	37.7	37.4		23.5	24.1	23.9	23.5	
Semiconductors and related devices	3674	270.5	270.3	265.7	267.1		101.5	102.5	102.2	102.5	
Electronic components, nec	3679	248.8	250.3	256.2	256.3		166.8	168.9	173.9	173.1	
Misc. electrical equipment and supplies	369	149.8	151.6	149.0	148.1		102.4	103.9	103.9	102.9	
Storage batteries	3691	26.5	26.6	29.9	29.5		20.3	22.2	23.4	22.8	
Engine electrical equipment	3694	65.0	64.4	63.2	63.1		48.4	48.2	47.9	47.8	
Transportation equipment	37	1,985.7	1,979.3	2,018.0	1,973.6	1,975.6	1,224.0	1,216.7	1,270.9	1,215.0	1,219.8
Motor vehicles and equipment	371	838.0	831.5	850.2	802.8	804.8	635.8	626.8	663.9	615.0	617.2
Motor vehicles and car bodies	3711	376.9	370.9	374.3	336.2	-	273.4	265.4	283.9	244.7	-
Truck and bus bodies	3713	39.3	39.5	45.1	45.4		30.8	30.6	35.8	35.9	
Motor vehicle parts and accessories	3714	378.0	376.3	383.2	373.6		297.9	296.1	307.3	297.2	
Truck trailers	3715	29.2	29.9	30.9	31.2		22.5	23.3	23.9	24.3	
Aircraft and parts	372	675.7	675.4	688.0	692.6		326.6	326.9	342.3	340.4	
Aircraft	3721	340.5	340.9	351.9	359.4		146.2	147.0	156.4	158.1	
Aircraft engines and engine parts	3724	152.1	151.2	156.2	154.9		76.6	75.4	79.7	77.7	
Aircraft equipment, nec	3728	183.1	183.3	179.9	178.3		103.8	104.5	106.2	104.6	
Ship and boat building and repairing	373	181.9	182.6	184.5	182.9		135.4	136.9	136.8	135.0	
Ship building and repairing	3731	128.9	129.8	124.0	123.3		93.1	94.4	87.7	87.0	
Boat building and repairing	3732	53.0	52.8	60.5	59.6		42.3	42.5	49.1	48.0	
Railroad equipment	374	26.9	27.0	22.4	22.7		19.1	18.8	15.0	15.2	
Guided missiles, space vehicles, and parts	376	204.0	204.5	209.7	211.0		68.1	68.5	69.6	67.8	
Guided missiles and space vehicles	3761	154.5	154.8	158.3	160.3		49.8	49.6	50.4	50.0	
Miscellaneous transportation equipment	379	48.6	47.4	51.0	49.9		31.8	31.3	34.6	33.4	
Travel trailers and campers	3792	18.3	18.7	20.9	20.3		14.0	14.3	16.3	15.6	
Instruments and related products	38	703.1	704.5	696.4	695.5	695.6	378.5	381.4	378.7	376.0	375.7
Engineering and scientific instruments	381	83.7	83.7	83.0	82.7	-	36.3	36.5	37.4	37.0	-
Measuring and controlling devices	382	245.5	245.2	238.8	237.9		134.4	135.4	133.4	132.3	
Environmental controls	3822	40.6	41.7	41.0	40.4		25.0	26.3	26.2	25.4	
Process control instruments	3823	55.1	54.9	51.6	51.5		27.9	27.8	26.9	26.9	
Instruments to measure electricity	3825	105.7	104.8	101.2	101.0		52.7	52.7	50.2	49.6	
Optical instruments and lenses	383	32.8	32.6	32.4	32.4		16.2	16.0	15.9	15.9	
Medical instruments and supplies	384	179.1	180.9	179.8	180.1		107.3	108.9	107.7	107.2	
Surgical and medical instruments	3841	87.1	87.7	86.6	86.6		49.5	50.2	49.7	49.3	
Surgical appliances and supplies	3842	77.6	78.8	78.9	79.1		49.7	50.6	49.9	49.8	
Ophthalmic goods	385	37.8	37.9	42.1	42.2		25.4	25.4	28.7	28.9	
Photographic equipment and supplies	386	114.1	113.4	109.1	109.2		52.0	51.5	47.4	46.9	
Watches, clocks, and watchcases	387	10.1	10.8	11.2	11.0		6.9	7.7	8.2	7.8	
Miscellaneous manufacturing	39	350.4	363.5	371.2	362.0	372.4	254.0	265.8	271.1	262.5	272.1
Jewelry, silverware, and plated ware	391	49.5	53.9	53.7	50.6	-	33.8	37.8	37.1	34.6	-
Jewelry, precious metal	3911	34.7	37.9	37.1	34.4		23.5	26.3	25.4	23.3	
Musical instruments	393	11.8	12.3	12.5	12.1		9.4	10.1	10.3	9.9	
Toys and sporting goods	394	92.9	95.1	100.0	98.6		69.9	71.7	75.2	73.5	
Dolls, games, toys, and children's vehicles	3942,4	43.0	45.7	46.8	46.0		31.5	34.1	34.5	33.8	
Sporting and athletic goods, nec	3949	49.9	49.4	53.2	52.6		38.4	37.6	40.7	39.7	
Pens, pencils, office, and art supplies	395	32.8	32.6	33.5	32.9		22.3	22.1	23.2	23.0	
Costume jewelry and notions	396	36.9	41.8	43.4	41.1		28.4	32.6	34.1	31.4	
Costume jewelry	3961	20.0	23.1	25.3	23.2		15.4	17.8	19.9	17.9	
Miscellaneous manufactures	399	126.5	127.8	128.1	126.7		90.2	91.5	91.2	90.1	
Signs and advertising displays	3993	55.3	55.3	55.0	54.8		38.6	38.8	37.9	38.0	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Nondurable goods		7,714	7,844	7,886	7,882	7,987	5,423	5,552	5,574	5,563	5,660
Food and kindred products	20	1,655.4	1,705.6	1,638.5	1,683.9	1,727.2	1,169.7	1,220.1	1,152.7	1,194.3	1,235.7
Meat products	201	376.1	376.8	382.7	387.2	-	320.0	320.7	325.0	328.7	-
Meat packing plants	2011	138.8	138.8	136.3	137.3	-	116.4	116.6	114.2	115.0	-
Sausages and other prepared meats	2013	77.3	77.8	76.4	76.8	-	57.2	57.7	56.4	56.4	-
Poultry dressing plants	2016	141.9	142.3	150.7	153.8	-	129.7	130.1	136.6	139.6	-
Dairy products	202	167.6	166.9	169.4	170.8	-	101.6	100.8	103.9	104.4	-
Cheese, natural and processed	2022	40.5	40.3	40.4	40.8	-	30.9	30.8	31.1	31.4	-
Fluid milk	2026	85.3	85.2	86.7	87.3	-	42.3	42.1	44.2	44.3	-
Preserved fruits and vegetables	203	259.4	301.6	241.0	274.2	-	215.9	258.2	196.3	228.3	-
Canned specialties	2032	24.6	27.3	23.8	25.3	-	17.8	20.5	16.1	17.6	-
Canned fruits and vegetables	2033	100.7	136.1	79.4	106.2	-	85.2	120.2	64.8	89.8	-
Frozen fruits and vegetables	2037	52.1	51.4	50.0	51.4	-	45.9	45.8	44.1	45.9	-
Grain mill products	204	121.2	122.5	120.8	121.3	-	83.0	84.1	82.8	83.2	-
Flour and other grain mill products	2041	21.8	22.2	22.5	22.8	-	15.1	15.1	15.0	15.3	-
Prepared feeds, nec	2048	43.0	42.9	42.4	42.2	-	26.9	26.8	26.9	26.8	-
Bakery-products	205	212.2	211.8	211.7	213.0	-	128.6	129.0	127.9	129.4	-
Bread, cake, and related products	2051	167.8	167.3	167.4	167.8	-	92.6	93.0	92.3	92.9	-
Cookies and crackers	2052	44.4	44.5	44.3	45.2	-	36.0	36.0	35.6	36.5	-
Sugar and confectionery products	206	88.5	95.1	89.5	87.7	-	68.2	74.2	69.2	67.4	-
Cane and beet sugar	2061-3	18.5	20.5	20.7	19.3	-	14.3	15.8	15.7	14.5	-
Confectionery products	2065	50.4	54.6	49.0	48.3	-	40.7	44.9	40.0	39.4	-
Fats and oils	207	33.5	33.6	32.1	31.9	-	24.2	24.0	22.6	22.8	-
Beverages	208	218.3	217.8	216.0	216.7	-	94.1	93.9	93.4	93.3	-
Malt beverages	2082	42.6	42.3	40.7	40.8	-	27.6	27.2	25.8	25.7	-
Bottled and canned soft drinks	2086	130.7	130.2	129.1	129.6	-	43.2	42.7	43.1	43.4	-
Misc. food and kindred products	209	178.6	179.5	175.3	181.1	-	134.1	135.2	131.6	136.8	-
Tobacco manufactures	21	55.4	58.1	53.4	53.6	56.2	40.8	43.5	39.0	39.0	41.3
Cigarettes	211	42.7	42.5	41.0	41.5	-	31.9	32.1	30.2	30.6	-
Textile mill products	22	693.0	710.7	732.5	723.4	736.8	597.5	615.5	636.9	628.4	640.2
Weaving mills, cotton	221	98.7	101.1	107.3	107.4	-	88.3	90.9	96.9	97.1	-
Weaving mills, synthetics	222	82.3	83.7	87.4	86.9	-	73.4	74.6	77.9	77.5	-
Weaving and finishing mills, wool	223	17.3	17.5	18.4	17.0	-	14.4	14.6	15.2	13.8	-
Narrow fabric mills	224	19.7	22.3	23.0	22.0	-	16.8	19.3	20.0	19.0	-
Knitting mills	225	207.6	211.2	212.5	209.2	-	180.3	184.5	186.9	183.8	-
Women's hosiery, except socks	2251	34.9	35.4	34.9	34.5	-	30.9	31.5	31.2	30.9	-
Hosiery, nec	2252	36.6	36.8	36.8	36.7	-	32.8	33.0	33.1	33.0	-
Knit outerwear mills	2253	70.7	72.0	73.7	72.1	-	62.0	63.4	65.6	64.2	-
Knit underwear mills	2254	24.1	24.7	23.5	22.8	-	19.8	20.6	19.9	19.2	-
Circular knit fabric mills	2257	23.7	24.1	25.6	25.4	-	20.4	20.9	22.5	22.2	-
Textile finishing, except wool	226	56.9	58.8	60.9	59.2	-	47.4	49.1	51.0	49.6	-
Finishing plants, cotton	2261	21.7	22.9	23.8	22.8	-	18.2	19.4	20.2	19.3	-
Finishing plants, synthetics	2262	21.3	21.8	22.7	22.0	-	17.3	17.6	18.4	17.9	-
Floor covering mills	227	54.8	56.0	58.9	58.8	-	45.0	46.1	47.8	48.0	-
Yarn and thread mills	228	102.7	105.5	108.8	107.9	-	91.0	94.1	97.6	96.6	-
Yarn mills, except wool	2281	74.8	76.4	79.8	79.6	-	67.5	69.0	72.4	72.1	-
Throwing and winding mills	2282	16.0	16.1	15.9	15.7	-	13.9	14.1	14.2	14.0	-
Miscellaneous textile goods	229	53.0	54.6	55.3	55.0	-	40.9	42.3	43.6	43.0	-
Apparel and other textile products	23	1,065.9	1,103.1	1,120.5	1,092.1	1,111.5	893.5	928.9	941.4	914.2	933.0
Men's and boys' suits and coats	231	58.1	59.3	57.9	57.2	-	50.1	51.0	49.5	49.1	-
Men's and boys' furnishings	232	301.1	307.1	316.4	312.8	-	260.5	265.8	273.4	270.0	-
Men's and boys' shirts and nightwear	2321	85.1	87.6	87.4	85.7	-	73.7	75.7	74.8	73.3	-
Men's and boys' separate trousers	2327	54.2	55.6	54.2	53.1	-	47.6	48.9	47.3	46.4	-
Men's and boys' work clothing	2328	90.1	90.3	97.0	96.7	-	78.5	78.8	84.9	84.5	-
Women's and misses' outerwear	233	335.3	353.7	362.2	344.7	-	276.8	294.9	301.8	284.9	-
Women's and misses' blouses and waists	2331	48.6	50.4	49.9	49.4	-	40.3	41.9	41.4	40.9	-
Women's and misses' dresses	2335	78.1	84.3	86.4	78.6	-	65.3	71.0	72.4	64.7	-
Women's and misses' suits and coats	2337	43.2	45.4	47.6	46.4	-	35.1	37.2	38.4	37.6	-
Women's and misses' outerwear, nec	2339	165.4	173.6	178.3	170.3	-	136.1	144.8	149.6	141.7	-

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Nondurable goods—Continued											
Apparel and other textile products—Continued											
Women's and children's undergarments	234	74.9	77.1	73.8	72.7		62.0	64.1	60.7	59.4	
Women's and children's underwear	2341	60.8	63.0	60.0	59.4		51.4	53.7	51.0	50.3	
Brassieres and allied garments	2342	14.1	14.1	13.8	13.3		10.6	10.4	9.7	9.1	
Children's outerwear	236	60.1	59.5	58.3	57.6		50.7	50.3	48.5	47.9	
Children's dresses and blouses	2361	24.4	24.5	24.0	23.9		21.5	21.6	20.8	20.9	
Misc. apparel and accessories	238	40.8	42.2	41.9	40.5		34.0	35.2	35.2	34.0	
Misc. fabricated textile products	239	176.4	185.2	190.6	187.5		144.3	152.6	157.0	153.8	
Curtains and draperies	2391	24.8	25.7	26.8	26.6		20.0	20.9	21.8	21.6	
House furnishings, nec	2392	48.3	51.0	51.8	51.5		41.1	43.5	43.9	43.5	
Automotive and apparel trimmings	2396	36.5	38.6	39.6	37.7		30.3	32.3	33.4	31.4	
Paper and allied products	26	674.3	674.8	683.2	677.8	678.8	510.6	511.4	519.5	515.0	516.9
Paper and pulp mills	261,2,6	195.1	194.8	195.2	193.1	-	149.1	148.7	148.7	146.8	-
Paper mills, except building paper	262	170.5	170.2	171.1	169.4		129.6	129.1	129.7	128.1	
Paperboard mills	263	53.8	52.5	53.6	53.4		40.9	39.7	40.3	40.1	
Misc. converted paper products	264	230.7	231.2	234.8	233.6		169.9	170.6	175.1	174.1	
Paper coating and glazing	2641	58.1	57.6	59.3	59.3		36.3	35.9	38.4	38.6	
Envelopes	2642	26.0	26.3	26.8	26.4		20.1	20.4	20.8	20.3	
Bags, except textile bags	2643	50.5	51.1	52.4	52.2		39.5	40.3	41.4	41.3	
Paperboard containers and boxes	265	194.7	196.3	199.6	197.7		150.7	152.4	155.4	154.0	
Folding paperboard boxes	2651	41.7	41.9	43.1	42.1		33.0	33.2	34.1	33.3	
Corrugated and solid fiber boxes	2653	103.3	104.6	104.6	104.1		77.8	79.1	79.4	79.0	
Sanitary food containers	2654	23.0	22.6	24.2	24.3		19.5	19.2	20.9	20.9	
Printing and publishing	27	1,454.2	1,457.4	1,499.7	1,498.7	1,502.6	815.7	818.3	839.7	836.8	839.1
Newspapers	271	457.6	457.0	461.2	461.7	-	169.7	169.5	170.0	169.5	-
Periodicals	272	115.2	116.0	121.3	122.9		42.1	42.5	44.9	44.9	
Books	273	109.6	108.8	114.6	113.1		60.5	59.4	61.5	59.9	
Book publishing	2731	81.5	81.0	85.0	83.9		38.1	37.5	38.4	37.2	
Book printing	2732	28.1	27.8	29.6	29.2		22.4	21.9	23.1	22.7	
Miscellaneous publishing	274	71.9	71.4	78.0	78.0		38.2	38.0	41.8	41.4	
Commercial printing	275	504.4	507.3	527.3	526.1		366.2	368.3	380.4	380.0	
Commercial printing, letterpress	2751	160.5	161.6	168.5	168.2		117.3	118.3	121.1	120.7	
Commercial printing, lithographic	2752	318.9	319.9	331.1	330.4		229.1	229.5	237.3	237.4	
Manifold business forms	276	49.3	49.3	48.3	47.9		34.4	34.5	33.7	33.3	
Blankbooks and bookbinding	278	72.6	73.7	74.5	74.3		58.3	59.6	59.7	59.5	
Printing trade services	279	51.2	51.3	53.3	53.3		38.3	38.3	39.7	39.5	
Chemicals and allied products	28	1,027.9	1,026.7	1,022.6	1,032.0	1,034.5	571.3	572.1	573.2	578.4	579.0
Industrial inorganic chemicals	281	136.2	135.6	133.9	132.8	-	69.3	69.6	68.6	67.4	-
Industrial inorganic chemicals, nec	2819	90.3	89.8	88.6	87.2		49.2	49.5	49.3	47.9	
Plastics materials and synthetics	282	167.8	168.1	157.4	167.8		113.0	113.1	103.5	110.1	
Plastics materials and resins	2821	75.7	76.0	77.0	77.6		45.7	45.9	45.5	45.9	
Organic fibers, noncellulosic	2824	62.6	62.9	51.1	60.9		45.3	45.6	36.2	42.5	
Drugs	283	208.3	208.3	212.8	213.4		96.0	95.9	97.9	98.2	
Pharmaceutical preparations	2834	165.7	166.2	169.6	169.6		75.1	75.3	76.7	76.6	
Soap, cleaners, and toilet goods	284	147.9	148.8	153.3	153.0		94.1	94.7	97.9	97.4	
Soap and other detergents	2841	42.9	41.3	41.8	42.1		27.5	26.0	26.4	26.7	
Polishing, sanitation, and finishing preparations	2842,3	39.7	40.1	40.5	40.7		21.2	21.4	22.2	22.4	
Toilet preparations	2844	65.3	67.4	71.0	70.2		45.4	47.3	49.3	48.3	
Paints and allied products	285	64.3	64.5	64.1	64.3		31.3	31.5	31.8	31.9	
Industrial organic chemicals	286	155.4	154.5	152.4	153.1		82.0	82.0	85.5	86.7	
Cyclic crudes and intermediates	2865	30.4	30.4	29.5	29.7		20.0	20.0	19.4	19.5	
Gum, wood, and industrial organic chemicals, nec	2861,9	125.0	124.1	122.9	123.4		62.0	62.0	66.1	67.2	
Agricultural chemicals	287	54.3	53.8	54.3	53.4		33.0	32.7	34.3	33.5	
Miscellaneous chemical products	289	93.7	93.1	94.4	94.2		52.6	52.6	53.7	53.2	
Petroleum and coal products	29	172.1	171.0	167.2	167.0	168.1	108.6	108.5	110.2	110.2	111.6
Petroleum refining	291	132.1	130.7	126.0	126.3	-	79.8	79.5	80.6	81.2	-
Paving and roofing materials	295	28.4	28.7	29.6	29.1		22.0	22.2	22.9	22.3	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Nondurable goods—Continued											
Rubber and misc. plastics products	30	774.7	786.0	816.6	806.6	816.5	599.4	610.2	634.0	623.6	632.8
Tires and inner tubes	301	87.0	86.0	85.7	85.8	-	63.2	62.9	61.6	61.2	-
Rubber and plastics footwear	302	9.8	10.4	10.0	9.6	-	8.2	8.7	8.1	7.8	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	21.6	21.4	21.5	21.6	-	14.7	14.7	15.4	15.4	-
Fabricated rubber products, nec	306	99.0	101.7	103.9	102.1	-	75.1	77.9	79.6	78.2	-
Miscellaneous plastics products	307	557.3	566.5	595.5	587.5	-	438.2	446.0	469.3	461.0	-
Leather and leather products	31	141.4	150.4	151.5	147.1	155.2	115.4	123.9	127.1	123.0	130.2
Leather tanning and finishing	311	13.5	13.8	13.9	13.1	-	11.2	11.6	11.4	10.7	-
Footwear, except rubber	314	83.9	89.6	89.7	87.0	-	70.2	75.4	77.4	75.0	-
Men's footwear, except athletic	3143	37.2	40.4	39.3	39.0	-	29.4	32.3	31.9	32.0	-
Women's footwear, except athletic	3144	28.9	31.6	32.8	31.1	-	25.3	27.8	29.0	27.4	-
Luggage	316	10.3	10.7	11.1	10.9	-	7.2	7.6	8.0	7.7	-
Handbags and personal leather goods	317	17.6	18.9	17.9	17.7	-	14.0	15.3	15.0	14.6	-
Transportation and public utilities		5,243	5,211	5,391	5,367	5,385	4,320	4,291	4,475	4,447	4,458
Transportation		3,016	3,027	3,156	3,118	3,135	-	-	-	-	-
Railroad transportation	40	337.0	335.7	311.5	311.9	-	-	-	-	-	-
Class I railroads ²	4011	300.2	299.0	275.9	275.9	-	-	-	-	-	-
Local and interurban passenger transit	41	233.3	229.6	281.4	233.2	-	213.4	209.6	260.4	212.2	-
Local and suburban transportation	411	98.1	97.9	101.3	100.4	-	90.6	90.1	92.3	91.7	-
Taxicabs	412	35.2	35.2	34.1	33.4	-	-	-	-	-	-
Intercity highway transportation	413	34.9	34.7	32.2	32.1	-	31.7	31.5	29.4	29.3	-
School buses	415	43.0	39.6	88.5	43.2	-	-	-	-	-	-
Trucking and warehousing	42	1,386.9	1,398.2	1,459.2	1,468.7	-	1,206.3	1,213.6	1,270.6	1,278.9	-
Trucking and trucking terminals	421,3	1,289.8	1,298.2	1,357.5	1,366.4	-	1,124.7	1,129.0	1,185.6	1,193.5	-
Public warehousing	422	97.1	100.0	101.7	102.3	-	81.6	84.6	85.0	85.4	-
Water transportation	44	178.2	175.5	180.2	179.8	-	-	-	-	-	-
Local water transportation	445	28.5	28.6	28.3	28.8	-	-	-	-	-	-
Water transportation services	446	95.7	92.7	99.4	96.2	-	-	-	-	-	-
Transportation by air	45	578.1	583.1	603.3	604.4	-	-	-	-	-	-
Air transportation	451,2	510.9	515.7	534.1	534.2	-	-	-	-	-	-
Air transportation services	458	67.2	67.4	69.2	70.2	-	-	-	-	-	-
Pipe lines, except natural gas	46	18.7	18.4	18.2	18.5	-	13.8	13.6	13.2	13.5	-
Transportation services	47	284.1	286.0	302.2	301.0	-	-	-	-	-	-
Freight forwarding	471	63.9	64.7	71.2	71.7	-	-	-	-	-	-
Communication and public utilities		2,227	2,184	2,235	2,249	2,250	-	-	-	-	-
Communication	48	1,289.5	1,249.4	1,296.0	1,305.1	-	980.5	946.2	986.6	994.9	-
Telephone communication	481	891.8	851.7	892.2	902.5	-	660.5	626.8	661.0	671.2	-
Radio and television broadcasting	483	237.8	237.8	236.9	233.5	-	195.1	194.7	195.0	192.0	-
Radio broadcasting	4832	113.2	112.5	113.9	113.2	-	-	-	-	-	-
Television broadcasting	4833	124.6	125.3	123.0	120.3	-	-	-	-	-	-
Electric, gas, and sanitary services	49	937.1	934.9	938.9	943.9	-	746.4	744.9	746.0	748.2	-
Electric services	491	456.2	455.5	457.5	458.8	-	352.1	351.2	350.2	350.3	-
Gas production and distribution	492	170.3	169.7	169.0	170.0	-	133.7	134.3	134.6	135.3	-
Combination utility services	493	209.4	208.8	204.9	205.6	-	173.7	173.0	169.3	169.4	-
Sanitary services	495	73.6	73.6	78.7	80.3	-	64.3	64.1	68.6	69.7	-
Wholesale trade		5,764	5,766	5,810	5,825	5,829	4,629	4,632	4,655	4,667	4,668
Durable goods	50	3,400	3,398	3,422	3,434	3,437	2,706	2,704	2,713	2,721	-
Motor vehicles and automotive equipment	501	432.9	433.5	437.0	438.6	-	347.9	348.1	350.7	351.8	-
Automobiles and other motor vehicles	5012	110.3	110.5	111.7	112.8	-	-	-	-	-	-
Automotive parts and supplies	5013	291.2	291.3	293.4	293.8	-	-	-	-	-	-

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				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Wholesale trade—Continued											
Durable goods—Continued											
Furniture and home furnishings	502	131.0	132.3	137.4	138.6		105.3	105.7	110.6	111.6	
Furniture	5021	57.3	57.7	60.1	60.0		-	-	-	-	
Home furnishings	5023	73.7	74.6	77.3	78.6		-	-	-	-	
Lumber and construction materials	503	230.9	231.9	232.3	233.4		190.2	191.6	192.1	192.9	
Lumber, plywood, and millwork	5031	102.8	102.9	105.7	106.4		-	-	-	-	
Construction materials, nec	5039	128.1	129.0	126.6	127.0		-	-	-	-	
Sporting goods, toys, and hobby goods	504	80.3	80.1	81.0	80.5		65.7	65.6	67.7	66.8	
Metals and minerals, except petroleum	505	132.3	132.0	133.6	133.9		104.5	104.2	104.6	104.5	
Electrical goods	506	489.1	487.5	489.8	491.6		372.6	370.3	373.0	374.0	
Electrical apparatus and equipment	5063	270.6	268.9	270.5	271.9		-	-	-	-	
Electrical appliances, TV and radios	5064	69.8	70.5	72.3	72.4		-	-	-	-	
Electronic parts and equipment	5065	148.7	148.1	147.0	147.3		-	-	-	-	
Hardware, plumbing, and heating equipment	507	259.8	259.5	264.9	267.2		208.3	208.8	213.7	215.6	
Hardware	5072	88.6	88.4	92.2	92.8		-	-	-	-	
Plumbing and hydronic heating supplies	5074	107.7	107.5	109.0	109.9		-	-	-	-	
Machinery, equipment, and supplies	508	1,453.9	1,450.5	1,451.9	1,454.5		1,160.1	1,156.4	1,145.6	1,147.2	
Commercial machines and equipment	5081	531.7	531.8	533.4	532.9		-	-	-	-	
Construction and mining machinery	5082	81.6	81.4	81.7	83.2		-	-	-	-	
Farm machinery and equipment	5083	120.7	119.8	121.7	122.6		-	-	-	-	
Industrial machinery and equipment	5084	305.3	301.8	296.6	297.2		-	-	-	-	
Industrial supplies	5085	130.3	130.6	129.7	130.3		-	-	-	-	
Professional equipment and supplies	5086	174.7	175.0	174.9	174.0		-	-	-	-	
Miscellaneous durable goods	509	189.3	190.4	194.5	195.6		151.7	152.8	155.2	157.0	
Scrap and waste materials	5093	86.9	87.3	89.2	89.9		-	-	-	-	
Nondurable goods	51	2,364	2,368	2,388	2,391	2,392	1,923	1,928	1,942	1,946	
Paper and paper products	511	190.6	191.8	192.6	193.2	-	155.0	156.2	156.5	157.2	
Drugs, proprietaries, and sundries	512	167.3	167.2	174.1	175.7		139.2	139.2	144.8	146.0	
Apparel, piece goods, and notions	513	191.4	192.1	192.8	192.5		143.9	144.6	144.3	144.7	
Groceries and related products	514	765.4	767.6	771.4	773.1		650.5	651.7	652.8	654.4	
Groceries, general line	5141	244.2	245.6	249.9	250.3		-	-	-	-	
Meats and meat products	5147	65.0	64.3	64.1	64.1		-	-	-	-	
Fresh fruits and vegetables	5148	96.6	95.0	91.6	90.9		-	-	-	-	
Chemicals and allied products	516	130.3	129.2	133.8	134.3		94.7	94.8	98.4	99.4	
Petroleum and petroleum products	517	202.1	202.0	195.6	196.5		156.5	156.9	152.8	154.1	
Petroleum bulk stations and terminals	5171	83.9	83.6	79.3	79.9		-	-	-	-	
Petroleum products, nec	5172	118.2	118.4	116.3	116.6		-	-	-	-	
Beer, wine, and distilled beverages	518	153.8	154.2	155.7	156.3		127.6	127.5	128.7	128.8	
Beer and ale	5181	97.1	97.1	98.9	99.4		-	-	-	-	
Wines and distilled beverages	5182	56.7	57.1	56.8	56.9		-	-	-	-	
Miscellaneous nondurable goods	519	438.5	435.7	443.9	443.5		354.9	352.4	359.9	359.0	
Farm supplies	5191	150.1	144.6	150.3	149.4		-	-	-	-	
Retail trade		17,947	18,031	18,372	18,344	18,376	15,984	16,056	16,341	16,299	16,327
Building materials and garden supplies	52	721.7	717.1	749.9	746.8		607.9	603.5	625.9	622.6	
Lumber and other building materials	521	389.4	389.5	405.3	406.6		332.2	332.7	345.1	346.1	
Hardware stores	525	160.2	159.0	163.1	163.3		134.6	133.9	136.0	135.7	
General merchandise stores	53	2,313.2	2,323.0	2,334.8	2,348.7	2,357.6	2,171.3	2,181.2	2,189.3	2,196.5	
Department stores	531	1,935.1	1,942.7	1,947.0	1,962.1	-	1,834.9	1,842.4	1,842.7	1,853.2	
Variety stores	533	236.9	238.7	243.2	241.8		214.5	216.3	221.6	218.1	
Misc. general merchandise stores	539	141.2	141.6	144.6	144.8		121.9	122.5	125.0	125.2	
Food stores	54	2,887.4	2,887.7	2,963.3	2,965.2	2,958.0	2,668.1	2,666.4	2,728.3	2,729.6	
Grocery stores	541	2,544.0	2,543.9	2,603.4	2,610.2	-	2,364.2	2,361.7	2,408.6	2,414.3	
Meat markets and freezer provisioners	542	59.5	59.2	61.3	59.6		-	-	-	-	
Dairy products stores	545	32.9	32.7	35.7	36.1		-	-	-	-	
Retail bakeries	546	159.1	158.7	163.7	161.3		143.7	143.7	148.7	146.2	
Automotive dealers and service stations	55	1,966.5	1,973.2	2,004.5	2,007.5	2,010.2	1,651.1	1,657.3	1,683.3	1,686.9	
New and used car dealers	551,2	949.4	952.4	968.6	968.5	-	790.3	792.3	805.6	805.8	
Auto and home supply stores	553	313.8	315.3	317.1	319.8		253.8	255.7	256.4	259.0	
Gasoline service stations	554	604.9	608.9	615.3	616.4		526.7	530.5	536.9	538.4	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Retail trade—Continued											
Apparel and accessory stores	56	1,045.2	1,062.2	1,092.8	1,086.5		881.4	897.2	922.9	916.4	
Men's and boys' clothing and furnishings	561	105.6	104.7	105.4	104.8		87.2	86.8	86.2	85.8	
Women's ready-to-wear stores	562	380.3	383.5	391.4	386.0		324.5	327.4	331.6	325.1	
Family clothing stores	565	230.2	236.4	247.7	247.8		198.7	204.9	214.5	214.8	
Shoe stores	566	200.1	206.3	208.6	211.1		160.3	165.8	170.3	173.8	
Furniture and home furnishings stores	57	762.4	766.3	793.8	796.8		633.5	636.5	657.5	657.3	
Furniture and home furnishings stores	571	428.1	430.7	450.6	452.2		352.0	354.3	371.1	371.0	
Furniture stores	5712	267.2	268.2	281.9	282.1		-	-	-	-	
Household appliance stores	572	86.2	86.6	84.2	84.0		73.7	74.1	71.4	71.4	
Radio, television, and music stores	573	248.1	249.0	259.0	260.6		207.8	208.1	215.0	214.9	
Radio and television stores	5732	182.7	183.9	193.0	194.4		-	-	-	-	
Music stores	5733	65.4	65.1	66.0	66.2		-	-	-	-	
Eating and drinking places	58	6,051.5	6,089.2	6,179.0	6,153.1	6,179.0	5,511.9	5,544.2	5,639.6	5,610.1	
Miscellaneous retail	59	2,199.2	2,212.2	2,253.6	2,239.3		1,858.6	1,869.5	1,893.7	1,879.5	
Drug stores and proprietary stores	591	558.8	561.2	588.9	586.3		476.8	478.7	500.5	498.1	
Liquor stores	592	124.1	123.0	124.7	125.5		-	-	-	-	
Miscellaneous shopping goods stores	594	722.2	730.5	730.0	730.8		604.5	612.7	608.2	609.5	
Sporting goods and bicycle shops	5941	124.1	127.4	125.0	126.5		-	-	-	-	
Book stores	5942	71.8	73.1	73.3	71.2		-	-	-	-	
Stationery stores	5943	73.6	74.0	75.0	74.4		-	-	-	-	
Jewelry stores	5944	142.7	142.8	141.7	141.6		-	-	-	-	
Gift, novelty, and souvenir shops	5947	141.8	143.5	142.1	144.2		-	-	-	-	
Sewing, needlework, and piece goods	5949	61.3	61.6	63.1	61.7		-	-	-	-	
Nonstore retailers	596	252.4	257.5	253.9	251.1		227.2	232.6	228.9	225.3	
Mail order houses	5961	116.8	121.0	117.5	117.4		-	-	-	-	
Merchandising machine operators	5962	77.9	78.5	82.1	81.6		-	-	-	-	
Fuel and ice dealers	598	104.3	103.4	111.6	110.6		86.8	86.2	92.0	91.1	
Retail stores, nec	599	358.2	357.1	360.2	350.2		294.4	291.6	295.0	284.7	
Finance, insurance, and real estate³		6,409	6,428	6,649	6,698	6,710	4,761	4,774	4,909	4,942	4,945
Finance		3,198	3,208	3,303	3,323	3,324					
Banking	60	1,758.8	1,757.5	1,746.4	1,754.1		1,284.1	1,281.8	1,261.3	1,268.9	
Commercial and stock savings banks	602	1,585.5	1,583.3	1,571.7	1,578.7		1,153.6	1,150.8	1,130.9	1,138.0	
State banks, Federal Reserve	6022	343.1	343.9	346.5	349.0		-	-	-	-	
State banks, not Federal Reserve	6023,4	379.2	378.9	379.6	380.6		-	-	-	-	
Mutual savings banks	603	83.8	84.2	88.1	88.1		-	-	-	-	
Credit agencies other than banks	61	842.6	849.6	904.3	906.7		637.4	642.5	679.0	678.7	
Savings and loan associations	612	380.7	382.6	404.5	406.0		291.3	292.5	309.3	310.3	
Federal savings and loan associations	6122	211.3	212.0	223.8	224.8		-	-	-	-	
State associations, insured	6123	161.6	162.8	172.2	172.8		-	-	-	-	
Personal credit institutions	614	228.2	229.2	235.7	236.7		176.7	177.6	182.1	182.2	
Business credit institutions	615	52.0	51.6	54.0	54.7		-	-	-	-	
Mortgage bankers and brokers	616	156.7	161.0	185.3	184.6		-	-	-	-	
Security, commodity brokers, and services	62	399.0	402.5	441.6	447.6						
Security brokers and dealers	621	317.0	320.1	352.1	356.1						
Holding and other investment offices	67	197.8	198.1	210.8	214.4						
Insurance		1,963	1,969	2,043	2,054	2,060					
Insurance carriers	63	1,377.8	1,380.1	1,413.6	1,420.3		942.8	944.9	956.7	959.3	
Life insurance	631	583.2	583.0	584.5	586.8		362.7	363.9	361.8	361.7	
Medical service and health insurance	632	188.5	189.3	193.0	193.4		153.0	153.7	155.3	155.0	
Fire, marine, and casualty insurance	633	505.8	507.1	532.6	536.9		349.9	349.5	359.5	363.3	
Title insurance	636	60.3	60.5	60.9	60.4		-	-	-	-	
Insurance agents, brokers, and service	64	585.2	589.3	629.6	633.7						

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Finance, insurance, and real estate—Continued											
Real estate, and combined real estate, insurance, etc		1,248	1,251	1,303	1,321	1,326					
Real estate	65	1,234.6	1,237.7	1,290.4	1,308.9						
Real estate operators and lessors	651	539.0	539.9	536.7	542.6						
Real estate agents and managers	653	499.5	500.6	538.0	548.1						
Subdividers and developers	655	165.3	166.1	178.5	181.2						
Combined real estate, insurance, etc	66	12.9	12.9	12.4	12.4						
Services		23,402	23,435	24,300	24,416	24,457	20,568	20,590	21,294	21,387	21,405
Hotels and other lodging places	70	1,539.3	1,549.4	1,522.5	1,560.2		-	-	-	-	
Hotels, motels, and tourist courts	701	1,460.1	1,463.8	1,468.6	1,496.8		1,316.1	1,318.8	1,318.2	1,346.6	
Personal services	72	1,091.2	1,085.4	1,140.8	1,131.8		-	-	-	-	
Laundry, cleaning, and garment services	721	387.8	386.2	408.8	407.6		344.9	344.3	364.1	362.9	
Photographic studios, portrait	722	55.6	57.9	59.7	59.0		-	-	-	-	
Beauty shops	723	348.2	345.4	352.3	350.2		315.4	313.3	317.3	314.8	
Funeral service and crematories	726	77.5	77.8	79.0	78.6		-	-	-	-	
Business services	73	4,831.2	4,868.6	5,106.6	5,143.0	5,201.9	4,158.9	4,189.6	4,380.4	4,413.0	
Advertising	731	202.2	201.4	199.3	200.5	-	149.8	149.6	149.1	149.9	
Advertising agencies	7311	149.3	148.5	146.8	147.7		-	-	-	-	
Credit reporting and collection	732	100.0	100.7	105.6	106.4		-	-	-	-	
Mailing, reproduction, and stenographic	733	194.5	194.6	204.0	206.0		-	-	-	-	
Services to buildings	734	691.2	696.7	697.7	700.0		625.0	629.8	633.0	636.2	
Personnel supply services	736	1,035.7	1,054.9	1,185.6	1,207.4		-	-	-	-	
Employment agencies	7361	153.1	158.8	183.4	183.0		-	-	-	-	
Temporary help supply services	7362	827.8	840.6	943.4	964.0		-	-	-	-	
Computer and data processing services	737	596.0	596.1	635.6	640.9		478.0	475.4	499.1	502.2	
Computer programming and software	7372	219.5	219.2	236.7	238.5		-	-	-	-	
Data processing services	7374	279.2	278.8	298.6	301.8		-	-	-	-	
Miscellaneous business services	739	2,003.0	2,015.5	2,069.7	2,072.8		-	-	-	-	
Research development laboratories, nec	7391	193.9	193.3	199.9	200.6		-	-	-	-	
Management and public relations	7392	554.7	555.7	573.9	576.2		-	-	-	-	
Detective and protective services	7393	447.1	452.2	450.9	449.9		-	-	-	-	
Equipment rental and leasing	7394	211.6	210.0	221.9	220.4		-	-	-	-	
Photofinishing laboratories	7395	79.7	80.2	80.3	80.8		-	-	-	-	
Auto repair, services, and garages	75	771.2	773.1	804.4	804.3		647.1	648.0	670.0	670.0	
Automotive rentals, without drivers	751	165.0	165.9	178.8	176.3		-	-	-	-	
Automotive repair shops	753	462.6	464.4	477.7	481.8		385.6	387.3	393.8	397.8	
Miscellaneous repair services	76	322.0	323.7	321.4	324.7		268.4	270.3	268.0	270.6	
Electrical repair shops	762	105.5	105.6	104.8	105.8		-	-	-	-	
Motion pictures	78	232.9	235.9	229.8	232.7		196.8	198.5	193.8	196.1	
Motion picture production and services	781	103.1	107.6	106.8	109.1		83.3	86.0	85.6	87.4	
Motion picture theaters	783	117.9	116.5	110.1	110.8		-	-	-	-	
Amusement and recreation services	79	1,093.6	1,109.2	1,142.1	1,179.4		989.4	1,003.5	1,003.3	1,039.7	
Health services	80	6,597.8	6,617.2	6,880.8	6,918.6	6,950.8	5,865.4	5,881.6	6,119.4	6,152.8	
Offices of physicians	801	1,003.4	1,011.4	1,070.9	1,081.1	-	830.6	837.0	884.9	890.1	
Offices of dentists	802	462.2	464.8	481.0	480.6		407.9	408.9	423.6	424.2	
Nursing and personal care facilities	805	1,262.3	1,268.1	1,300.6	1,306.4		1,140.8	1,147.1	1,175.2	1,181.0	
Skilled nursing care facilities	8051	843.7	846.4	867.4	871.0		-	-	-	-	
Nursing and personal care, nec	8059	418.6	421.7	433.2	435.4		-	-	-	-	
Hospitals	806	3,052.8	3,054.2	3,149.8	3,171.0		2,781.3	2,783.0	2,874.2	2,895.6	
General medical and surgical hospitals	8062	2,857.2	2,858.4	2,948.2	2,966.1		-	-	-	-	
Psychiatric hospitals	8063	65.8	65.7	68.0	68.4		-	-	-	-	
Specialty hospitals, excluding psychiatric	8069	129.8	130.1	133.6	136.5		-	-	-	-	
Medical and dental laboratories	807	129.8	131.1	141.0	141.3		-	-	-	-	
Outpatient care facilities	808	251.0	251.4	269.6	271.3		-	-	-	-	

See footnotes at end of table.

**ESTABLISHMENT DATA
EMPLOYMENT
NOT SEASONALLY ADJUSTED**

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

(In thousands)

Industry	1972 SIC Code	All employees					Production workers ¹				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Services—Continued											
Legal services	81	767.2	764.8	808.6	811.5		649.7	646.3	681.4	682.7	
Educational services	82	1,216.9	1,208.5	1,287.6	1,208.9						
Elementary and secondary schools	821	315.1	311.3	352.2	316.4						
Colleges and universities	822	749.5	745.6	783.0	735.8						
Correspondence and vocational schools	824	67.9	68.0	70.3	68.2						
Social services	83	1,444.0	1,435.7	1,518.2	1,540.2						
Individual and family services	832	292.8	294.2	312.5	321.2						
Job training and related services	833	271.9	262.1	269.8	289.7						
Residential care	836	322.1	321.9	339.5	340.0						
Museums, botanical and zoological gardens	84	48.8	48.4	52.5	53.5						
Membership organizations	86	1,558.0	1,538.6	1,562.2	1,572.7						
Business associations	861	94.5	94.2	92.5	92.6						
Labor organizations	863	129.8	128.5	133.0	127.9						
Civic and social associations	864	386.9	373.0	370.5	401.1						
Miscellaneous services	89	1,273.5	1,271.9	1,311.4	1,320.8		1,041.8	1,041.7	1,068.4	1,072.6	
Engineering and architectural services	891	694.8	693.9	709.4	714.7		588.4	588.7	598.7	601.9	
Noncommercial research organizations	892	129.5	128.7	130.6	133.4		-	-	-	-	
Accounting, auditing, and bookkeeping	893	423.5	423.9	444.3	445.9		330.5	331.0	344.9	343.9	
Government		15,811	15,674	17,094	16,200	16,072					
Federal Government⁴		2,918	2,907	2,976	2,977	2,971					
Executive, by agency ⁴		2,862.0	2,850.5	2,917.5							
Department of Defense		990.2	984.3	993.6							
Postal Service ⁵		792.1	793.0	816.3							
Other executive agencies		1,079.7	1,073.2	1,107.6							
Legislative		37.7	37.3	39.2							
Judicial		18.5	18.8	19.6							
Federal government, by industry:											
Manufacturing activities		124.3	123.7	125.1	125.8						
Shipbuilding and repairing	3731	74.7	74.2	76.8	77.4						
Transportation and public utilities, except Postal Service		38.8	38.9	39.4	39.5						
Services		414.6	412.2	417.6	420.4						
Hospitals	806	248.1	246.7	254.7	256.3						
State government		3,673	3,663	3,822	3,737	3,726					
Hospitals	806	444.7	443.9	451.3	453.2	-					
Education	82	1,293.0	1,287.1	1,435.4	1,323.6						
General administration, including executive, legislative, and judicial functions		1,358.3	1,353.3	1,355.8	1,374.9						
Local government		9,220	9,104	10,296	9,486	9,375					
Transportation and public utilities		497.1	497.7	493.5	496.7	-					
Hospitals	806	608.4	608.4	623.4	626.7						
Education	82	4,522.8	4,441.3	5,675.4	4,662.5						
General administration, including executive, legislative, and judicial functions		3,219.1	3,194.2	3,151.6	3,315.9						

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	May 1986	June 1986	Apr. 1987	May 1987	June 1987
Total	45,635	45,627	47,036	47,264	47,323
Total private	37,008	37,229	38,110	38,352	38,626
Goods-producing	6,783	6,827	6,828	6,854	6,918
Mining	108	107	97	97	98
Construction	500	509	525	532	541
Manufacturing	6,175	6,211	6,206	6,225	6,279
Durable goods	2,986	2,987	2,978	2,984	3,000
Lumber and wood products	110	113	116	118	121
Furniture and fixtures	154	154	158	159	159
Stone, clay, and glass products	113	115	113	114	115
Primary metal industries	101	100	100	100	101
Fabricated metal products	320	322	322	323	325
Machinery, except electrical	452	452	446	446	447
Electrical and electronic equipment	885	877	866	866	868
Transportation equipment	377	380	390	390	391
Instruments and related products	305	306	299	299	301
Miscellaneous manufacturing	167	168	168	169	172
Nondurable goods	3,189	3,224	3,228	3,241	3,279
Food and kindred products	484	503	488	494	512
Tobacco manufactures	18	18	17	17	17
Textile mill products	342	344	350	352	354
Apparel and other textile products	893	895	885	887	892
Paper and allied products	163	166	164	165	168
Printing and publishing	614	618	642	641	644
Chemicals and allied products	285	290	290	292	295
Petroleum and coal products	26	26	24	24	24
Rubber and misc. plastics products	272	275	281	281	283
Leather and leather products	90	89	88	89	90
Service-producing	38,852	38,800	40,208	40,410	40,405
Transportation and public utilities	1,493	1,447	1,520	1,530	1,537
Wholesale trade	1,670	1,667	1,688	1,688	1,705
Retail trade	9,317	9,423	9,482	9,600	9,700
Finance, insurance, and real estate	3,872	3,924	4,079	4,100	4,138
Services	13,873	13,941	14,513	14,580	14,628
Government	8,627	8,398	8,926	8,912	8,697
Federal	1,037	1,040	1,043	1,050	1,061
State	1,868	1,783	1,949	1,925	1,833
Local	5,722	5,575	5,934	5,937	5,803

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total	99,772	100,039	100,209	100,415	100,567	100,919	101,150	101,329	101,598	101,708	101,818	102,114	102,270
Total private	83,125	83,241	83,337	83,515	83,643	83,983	84,215	84,352	84,560	84,677	84,787	85,089	85,196
Goods-producing	24,639	24,620	24,611	24,630	24,630	24,708	24,743	24,749	24,759	24,752	24,761	24,857	24,857
Mining	748	739	735	730	724	718	719	722	729	735	738	743	749
Oil and gas extraction	428	419	416	412	406	405	406	408	416	420	425	429	433
Construction	4,946	4,948	4,942	4,946	4,936	5,034	5,038	5,032	5,019	4,999	5,008	5,008	5,007
General building contractors	1,295	1,291	1,289	1,289	1,277	1,311	1,309	1,291	1,272	1,267	1,266	1,263	1,264
Manufacturing	18,945	18,933	18,934	18,954	18,970	18,956	18,986	18,995	19,011	19,018	19,015	19,106	19,101
Durable goods	11,206	11,181	11,169	11,174	11,175	11,157	11,179	11,176	11,175	11,175	11,176	11,195	11,219
Lumber and wood products	712	716	718	723	728	731	733	734	736	738	735	740	736
Furniture and fixtures	499	499	499	499	499	500	501	502	504	509	510	519	520
Stone, clay, and glass products	584	584	581	582	584	586	588	586	586	584	582	582	584
Primary metal industries	735	732	733	733	733	726	733	739	743	742	746	749	751
Blast furnaces and basic steel products	265	260	262	260	259	254	261	266	272	272	275	276	278
Fabricated metal products	1,423	1,424	1,421	1,419	1,422	1,422	1,419	1,419	1,423	1,420	1,424	1,425	1,423
Machinery, except electrical	2,051	2,031	2,022	2,015	2,011	2,007	2,015	2,022	2,022	2,025	2,028	2,028	2,041
Electrical and electronic equipment	2,123	2,118	2,120	2,119	2,118	2,111	2,106	2,099	2,092	2,087	2,080	2,087	2,089
Transportation equipment	2,016	2,015	2,013	2,023	2,018	2,014	2,022	2,022	2,011	2,011	2,010	1,994	2,012
Motor vehicles and equipment	861	857	850	858	853	851	859	854	847	843	842	813	833
Instruments and related products	703	703	702	700	698	697	695	694	694	693	693	696	694
Miscellaneous manufacturing	360	359	360	361	364	363	364	366	364	366	368	371	369
Nondurable goods	7,739	7,752	7,765	7,780	7,795	7,799	7,807	7,819	7,836	7,843	7,839	7,911	7,882
Food and kindred products	1,616	1,619	1,621	1,627	1,631	1,628	1,630	1,635	1,642	1,643	1,634	1,646	1,637
Tobacco manufactures	58	58	58	59	58	58	58	57	56	57	57	58	56
Textile mill products	707	707	709	714	715	718	722	725	724	727	729	737	733
Apparel and other textile products	1,102	1,102	1,104	1,101	1,110	1,106	1,101	1,103	1,104	1,107	1,108	1,131	1,110
Paper and allied products	671	675	677	678	679	678	679	678	677	677	676	676	675
Printing and publishing	1,462	1,465	1,469	1,472	1,474	1,479	1,483	1,485	1,493	1,497	1,498	1,503	1,507
Chemicals and allied products	1,021	1,021	1,020	1,020	1,017	1,018	1,018	1,017	1,018	1,022	1,014	1,026	1,029
Petroleum and coal products	168	167	166	165	163	164	164	164	164	164	164	163	165
Rubber and misc. plastics products	786	791	794	797	800	803	805	807	809	809	810	816	817
Leather and leather products	148	147	147	147	148	147	147	148	149	150	149	155	153
Service-producing	75,133	75,419	75,598	75,785	75,937	76,211	76,407	76,580	76,839	76,956	77,057	77,257	77,413
Transportation and public utilities	5,202	5,255	5,251	5,278	5,286	5,304	5,315	5,333	5,348	5,344	5,350	5,360	5,376
Transportation	3,035	3,050	3,053	3,071	3,078	3,089	3,097	3,112	3,124	3,120	3,128	3,131	3,144
Communication and public utilities	2,167	2,205	2,198	2,207	2,208	2,215	2,218	2,221	2,224	2,224	2,222	2,229	2,232
Wholesale trade	5,736	5,736	5,731	5,728	5,725	5,741	5,757	5,766	5,772	5,775	5,781	5,796	5,798
Durable goods	3,382	3,383	3,379	3,380	3,383	3,386	3,391	3,397	3,397	3,401	3,405	3,417	3,420
Nondurable goods	2,354	2,353	2,352	2,348	2,342	2,355	2,366	2,369	2,375	2,374	2,376	2,379	2,378
Retail trade	17,913	17,939	17,980	18,009	18,007	18,080	18,140	18,136	18,197	18,205	18,226	18,271	18,248
General merchandise stores	2,371	2,374	2,385	2,379	2,363	2,358	2,373	2,380	2,385	2,390	2,387	2,404	2,406
Food stores	2,889	2,892	2,901	2,906	2,916	2,929	2,940	2,944	2,953	2,956	2,960	2,959	2,958
Automotive dealers and service stations	1,949	1,958	1,960	1,963	1,970	1,978	1,979	1,979	1,978	1,978	1,983	1,984	1,986
Eating and drinking places	5,904	5,911	5,919	5,927	5,938	5,946	5,956	5,964	5,962	5,976	5,982	5,986	5,993
Finance, insurance, and real estate	6,351	6,374	6,395	6,418	6,451	6,480	6,501	6,526	6,558	6,576	6,586	6,607	6,630
Finance	3,183	3,193	3,204	3,212	3,227	3,235	3,243	3,256	3,272	3,276	3,280	3,290	3,298
Insurance	1,961	1,971	1,980	1,990	1,999	2,012	2,016	2,022	2,032	2,037	2,037	2,042	2,052
Real estate	1,207	1,210	1,211	1,216	1,225	1,233	1,242	1,248	1,254	1,263	1,269	1,275	1,280
Services	23,284	23,317	23,369	23,452	23,544	23,670	23,759	23,842	23,926	24,025	24,083	24,198	24,287
Business services	4,815	4,835	4,861	4,877	4,912	4,950	4,984	5,020	5,044	5,083	5,086	5,107	5,145
Health services	6,594	6,615	6,644	6,661	6,691	6,721	6,748	6,773	6,800	6,822	6,853	6,884	6,923
Government	16,647	16,798	16,872	16,900	16,924	16,936	16,935	16,977	17,038	17,031	17,031	17,025	17,074
Federal	2,882	2,902	2,897	2,900	2,904	2,912	2,916	2,922	2,933	2,935	2,935	2,930	2,944
State	3,881	3,890	3,907	3,915	3,927	3,929	3,927	3,930	3,943	3,947	3,932	3,950	3,951
Local	9,884	10,006	10,068	10,085	10,093	10,095	10,092	10,125	10,162	10,149	10,164	10,145	10,179

^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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total	45,453	45,661	45,801	45,960	46,111	46,229	46,358	46,517	46,654	46,766	46,937	46,999	47,142
Total private	37,055	37,258	37,382	37,436	37,547	37,653	37,767	37,909	38,057	38,133	38,271	38,337	38,445
Goods-producing	6,783	6,797	6,796	6,800	6,813	6,826	6,842	6,838	6,843	6,846	6,863	6,869	6,876
Mining	107	105	103	101	100	99	98	97	97	96	97	97	98
Construction	502	507	508	511	513	516	519	522	524	526	530	533	534
Manufacturing	6,174	6,185	6,185	6,188	6,200	6,211	6,225	6,219	6,222	6,224	6,236	6,239	6,244
Durable goods	2,968	2,975	2,979	2,979	2,981	2,983	2,985	2,979	2,983	2,978	2,980	2,980	2,983
Lumber and wood products	110	111	112	112	113	113	115	115	117	117	117	118	118
Furniture and fixtures	155	155	155	155	155	155	155	156	156	157	157	159	160
Stone, clay, and glass products	114	113	113	113	112	112	113	114	113	113	114	114	114
Primary metal industries	99	99	99	100	100	100	99	99	100	100	100	99	100
Fabricated metal products	320	319	320	320	320	321	321	320	320	320	322	322	323
Machinery, except electrical	449	448	445	443	443	442	441	440	441	441	444	444	444
Electrical and electronic equipment	872	885	886	885	886	885	884	880	876	870	868	866	864
Transportation equipment	378	378	381	382	384	387	389	388	392	392	391	390	390
Instruments and related products	304	303	303	303	302	301	301	300	300	299	299	299	299
Miscellaneous manufacturing	167	164	165	166	166	167	167	167	168	169	168	169	171
Nondurable goods	3,206	3,210	3,206	3,209	3,219	3,228	3,240	3,240	3,239	3,246	3,256	3,259	3,261
Food and kindred products	507	506	504	505	508	513	514	514	514	517	518	515	515
Tobacco manufactures	20	20	19	20	19	20	19	19	19	19	18	19	18
Textile mill products	342	345	345	344	345	347	349	349	350	352	351	351	352
Apparel and other textile products	884	887	883	882	883	881	889	883	878	878	880	883	883
Paper and allied products	163	163	163	164	164	165	165	165	165	165	165	165	165
Printing and publishing	617	620	621	623	626	628	629	632	634	636	640	641	643
Chemicals and allied products	287	287	287	287	288	288	287	289	290	290	291	292	292
Petroleum and coal products	26	26	26	25	25	25	25	24	24	24	24	24	24
Rubber and misc. plastics products	272	269	271	272	275	275	276	278	278	278	281	280	280
Leather and leather products	88	87	87	87	86	86	87	87	87	87	88	89	89
Service-producing	38,670	38,864	39,005	39,160	39,298	39,403	39,516	39,679	39,811	39,920	40,074	40,130	40,266
Transportation and public utilities	1,441	1,481	1,465	1,486	1,487	1,496	1,501	1,507	1,510	1,517	1,520	1,524	1,531
Wholesale trade	1,665	1,672	1,675	1,675	1,673	1,673	1,675	1,682	1,691	1,695	1,695	1,693	1,703
Retail trade	9,373	9,403	9,452	9,456	9,484	9,501	9,504	9,547	9,607	9,603	9,636	9,629	9,642
Finance, insurance, and real estate	3,898	3,922	3,944	3,961	3,978	3,996	4,016	4,036	4,053	4,064	4,087	4,100	4,109
Services	13,895	13,983	14,050	14,058	14,112	14,161	14,229	14,299	14,353	14,408	14,470	14,522	14,584
Government	8,398	8,403	8,419	8,524	8,564	8,576	8,591	8,608	8,597	8,633	8,666	8,662	8,697
Federal	1,023	1,019	1,024	1,033	1,032	1,033	1,035	1,037	1,038	1,041	1,043	1,045	1,044
State	1,845	1,849	1,850	1,852	1,861	1,865	1,869	1,878	1,871	1,883	1,890	1,897	1,896
Local	5,530	5,535	5,545	5,639	5,671	5,678	5,687	5,693	5,688	5,709	5,733	5,720	5,757

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	67,254	67,348	67,411	67,570	67,665	67,939	68,149	68,263	68,419	68,488	68,598	68,817	68,902
Goods-producing	17,265	17,252	17,238	17,270	17,283	17,331	17,379	17,380	17,375	17,360	17,377	17,446	17,455
Mining	524	518	516	514	510	504	508	511	518	525	528	533	535
Construction	3,884	3,883	3,873	3,877	3,867	3,943	3,955	3,944	3,918	3,889	3,891	3,892	3,899
Manufacturing	12,857	12,851	12,849	12,879	12,906	12,884	12,916	12,925	12,939	12,946	12,958	13,021	13,021
Durable goods	7,399	7,382	7,369	7,385	7,393	7,370	7,398	7,399	7,406	7,409	7,421	7,424	7,457
Lumber and wood products	598	601	603	607	611	611	614	615	617	618	615	619	615
Furniture and fixtures	398	399	399	398	398	400	400	402	403	407	408	417	417
Stone, clay, and glass products	449	450	448	449	451	452	454	453	453	452	451	449	452
Primary metal industries	549	546	546	547	547	540	547	553	559	557	561	564	566
Blast furnaces and basic steel products	201	195	197	194	193	188	194	199	205	205	207	209	210
Fabricated metal products	1,051	1,052	1,050	1,049	1,052	1,051	1,051	1,051	1,053	1,050	1,054	1,055	1,056
Machinery, except electrical	1,221	1,203	1,195	1,190	1,187	1,183	1,190	1,190	1,198	1,203	1,210	1,212	1,223
Electrical and electronic equipment	1,229	1,226	1,226	1,230	1,234	1,226	1,223	1,218	1,216	1,215	1,212	1,219	1,220
Transportation equipment	1,261	1,261	1,261	1,273	1,267	1,265	1,276	1,273	1,265	1,265	1,265	1,240	1,264
Motor vehicles and equipment	660	659	652	663	658	659	668	663	657	655	655	628	650
Instruments and related products	381	382	380	379	379	377	377	376	376	375	376	378	376
Miscellaneous manufacturing	262	262	261	263	267	265	266	268	266	267	269	271	268
Nondurable goods	5,458	5,469	5,480	5,494	5,513	5,514	5,518	5,526	5,533	5,537	5,537	5,597	5,564
Food and kindred products	1,135	1,138	1,139	1,146	1,149	1,147	1,150	1,154	1,158	1,153	1,150	1,161	1,149
Tobacco manufactures	43	44	44	45	44	44	44	44	43	44	42	43	41
Textile mill products	612	612	615	619	621	624	627	630	628	631	633	641	636
Apparel and other textile products	928	928	929	927	937	931	925	926	929	927	930	950	932
Paper and allied products	508	512	514	515	517	515	516	515	514	513	513	514	514
Printing and publishing	822	824	827	828	830	833	833	832	832	836	839	842	843
Chemicals and allied products	570	569	568	568	566	568	569	570	569	572	568	576	577
Petroleum and coal products	106	105	105	105	105	106	106	106	106	107	108	107	109
Rubber and misc. plastics products	612	616	618	620	622	623	625	626	629	629	629	633	635
Leather and leather products	122	121	121	121	122	123	123	123	125	125	125	130	128
Service-producing	49,989	50,096	50,173	50,300	50,382	50,608	50,770	50,883	51,044	51,128	51,221	51,371	51,447
Transportation and public utilities	4,290	4,344	4,342	4,368	4,380	4,389	4,401	4,419	4,428	4,429	4,439	4,447	4,458
Wholesale trade	4,602	4,598	4,590	4,586	4,583	4,600	4,611	4,617	4,622	4,623	4,632	4,639	4,636
Retail trade	15,953	15,977	16,013	16,035	16,030	16,097	16,141	16,132	16,189	16,193	16,195	16,234	16,230
Finance, insurance, and real estate	4,699	4,712	4,726	4,743	4,767	4,786	4,806	4,823	4,840	4,844	4,851	4,855	4,867
Services	20,445	20,465	20,502	20,568	20,622	20,736	20,811	20,892	20,965	21,039	21,104	21,196	21,256

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	^p 69.5	^p 54.9				
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	^p 68.4	^p 65.1					
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	^p 68.1	^p 65.9							
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.....	^p 62.2	^p 64.6										

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Alabama	1,469.5	1,488.1	1,487.7	12.0	11.3	10.5	77.7	78.3	78.6
Birmingham	383.3	392.7	392.2	6.0	5.9	5.5	24.0	25.5	25.9
Huntsville	118.0	121.5	121.6	.1	.1	.1	5.1	5.3	5.3
Mobile	158.9	159.4	159.7	.6	.5	.5	10.8	8.8	8.9
Montgomery	122.5	123.9	123.9	.1	.1	.1	9.4	9.7	9.7
Tuscaloosa	54.9	56.6	56.6	2.7	2.4	2.1	2.9	3.4	3.4
Alaska	237.9	219.3	226.0	9.0	8.2	8.3	15.8	13.4	14.2
Arizona	1,323.2	1,351.7	1,341.5	10.8	11.1	11.1	117.5	105.6	104.6
Phoenix	877.2	892.9	887.6	.6	.6	.6	81.6	70.8	70.0
Tucson	236.0	241.0	236.0	1.6	1.6	1.6	22.6	21.4	21.1
Arkansas	810.9	834.7	831.8	4.2	4.0	4.0	38.5	36.7	37.4
Fayetteville-Springdale	43.5	46.2	46.1	(¹)	(¹)	(¹)	1.9	2.1	2.1
Fort Smith	73.2	74.8	75.1	.9	1.1	1.0	3.1	2.9	2.9
Little Rock-North Little Rock	223.6	227.4	226.8	.4	.4	.4	11.8	12.1	12.4
Pine Bluff	33.7	32.1	31.5	(¹)	(¹)	(¹)	4.0	1.7	1.7
California	11,235.6	11,671.8	11,597.7	40.5	39.3	39.6	533.3	569.4	575.8
Anaheim-Santa Ana	1,035.9	1,094.7	1,088.2	2.3	2.0	2.1	53.9	58.8	59.0
Bakersfield	152.9	158.3	156.0	12.3	12.0	12.0	9.6	10.1	10.1
Fresno	196.3	204.0	201.4	.6	.7	.8	12.4	12.7	12.7
Los Angeles-Long Beach	3,896.9	4,019.5	4,004.9	10.6	10.5	10.5	128.0	135.0	135.7
Modesto	99.8	102.1	104.4	.1	.1	.1	6.2	6.6	6.9
Oakland	788.6	821.3	815.7	2.5	2.5	2.5	46.0	49.0	49.4
Oxnard-Ventura	194.0	201.9	201.3	3.1	2.5	2.5	10.7	11.7	11.9
Riverside-San Bernardino	555.7	599.4	591.1	1.2	1.3	1.3	45.6	51.8	52.7
Sacramento	516.0	544.1	536.7	.8	.7	.8	32.3	33.5	34.4
Salinas-Seaside-Monterey	103.7	107.6	108.0	.5	.5	.5	4.2	4.5	4.6
San Diego	815.3	857.8	850.4	.8	.8	.8	52.8	58.2	59.3
San Francisco	917.3	936.8	930.1	1.1	1.1	1.1	33.7	34.3	34.5
San Jose	767.0	774.4	775.5	.2	.2	.2	31.9	31.4	31.9
Santa Barbara-Santa Maria-Lompoc	143.0	147.3	144.9	1.3	1.4	1.4	6.6	6.4	6.3
Santa Rosa-Petaluma	117.8	123.5	122.6	.7	.6	.6	8.4	8.8	9.1
Stockton	137.9	139.8	139.6	.1	.1	.1	8.8	9.2	9.4
Vallejo-Fairfield-Napa	123.0	127.6	127.9	.3	.3	.3	8.1	8.7	9.0
Colorado	1,396.0	1,403.9	1,387.7	27.1	24.1	24.4	79.8	73.9	74.1
Boulder-Longmont	102.1	103.8	103.1	.3	.3	.3	4.5	3.8	3.9
Denver	805.0	808.1	799.4	17.4	15.9	15.9	43.9	40.7	40.9
Connecticut	1,599.7	1,664.2	1,647.3	1.7	1.7	1.7	75.2	75.3	77.5
Bridgeport-Milford	190.6	200.0	196.3	(¹)	(¹)	(¹)	8.1	8.9	9.1
Hartford	460.3	480.3	475.5	.3	.4	.4	19.3	19.9	20.4
New Britain	63.7	66.4	65.2	(¹)	(¹)	(¹)	4.1	4.5	4.6
New Haven-Meriden	243.1	253.5	250.7	.3	.3	.3	12.8	13.6	14.0
Stamford	123.9	128.1	126.9	.6	.6	.6	5.4	5.6	5.7
Waterbury	82.5	88.3	84.6	(¹)	(¹)	(¹)	4.2	4.6	4.6
Delaware	305.4	319.1	316.8	.1	.1	.1	20.6	19.6	20.0
Wilmington	260.1	274.9	272.4	.2	.2	.2	19.2	18.3	18.2
District of Columbia	657.3	648.9	661.3	.1	.1	.1	13.6	14.1	14.6
Washington MSA	2,010.6	2,054.9	2,062.8	1.0	1.0	.9	126.1	127.0	129.9
Florida	4,530.2	4,786.7	4,741.3	9.6	9.9	9.9	343.2	340.5	343.0
Daytona Beach	105.3	111.4	109.6	(¹)	(¹)	(¹)	7.9	8.0	8.1
Fort Lauderdale-Hollywood-Pompano Beach	433.5	453.9	448.3	.4	.4	.4	37.2	36.6	36.3
Fort Myers-Cape Coral	97.7	110.1	108.6	(¹)	(¹)	(¹)	11.7	12.8	12.9
Gainesville	87.0	90.9	91.0	(¹)	(¹)	(¹)	4.9	4.4	4.4
Jacksonville	369.4	388.1	385.6	.5	.4	.5	28.0	28.3	28.1
Lakeland-Winter Haven	130.2	141.7	138.6	4.3	4.8	4.7	8.3	9.4	9.3
Melbourne-Titusville-Palm Bay	138.1	140.1	140.3	(¹)	(¹)	(¹)	9.0	8.3	8.3
Miami-Hialeah	790.2	810.0	807.4	.9	.9	.9	40.6	39.3	39.5
Orlando	443.5	477.2	474.1	(¹)	(¹)	(¹)	34.2	33.3	33.6
Pensacola	121.0	124.3	122.8	.3	.3	.3	10.7	10.4	10.4
Sarasota	94.8	100.8	99.1	(¹)	(¹)	(¹)	9.9	9.7	9.8
Tallahassee	100.4	106.1	106.2	(¹)	(¹)	(¹)	5.3	6.0	6.0
Tampa-St. Petersburg-Clearwater	752.8	781.9	775.8	.7	.7	.7	61.7	64.1	63.8
West Palm Beach-Boca Raton-DeLray Beach	288.9	316.6	311.3	(¹)	(¹)	(¹)	27.4	30.4	31.0

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Alabama	358.2	359.1	359.6	72.2	72.5	72.3	322.6	329.7	329.1
Birmingham	54.9	53.1	52.0	27.9	28.2	28.5	95.9	99.6	100.1
Huntsville	30.9	30.6	30.9	2.7	2.7	2.6	22.4	23.2	23.4
Mobile	25.1	26.6	27.0	9.6	9.4	9.1	43.7	44.6	44.4
Montgomery	17.8	17.6	17.5	4.8	4.7	4.8	27.5	28.1	28.2
Tuscaloosa	8.8	9.4	9.3	2.0	2.1	2.2	11.5	12.0	12.1
Alaska	21.6	15.1	21.9	19.5	18.8	19.0	46.2	43.2	43.8
Arizona	185.0	184.8	185.1	67.9	69.6	70.3	320.7	331.2	329.9
Phoenix	132.1	133.8	134.1	45.3	46.7	47.7	218.0	227.1	226.0
Tucson	31.9	30.5	30.4	9.8	9.8	9.8	53.7	54.1	53.7
Arkansas	213.8	218.2	219.9	48.3	50.4	50.5	186.5	193.0	193.5
Fayetteville-Springdale	10.0	10.8	10.9	4.0	4.3	4.3	10.6	11.0	11.0
Fort Smith	25.3	26.0	26.5	3.7	3.8	3.8	15.9	15.2	15.2
Little Rock-North Little Rock	32.4	31.8	32.0	14.9	14.9	14.9	54.8	56.1	55.7
Pine Bluff	6.0	6.4	6.5	2.9	2.8	2.8	6.8	6.4	6.3
California	2,076.1	2,082.0	2,092.8	581.6	589.5	593.6	2,718.2	2,808.4	2,822.0
Anaheim-Santa Ana	243.5	245.4	246.0	34.6	35.2	35.1	282.8	277.1	280.6
Bakersfield	10.0	10.4	10.4	8.3	8.6	8.6	40.3	40.5	40.9
Fresno	21.6	21.1	21.3	10.5	10.5	10.5	50.4	53.1	53.4
Los Angeles-Long Beach	882.2	896.8	896.0	203.3	205.5	207.8	924.7	948.9	952.4
Modesto	23.9	22.0	24.6	4.4	4.2	4.2	24.4	25.9	26.2
Oakland	101.5	103.7	104.6	55.3	55.9	56.1	199.1	206.1	206.2
Oxnard-Ventura	29.3	29.3	29.5	9.4	10.5	10.2	49.3	51.4	51.1
Riverside-San Bernardino	73.9	78.7	78.5	30.8	32.1	31.9	140.5	148.7	148.5
Sacramento	39.2	39.8	39.8	24.0	24.6	25.2	128.0	132.0	133.0
Salinas-Seaside-Monterey	9.5	10.3	10.5	4.9	5.0	5.1	28.1	28.1	28.3
San Diego	122.1	120.5	120.0	32.7	32.9	33.1	197.7	204.5	206.4
San Francisco	77.5	76.5	76.1	80.4	79.2	79.3	213.6	218.6	219.6
San Jose	268.0	259.9	264.3	21.2	21.3	21.2	149.3	153.6	154.4
Santa Barbara-Santa Maria-Lompoc	24.1	22.9	22.9	5.3	5.2	5.2	34.3	35.2	35.4
Santa Rosa-Petaluma	18.0	18.1	18.3	5.6	5.9	5.9	31.0	32.4	32.5
Stockton	23.8	22.1	24.0	9.4	8.6	9.3	32.1	32.6	32.8
Vallejo-Fairfield-Napa	13.1	12.6	13.5	4.5	4.5	4.5	29.7	31.2	31.5
Colorado	185.5	184.0	184.2	88.7	89.4	89.6	351.7	346.9	348.4
Boulder-Longmont	28.2	28.3	28.3	2.3	2.2	2.2	22.5	23.0	22.8
Denver	96.9	94.9	94.8	63.1	64.5	64.9	206.3	201.6	202.5
Connecticut	388.6	394.3	384.8	68.3	72.8	71.0	357.6	377.3	375.4
Bridgeport-Milford	59.1	61.0	58.8	7.3	7.6	7.2	44.7	45.9	45.9
Hartford	92.4	94.7	93.3	16.6	17.8	17.2	96.7	101.7	100.7
New Britain	21.4	20.6	19.8	3.1	3.2	3.1	12.8	13.9	13.6
New Haven-Meriden	46.4	47.2	46.1	17.7	18.4	18.0	56.6	59.4	59.0
Stamford	25.3	24.5	23.6	5.0	5.1	5.1	29.4	30.8	30.7
Waterbury	23.6	24.8	22.1	3.0	3.2	2.9	16.5	17.4	17.3
Delaware	64.6	69.7	66.2	12.2	13.0	12.6	70.1	72.5	72.8
Wilmington	54.3	59.2	55.5	13.4	14.2	13.7	55.7	58.6	59.0
District of Columbia	15.6	15.7	15.6	24.6	24.9	25.0	63.1	64.5	63.7
Washington MSA	86.3	84.9	85.0	95.2	99.3	100.2	401.3	415.6	415.4
Florida	511.6	524.6	520.8	246.1	249.6	249.8	1,227.0	1,304.7	1,304.3
Daytona Beach	12.0	12.9	12.8	3.4	3.4	3.4	30.7	32.6	32.3
Fort Lauderdale-Hollywood-Pompano Beach	42.8	44.6	44.2	21.2	22.4	22.5	128.4	134.1	133.3
Fort Myers-Cape Coral	5.2	5.7	5.7	4.6	5.1	5.1	28.7	33.0	32.8
Gainesville	5.4	5.6	5.6	1.7	1.7	1.7	19.2	20.5	20.3
Jacksonville	37.7	37.6	37.8	26.6	27.9	27.6	100.7	104.8	105.2
Lakeland-Winter Haven	19.8	21.5	20.3	5.9	6.1	6.0	36.5	39.3	38.6
Melbourne-Titusville-Palm Bay	27.4	27.1	27.1	5.6	5.5	5.5	31.9	32.7	33.0
Miami-Hialeah	92.3	92.7	91.9	67.9	66.2	66.3	210.3	218.5	219.8
Orlando	51.0	53.5	53.4	23.6	25.0	25.3	114.5	122.0	122.5
Pensacola	11.1	11.3	11.5	6.2	6.6	6.5	32.3	32.3	32.2
Sarasota	7.9	8.6	8.6	3.6	3.5	3.5	28.2	29.0	28.9
Tallahassee	4.4	4.8	4.9	2.8	2.9	2.9	21.4	22.7	22.6
Tampa-St. Petersburg-Clearwater	90.0	88.6	88.0	37.4	37.3	37.2	207.2	212.7	212.6
West Palm Beach-Boca Raton-DeLray Beach	35.4	36.1	35.5	10.7	11.5	11.5	76.0	82.1	82.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1986	June 1987	July 1987 ^a	July 1986	June 1987	July 1987 ^a	July 1986	June 1987	July 1987 ^a
Alabama	69.9	71.2	71.4	259.7	269.1	269.8	297.2	296.9	296.4
Birmingham	28.8	29.1	29.3	87.3	92.4	92.5	58.5	58.9	58.4
Huntsville	3.4	3.5	3.5	25.5	26.9	27.0	27.9	29.2	28.8
Mobile	7.8	7.4	7.4	33.6	34.5	34.7	27.7	27.6	27.7
Montgomery	7.3	7.3	7.3	24.1	24.2	24.2	31.5	32.2	32.1
Tuscaloosa	2.0	2.1	2.1	7.4	7.8	7.8	17.6	17.4	17.6
Alaska	13.0	12.0	11.9	46.7	43.4	43.4	66.1	65.2	63.5
Arizona	90.2	92.0	91.7	327.7	337.9	336.3	203.4	219.5	212.5
Phoenix	71.2	72.5	72.2	218.9	228.1	226.4	109.5	113.3	110.6
Tucson	12.4	12.9	12.9	61.2	62.2	62.2	42.8	48.5	44.3
Arkansas	38.0	38.5	38.6	148.1	155.0	156.1	133.5	138.9	131.8
Fayetteville-Springdale	1.5	1.4	1.4	6.0	6.7	6.7	9.5	9.9	9.7
Fort Smith	2.7	2.7	2.8	15.3	16.2	16.5	6.3	6.9	6.4
Little Rock-North Little Rock	15.3	15.5	15.5	50.5	52.6	52.7	43.5	44.0	43.2
Pine Bluff	1.6	1.7	1.7	5.8	6.0	5.9	6.6	7.1	6.6
California	773.1	789.9	793.2	2,764.5	2,883.8	2,883.9	1,748.3	1,909.5	1,796.8
Anaheim-Santa Ana	84.2	85.1	85.0	259.2	274.5	275.4	95.4	116.6	105.0
Bakersfield	6.4	6.3	6.3	30.3	31.3	31.5	35.7	39.1	36.2
Fresno	13.9	14.0	14.0	46.1	46.5	47.1	40.8	45.4	41.6
Los Angeles-Long Beach	275.8	282.5	284.0	999.1	1,033.7	1,035.7	473.2	506.6	482.8
Modesto	4.6	4.6	4.8	20.7	21.6	21.6	15.5	17.1	16.0
Oakland	52.2	55.0	55.5	178.2	186.1	184.4	153.8	163.0	157.0
Oxnard-Ventura	10.3	10.6	10.6	43.0	45.4	45.3	38.9	40.5	40.2
Riverside-San Bernardino	24.0	25.3	25.4	129.0	138.3	136.4	110.7	123.2	116.4
Sacramento	31.4	32.4	32.5	107.8	114.6	113.9	152.5	166.5	157.1
Salinas-Seaside-Monterey	5.0	5.2	5.4	25.5	26.2	26.7	26.0	27.8	26.9
San Diego	57.0	58.7	59.0	212.3	224.2	225.9	139.9	158.0	145.9
San Francisco	114.6	112.4	112.6	267.4	276.4	275.2	129.0	138.3	131.7
San Jose	33.2	33.0	32.9	183.6	190.7	189.6	79.6	84.3	81.0
Santa Barbara-Santa Maria-Lompoc	8.0	8.3	8.3	38.3	39.9	39.8	25.1	28.0	25.6
Santa Rosa-Petaluma	8.1	8.2	8.3	26.2	27.5	27.6	19.8	22.0	20.3
Stockton	8.1	8.3	8.2	27.8	28.2	28.1	27.8	30.7	27.7
Vallejo-Fairfield-Napa	4.8	4.8	4.9	27.1	28.2	28.1	35.4	37.3	36.1
Colorado	99.1	98.0	97.9	327.7	331.0	330.3	236.4	256.6	238.8
Boulder-Longmont	3.9	3.9	3.9	21.1	22.0	22.2	19.3	20.3	19.5
Denver	66.8	66.1	66.0	197.7	200.8	199.6	112.9	123.6	114.8
Connecticut	142.4	147.8	148.6	376.5	392.4	394.0	189.4	202.6	194.3
Bridgeport-Milford	10.7	11.7	11.6	44.2	46.7	47.2	16.5	18.2	16.5
Hartford	76.0	78.8	79.5	103.1	107.8	107.9	55.9	59.2	56.1
New Britain	3.8	4.2	4.3	12.6	13.6	13.8	5.9	6.4	6.0
New Haven-Meriden	14.6	15.3	15.2	65.6	68.4	68.2	29.1	30.9	29.9
Stamford	11.4	12.0	12.2	37.2	39.4	39.5	9.6	10.1	9.5
Waterbury	4.1	4.3	4.2	19.5	21.6	21.9	11.6	12.4	11.6
Delaware	23.5	25.3	25.4	68.1	72.2	72.4	45.9	46.6	47.3
Wilmington	21.2	23.2	23.4	60.2	64.2	64.2	36.0	37.1	38.2
District of Columbia	36.5	37.3	37.1	221.4	228.7	228.1	282.4	263.6	277.2
Washington MSA	117.1	121.4	122.3	625.3	644.0	645.7	558.2	561.7	563.5
Florida	343.0	356.2	357.7	1,195.9	1,276.3	1,268.8	653.8	724.9	687.0
Daytona Beach	6.5	6.5	6.5	28.5	29.4	29.4	16.3	18.6	17.1
Fort Lauderdale-Hollywood-Pompano Beach	36.8	38.2	38.4	116.4	121.0	120.6	50.3	56.6	52.6
Fort Myers-Cape Coral	7.9	8.6	8.8	26.3	29.2	28.9	13.2	15.6	14.3
Gainesville	4.2	4.0	4.1	19.9	21.3	21.2	31.6	33.3	33.6
Jacksonville	35.6	37.0	37.4	89.9	94.8	94.7	50.4	57.3	54.3
Lakeland-Winter Haven	8.1	8.0	8.1	30.6	33.6	33.8	16.7	19.0	17.8
Melbourne-Titusville-Palm Bay	5.1	5.1	5.2	39.3	40.0	40.3	19.7	21.3	20.8
Miami-Hialeah	67.5	69.6	70.0	210.9	214.8	214.5	99.8	108.0	104.5
Orlando	30.5	32.7	32.9	143.9	156.4	156.6	45.7	54.2	49.7
Pensacola	5.5	5.7	5.7	29.2	30.0	29.9	25.7	27.7	26.3
Sarasota	8.1	8.2	8.1	26.5	29.5	28.9	10.6	12.2	11.2
Tallahassee	4.5	4.5	4.6	20.4	21.2	21.2	41.3	43.7	43.7
Tampa-St. Petersburg-Clearwater	62.0	63.8	63.8	203.0	214.7	215.2	90.8	100.0	94.5
West Palm Beach-Boca Raton-Delray Beach	25.3	27.4	27.5	81.9	90.1	89.6	32.2	39.0	34.1

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Georgia	2,672.7	2,757.4	2,747.3	8.6	8.9	8.9	160.8	156.4	158.4
Albany	46.5	48.1	48.3	(¹)	(¹)	(¹)	2.2	2.1	2.2
Athens	59.9	62.9	62.6	.1	.2	.2	2.7	2.8	2.9
Atlanta	1,334.4	1,387.0	1,384.2	1.6	1.7	1.7	80.5	78.6	80.2
Augusta	150.7	151.8	152.3	.5	.5	.5	9.2	8.6	8.8
Columbus	89.6	91.1	91.1	.1	.1	.1	5.5	5.4	5.4
Macon-Warner Robins	115.4	117.6	117.8	.1	.1	.1	5.3	5.2	5.3
Savannah	99.2	101.9	101.8	(¹)	(¹)	(¹)	7.1	7.2	7.1
Hawaii	438.3	451.0	452.0	(¹)	(¹)	(¹)	18.9	21.8	21.8
Honolulu	351.0	362.6	362.9	(¹)	(¹)	(¹)	15.5	17.9	17.8
Idaho	335.0	343.9	339.7	2.9	2.7	2.7	16.2	16.3	16.9
Boise City	87.3	89.4	89.2	(²)	(²)	(²)	5.2	5.1	5.3
Illinois	4,785.9	4,874.2	4,871.6	25.5	24.9	24.9	191.7	183.7	191.6
Aurora-Elgin	130.5	136.7	135.3	(¹)	(¹)	(¹)	5.6	6.0	6.1
Bloomington-Normal	50.5	53.0	51.8	(¹)	(¹)	(¹)	1.5	1.4	1.5
Champaign-Urbana-Rantoul	78.0	80.0	79.0	(¹)	(¹)	(¹)	2.3	2.2	2.2
Chicago	2,965.3	3,019.1	3,024.0	3.3	3.4	3.4	120.2	123.8	127.5
Davenport-Rock Island-Moline	154.5	155.3	154.5	(¹)	(¹)	(¹)	4.8	4.9	4.9
Decatur	49.7	49.8	49.5	(¹)	(¹)	(¹)	1.7	1.7	1.7
Joliet	93.0	93.6	92.0	(¹)	(¹)	(¹)	4.4	4.2	4.4
Kankakee	32.7	33.0	32.9	(¹)	(¹)	(¹)	1.2	1.2	1.2
Lake County	176.9	182.6	182.5	(¹)	(¹)	(¹)	7.5	6.7	7.0
Peoria	131.3	131.7	132.1	(¹)	(¹)	(¹)	5.4	5.6	5.8
Rockford	123.9	122.4	122.8	(¹)	(¹)	(¹)	3.9	3.7	4.0
Springfield	94.4	93.6	93.2	(¹)	(¹)	(¹)	2.8	2.5	2.6
Indiana	2,223.0	2,306.5	2,304.4	9.1	8.6	8.6	105.1	117.4	123.7
Anderson	48.1	47.6	47.1	(²)	(²)	(²)	1.5	1.5	1.5
Bloomington	46.5	49.3	49.4	(²)	(²)	(²)	2.3	2.3	2.4
Elkhart-Goshen	92.1	98.1	97.2	(²)	(²)	(²)	2.7	3.0	3.0
Evansville	121.7	125.5	125.1	2.3	2.2	2.2	8.8	8.8	8.9
Fort Wayne	177.1	182.2	184.3	(²)	(²)	(²)	9.1	9.6	10.0
Gary-Hammond	215.9	216.8	218.0	(²)	(²)	(²)	12.1	12.4	13.0
Indianapolis	581.4	603.2	603.7	.8	.8	.8	30.4	33.2	34.2
Kokomo	43.9	44.7	44.3	(²)	(²)	(²)	1.3	1.3	1.4
Lafayette	56.9	59.9	59.6	(²)	(²)	(²)	2.2	2.6	2.6
Muncie	46.6	47.8	47.7	(²)	(²)	(²)	1.9	2.1	2.2
South Bend-Mishawaka	104.0	108.5	108.6	(²)	(²)	(²)	5.0	5.4	5.7
Terre Haute	51.2	50.9	50.3	.5	.4	.4	1.9	1.9	2.0
Iowa	1,070.9	1,108.7	1,098.2	2.2	2.2	2.2	40.8	42.3	44.6
Cedar Rapids	81.1	82.5	82.0	.2	.2	.2	3.3	3.4	3.6
Des Moines	198.0	205.6	204.5	(¹)	(¹)	(¹)	8.1	7.3	7.8
Dubuque	40.2	41.1	41.0	(¹)	(¹)	(¹)	1.3	1.2	1.3
Iowa City	46.0	47.3	47.0	(¹)	(¹)	(¹)	1.5	1.8	1.9
Sioux City	48.9	49.4	49.0	(¹)	(¹)	(¹)	1.8	1.9	2.0
Waterloo-Cedar Falls	57.6	59.8	59.6	(¹)	(¹)	(¹)	2.0	1.8	2.0
Kansas	973.1	999.9	987.6	11.3	11.9	12.3	48.5	45.4	46.4
Lawrence	27.7	29.5	29.1	(¹)	(¹)	(¹)	1.3	1.4	1.4
Topeka	84.2	85.6	84.7	(¹)	(¹)	(¹)	4.0	3.8	4.0
Wichita	204.8	215.7	214.8	2.1	2.3	2.4	10.8	12.2	12.4
Kentucky	1,268.4	1,307.1	1,294.6	40.4	39.5	39.6	60.9	63.9	65.0
Lexington-Fayette	166.5	172.2	171.2	.9	1.1	1.1	10.6	12.7	13.3
Louisville	428.3	434.1	435.9	.7	.7	.7	22.6	22.4	24.1
Owensboro	32.9	31.8	32.2	.9	1.1	1.1	2.2	2.0	2.2
Louisiana	1,505.9	1,490.8	1,484.7	60.0	59.5	60.8	90.8	84.1	83.1
Alexandria	45.3	46.0	45.5	.2	.2	.2	2.8	2.7	2.8
Baton Rouge	210.7	211.6	211.6	1.0	1.0	1.0	19.7	19.9	19.7
Houma-Thibodaux	54.5	52.7	52.5	6.2	6.2	6.3	1.8	1.5	1.4
Lafayette	86.2	82.2	82.4	11.0	11.2	11.0	3.9	3.0	3.1
Lake Charles	57.6	59.0	59.3	1.3	1.3	1.3	5.1	4.9	4.9
Monroe	56.2	55.4	55.3	.4	.7	.7	3.3	3.1	2.9
New Orleans	515.9	508.7	511.7	16.0	17.0	17.3	25.9	24.0	23.9
Shreveport	133.6	130.1	129.5	3.6	3.2	3.2	8.1	7.7	8.0
Maine	485.6	505.9	500.7	.1	.1	.1	30.8	32.1	32.5
Lewiston-Auburn	36.4	39.2	38.3	(¹)	(¹)	(¹)	2.0	2.0	2.1
Portland	118.5	120.3	120.6	(¹)	(¹)	(¹)	7.9	7.9	8.3

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1986	June 1987	July 1987 ^a	July 1986	June 1987	July 1987 ^a	July 1986	June 1987	July 1987 ^a
Georgia	556.3	571.0	567.5	168.3	170.3	171.2	673.6	696.2	698.5
Albany	8.1	8.6	8.6	2.2	2.2	2.2	12.3	12.5	12.6
Athens	14.7	15.5	15.6	1.7	1.7	1.7	12.5	12.6	12.7
Atlanta	188.5	193.0	190.4	109.5	111.7	112.6	368.7	387.4	387.7
Augusta	36.2	36.2	36.0	5.0	5.1	5.2	32.4	33.2	33.3
Columbus	19.5	19.6	19.6	3.4	3.4	3.5	20.1	20.4	20.4
Macon-Warner Robins	19.0	19.6	20.0	5.0	5.1	5.1	25.3	25.2	25.1
Savannah	16.7	17.0	17.0	9.7	9.7	9.6	24.1	24.0	24.1
Hawaii	23.1	22.0	22.7	34.2	34.8	34.6	117.3	119.9	121.6
Honolulu	17.2	16.5	16.7	28.0	28.3	28.2	92.0	94.5	96.0
Idaho	53.5	55.6	55.1	18.6	18.6	18.5	84.8	85.1	85.1
Boise City	10.4	10.8	10.8	5.5	5.9	5.9	22.2	22.8	22.8
Illinois	922.4	929.0	930.3	278.0	283.1	282.5	1,183.3	1,228.4	1,232.7
Aurora-Elgin	35.5	36.5	36.5	4.7	5.1	5.2	35.7	37.5	36.9
Bloomington-Normal	4.5	5.1	5.1	2.9	2.9	2.9	12.4	12.5	12.4
Champaign-Urbana-Rantoul	7.7	7.7	7.7	2.2	1.9	1.9	19.0	19.3	19.3
Chicago	544.1	542.6	538.7	187.2	192.8	192.3	732.2	747.9	744.0
Davenport-Rock Island-Moline	33.7	34.0	33.6	8.3	8.3	8.3	42.2	42.3	42.3
Decatur	14.1	13.5	13.5	4.5	4.6	4.6	11.0	11.0	11.0
Joliet	19.6	19.4	19.4	8.8	8.4	8.4	22.5	22.4	22.4
Kankakee	5.3	5.4	5.4	1.5	1.4	1.4	8.1	8.1	8.0
Lake County	39.7	39.9	40.0	6.1	6.6	6.5	45.4	46.7	46.5
Peoria	31.4	30.5	30.5	6.7	6.6	6.6	32.7	33.4	33.7
Rockford	45.2	43.3	43.3	4.6	4.5	4.5	28.3	28.5	28.5
Springfield	3.9	3.8	3.8	4.7	4.8	4.8	19.3	19.3	19.3
Indiana	601.6	609.2	607.2	114.2	116.7	117.1	531.4	559.2	558.8
Anderson	18.1	16.9	16.7	1.4	1.4	1.3	10.7	11.2	11.2
Bloomington	8.0	8.5	8.6	1.7	1.7	1.7	11.1	11.9	12.1
Elkhart-Goshen	49.5	52.8	52.1	2.8	2.9	2.8	17.8	18.8	18.8
Evansville	28.6	29.9	30.0	6.5	6.5	6.5	30.7	31.5	31.6
Fort Wayne	48.6	50.0	50.3	11.7	12.1	12.0	43.5	45.5	45.6
Gary-Hammond	55.9	54.9	54.7	14.0	14.0	14.0	50.7	52.0	52.1
Indianapolis	107.1	106.9	106.1	34.9	36.8	37.0	149.3	154.0	154.7
Kokomo	19.3	18.7	18.4	1.4	1.4	1.4	9.4	10.1	10.1
Lafayette	10.4	11.5	11.5	1.6	1.6	1.6	12.2	12.7	12.5
Muncie	10.7	10.6	10.6	2.2	2.3	2.2	12.0	12.2	12.1
South Bend-Mishawaka	22.5	24.0	23.7	4.8	4.9	5.0	27.6	28.9	28.7
Terre Haute	10.7	10.1	10.1	2.6	2.6	2.6	14.2	14.1	14.2
Iowa	202.8	212.1	212.4	52.5	53.1	53.3	281.5	281.6	282.0
Cedar Rapids	22.5	22.5	22.5	4.3	4.2	4.2	20.2	20.4	20.2
Des Moines	21.6	22.8	22.3	11.9	12.0	12.1	52.7	52.7	53.1
Dubuque	11.8	12.2	12.1	1.7	1.6	1.6	9.3	10.0	9.9
Iowa City	3.7	3.9	4.0	1.1	1.3	1.3	9.1	9.3	9.2
Sioux City	10.3	8.1	8.1	3.3	3.7	3.8	12.0	12.5	12.6
Waterloo-Cedar Falls	12.3	13.2	13.5	1.9	1.7	1.7	14.3	14.4	14.4
Kansas	175.8	179.1	180.1	61.8	63.3	63.1	247.8	252.1	251.6
Lawrence	4.5	4.5	4.5	1.3	1.3	1.3	6.5	6.7	6.7
Topeka	9.5	9.6	9.4	6.8	6.6	6.6	18.8	19.3	19.3
Wichita	55.2	59.0	59.7	9.7	10.0	9.9	49.5	50.9	50.4
Kentucky	252.5	258.9	258.3	67.5	70.1	70.2	305.0	301.3	300.8
Lexington-Fayette	27.5	28.1	27.9	7.7	7.1	7.1	39.4	39.9	39.8
Louisville	86.3	86.2	84.8	26.1	26.8	26.8	104.3	104.6	103.5
Owensboro	5.8	6.1	6.0	2.3	2.3	2.4	8.4	7.6	7.7
Louisiana	165.8	166.2	166.9	108.2	107.4	107.9	370.0	358.2	357.7
Alexandria	3.3	3.4	3.4	2.5	2.3	2.3	10.7	11.1	11.0
Baton Rouge	19.1	19.0	19.0	10.3	10.7	10.7	51.9	52.6	52.5
Houma-Thibodaux	4.8	4.4	4.5	5.9	5.9	5.9	14.1	13.4	13.6
Lafayette	5.9	5.8	5.7	6.8	6.4	6.5	23.6	22.0	22.0
Lake Charles	8.7	10.4	10.5	3.9	3.8	3.8	13.9	13.8	13.8
Monroe	7.4	7.2	7.0	3.0	2.7	2.6	15.4	15.1	15.0
New Orleans	43.0	43.8	43.1	43.5	42.2	42.6	137.1	132.9	132.5
Shreveport	19.1	18.5	18.1	8.5	7.9	7.9	31.6	29.6	29.7
Maine	99.6	103.1	98.6	19.7	20.1	19.8	123.4	127.4	129.9
Lewiston-Auburn	9.4	10.1	9.6	1.4	1.4	1.4	8.9	9.3	9.2
Portland	16.3	15.3	15.0	6.2	6.3	6.4	35.3	36.0	36.5

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Georgia	147.7	150.5	151.7	510.2	536.4	535.1	447.3	467.7	456.0
Albany	2.5	2.5	2.5	8.1	8.0	8.2	11.2	12.3	12.1
Athens	2.0	2.0	2.0	9.0	9.5	9.5	17.0	18.4	17.9
Atlanta	95.6	97.7	98.5	308.9	325.9	326.2	181.0	190.9	186.8
Augusta	5.9	6.1	6.1	29.2	28.7	28.8	32.2	33.4	33.6
Columbus	6.2	6.2	6.3	15.3	15.6	15.5	19.5	20.4	20.5
Macon-Warner Robins	7.4	7.5	7.7	20.4	20.6	20.6	32.8	34.2	33.9
Savannah	4.5	4.4	4.5	22.8	23.1	23.0	14.2	16.6	16.5
Hawaii	33.3	33.6	33.7	119.3	123.7	123.9	92.2	95.2	93.7
Honolulu	28.2	28.6	28.6	92.7	96.6	97.1	77.4	80.2	78.5
Idaho	24.0	24.3	24.5	68.7	68.4	69.4	66.3	72.9	67.4
Boise City	8.7	8.6	8.6	19.3	19.4	19.7	16.0	16.8	16.1
Illinois	350.9	357.2	358.4	1,143.4	1,153.2	1,161.0	690.7	714.7	690.2
Aurora-Elgin	6.9	6.9	6.9	28.5	29.7	29.9	13.5	14.9	13.7
Bloomington-Normal	9.1	9.3	9.4	11.2	11.4	11.5	8.9	10.4	9.0
Champaign-Urbana-Rantoul	3.2	3.3	3.2	14.9	14.8	14.9	28.7	30.8	29.8
Chicago	255.8	259.5	261.4	769.8	785.2	793.4	352.7	363.9	363.3
Davenport-Rock Island-Moline	7.9	8.1	8.1	30.7	30.2	30.2	26.9	27.5	27.1
Decatur	2.8	2.7	2.7	10.4	10.6	10.6	5.2	5.7	5.4
Joliet	3.9	3.8	3.8	19.4	19.4	19.3	14.2	15.8	14.1
Kankakee	1.6	1.6	1.6	8.0	8.6	8.6	7.0	6.7	6.7
Lake County	6.6	6.6	6.6	42.6	45.5	46.0	28.3	29.9	29.2
Peoria	7.0	7.1	7.1	32.6	33.1	33.1	15.5	15.4	15.3
Rockford	5.4	5.6	5.6	24.9	24.7	24.9	11.6	12.1	12.0
Springfield	7.9	8.0	7.9	24.4	23.0	22.9	31.3	32.1	31.8
Indiana	112.8	117.0	117.4	430.3	448.2	446.7	318.4	330.4	324.9
Anderson	1.6	1.6	1.6	9.0	9.2	9.1	5.8	5.8	5.6
Bloomington	1.7	1.8	1.8	7.4	8.1	7.9	14.5	15.0	14.8
Elkhart-Goshen	2.4	2.4	2.4	12.1	12.8	12.8	4.8	5.5	5.2
Evansville	5.0	5.1	5.1	28.8	29.2	29.5	11.0	12.3	11.2
Fort Wayne	11.9	12.1	12.1	35.5	37.3	37.1	16.8	15.6	17.2
Gary-Hammond	8.1	8.3	8.4	43.9	45.5	45.7	31.2	29.7	30.1
Indianapolis	44.2	45.5	46.0	129.1	138.0	138.0	85.6	88.0	86.9
Kokomo	1.3	1.4	1.4	6.1	6.4	6.6	5.1	5.3	5.1
Lafayette	3.0	3.1	3.1	10.9	11.3	11.3	16.6	17.3	17.1
Muncie	1.6	1.6	1.6	10.0	10.4	10.3	8.2	8.5	8.7
South Bend-Mishawaka	5.6	5.9	5.9	28.0	29.2	29.1	10.5	10.3	10.5
Terre Haute	1.9	1.9	1.9	10.3	10.7	10.6	9.1	9.3	8.5
Iowa	63.6	65.1	65.1	235.8	241.9	240.1	191.7	210.4	198.5
Cedar Rapids	4.7	4.5	4.6	17.6	18.3	18.0	8.3	9.0	8.7
Des Moines	25.7	27.2	27.3	49.8	53.0	53.1	28.1	30.5	28.7
Dubuque	1.4	1.5	1.5	11.7	11.5	11.6	3.0	3.1	3.0
Iowa City	1.5	1.7	1.8	7.4	7.8	7.6	21.6	21.4	21.0
Sioux City	2.6	2.6	2.6	12.6	13.9	13.5	6.3	6.7	6.4
Waterloo-Cedar Falls	3.2	3.3	3.3	13.6	14.1	14.0	10.2	11.3	10.7
Kansas	55.0	56.2	56.4	193.4	200.4	199.5	179.5	191.5	178.2
Lawrence	1.0	1.1	1.1	5.2	5.4	5.4	7.9	9.1	8.7
Topeka	5.9	6.3	6.3	18.9	19.6	19.7	20.2	20.3	19.3
Wichita	10.9	11.3	11.4	43.1	45.0	44.8	23.5	25.0	23.8
Kentucky	61.0	62.7	63.2	259.4	271.9	270.0	221.7	238.8	227.5
Lexington-Fayette	9.1	9.0	9.1	38.6	38.4	37.3	32.7	35.9	35.6
Louisville	28.1	29.4	29.6	99.0	104.5	104.5	61.2	59.5	61.9
Owensboro	1.4	1.4	1.4	7.4	7.2	7.3	4.5	4.1	4.1
Louisiana	86.3	84.8	84.7	316.1	315.8	315.7	308.7	312.8	307.9
Alexandria	2.7	2.6	2.7	11.0	11.1	11.0	12.1	12.6	12.1
Baton Rouge	13.8	13.5	13.5	41.6	42.2	42.4	53.3	52.7	52.8
Houma-Thibodaux	2.6	2.4	2.4	8.4	8.4	8.4	10.7	10.5	10.0
Lafayette	4.1	3.9	3.9	18.7	17.7	17.6	12.2	12.2	12.6
Lake Charles	2.8	2.8	2.8	11.0	10.7	10.8	10.9	11.3	11.4
Monroe	4.6	4.6	4.5	11.2	11.5	11.6	10.9	10.5	11.0
New Orleans	34.2	34.0	33.8	130.8	130.9	130.0	85.4	83.9	88.5
Shreveport	7.8	7.6	7.6	32.0	31.6	31.7	22.9	24.0	23.3
Maine	23.4	24.2	24.5	110.8	110.4	116.0	77.8	88.5	79.3
Lewiston-Auburn	2.1	2.2	2.2	9.3	10.3	10.2	3.3	3.9	3.6
Portland	11.2	11.8	12.1	28.0	29.0	29.3	13.6	14.0	13.0

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Maryland	1,970.9	2,008.3	1,999.0	1.7	1.7	1.7	145.9	146.3	148.2
Baltimore MSA	1,063.9	1,078.6	1,066.8	.2	.2	.2	69.6	71.3	71.9
Baltimore City	458.2	459.5	459.5	(¹)	(¹)	(¹)	18.8	18.3	18.8
Suburban Maryland-D.C.	690.2	719.2	714.0	.4	.4	.4	62.5	63.6	64.8
Massachusetts	2,972.3	3,081.5	3,041.6	1.8	2.5	2.6	129.8	134.6	136.4
Boston	1,661.2	1,733.0	1,707.5	.8	.9	1.0	68.0	70.2	71.9
Brockton	69.4	73.1	72.2	(¹)	(¹)	(¹)	4.0	5.0	5.2
Fall River	53.0	56.9	54.5	(¹)	(¹)	(¹)	2.3	3.0	3.0
Fitchburg-Leominster	38.3	40.5	38.8	(¹)	(¹)	(¹)	2.2	2.3	2.3
Lawrence-Haverhill	156.9	163.6	160.4	(¹)	(¹)	(¹)	9.6	9.3	9.8
Lowell	102.5	106.0	103.3	.2	.1	.1	5.3	5.6	5.7
New Bedford	63.6	67.3	65.3	(¹)	(¹)	(¹)	3.2	3.8	4.0
Pittsfield	43.1	44.8	43.9	.1	.1	.1	2.1	2.3	2.5
Springfield	228.2	242.2	238.0	.2	.2	.2	9.0	9.8	10.1
Worcester	186.9	198.9	193.9	.2	.2	.2	9.1	9.8	9.9
Michigan	3,602.2	3,709.0	3,643.5	10.8	11.4	11.6	123.9	140.9	146.2
Ann Arbor	148.7	158.9	156.7	(¹)	(¹)	(¹)	5.9	5.8	8.2
Battle Creek	55.3	56.0	56.0	(¹)	(¹)	(¹)	1.7	1.7	1.9
Benton Harbor	62.5	63.0	63.5	(¹)	(¹)	(¹)	1.5	1.6	1.7
Detroit	1,832.6	1,894.2	1,857.3	.9	.9	.9	66.1	73.7	77.0
Flint	177.7	175.4	171.9	(¹)	(¹)	(¹)	6.3	5.8	5.7
Grand Rapids	297.4	304.9	302.4	(¹)	(¹)	(¹)	14.8	16.2	16.6
Jackson	49.1	49.8	49.6	(¹)	(¹)	(¹)	1.4	1.5	1.6
Kalamazoo	99.6	102.2	100.0	(¹)	(¹)	(¹)	3.5	3.3	3.4
Lansing-East Lansing	191.1	201.3	191.5	(¹)	(¹)	(¹)	6.2	5.2	5.5
Muskegon	56.9	56.4	56.6	(¹)	(¹)	(¹)	2.2	1.9	2.1
Saginaw-Bay City-Midland	149.7	154.6	154.7	(¹)	(¹)	(¹)	6.7	6.3	6.6
Minnesota	1,896.9	1,961.8	1,945.0	7.5	7.0	6.9	84.6	88.0	92.5
Duluth	83.9	86.2	84.9	4.0	4.2	4.0	4.2	4.1	4.6
Minneapolis-St. Paul	1,235.1	1,267.7	1,260.0	(¹)	(¹)	(¹)	54.1	55.0	56.9
Rochester	55.4	57.5	57.9	(²)	(²)	(²)	2.2	2.1	2.3
St. Cloud	64.2	67.5	66.6	(²)	(²)	(²)	3.9	4.8	5.3
Mississippi	840.3	855.8	851.0	6.4	6.4	6.3	36.8	35.7	36.4
Jackson	167.8	173.2	172.1	1.0	1.1	1.1	8.9	8.8	9.1
Missouri	2,130.3	2,160.2	2,144.3	5.7	5.6	5.7	105.2	102.7	103.6
Kansas City	714.0	718.2	713.3	.6	.6	.6	36.4	36.1	36.1
St. Joseph	35.6	35.6	35.3	(¹)	(¹)	(¹)	1.6	1.7	1.8
St. Louis	1,100.6	1,106.9	1,101.3	3.6	3.5	3.5	61.0	56.0	56.9
Springfield	102.2	103.4	104.1	.1	.1	.1	4.5	4.5	4.6
Montana	275.7	280.3	274.9	5.9	6.4	6.6	12.1	9.9	10.1
Nebraska	651.3	666.5	660.0	2.0	2.1	2.1	27.1	25.0	25.3
Lincoln	106.3	107.6	107.4	(¹)	(¹)	(¹)	4.1	3.9	4.0
Omaha	293.0	297.9	296.4	.2	.2	.2	13.9	13.5	14.0
Nevada	473.7	503.4	506.4	6.4	7.1	7.3	29.4	31.8	32.4
Las Vegas	263.0	284.9	285.3	.3	.3	.3	17.3	19.1	19.3
Reno	128.3	132.5	134.1	.7	.7	.8	7.6	8.0	8.3
New Hampshire	494.0	509.1	509.9	.6	.6	.6	37.6	36.1	37.6
Nashua	88.9	90.3	88.9	.1	.1	.1	4.7	5.1	5.0
Portsmouth-Dover-Rochester,NH-ME	106.9	110.3	110.1	.1	.1	.1	5.8	5.4	5.5
New Jersey	3,522.3	3,623.1	3,614.9	2.3	2.3	2.4	162.9	174.3	178.0
Atlantic City	178.2	178.9	184.6	(¹)	(¹)	(¹)	9.9	11.5	11.3
Bergen-Passaic	646.8	661.5	658.0	.1	.1	.1	30.2	32.4	32.5
Camden	409.0	423.1	419.8	.1	.1	.1	21.2	23.8	24.4
Jersey City	236.9	243.5	242.9	(¹)	(¹)	(¹)	6.5	6.9	7.0
Middlesex-Somerset-Hunterdon	495.2	508.2	508.6	.6	.6	.6	23.1	22.7	22.9
Monmouth-Ocean	321.2	328.3	331.0	(¹)	(¹)	(¹)	20.3	21.6	21.7
Newark	949.3	964.8	963.9	.7	.7	.7	37.0	39.5	39.9
Trenton	188.1	195.5	193.4	(¹)	(¹)	(¹)	5.0	5.3	5.7
Vineland-Millville-Bridgeton	54.4	56.6	56.3	.3	.4	.4	2.4	2.9	2.8

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Maryland	209.4	208.0	208.1	90.8	94.3	94.5	503.7	515.1	516.3
Baltimore MSA	133.3	131.2	131.1	54.5	55.6	55.6	260.4	265.2	264.7
Baltimore City	46.9	45.5	45.3	27.5	27.1	(¹)	96.7	97.8	97.8
Suburban Maryland-D.C.	35.7	35.2	35.3	23.9	25.4	25.7	184.9	192.5	192.3
Massachusetts	603.0	607.4	592.0	123.8	130.8	127.3	708.6	729.8	723.8
Boston	289.4	290.2	284.4	72.5	76.0	74.2	372.4	392.9	387.7
Brockton	10.8	11.1	10.7	4.9	5.0	4.8	20.8	21.9	21.8
Fall River	15.7	16.8	15.1	1.7	1.8	1.9	14.1	14.9	15.1
Fitchburg-Leominster	12.1	13.2	12.4	1.5	1.5	1.3	9.7	10.3	10.1
Lawrence-Haverhill	51.5	50.8	50.0	6.3	6.9	6.5	35.4	38.3	38.1
Lowell	37.7	37.1	36.4	3.1	3.2	2.9	21.3	21.8	21.2
New Bedford	18.7	20.9	19.4	3.1	3.3	3.3	15.3	15.2	15.2
Pittsfield	11.7	11.9	11.3	1.1	1.1	1.0	11.3	11.6	11.5
Springfield	50.7	52.9	52.3	8.6	9.3	8.9	53.2	57.1	56.0
Worcester	45.0	45.4	44.8	8.1	8.3	8.0	46.5	49.9	49.5
Michigan	974.0	975.4	928.7	149.1	150.7	149.7	818.1	847.3	846.9
Ann Arbor	34.0	38.6	37.3	4.6	4.9	4.9	24.7	27.6	27.4
Battle Creek	15.4	15.5	15.8	1.9	1.8	1.8	10.4	10.6	10.6
Benton Harbor	21.5	21.3	21.4	2.5	2.6	2.6	12.3	12.6	12.8
Detroit	483.0	476.7	445.6	83.2	85.4	85.0	426.0	443.3	442.6
Flint	63.4	58.3	54.1	4.6	4.5	4.6	42.9	43.4	43.6
Grand Rapids	93.4	94.3	92.9	10.8	10.9	11.0	74.7	76.6	76.5
Jackson	12.7	12.8	12.5	4.2	4.1	4.2	10.7	11.0	11.0
Kalamazoo	29.4	29.3	27.6	3.4	3.5	3.5	22.7	23.5	23.3
Lansing-East Lansing	37.4	36.8	33.3	5.4	5.2	5.1	39.0	39.3	39.2
Muskegon	18.3	17.9	17.8	2.7	2.6	2.5	12.3	12.4	12.5
Saginaw-Bay City-Midland	44.2	44.9	43.8	7.2	7.2	7.2	34.3	35.7	35.8
Minnesota	373.4	374.4	375.6	97.5	98.4	98.2	476.9	486.5	485.7
Duluth	7.5	7.4	7.3	5.8	5.4	5.4	22.1	22.3	22.2
Minneapolis-St. Paul	252.9	252.3	253.4	66.9	66.0	66.2	304.8	310.6	310.3
Rochester	11.1	10.6	10.7	1.6	1.6	1.6	11.4	11.6	11.7
St. Cloud	11.6	12.0	11.7	3.6	3.7	3.7	19.7	21.5	21.2
Mississippi	221.5	223.9	221.4	39.7	40.0	40.1	183.3	188.0	188.6
Jackson	20.1	20.2	20.4	11.1	11.3	11.3	41.7	42.6	42.6
Missouri	416.2	417.4	413.9	140.4	143.4	142.6	510.9	512.8	512.3
Kansas City	115.8	110.5	109.5	54.4	54.9	54.6	180.9	182.4	182.4
St. Joseph	9.2	9.3	9.2	2.0	2.0	1.9	8.7	8.6	8.6
St. Louis	219.9	220.1	216.8	74.8	75.0	75.1	261.9	261.9	262.0
Springfield	20.6	19.5	19.6	6.6	6.7	6.7	27.9	28.7	28.9
Montana	21.8	21.4	21.9	20.5	20.5	20.3	75.1	72.8	73.3
Nebraska	85.4	86.0	86.5	43.4	44.2	44.4	168.9	173.6	173.2
Lincoln	12.8	13.3	13.2	6.0	6.0	6.0	24.6	25.1	24.7
Omaha	32.6	32.5	32.7	23.0	24.0	24.0	75.4	78.1	77.8
Nevada	22.5	23.5	23.7	27.1	27.7	27.9	95.6	101.3	102.5
Las Vegas	8.1	8.6	8.7	15.2	15.9	15.9	54.8	58.4	59.0
Reno	8.3	8.6	8.6	8.7	8.9	8.9	28.9	30.0	30.5
New Hampshire	114.3	118.4	116.6	16.6	17.7	16.6	124.0	128.6	129.9
Nashua	35.8	36.0	36.0	2.0	2.3	2.2	19.4	20.5	20.1
Portsmouth-Dover-Rochester,NH-ME	19.4	20.2	19.3	2.9	3.1	3.1	30.2	30.4	30.9
New Jersey	687.4	687.0	677.1	228.2	232.2	230.0	843.9	872.2	872.6
Atlantic City	8.1	8.2	8.1	6.1	6.2	6.2	44.6	42.1	45.7
Bergen-Passaic	161.2	159.8	156.5	28.5	29.3	28.9	183.1	186.4	186.1
Camden	75.6	73.7	73.2	17.1	17.5	17.3	106.7	110.2	109.6
Jersey City	52.7	53.5	52.0	29.8	30.0	29.5	56.8	59.0	58.5
Middlesex-Somerset-Hunterdon	112.3	114.5	113.5	39.3	40.3	40.3	119.0	120.6	120.2
Monmouth-Ocean	30.4	30.0	29.7	15.4	16.1	16.0	91.1	92.6	94.4
Newark	185.4	187.2	185.5	80.1	79.7	78.8	193.8	199.1	198.8
Trenton	31.6	32.1	32.0	5.9	6.4	6.2	30.4	31.4	31.2
Vineland-Millville-Bridgeton	15.3	15.3	15.5	2.2	2.2	2.2	10.8	11.5	11.5

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Maryland	120.7	122.2	122.4	516.9	529.8	530.6	381.8	391.0	377.2
Baltimore MSA	73.0	74.9	75.2	267.7	272.8	271.6	205.2	207.4	196.6
Baltimore City	45.2	45.9	46.0	132.4	137.5	137.1	90.7	87.5	86.9
Suburban Maryland-D.C.	39.2	40.6	40.8	201.2	206.3	208.6	142.4	155.1	146.1
Massachusetts	208.7	218.4	219.7	818.4	860.8	857.7	378.2	397.2	382.1
Boston	143.4	149.0	150.1	525.2	551.4	545.6	189.5	202.4	192.6
Brockton	3.1	3.2	3.3	14.4	14.6	14.8	11.4	12.0	11.6
Fall River	2.9	3.0	3.0	10.6	10.9	10.9	5.7	6.5	5.5
Fitchburg-Leominster	1.6	1.7	1.7	7.3	7.1	7.0	3.9	4.4	4.0
Lawrence-Haverhill	6.1	6.4	6.5	31.4	32.6	32.2	16.6	19.3	17.3
Lowell	4.1	4.4	4.4	18.9	20.7	20.6	11.9	13.1	12.0
New Bedford	2.6	2.6	2.7	11.9	12.5	12.4	8.8	9.0	8.3
Pittsfield	2.1	2.2	2.3	10.5	11.0	11.2	4.2	4.6	4.0
Springfield	16.0	16.7	16.9	54.4	57.2	56.4	36.1	39.0	37.2
Worcester	12.7	13.3	13.5	43.5	48.1	45.9	21.8	23.9	22.1
Michigan	174.4	182.4	184.3	790.5	805.1	804.7	561.5	595.8	571.5
Ann Arbor	4.4	4.8	4.9	31.8	33.3	33.7	43.2	43.7	42.2
Battle Creek	3.8	3.5	3.3	10.9	11.3	11.3	11.2	11.6	11.3
Benton Harbor	2.4	2.6	2.6	13.8	14.0	14.2	8.3	8.3	8.2
Detroit	100.7	104.7	105.8	452.2	468.8	467.4	220.5	240.7	233.1
Flint	6.2	6.6	6.7	32.2	32.7	33.4	22.0	24.2	23.9
Grand Rapids	13.4	13.6	13.5	60.6	62.5	62.0	29.3	30.4	29.6
Jackson	1.6	1.5	1.6	9.5	9.2	9.3	8.8	9.5	9.2
Kalamazoo	4.5	4.8	4.8	22.7	23.4	23.7	13.4	14.2	13.5
Lansing-East Lansing	10.9	11.5	11.6	34.6	36.9	36.8	57.1	65.9	59.4
Muskegon	1.4	1.4	1.4	11.4	11.7	11.8	8.5	8.5	8.4
Saginaw-Bay City-Midland	6.2	6.1	6.3	30.5	32.3	32.6	20.3	21.8	22.3
Minnesota	118.1	121.7	122.0	450.4	469.5	471.3	288.5	316.4	292.7
Duluth	3.2	3.1	3.1	20.2	20.6	20.6	16.9	19.2	17.6
Minneapolis-St. Paul	91.2	94.1	94.4	307.0	317.0	317.9	157.3	171.9	160.0
Rochester	1.6	1.6	1.6	22.5	23.6	24.5	5.0	6.3	5.5
St. Cloud	2.4	2.4	2.5	12.5	12.2	12.1	10.6	10.8	10.0
Mississippi	37.9	39.1	39.1	134.9	138.2	139.9	179.8	184.5	179.2
Jackson	13.7	14.2	14.2	36.0	37.0	37.0	35.5	37.9	36.4
Missouri	132.0	135.8	137.0	500.0	510.2	511.8	319.9	332.3	317.4
Kansas City	57.4	57.6	57.7	162.4	165.7	165.8	106.1	110.4	106.6
St. Joseph	1.9	1.9	1.9	6.9	6.7	6.6	5.3	5.4	5.3
St. Louis	71.5	73.5	73.8	275.6	284.0	286.2	132.3	132.9	127.0
Springfield	5.2	5.2	5.2	25.7	26.3	26.4	11.6	12.4	12.6
Montana	13.5	13.3	13.4	64.0	64.2	64.4	62.8	71.8	64.9
Nebraska	47.7	49.0	49.1	147.2	149.0	147.3	129.6	137.6	132.1
Lincoln	7.7	8.0	7.9	22.1	23.1	23.0	29.0	28.2	28.6
Omaha	28.8	30.3	30.5	78.3	76.9	76.2	40.8	42.4	41.0
Nevada	22.9	24.3	24.4	211.6	224.4	227.8	58.2	63.3	60.4
Las Vegas	13.6	14.6	14.7	124.7	136.0	137.6	29.0	32.0	29.8
Reno	6.9	7.1	7.1	52.8	53.7	54.8	14.4	15.5	15.1
New Hampshire	29.1	31.0	31.3	113.8	113.4	117.8	58.0	63.3	59.5
Nashua	3.3	3.7	3.7	16.2	16.6	16.4	5.4	6.0	5.4
Portsmouth-Dover-Rochester,NH-ME	5.9	6.4	6.5	20.1	20.8	21.6	22.5	23.9	23.1
New Jersey	213.6	222.0	224.7	853.1	886.7	889.8	530.9	546.4	540.3
Atlantic City	7.1	7.2	7.4	76.0	77.6	80.8	26.4	26.0	25.0
Bergen-Passaic	35.4	37.7	38.3	142.7	148.4	148.9	65.4	67.4	64.7
Camden	22.3	23.5	23.8	95.9	100.1	99.5	70.2	74.2	71.9
Jersey City	9.9	10.8	10.8	40.7	42.8	43.0	40.5	40.5	42.1
Middlesex-Somerset-Hunterdon	33.5	34.2	34.4	97.8	102.6	104.5	69.7	72.7	72.2
Monmouth-Ocean	17.0	17.7	18.0	88.5	88.3	91.7	58.5	61.9	59.4
Newark	74.2	76.9	77.6	241.2	246.2	246.8	136.8	135.5	135.8
Trenton	9.1	9.1	9.5	52.9	56.1	54.0	53.3	55.1	54.8
Vineland-Millville-Bridgeton	2.8	2.9	2.9	9.6	10.1	9.8	11.1	11.3	11.2

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
New Mexico	525.7	535.9	533.9	15.3	15.0	15.0	36.6	35.4	35.9
Albuquerque	226.8	233.1	231.2	.2	.2	.2	17.6	17.2	17.0
Las Cruces	39.0	38.6	37.5	.1	.1	.1	2.7	2.8	3.0
Santa Fe	54.1	55.5	56.0	.1	.1	.1	3.3	3.5	3.5
New York	7,930.1	8,158.3	8,097.6	6.4	6.5	6.5	328.3	351.6	357.0
Albany-Schenectady-Troy	394.3	402.9	400.1	.3	.3	.3	19.1	20.5	21.8
Binghamton	116.6	120.7	118.5	(¹)	(¹)	(¹)	5.6	5.7	5.9
Buffalo	421.9	436.1	431.6	.4	.4	.4	17.1	17.2	18.3
Elmira	36.1	38.8	38.7	(¹)	(¹)	(¹)	1.7	1.8	1.8
Glens Falls	48.2	49.1	50.9	(¹)	(¹)	(¹)	2.2	2.4	2.6
Nassau-Suffolk	1,111.2	1,141.8	1,127.4	.2	.2	.2	58.6	59.1	59.7
New York PMSA	4,064.7	4,134.5	4,114.9	1.4	1.3	1.3	148.1	155.3	155.1
New York City	3,538.9	3,606.2	3,585.2	.8	.7	.7	114.1	119.9	119.4
Niagara Falls	78.6	79.7	78.3	(¹)	(¹)	(¹)	3.1	3.0	3.2
Orange County	97.5	100.1	99.1	(¹)	(¹)	(¹)	4.7	5.0	5.2
Poughkeepsie	116.9	117.4	117.3	(²)	(²)	(²)	6.3	7.0	7.1
Rochester	450.5	460.7	456.1	.8	.8	.8	18.1	17.4	18.4
Rockland County	96.7	98.8	98.1	(²)	(²)	(²)	5.0	5.3	5.4
Syracuse	291.5	295.9	292.9	.3	.2	.3	16.5	15.1	15.7
Utica-Rome	120.7	120.8	120.7	.2	.2	.2	4.5	4.3	4.5
Westchester County	411.2	411.7	413.7	.3	.3	.3	27.7	28.6	28.7
North Carolina	2,694.3	2,840.9	2,795.0	4.8	4.9	4.9	162.2	169.4	172.4
Asheville	77.0	78.4	77.3	.1	.1	.1	4.0	4.0	4.0
Charlotte-Gastonia-Rock Hill	537.8	565.4	560.9	.3	.3	.3	32.3	34.1	34.7
Greensboro-Winston-Salem-High Point	442.5	458.4	449.9	.3	.3	.3	25.1	24.8	24.9
Raleigh-Durham	364.2	376.6	374.7	.3	.4	.4	24.3	25.3	25.7
North Dakota	249.9	254.1	252.2	4.4	4.1	4.1	13.3	12.4	12.9
Bismarck	35.9	37.0	36.6	.2	.2	.2	1.7	1.8	1.8
Fargo-Moorhead	66.0	70.2	69.1	(¹)	(¹)	(¹)	3.9	3.8	4.0
Grand Forks	28.6	29.0	28.7	(¹)	(¹)	(¹)	2.1	1.9	2.1
Ohio	4,478.3	4,614.8	4,583.4	22.6	20.4	20.6	175.3	182.5	190.4
Akron	257.6	262.8	262.8	.7	.6	.7	9.5	10.7	11.0
Canton	152.7	156.4	154.9	1.1	1.0	1.0	6.0	6.7	7.0
Cincinnati	652.6	679.2	681.9	.4	.4	.4	27.7	29.7	30.7
Cleveland	889.6	908.0	911.3	1.1	.8	.9	28.0	28.0	29.1
Columbus	628.0	661.0	653.2	.9	1.0	.9	26.1	28.3	29.6
Dayton-Springfield	417.5	433.5	428.7	.4	.5	.5	16.3	19.0	19.8
Toledo	288.6	283.8	282.0	.2	.2	.2	10.3	10.9	11.4
Youngstown-Warren	187.6	194.8	187.2	.6	.6	.6	7.7	8.8	9.2
Oklahoma	1,131.9	1,137.5	1,123.9	53.8	53.0	53.6	42.0	41.1	41.3
Enid	22.4	21.9	21.5	1.2	1.2	1.2	.8	.8	.8
Lawton	33.2	32.8	32.0	.2	.2	.2	1.4	1.3	1.3
Oklahoma City	407.7	403.7	397.0	12.7	11.4	11.6	14.3	14.8	14.7
Tulsa	300.2	302.6	298.5	17.6	17.1	17.1	12.3	13.2	13.5
Oregon	1,051.1	1,111.0	1,096.4	1.5	1.4	1.5	36.6	36.9	38.6
Eugene-Springfield	96.8	105.1	102.0	.2	.2	.2	3.3	3.5	3.8
Portland	526.4	552.8	548.6	.6	.5	.6	19.5	19.4	20.7
Salem	90.9	94.3	97.0	.1	.1	.1	3.2	2.9	3.0
Pennsylvania	4,792.6	4,952.5	4,934.9	34.1	31.7	31.2	224.3	234.0	244.6
Allentown-Bethlehem	261.9	272.0	270.1	.5	.6	.6	11.8	12.7	13.4
Altoona	49.9	51.2	51.1	(²)	(²)	(²)	2.8	3.0	3.1
Beaver County	50.8	51.0	50.5	(²)	(²)	(²)	3.6	4.0	4.2
Erie	108.8	111.1	110.1	.3	.3	.3	3.6	3.6	3.8
Harrisburg-Lebanon-Carlisle	285.9	295.8	295.4	.4	.4	.4	11.8	12.4	12.5
Johnstown	76.8	79.0	79.3	3.8	3.9	3.8	3.2	3.3	3.7
Lancaster	172.9	181.0	181.2	.4	.4	.4	9.9	10.8	11.3
Philadelphia PMSA	2,085.1	2,170.4	2,160.6	1.2	1.3	1.2	101.2	106.2	109.5
Philadelphia City	745.2	775.1	776.4	(²)	(²)	(²)	19.5	19.0	19.2
Pittsburgh	848.0	864.0	856.1	6.6	6.8	6.9	44.2	45.9	46.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
New Mexico	37.8	38.8	39.1	28.3	27.8	27.7	127.6	130.7	130.6
Albuquerque	19.9	19.7	19.7	12.1	12.2	12.2	58.3	60.5	60.4
Las Cruces	3.6	3.7	3.7	1.2	1.1	1.1	7.7	7.7	7.6
Santa Fe	1.6	1.6	1.6	1.2	1.1	1.1	10.3	11.1	11.1
New York	1,234.4	1,220.0	1,207.7	399.5	412.0	401.5	1,681.8	1,732.6	1,723.4
Albany-Schenectady-Troy	50.3	48.0	47.9	16.4	16.6	16.4	84.1	86.0	85.6
Binghamton	37.3	37.4	37.0	4.2	4.3	4.3	24.6	26.2	26.1
Buffalo	75.6	76.2	75.2	21.3	22.2	21.5	104.8	109.7	108.0
Elmira	6.7	7.7	7.8	1.3	1.2	1.2	10.1	10.7	10.7
Glens Falls	10.1	10.5	10.3	1.6	1.5	1.6	12.1	11.8	12.6
Nassau-Suffolk	179.3	177.7	174.6	44.2	49.6	47.0	300.5	309.6	307.7
New York PMSA	465.8	466.2	461.1	242.0	243.1	238.9	761.0	769.6	761.3
New York City	380.0	383.9	375.4	217.2	217.5	213.5	635.9	643.0	635.0
Niagara Falls	24.1	23.8	23.0	3.6	3.8	3.6	17.8	18.5	18.4
Orange County	15.2	14.9	14.8	5.4	5.7	5.5	25.8	26.5	26.6
Poughkeepsie	32.3	30.4	30.6	3.3	3.4	3.4	21.3	22.2	22.2
Rochester	136.8	134.2	134.8	13.8	14.1	14.1	96.4	99.6	98.7
Rockland County	15.9	16.0	15.7	4.0	4.2	4.0	23.1	23.8	23.6
Syracuse	54.4	52.9	52.5	17.0	17.1	16.9	69.8	72.2	71.8
Utica-Rome	24.6	23.9	23.7	4.6	4.8	4.7	26.5	26.3	26.5
Westchester County	68.2	64.4	68.1	20.2	20.7	20.7	97.6	98.5	98.2
North Carolina	825.7	850.7	848.7	134.2	135.4	135.3	610.4	629.8	633.0
Asheville	20.2	19.8	19.6	3.6	3.7	3.7	17.4	17.4	17.6
Charlotte-Gastonia-Rock Hill	146.4	151.6	151.2	46.7	48.7	48.5	129.2	132.5	132.8
Greensboro-Winston-Salem-High Point	151.2	152.7	152.4	24.7	25.5	25.4	99.9	103.0	102.8
Raleigh-Durham	58.9	57.7	57.5	17.9	18.4	18.6	74.9	77.0	77.1
North Dakota	15.6	15.9	16.1	15.8	16.1	16.1	67.6	67.9	67.9
Bismarck	2.0	2.0	2.0	2.7	2.7	2.7	9.7	9.8	9.8
Fargo-Moorhead	4.7	5.1	5.1	4.1	4.2	4.2	20.3	21.0	20.9
Grand Forks	1.6	1.8	1.7	1.5	1.4	1.3	7.9	8.2	6.0
Ohio	1,105.8	1,091.8	1,083.6	208.1	211.9	211.9	1,073.0	1,106.0	1,107.6
Akron	66.5	64.5	64.0	13.1	13.4	13.5	63.8	66.1	65.9
Canton	44.0	42.5	41.6	5.8	6.1	6.1	38.6	39.9	40.0
Cincinnati	147.5	145.4	149.3	34.5	34.8	34.8	166.3	174.0	174.9
Cleveland	204.7	204.2	203.2	41.3	41.8	41.8	215.1	219.3	219.7
Columbus	106.1	103.1	101.9	27.5	28.9	29.1	155.7	161.9	162.1
Dayton-Springfield	106.2	104.7	104.1	14.6	15.1	15.0	94.8	98.2	98.0
Toledo	63.0	62.2	61.8	13.3	14.7	14.8	66.5	69.5	69.7
Youngstown-Warren	51.5	51.1	45.4	7.7	8.2	8.0	46.5	48.1	48.1
Oklahoma	163.3	159.0	158.4	64.8	62.9	63.1	278.7	275.4	274.1
Enid	1.6	1.6	1.7	2.3	2.2	2.1	6.7	6.3	6.3
Lawton	3.3	3.4	3.3	1.4	1.2	1.1	8.8	8.4	8.3
Oklahoma City	50.3	48.5	48.6	20.6	20.3	20.0	102.9	97.8	97.4
Tulsa	51.2	49.2	49.6	23.0	22.8	22.7	73.2	74.4	73.7
Oregon	198.2	204.1	212.7	57.3	57.6	57.6	271.5	279.4	280.6
Eugene-Springfield	17.2	19.2	19.6	3.9	4.0	4.1	25.9	26.7	26.6
Portland	90.9	92.0	93.8	33.2	33.9	34.1	140.7	146.2	147.0
Salem	14.3	13.8	19.0	2.5	2.5	2.5	21.3	21.6	21.8
Pennsylvania	1,045.9	1,045.3	1,036.9	236.5	244.8	238.1	1,096.4	1,142.6	1,143.9
Allentown-Bethlehem	77.5	76.5	75.7	14.1	14.5	14.2	58.9	61.2	60.9
Altoona	10.9	11.0	11.1	4.8	4.8	4.9	12.5	12.7	12.8
Beaver County	11.0	9.9	9.8	5.0	5.1	5.0	11.2	11.5	11.5
Erie	34.6	34.4	34.4	4.1	4.0	4.0	23.4	24.1	23.9
Harrisburg-Lebanon-Carlisle	50.6	51.2	51.9	17.9	18.5	18.0	63.9	67.3	67.5
Johnstown	12.8	13.1	13.1	4.7	4.7	4.5	16.3	16.7	16.7
Lancaster	59.0	60.5	60.4	6.8	7.6	7.3	42.2	44.2	45.0
Philadelphia PMSA	384.8	380.6	378.6	95.6	98.2	96.9	483.3	504.4	503.2
Philadelphia City	99.7	98.4	97.5	44.6	46.0	46.0	146.2	150.5	149.3
Pittsburgh	128.7	128.1	125.9	43.7	43.8	42.4	214.5	220.8	219.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
New Mexico	26.9	27.4	27.4	120.3	124.8	125.1	132.9	136.0	133.1
Albuquerque	14.3	15.0	15.0	61.2	63.8	64.0	43.2	44.5	42.7
Las Cruces	1.8	1.6	1.7	5.4	6.0	6.2	16.7	15.6	14.1
Santa Fe	2.1	2.2	2.2	14.1	14.3	14.8	21.4	21.6	21.8
New York	766.6	787.5	795.3	2,142.0	2,229.3	2,238.5	1,371.1	1,418.7	1,367.9
Albany-Schenectady-Troy	21.7	22.8	22.9	95.6	98.5	98.8	108.6	110.5	106.5
Binghamton	3.9	3.9	3.9	21.5	22.4	22.4	19.4	20.9	18.9
Buffalo	24.9	24.8	25.6	105.2	110.5	109.6	72.8	75.1	73.1
Elmira	1.2	1.2	1.2	8.8	9.5	9.6	6.3	6.7	6.4
Glens Falls	2.0	1.9	2.0	11.8	11.5	13.2	8.3	9.2	8.4
Nassau-Suffolk	72.5	75.3	75.7	284.1	288.2	291.2	171.7	182.1	171.3
New York PMSA	563.7	573.6	578.7	1,221.2	1,257.2	1,253.9	661.6	668.3	664.7
New York City	532.9	542.0	547.1	1,076.4	1,113.2	1,108.8	581.7	586.0	585.3
Niagara Falls	1.8	1.8	1.8	15.6	16.0	15.9	12.4	12.6	12.2
Orange County	4.2	4.2	4.2	21.4	21.2	21.8	20.8	22.5	20.9
Poughkeepsie	4.3	4.6	4.7	25.6	25.5	26.1	23.8	24.3	23.3
Rochester	21.5	21.7	22.0	103.6	107.6	107.4	59.4	65.2	59.8
Rockland County	4.0	4.1	4.2	24.4	23.9	24.7	20.4	21.7	20.4
Syracuse	19.2	19.3	19.4	65.9	66.9	67.3	48.3	52.0	49.0
Utica-Rome	6.5	6.8	6.8	24.4	25.1	25.3	29.3	29.4	29.1
Westchester County	26.2	26.9	26.8	115.3	115.4	115.6	55.8	56.8	55.3
North Carolina	120.5	128.3	129.4	458.2	479.1	483.4	378.3	443.2	387.8
Asheville	2.7	2.7	2.7	18.4	18.2	18.3	10.5	12.5	11.2
Charlotte-Gastonia-Rock Hill	32.7	34.8	35.0	95.8	101.6	101.8	54.4	61.8	56.6
Greensboro-Winston-Salem-High Point	22.0	22.2	22.4	75.9	78.0	78.2	43.4	51.8	43.3
Raleigh-Durham	21.9	23.7	23.7	85.4	89.1	89.6	80.5	85.0	82.2
North Dakota	12.6	12.7	12.7	59.4	60.6	60.5	61.2	64.4	61.9
Bismarck	1.7	1.6	1.6	10.0	10.2	10.2	7.9	8.7	8.3
Fargo-Moorhead	4.3	4.5	4.5	17.5	18.3	18.4	11.2	13.3	12.0
Grand Forks	1.2	1.2	1.2	6.2	6.5	6.3	8.1	8.0	8.1
Ohio	236.1	244.3	246.4	1,013.8	1,069.9	1,072.7	643.5	688.0	650.3
Akron	10.1	10.5	10.6	57.0	59.2	59.5	37.0	37.9	37.6
Canton	6.6	6.6	6.6	33.8	35.2	34.9	16.9	18.4	17.6
Cincinnati	38.4	40.4	40.8	158.5	167.9	169.5	79.3	86.6	81.6
Cleveland	52.9	55.1	55.5	226.0	239.9	239.5	120.3	118.9	121.5
Columbus	54.8	56.4	57.0	147.7	159.0	159.9	109.3	122.4	112.8
Dayton-Springfield	17.7	18.1	18.1	99.6	106.6	106.2	67.8	71.1	67.0
Toledo	11.2	11.6	11.7	67.4	74.8	75.4	36.6	39.9	37.0
Youngstown-Warren	8.3	8.5	8.5	43.9	45.2	45.6	21.5	24.3	21.8
Oklahoma	63.3	63.1	62.6	226.9	230.5	230.2	239.1	252.5	240.6
Enid	1.2	1.0	1.0	5.2	5.3	5.2	3.4	3.5	3.2
Lawton	1.6	1.5	1.5	5.7	5.7	5.7	10.8	11.1	10.6
Oklahoma City	28.6	26.3	25.9	85.9	87.8	86.5	94.4	96.8	92.3
Tulsa	17.6	17.7	17.6	69.2	71.1	71.5	36.1	37.1	32.8
Oregon	71.0	73.8	74.3	232.7	245.2	246.2	182.1	212.6	186.9
Eugene-Springfield	4.8	4.8	4.8	22.3	23.7	23.5	19.2	23.0	19.4
Portland	43.7	45.8	46.2	127.6	136.4	136.8	70.2	78.6	69.4
Salem	5.4	5.5	5.5	17.8	18.4	18.2	26.3	29.5	26.9
Pennsylvania	282.7	291.1	291.2	1,226.3	1,277.9	1,281.7	646.4	685.1	667.3
Allentown-Bethlehem	10.7	11.0	11.2	60.4	65.0	65.6	28.0	30.5	28.5
Altoona	1.6	1.6	1.6	10.3	10.8	10.7	7.0	7.3	6.9
Beaver County	1.8	1.7	1.8	10.5	10.8	10.8	7.5	8.0	7.4
Erie	5.1	5.2	5.2	25.5	26.1	26.4	12.2	13.4	12.1
Harrisburg-Lebanon-Carlisle	16.1	16.8	16.8	61.5	63.1	63.5	63.7	66.1	64.8
Johnstown	4.9	5.1	5.2	18.5	19.3	19.4	12.6	12.9	12.9
Lancaster	6.6	6.8	7.0	34.4	36.1	36.0	13.6	14.6	13.8
Philadelphia PMSA	155.1	159.1	159.3	587.1	617.7	617.6	276.8	302.9	294.3
Philadelphia City	70.4	71.5	71.5	238.0	247.9	246.1	126.8	141.8	146.8
Pittsburgh	52.2	53.7	53.7	252.5	260.0	257.4	105.6	104.9	103.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Pennsylvania—Continued									
Reading	141.9	148.7	145.8	(²)	(²)	(²)	6.3	6.6	6.9
Scranton—Wilkes-Barre	284.3	286.2	287.5	0.8	0.7	0.7	12.7	12.5	13.5
Sharon	40.3	41.5	41.3	.2	.2	.2	1.5	1.6	1.8
State College	48.4	50.1	50.2	.2	.2	.2	2.4	2.5	2.5
Williamsport	47.2	50.2	50.1	(²)	(²)	(²)	2.0	2.1	2.2
York	163.4	168.1	168.0	.4	.4	.4	9.2	9.4	9.9
Rhode Island	440.3	451.0	446.3	.2	.1	.2	18.3	18.9	19.2
Pawtucket—Woonsocket—Attleboro	129.1	134.2	132.5	.1	.1	.1	4.8	4.8	4.9
Providence	306.4	319.2	316.1	.1	.1	.1	15.0	16.2	16.5
South Carolina	1,333.6	1,394.0	1,380.4	1.7	1.7	1.7	89.8	93.0	92.7
Charleston	182.7	189.5	188.3	(¹)	(¹)	(¹)	14.1	14.8	14.9
Columbia	214.9	214.5	213.6	(¹)	(¹)	(¹)	14.6	15.0	15.2
Greenville—Spartanburg	294.5	304.9	299.6	(¹)	(¹)	(¹)	23.0	22.2	22.0
South Dakota	253.4	260.3	255.2	2.7	2.6	2.6	11.7	11.0	11.5
Rapid City	34.2	35.1	34.7	.3	.3	.3	2.6	2.3	2.4
Sioux Falls	62.6	63.8	63.0	(¹)	(¹)	(¹)	2.7	2.6	2.7
Tennessee	1,923.9	2,011.1	2,003.9	7.7	7.1	7.0	92.7	98.6	101.5
Chattanooga	180.1	180.8	180.1	1.0	1.0	1.0	7.5	7.2	7.5
Johnson City—Kingsport—Bristol	151.1	155.8	155.3	.2	.1	.1	5.3	5.7	5.8
Knoxville	239.4	244.0	243.3	2.2	1.8	1.7	12.0	11.2	11.6
Memphis	405.1	416.8	415.7	.1	.1	.1	19.1	19.5	20.5
Nashville	447.3	454.5	449.5	.8	1.0	1.0	29.1	31.2	31.5
Texas	6,549.6	6,488.1	6,466.0	201.7	190.4	193.2	419.2	366.1	372.6
Abilene	49.4	49.8	49.2	2.4	2.2	2.2	2.5	2.3	2.4
Amarillo	77.5	77.6	77.3	1.6	1.3	1.2	4.3	4.0	4.1
Austin	353.1	351.8	348.5	1.0	.9	.9	23.9	19.4	19.4
Beaumont—Port Arthur	129.2	126.7	126.7	1.6	1.6	1.6	7.1	7.2	7.3
Brazoria	56.7	57.0	56.6	1.6	1.3	1.3	5.7	5.8	5.8
Brownsville—Harlingen	64.5	65.3	64.6	.1	.1	.1	2.8	2.7	2.7
Bryan—College Station	46.8	46.3	46.7	.8	.8	.9	2.4	1.9	1.9
Corpus Christi	129.2	126.8	126.1	6.6	5.6	5.6	8.5	7.4	7.4
Dallas	1,341.3	1,305.6	1,300.9	21.1	19.2	19.1	82.7	64.1	63.5
El Paso	182.8	186.2	184.2	.2	.1	.1	10.2	9.6	9.7
Ft. Worth—Arlington	511.6	511.8	514.2	3.6	3.4	3.4	31.9	30.2	30.5
Galveston—Texas City	71.2	70.3	69.6	.5	.4	.4	4.2	3.2	3.3
Houston	1,397.1	1,378.4	1,373.9	70.5	62.5	63.4	94.0	82.8	84.5
Killeen—Temple	69.0	69.3	68.8	.1	.1	.1	4.1	3.7	3.7
Laredo	35.3	35.1	34.7	1.7	2.1	2.1	1.4	1.4	1.4
Longview—Marshall	65.2	64.0	64.0	3.7	3.6	3.6	3.2	3.0	2.9
Lubbock	90.3	88.9	89.0	.3	.3	.3	4.1	2.9	2.9
McAllen—Edinburg—Mission	85.4	88.2	86.4	1.1	1.0	1.0	4.6	4.3	4.4
Midland	44.3	43.8	43.2	9.4	8.7	8.8	1.7	1.6	1.6
Odessa	43.3	44.4	43.2	6.3	6.4	6.4	2.6	2.4	2.4
San Angelo	36.4	36.7	36.1	.6	.6	.6	2.0	1.9	1.9
San Antonio	494.1	494.1	490.1	2.7	2.6	2.6	36.4	30.8	31.8
Sherman—Denison	37.3	37.9	37.7	.2	.1	.1	1.9	1.8	1.8
Texarkana	45.0	45.3	45.0	.1	.1	.1	2.0	1.5	1.6
Tyler	62.1	60.7	60.3	2.0	2.0	2.0	3.1	2.7	2.7
Victoria	28.4	27.8	27.9	1.8	1.7	1.8	2.1	2.0	2.0
Waco	76.6	77.5	76.6	.2	.1	.1	4.2	3.9	3.9
Wichita Falls	50.1	50.4	50.1	2.1	2.0	2.0	2.3	2.0	2.0
Utah	629.8	643.2	636.6	6.9	8.1	7.8	34.9	29.6	29.8
Provo—Orem	70.4	72.3	71.7	(¹)	(¹)	(¹)	3.1	2.7	2.8
Salt Lake City—Ogden	443.0	450.6	448.1	1.5	2.6	2.6	25.1	21.1	21.2
Vermont	233.8	239.3	239.0	.5	.6	.5	16.9	15.6	16.3
Barre—Montpelier	31.2	32.8	32.7	.2	.2	.2	2.3	2.2	2.4
Burlington	70.8	73.7	74.2	(¹)	(¹)	(¹)	4.4	4.3	4.6

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Pennsylvania-Continued									
Reading	47.2	48.1	47.8	6.2	6.8	6.3	31.5	32.3	31.9
Scranton-Wilkes-Barre	72.0	72.5	71.6	14.5	15.3	15.0	63.5	64.2	64.1
Sharon	9.7	9.4	9.6	1.8	1.8	1.7	10.8	11.4	11.5
State College	7.5	7.3	7.1	1.1	1.3	1.2	9.1	9.3	9.4
Williamsport	15.3	16.6	16.5	1.8	1.8	1.8	10.6	11.0	11.3
York	57.7	57.3	57.8	6.7	7.1	6.9	39.1	39.8	40.2
Rhode Island									
Pawtucket-Woonsocket-Attleboro	53.3	56.1	54.7	3.5	3.7	3.7	31.1	31.8	31.5
Providence	72.0	75.4	73.1	11.2	11.8	11.8	68.3	70.8	70.8
South Carolina									
Charleston	20.0	21.1	20.9	9.4	9.7	9.7	45.4	47.2	47.5
Columbia	28.2	29.6	29.4	10.0	10.4	10.4	47.5	46.4	46.8
Greenville-Spartanburg	98.6	99.3	98.6	10.7	11.2	11.3	67.3	69.5	69.9
South Dakota									
Rapid City	3.2	3.2	3.2	1.7	1.7	1.7	10.6	10.8	11.1
Sioux Falls	8.6	7.3	7.9	4.6	4.7	4.7	16.6	16.9	16.7
Tennessee									
Chattanooga	490.5	498.2	496.8	97.5	99.1	99.6	453.3	479.9	483.9
Johnson City-Kingsport-Bristol	52.4	52.1	51.6	6.3	6.3	6.3	34.0	34.5	35.0
Knoxville	50.0	50.7	51.0	9.2	9.3	9.5	61.3	60.0	60.5
Memphis	52.9	52.0	51.9	35.5	37.5	37.9	113.0	115.9	116.0
Nashville	89.6	88.8	87.8	22.0	22.1	20.9	109.5	110.0	110.4
Texas									
Abilene	4.8	4.8	4.7	2.6	2.6	2.5	13.8	14.2	14.2
Amarillo	10.0	9.8	9.7	6.3	5.5	5.6	22.9	23.0	23.3
Austin	40.8	39.4	39.4	11.3	11.1	11.2	81.5	80.0	79.8
Beaumont-Port Arthur	25.3	24.3	24.0	10.0	9.4	9.4	32.7	31.1	31.6
Brazoria	15.7	15.0	15.1	2.3	2.2	2.3	11.4	11.1	11.0
Brownsville-Harlingen	9.1	9.7	9.7	3.1	3.0	3.0	18.1	17.5	17.6
Bryan-College Station	3.3	3.0	3.0	1.7	1.6	1.6	11.2	10.8	10.8
Corpus Christi	12.2	11.6	11.6	7.3	7.0	7.0	34.5	34.1	34.3
Dallas	228.7	223.6	223.0	87.4	86.6	87.2	360.5	350.2	349.8
El Paso	35.9	35.2	35.3	9.9	10.0	10.1	45.3	45.7	45.7
Ft. Worth-Arlington	112.9	110.7	113.5	26.6	27.8	27.8	137.1	133.7	133.5
Galveston-Texas City	9.4	8.9	9.1	4.7	4.5	4.3	14.5	14.3	14.5
Houston	151.9	148.7	149.1	94.9	91.5	91.9	359.4	349.5	348.6
Killeen-Temple	8.8	8.7	8.8	2.9	2.6	2.6	16.4	16.4	16.4
Laredo	1.8	1.9	1.9	4.0	3.9	4.1	10.5	9.7	9.7
Longview-Marshall	15.3	15.0	14.9	3.2	3.1	3.1	17.4	16.8	16.9
Lubbock	7.5	7.4	7.2	4.6	4.6	4.6	27.9	27.6	27.5
McAllen-Edinburg-Mission	12.0	13.0	12.6	2.8	2.9	2.8	25.2	25.8	25.5
Midland	3.2	3.0	2.9	2.2	2.2	2.1	10.6	10.7	10.6
Odessa	3.9	3.7	3.7	2.0	2.0	2.0	13.1	13.3	13.2
San Angelo	5.7	5.7	5.8	3.3	3.1	3.0	9.3	9.3	9.2
San Antonio	49.3	46.6	45.8	18.8	18.0	18.2	129.6	131.3	131.0
Sherman-Denison	11.6	11.3	11.3	2.0	2.1	2.1	8.4	8.8	8.7
Texarkana	7.1	7.2	7.2	1.9	1.7	1.7	11.3	11.4	11.3
Tyler	11.7	10.8	10.9	2.9	2.7	2.7	16.6	16.3	16.2
Victoria	3.0	3.1	2.9	1.5	1.5	1.4	8.2	7.7	8.0
Waco	15.3	15.0	15.0	3.5	3.4	3.4	18.7	19.2	19.1
Wichita Falls	8.1	8.3	8.2	2.7	2.6	2.6	12.2	12.5	12.6
Utah									
Provo-Orem	92.7	93.6	94.0	37.6	37.9	38.0	153.7	156.0	156.3
Salt Lake City-Ogden	11.6	10.1	10.1	2.5	2.8	2.8	15.5	15.8	15.8
Vermont									
Barre-Montpelier	4.1	4.6	4.3	.8	.9	.8	6.6	6.9	6.9
Burlington	16.8	16.7	16.7	3.1	3.2	3.1	15.9	16.6	16.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Pennsylvania—Continued									
Reading	7.3	8.0	7.9	28.6	30.2	29.7	14.8	16.7	15.3
Scranton-Wilkes-Barre	12.3	12.9	12.9	68.7	69.3	70.2	39.8	40.8	39.5
Sharon	1.4	1.3	1.3	10.1	10.6	10.5	4.8	5.2	4.7
State College	1.6	1.7	1.7	9.1	9.6	9.6	17.4	18.2	18.5
Williamsport	2.2	2.3	2.3	9.3	9.5	9.7	6.0	6.9	6.3
York	4.9	5.3	5.3	28.7	31.4	31.0	16.7	17.4	16.5
Rhode Island									
Pawtucket-Woonsocket-Attleboro	3.7	3.9	4.0	23.3	24.1	24.3	9.3	9.7	9.3
Providence	21.3	21.6	21.8	76.7	79.8	80.1	41.8	43.5	41.9
South Carolina									
Charleston	8.4	8.7	8.9	36.3	38.2	37.8	49.0	49.7	48.5
Columbia	17.5	17.9	18.0	39.1	39.4	39.2	57.6	55.4	54.2
Greenville-Spartanburg	11.6	11.7	11.7	48.4	50.2	50.2	34.6	40.5	35.6
South Dakota									
Rapid City	1.7	1.7	1.7	8.5	8.4	8.5	5.6	6.7	6.0
Sioux Falls	6.1	5.9	5.9	17.4	18.0	18.2	6.5	8.3	6.8
Tennessee									
Chattanooga	11.3	12.2	12.2	35.2	35.3	35.1	30.4	31.1	30.3
Johnson City-Kingsport-Bristol	4.9	4.9	5.0	26.0	26.9	26.8	22.0	25.3	24.7
Knoxville	8.5	8.7	8.7	50.3	51.5	51.8	45.9	50.8	48.5
Memphis	23.2	23.5	23.7	95.6	99.7	100.2	65.7	68.6	65.4
Nashville	31.1	30.4	30.6	104.0	107.4	104.8	61.2	63.6	62.5
Texas									
Abilene	2.6	2.6	2.6	13.0	12.8	12.7	7.7	8.3	7.9
Amarillo	4.4	4.4	4.4	16.0	16.9	16.8	12.0	12.7	12.2
Austin	25.9	25.3	25.3	83.4	83.9	84.1	85.3	91.8	88.4
Beaumont-Port Arthur	5.7	5.4	5.4	28.1	28.3	28.3	18.7	19.4	19.1
Brazoria	2.1	2.1	2.1	7.6	8.1	7.9	10.3	11.4	11.1
Brownsville-Harlingen	3.4	3.4	3.4	13.9	14.3	14.3	14.0	14.6	13.8
Bryan-College Station	1.8	1.7	1.7	8.0	7.8	8.0	17.6	18.7	18.8
Corpus Christi	7.0	6.8	6.9	26.6	27.0	27.0	26.5	27.3	26.3
Dallas	134.7	130.9	130.9	289.8	286.5	287.9	136.4	144.5	139.5
El Paso	9.9	10.1	10.3	35.0	36.4	36.2	36.4	39.1	36.8
Ft. Worth-Arlington	28.9	28.9	29.1	111.1	114.7	115.5	59.5	62.4	60.9
Galveston-Texas City	4.6	4.3	4.4	13.6	13.7	13.9	19.7	21.0	19.7
Houston	105.3	100.1	99.6	340.6	354.0	354.6	180.5	189.3	182.2
Killeen-Temple	3.2	3.0	2.9	13.9	14.6	14.5	19.6	20.2	19.8
Laredo	1.6	1.6	1.6	6.1	6.1	6.0	8.2	8.4	7.9
Longview-Marshall	3.3	3.1	3.0	11.2	11.2	11.3	7.9	8.2	8.3
Lubbock	5.5	5.4	5.4	20.4	20.8	20.8	20.0	19.9	20.3
McAllen-Edinburg-Mission	4.0	3.8	3.8	13.7	13.7	13.7	22.0	23.7	22.6
Midland	2.9	2.7	2.7	8.8	8.8	8.5	5.5	6.1	6.0
Odessa	1.7	1.6	1.6	7.2	7.4	7.2	6.5	7.6	6.7
San Angelo	1.7	1.8	1.8	7.7	7.8	7.7	6.1	6.5	6.1
San Antonio	36.9	39.4	39.6	115.7	118.1	118.8	102.7	107.3	102.3
Sherman-Denison	1.6	1.5	1.5	6.9	7.3	7.3	4.7	5.0	4.9
Texarkana	1.9	1.9	1.8	8.9	9.2	9.1	11.8	12.3	12.2
Tyler	3.9	3.7	3.6	13.5	13.5	13.6	8.4	9.0	8.6
Victoria	1.6	1.5	1.5	6.0	5.9	5.9	4.2	4.4	4.4
Waco	4.9	4.6	4.8	18.6	18.7	18.8	11.2	12.4	11.5
Wichita Falls	2.5	2.4	2.4	11.0	11.1	11.1	9.2	9.5	9.2
Utah									
Provo-Orem	2.3	2.4	2.4	23.3	24.4	24.7	12.2	14.0	12.9
Salt Lake City-Ogden	27.4	28.1	28.1	95.6	99.2	99.9	89.7	94.0	90.5
Vermont									
Barre-Montpelier	2.9	2.9	3.0	6.8	7.0	7.5	7.5	8.1	7.6
Burlington	3.3	3.5	3.6	18.1	18.7	19.5	9.2	10.8	10.2

See footnotes at end of table.

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

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

(In thousands)

State and area	Total			Mining			Construction		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Virginia	2,565.5	2,656.6	2,640.1	16.7	15.6	15.6	178.2	178.2	183.8
Bristol	29.5	31.4	31.3	.1	.1	.1	.9	.8	.8
Charlottesville	60.7	62.1	61.4	.1	.1	.1	3.7	3.8	4.0
Danville	37.9	39.4	38.8	.1	.1	.1	1.5	1.3	1.3
Lynchburg	68.6	71.5	69.4	.1	.1	.1	3.3	3.3	3.3
Norfolk-Virginia Beach-Newport News	537.2	552.4	549.3	.1	.1	.1	40.5	37.2	38.3
Northern Virginia	663.1	686.8	687.5	.5	.4	.4	50.0	49.2	50.5
Richmond-Petersburg	412.1	429.6	428.9	.4	.4	.4	26.2	27.0	27.5
Roanoke	118.0	123.8	123.2	.2	.1	.1	7.2	7.4	7.6
Washington	1,775.0	1,854.0	1,838.1	3.0	3.0	3.0	90.3	93.1	95.4
Seattle	892.0	927.0	929.2	.6	.6	.6	46.4	45.5	47.1
West Virginia	603.6	604.2	604.4	40.4	36.4	36.4	24.8	26.2	26.9
Charleston	109.5	108.8	109.3	2.2	2.4	2.4	4.9	5.3	5.4
Huntington-Ashland	100.8	101.7	101.8	1.1	1.0	1.0	3.8	4.0	4.1
Parkersburg-Manetta	58.2	60.4	60.1	.7	.8	.8	3.0	3.1	3.1
Wheeling	57.6	57.7	57.9	2.3	2.4	2.6	1.7	1.8	1.9
Wisconsin	2,021.7	2,085.2	2,066.0	2.4	2.4	2.5	69.2	68.3	69.9
Appleton-Oshkosh-Neenah	139.0	145.6	145.2	(¹)	(¹)	(¹)	6.1	5.6	6.8
Eau Claire	52.7	55.3	54.7	(¹)	(¹)	(¹)	1.8	1.4	1.5
Green Bay	90.8	93.3	92.2	(¹)	(¹)	(¹)	3.4	2.8	2.8
Janesville-Beloit	52.6	54.0	53.3	(¹)	(¹)	(¹)	1.3	1.2	1.2
Kenosha	36.6	39.8	39.7	(¹)	(¹)	(¹)	.9	1.0	1.0
La Crosse	47.4	49.3	49.2	(¹)	(¹)	(¹)	1.1	1.2	1.2
Madison	189.0	195.7	194.0	(¹)	(¹)	(¹)	6.5	5.9	6.1
Milwaukee	671.1	694.2	686.4	(¹)	(¹)	(¹)	20.7	20.7	20.8
Racine	67.5	69.5	68.8	(¹)	(¹)	(¹)	2.3	2.3	2.6
Sheboygan	45.0	47.0	46.7	(¹)	(¹)	(¹)	1.2	1.1	1.1
Wausau	45.2	46.8	46.7	(¹)	(¹)	(¹)	1.8	1.4	1.4
Wyoming	204.5	198.8	196.3	19.2	18.3	18.2	19.7	15.4	15.9
Puerto Rico	732.3	772.7	761.2	.7	.8	.8	29.4	34.3	34.5
Caguas	45.2	46.3	46.3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Mayaguez	52.9	52.4	53.5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Ponce	45.7	48.4	48.1	.1	.1	.1	2.8	3.5	3.6
San Juan	445.2	477.6	466.5	.4	.5	.5	23.5	26.2	26.1
Virgin Islands	38.0	37.6	37.5	(¹)	(¹)	(¹)	2.5	1.7	1.7

See footnotes at end of table.

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

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

(In thousands)

State and area	Manufacturing			Transportation and public utilities			Wholesale and retail trade		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Virginia	422.2	425.3	425.2	139.8	142.0	142.7	585.9	609.0	610.1
Bristol	9.4	9.9	9.9	1.1	1.2	1.2	8.1	8.5	8.7
Charlottesville	8.7	8.5	8.5	2.1	2.2	2.3	12.1	12.0	12.3
Danville	16.0	16.8	16.9	1.0	1.0	1.0	8.2	8.1	8.2
Lynchburg	23.2	24.2	24.0	3.0	3.0	3.0	12.9	13.3	13.2
Norfolk-Virginia Beach-Newport News	69.6	66.5	66.5	26.0	26.1	26.2	131.5	139.2	139.9
Northern Virginia	35.0	34.0	34.1	46.7	49.0	49.5	153.4	158.6	159.3
Richmond-Petersburg	62.6	63.3	63.1	22.5	22.6	22.8	100.5	101.4	102.5
Roanoke	20.5	20.6	20.6	9.1	8.9	8.9	31.6	35.1	35.2
Washington	302.7	314.2	315.9	97.0	99.7	100.3	439.7	462.1	464.9
Seattle	171.7	180.8	183.2	58.0	59.0	59.4	222.2	231.0	234.0
West Virginia	86.6	87.4	86.0	37.4	36.2	36.2	138.6	139.8	140.8
Charleston	12.4	11.9	11.8	8.3	8.3	8.4	28.6	28.6	28.7
Huntington-Ashland	19.5	19.5	19.4	7.5	7.4	7.4	25.8	25.8	25.9
Parkersburg-Manetta	14.0	14.6	14.7	2.0	2.0	2.0	14.3	14.4	14.5
Wheeling	6.9	7.1	7.0	3.1	2.9	3.0	15.6	16.2	16.2
Wisconsin	520.0	526.2	531.4	90.7	94.3	91.4	486.1	499.5	499.5
Appleton-Oshkosh-Neenah	48.5	51.0	51.2	5.2	5.5	5.4	29.9	30.2	30.2
Eau Claire	10.5	10.3	10.3	2.8	3.1	3.0	14.8	16.5	16.5
Green Bay	25.6	24.5	25.1	6.4	6.8	6.7	23.4	24.3	24.3
Janesville-Beloit	17.0	16.9	17.1	1.8	1.9	1.7	13.6	14.1	13.9
Kenosha	10.7	12.8	13.1	1.3	1.5	1.4	8.7	8.7	8.8
La Crosse	10.4	10.1	10.3	2.3	2.3	2.3	13.2	14.3	14.4
Madison	21.7	22.4	22.5	6.4	6.7	6.5	41.0	43.3	43.3
Milwaukee	166.5	166.1	165.6	33.6	35.3	34.1	157.5	163.5	164.8
Racine	24.0	24.0	23.4	2.3	2.4	2.3	16.0	16.8	16.7
Sheboygan	19.0	19.9	20.0	1.4	1.5	1.4	8.6	9.1	9.1
Wausau	12.4	13.5	13.7	2.6	2.9	2.8	11.4	11.9	11.9
Wyoming	8.1	8.0	8.2	14.4	13.9	14.0	47.5	45.7	46.2
Puerto Rico	147.1	147.7	152.4	16.3	14.6	15.0	122.1	128.3	127.5
Caguas	14.6	15.5	16.6	(¹)	(¹)	(¹)	8.1	8.1	8.1
Mayaguez	20.2	17.7	19.7	(¹)	(¹)	(¹)	6.8	7.0	6.9
Ponce	8.6	7.6	8.4	(¹)	(¹)	(¹)	7.1	7.9	7.8
San Juan	64.5	64.5	64.5	12.1	10.5	10.8	84.1	89.1	88.5
Virgin Islands	1.7	1.9	1.9	2.4	2.5	2.5	8.2	8.7	8.6

See footnotes at end of table.

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

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

(In thousands)

State and area	Finance, insurance, and real estate			Services			Government		
	July 1986	June 1987	July 1987 ^p	July 1986	June 1987	July 1987 ^p	July 1986	June 1987	July 1987 ^p
Virginia	134.4	139.3	140.7	591.7	613.6	611.7	496.7	533.5	510.3
Bristol .....	.9	.9	.9	4.3	4.5	4.5	4.6	5.5	5.3
Charlottesville	3.1	3.2	3.1	11.3	11.4	11.4	19.6	20.9	19.8
Danville	1.2	1.1	1.1	5.7	5.7	5.5	4.3	5.4	4.8
Lynchburg	3.3	3.4	3.4	13.5	14.6	13.4	9.4	9.6	9.1
Norfolk-Virginia Beach-Newport News	24.8	25.5	25.8	124.5	130.3	131.5	120.2	127.6	121.0
Northern Virginia	41.4	43.6	44.4	202.7	209.0	209.0	133.4	143.1	140.3
Richmond-Petersburg	33.4	35.0	35.3	85.3	90.4	90.8	81.2	89.3	86.7
Roanoke	8.1	8.4	8.4	27.1	27.3	27.0	14.4	15.9	15.3
Washington	106.7	108.3	108.8	395.7	410.4	411.4	339.9	363.2	338.4
Seattle	67.4	67.6	67.9	200.5	210.5	212.0	125.2	132.0	125.0
West Virginia	24.1	24.6	24.7	120.7	126.1	125.8	131.0	127.5	127.6
Charleston	6.0	6.1	6.1	25.0	25.0	25.1	22.1	21.2	21.4
Huntington-Ashland	4.3	4.4	4.4	20.0	20.8	20.6	18.8	18.8	19.0
Parkersburg-Marietta	2.2	2.2	2.2	12.8	13.3	13.3	9.2	10.0	9.5
Wheeling	2.6	2.7	2.6	15.7	15.2	15.3	9.7	9.4	9.3
Wisconsin	109.6	112.8	113.5	439.0	453.0	454.2	304.5	328.7	303.7
Appleton-Oshkosh-Neenah	7.0	7.3	7.4	26.5	28.5	28.5	15.7	17.2	15.6
Eau Claire	1.9	1.9	1.9	11.8	12.5	12.8	9.0	9.5	8.6
Green Bay	3.3	3.4	3.4	19.1	20.4	19.9	9.6	11.1	9.9
Janesville-Beloit	1.7	1.7	1.7	10.9	11.5	11.4	6.3	6.7	6.2
Kenosha	1.1	1.2	1.2	8.1	8.2	8.3	5.8	6.4	6.0
La Crosse	1.5	1.5	1.5	12.8	13.5	13.7	6.0	6.4	5.8
Madison	17.3	17.6	17.9	39.7	41.8	41.3	56.2	57.8	56.0
Milwaukee	47.1	48.4	48.8	170.3	176.7	177.1	74.9	83.1	74.7
Racine	2.2	2.2	2.2	12.8	13.2	13.4	8.0	8.6	8.2
Sheboygan	2.1	2.0	2.1	7.4	7.8	7.8	5.3	5.7	5.2
Wausau	3.4	3.4	3.4	8.1	8.1	8.2	5.5	5.6	5.2
Wyoming	8.3	7.9	7.9	36.9	36.1	36.7	50.3	53.3	49.1
Puerto Rico	32.7	34.1	34.4	93.8	102.1	99.9	290.3	310.8	296.8
Caguas	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	17.2	17.1	16.2
Mayaguez	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	18.0	18.9	18.0
Ponce	(¹)	(¹)	(¹)	7.7	7.7	7.8	16.6	18.6	17.5
San Juan	26.5	27.8	28.1	68.4	73.4	71.4	165.7	185.5	176.6
Virgin Islands	1.5	1.6	1.6	7.6	8.6	8.5	14.1	12.6	12.7

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

NOTE: Area definitions are published annually in the May issue of this publication. All State and area data have been adjusted to March 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:									
August	35.1	\$8.70	\$305.37	42.3	\$12.51	\$529.17	38.3	\$12.44	\$476.45
September	34.8	8.82	306.94	42.1	12.52	527.09	38.5	12.59	484.72
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 ^p	35.0	8.91	311.85	42.3	12.33	521.56	38.6	12.57	485.20
August ^p	35.3	8.95	315.94	43.2	12.42	536.54	38.6	12.68	489.45

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:										
August	40.7	\$9.68	\$9.27	\$393.98	39.4	\$11.67	\$459.80	38.5	\$9.32	\$358.82
September	41.0	9.73	9.31	398.93	39.2	11.77	461.38	38.3	9.37	358.87
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 ^p	40.6	9.88	9.46	401.13	39.4	11.99	472.41	38.3	9.57	366.53
August ^p	40.9	9.86	9.41	403.27	39.3	12.07	474.35	38.5	9.63	370.76

See footnotes at end of table.

**ESTABLISHMENT DATA
HISTORICAL HOURS AND EARNINGS**

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

Year and month	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:									
August	29.9	\$5.97	\$178.50	36.5	\$8.34	\$304.41	32.8	\$8.04	\$263.71
September	29.1	6.06	176.35	36.2	8.39	303.72	32.4	8.19	265.36
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 ^p	30.0	6.07	182.10	36.1	8.66	312.63	32.8	8.33	273.22
August ^p	30.3	6.06	183.62	36.6	8.79	321.71	33.0	8.40	277.20

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				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Total private		34.9	35.1	35.0	35.0	35.3					
Mining		41.4	42.3	42.4	42.3	43.2					
Metal mining ..	10	40.5	40.9	41.9	41.9						
Iron ores ..	101	40.6	40.4	41.4	39.9						
Copper ores ..	102	40.5	41.6	42.3	43.5						
Coal mining	11,12		40.0	42.2							
Bituminous coal and lignite mining	12		40.0	42.3							
Oil and gas extraction	13	42.2	42.5	41.3	42.7						
Crude petroleum, natural gas, and natural gas liquids ..	131,2	42.8	43.4	40.8	42.8						
Oil and gas field services	138	41.9	41.9	41.5	42.7						
Nonmetallic minerals, except fuels	14	45.3	45.7	46.3	46.6						
Crushed and broken stone ..	142	47.6	47.6	48.0	48.5						
Construction ..		38.2	38.3	38.1	38.6	38.6					
General building contractors	15	37.4	37.6	37.7	37.9						
Residential building construction	152	36.7	36.9	37.4	37.3						
Operative builders	153	39.3	38.7	38.7	38.6						
Nonresidential building construction ..	154	38.1	38.3	38.0	38.5						
Heavy construction contractors	16	42.5	42.5	41.5	42.6						
Highway and street construction	161	43.2	43.6	42.5	44.6						
Heavy construction, except highway ..	162	42.1	41.8	40.9	41.3						
Special trade contractors	17	37.2	37.4	37.3	37.7						
Plumbing, heating, and air conditioning	171	38.6	38.5	38.2	38.7						
Painting, paper hanging, and decorating ..	172	36.1	35.6	35.8	36.3						
Electrical work	173	39.2	39.1	38.9	39.2						
Masonry, stonework, and plastering ..	174	35.4	35.4	35.5	35.6						
Carpentering and flooring	175	34.1	35.0	35.8	35.7						
Roofing and sheet metal work	176	34.9	35.4	34.4	35.4						
Manufacturing		40.2	40.7	41.1	40.6	40.9	3.3	3.5	3.7	3.6	3.9
Durable goods		40.6	41.1	41.7	41.0	41.3	3.3	3.5	3.8	3.6	3.9
Lumber and wood products	24	40.2	40.6	41.3	40.4	41.0	3.6	3.9	4.1	3.9	
Logging camps and logging contractors ..	241	40.6	39.8	40.8	38.8		3.7	4.1	4.4	4.0	
Sawmills and planing mills	242	41.1	41.4	42.3	41.3		4.1	4.5	4.8	4.6	
Sawmills and planing mills, general	2421	41.3	41.5	42.3	41.5		4.4	4.8	4.9	4.8	
Hardwood dimension and flooring	2426	40.3	41.4	42.2	41.2		2.8	3.5	4.3	3.7	
Millwork, plywood, and structural members ..	243	40.2	40.8	41.6	40.5		3.7	3.9	4.1	3.8	
Millwork	2431	40.5	41.3	42.4	41.1		3.5	3.7	4.1	3.6	
Wood kitchen cabinets	2434	39.8	40.3	40.7	40.1		3.4	3.5	3.5	3.4	
Hardwood veneer and plywood	2435	40.0	40.1	41.2	39.8		3.2	3.7	3.9	4.0	
Softwood veneer and plywood	2436	40.2	41.4	42.0	40.2		4.4	4.9	4.7	4.4	
Wood containers	244	37.9	38.6	39.1	38.6		2.3	2.4	3.2	2.8	
Wood buildings and mobile homes	245	39.5	39.9	39.8	40.4		3.0	3.2	3.4	3.4	
Mobile homes	2451	39.8	40.2	39.3	40.1		2.7	2.9	3.1	3.0	
Miscellaneous wood products	249	39.2	40.1	40.7	39.8		3.1	3.2	3.3	3.1	
Furniture and fixtures	25	39.0	40.1	40.0	39.1	39.9	2.3	2.8	2.7	2.6	
Household furniture	251	37.9	39.5	39.5	38.9	-	1.7	2.4	2.5	2.3	
Wood household furniture	2511	38.6	39.9	40.1	39.2		1.9	2.5	2.6	2.2	
Upholstered household furniture	2512	36.7	38.6	38.4	37.8		1.1	1.8	2.0	1.8	
Metal household furniture	2514	38.3	40.2	41.2	40.9		2.4	3.2	3.6	3.2	
Mattresses and bedsprings	2515	38.3	40.2	38.7	38.7		2.4	2.9	2.8	3.3	
Office furniture	252	40.6	41.1	40.7	38.0		2.8	3.3	2.9	2.6	
Public building and related furniture ..	253	39.1	40.2	40.5	41.1		3.2	3.4	3.4	3.6	
Partitions and fixtures	254	41.3	41.6	41.2	40.0		3.7	4.0	3.4	3.4	
Miscellaneous furniture and fixtures ..	259	40.3	40.7	40.3	39.9		2.2	2.6	2.4	2.5	
Stone, clay, and glass products	32	42.4	42.8	42.5	42.5	42.5	5.1	5.3	5.2	5.3	
Flat glass	321	45.9	44.7	46.7	44.1	-	7.2	6.0	6.0	5.0	
Glass and glassware, pressed or blown ..	322	40.9	41.5	41.4	41.4		4.7	4.9	4.8	4.9	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Total private		\$8.70	\$8.70	\$8.92	\$8.91	\$8.95	\$303.63	\$305.37	\$312.20	\$311.85	\$315.94
Mining		12.49	12.51	12.44	12.33	12.42	517.09	529.17	527.46	521.56	536.54
Metal mining	10	13.33	12.96	13.05	13.07		539.87	530.06	546.80	547.63	
Iron ores	101	13.91	13.85	14.40	15.29		564.75	559.54	596.16	610.07	
Copper ores	102	12.72	11.48	11.44	11.35		515.16	477.57	483.91	493.73	
Coal mining	11,12		15.45	15.64			583.60	618.00	660.01	609.88	
Bituminous coal and lignite mining	12		15.51	15.70			587.79	620.40	664.11	612.58	
Oil and gas extraction	13	11.71	11.74	11.44	11.38		494.16	498.95	472.47	485.93	
Crude petroleum, natural gas, and natural gas liquids	131,2	13.79	13.65	14.00	14.01		590.21	592.41	571.20	599.63	
Oil and gas field services	138	10.33	10.44	9.99	9.91		432.83	437.44	414.59	423.16	
Nonmetallic minerals, except fuels	14	10.41	10.44	10.67	10.64		471.57	477.11	494.02	495.82	
Crushed and broken stone	142	9.93	9.98	10.07	10.06	-	472.67	475.05	483.36	487.91	
Construction		12.34	12.44	12.61	12.57	12.68	471.39	476.45	480.44	485.20	489.45
General building contractors	15	11.26	11.40	11.63	11.68		421.12	428.64	438.45	442.67	
Residential building construction	152	10.65	10.77	10.94	10.97		390.86	397.41	409.16	409.18	
Operative builders	153	9.51	9.65	10.28	10.24		373.74	373.46	397.84	395.26	
Nonresidential building construction	154	12.01	12.17	12.49	12.54		457.58	466.11	474.62	482.79	
Heavy construction contractors	16	11.96	12.07	12.13	12.06		508.30	512.98	503.40	513.76	
Highway and street construction	161	11.79	12.16	12.15	12.15		509.33	530.18	516.38	541.89	
Heavy construction, except highway	162	12.06	12.01	12.12	11.99		507.73	502.02	495.71	495.19	
Special trade contractors	17	12.93	13.01	13.16	13.09		481.00	486.57	490.87	493.49	
Plumbing, heating, and air conditioning	171	13.14	13.10	13.36	13.32		507.20	504.35	510.35	515.48	
Painting, paper hanging, and decorating	172	12.33	12.33	12.44	12.42		445.11	438.95	445.35	450.85	
Electrical work	173	14.35	14.37	14.69	14.65		562.52	561.87	571.44	574.28	
Masonry, stonework, and plastering	174	13.05	13.25	13.47	13.38		461.97	469.05	478.19	476.33	
Carpentering and flooring	175	12.63	12.55	12.54	12.49		430.68	439.25	448.93	445.89	
Roofing and sheet metal work	176	11.44	11.65	11.44	11.53		399.26	412.41	393.54	408.16	
Manufacturing		9.74	9.68	9.87	9.88	9.86	391.55	393.98	405.66	401.13	403.27
Durable goods		10.26	10.22	10.42	10.41	10.40	416.56	420.04	434.51	426.81	429.52
Lumber and wood products	24	8.29	8.33	8.44	8.47	8.54	333.26	338.20	348.57	342.19	350.14
Logging camps and logging contractors	241	10.70	10.77	10.99	11.05	-	434.42	428.65	448.39	428.74	-
Sawmills and planing mills	242	8.51	8.52	8.57	8.58		349.76	352.73	362.51	354.35	
Sawmills and planing mills, general	2421	8.92	8.93	8.94	8.94		368.40	370.60	378.16	371.01	
Hardwood dimension and flooring	2426	6.51	6.49	6.79	6.80		262.35	268.69	286.54	280.16	
Millwork, plywood, and structural members	243	8.14	8.20	8.34	8.37		327.23	334.56	346.94	338.99	
Millwork	2431	8.30	8.46	8.62	8.67		336.15	349.40	365.49	356.34	
Wood kitchen cabinets	2434	7.52	7.54	7.66	7.66		299.30	303.86	311.76	307.17	
Hardwood veneer and plywood	2435	6.83	6.84	6.87	6.90		273.20	274.28	283.04	274.62	
Softwood veneer and plywood	2436	9.60	9.59	9.77	9.77		385.92	397.03	410.34	392.75	
Wood containers	244	5.92	5.99	6.14	6.14		224.37	231.21	240.07	237.00	
Wood buildings and mobile homes	245	7.58	7.56	7.92	7.96		299.41	301.64	315.22	321.58	
Mobile homes	2451	7.71	7.65	8.02	8.04		306.86	307.53	315.19	322.40	
Miscellaneous wood products	249	7.28	7.23	7.38	7.31		285.38	289.92	300.37	290.94	
Furniture and fixtures	25	7.45	7.50	7.66	7.71	7.77	290.55	300.75	306.40	301.46	310.02
Household furniture	251	6.81	6.90	7.05	7.06	-	258.10	272.55	278.48	274.63	-
Wood household furniture	2511	6.29	6.36	6.51	6.53		242.79	253.76	261.05	255.98	
Upholstered household furniture	2512	7.36	7.51	7.73	7.70		270.11	289.89	296.83	291.06	
Metal household furniture	2514	7.22	7.21	7.08	7.16		276.53	289.84	291.70	292.84	
Mattresses and bedsprings	2515	7.22	7.32	7.57	7.60		276.53	294.26	292.96	294.12	
Office furniture	252	8.31	8.49	8.68	8.99		337.39	348.94	353.28	341.62	
Public building and related furniture	253	7.92	7.88	8.09	8.01		309.67	316.78	327.65	329.21	
Partitions and fixtures	254	8.94	8.86	9.14	9.23		369.22	368.58	376.57	369.20	
Miscellaneous furniture and fixtures	259	7.79	7.81	8.09	8.04		313.94	317.87	326.03	320.80	
Stone, clay, and glass products	32	10.06	10.07	10.29	10.31	10.32	426.54	431.00	437.33	438.18	438.60
Flat glass	321	14.25	14.19	14.34	14.09	-	654.08	634.29	669.68	621.37	-
Glass and glassware, pressed or blown	322	11.04	11.09	11.40	11.56		451.54	460.24	471.96	478.58	

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				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	40.7	41.9	41.7	41.0		5.6	6.1	5.8	5.8	
Pressed and blown glass, nec	3229	41.2	41.1	41.1	41.8		3.5	3.5	3.6	3.9	
Products of purchased glass	323	41.5	41.5	41.3	41.1		3.2	3.4	3.6	3.5	
Cement, hydraulic	324	41.2	40.8	41.7	42.1		3.2	3.3	3.4	3.4	
Structural clay products	325	41.3	41.9	41.9	42.0		4.4	4.3	4.2	4.3	
Pottery and related products	326	39.1	40.4	40.1	39.3		2.5	2.6	2.6	3.0	
Concrete, gypsum, and plaster products	327	44.6	45.3	44.2	44.6		7.2	7.5	7.1	7.3	
Concrete block and brick	3271	46.1	46.1	46.3	45.2		8.4	8.1	8.9	8.5	
Concrete products, nec	3272	44.0	44.9	43.5	43.3		6.4	6.8	6.2	6.1	
Ready-mixed concrete	3273	44.3	44.8	43.8	45.2		7.5	7.7	7.1	7.8	
Misc. nonmetallic mineral products	329	40.9	41.0	41.6	41.1		3.7	3.7	4.5	4.2	
Abrasive products	3291	41.7	40.0	42.9	42.0		2.7	2.4	4.1	3.6	
Asbestos products	3292	42.6	42.9	42.7	39.9		3.9	3.6	5.1	3.9	
Primary metal industries	33	41.0	41.5	43.2	42.7	42.9	3.9	4.1	4.9	4.8	
Blast furnaces and basic steel products	331	41.4	41.2	43.8	43.5	42.8	3.8	3.9	5.0	5.1	
Blast furnaces and steel mills	3312	41.5	41.2	44.0	43.9	-	3.9	3.9	5.0	5.3	
Steel pipe and tubes	3317	40.2	41.5	43.2	41.6		3.0	3.6	5.4	4.6	
Iron and steel foundries	332	39.9	41.3	43.0	42.1		3.7	4.1	5.0	4.5	
Gray iron foundries	3321	39.3	41.4	43.1	42.3		4.0	4.8	5.4	4.8	
Malleable iron foundries	3322	39.4	40.0	42.6	39.5		2.5	2.6	4.7	3.3	
Steel foundries, nec	3325	40.3	40.7	42.2	42.0		3.0	3.0	4.3	4.4	
Primary nonferrous metals	333	41.2	41.8	43.5	43.4		3.7	3.9	4.6	4.8	
Primary aluminum	3334	41.1	42.1	44.3	44.0		3.6	3.9	4.8	4.8	
Nonferrous rolling and drawing	335	41.4	42.3	43.3	42.9		5.0	5.2	5.5	5.6	
Copper rolling and drawing	3351	40.7	42.4	43.2	42.5		4.8	4.7	5.4	5.3	
Aluminum sheet, plate, and foil	3353	42.1	42.7	43.7	43.7		5.6	6.6	7.1	7.4	
Nonferrous wire drawing and insulating	3357	40.9	41.9	42.3	42.3		4.8	5.2	4.7	4.9	
Nonferrous foundries	336	40.4	41.0	41.8	40.7		3.1	3.2	3.5	3.2	
Aluminum foundries	3361	41.0	41.5	42.2	41.6		3.6	3.5	3.8	3.6	
Fabricated metal products	34	40.5	41.1	41.7	40.8	41.5	3.2	3.5	3.9	3.6	
Metal cans and shipping containers	341	44.2	44.2	44.4	44.3	-	6.0	6.2	6.2	6.3	
Metal cans	3411	44.5	44.5	44.4	44.6		6.1	6.4	6.2	6.4	
Cutlery, hand tools, and hardware	342	39.8	40.0	41.2	40.3		2.5	2.7	3.0	2.9	
Hand and edge tools, and hand saws and blades	3423,5	39.8	40.5	42.0	39.9		2.2	2.8	3.2	2.5	
Hardware, nec	3429	39.8	39.8	40.4	40.3		2.8	2.7	2.9	3.2	
Plumbing and heating, except electric	343	38.9	40.0	42.0	40.8		2.1	2.8	3.9	3.4	
Plumbing fittings and brass goods	3432	39.9	40.7	42.6	40.8		2.3	2.8	3.8	2.3	
Heating equipment, except electric	3433	37.2	38.7	40.5	40.2		1.5	2.0	3.0	3.5	
Fabricated structural metal products	344	40.5	41.1	41.0	40.5		3.3	3.5	3.5	3.3	
Fabricated structural metal	3441	41.6	42.4	41.5	41.1		3.8	4.4	3.7	3.6	
Metal doors, sash, and trim	3442	40.5	40.6	40.7	40.3		3.5	3.4	3.6	3.2	
Fabricated plate work (boiler shops)	3443	39.9	40.9	42.1	41.1		2.3	2.8	3.6	3.3	
Sheet metal work	3444	39.7	40.2	40.0	39.5		3.0	3.0	3.1	3.0	
Architectural metal work	3446	39.8	40.4	41.2	40.1		3.6	4.1	3.8	3.3	
Screw machine products, bolts, etc	345	41.6	41.9	43.1	41.8		4.2	4.3	5.0	4.3	
Screw machine products	3451	40.8	40.3	41.2	40.7		3.2	2.8	3.5	3.2	
Bolts, nuts, rivets, and washers	3452	42.4	43.6	45.0	43.0		5.2	5.7	6.5	5.5	
Metal forgings and stampings	346	41.0	41.7	42.6	40.7		3.6	3.9	4.8	3.7	
Iron and steel forgings	3462	41.4	40.9	41.9	41.1		3.5	3.4	3.9	3.5	
Automotive stampings	3465	41.9	42.8	44.0	41.0		4.3	4.6	5.9	3.9	
Metal stampings, nec	3469	39.8	40.6	41.0	40.0		2.6	3.1	3.8	3.5	
Metal services, nec	347	40.1	40.4	41.3	40.8		3.2	3.3	3.7	3.5	
Plating and polishing	3471	39.8	40.1	40.9	40.4		3.0	3.1	3.4	3.5	
Metal coating and allied services	3479	40.8	41.1	42.1	41.6		3.7	3.8	4.2	3.5	
Ordnance and accessories, nec	348	39.2	40.5	41.4	41.0		2.2	2.8	3.0	2.8	
Ammunition, except for small arms, nec	3483	39.4	40.1	40.0	39.5		2.0	2.6	2.4	2.0	
Misc. fabricated metal products	349	39.5	40.3	41.3	40.5		2.3	2.8	3.5	3.4	
Valves and pipe fittings	3494	38.7	39.6	41.8	40.5		2.2	2.4	3.7	3.5	
Misc. fabricated wire products	3496	39.3	40.2	41.1	41.0		2.1	2.7	3.2	3.3	
Machinery, except electrical	35	40.7	41.2	42.3	41.7	41.8	3.1	3.3	4.0	3.8	
Engines and turbines	351	42.1	41.4	42.6	43.0	-	3.2	4.0	4.9	3.3	
Turbines and turbine generator sets	3511	38.7	38.9	39.6	38.9		3.9	3.9	3.7	3.2	
Internal combustion engines, nec	3519	43.5	42.4	43.6	44.4		2.9	4.0	5.3	3.4	
Farm and garden machinery	352	40.0	40.3	42.1	42.1		2.2	2.9	3.6	4.0	
Farm machinery and equipment	3523	40.7	41.3	42.7	43.3		2.7	3.4	4.4	5.0	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Durable goods—Continued											
Stone, clay, and glass products—Continued											
Glass containers	3221	\$11.39	\$11.45	\$11.96	\$12.04		\$463.57	\$479.76	\$498.73	\$493.64	
Pressed and blown glass, nec	3229	10.62	10.65	10.76	11.01		437.54	437.72	442.24	460.22	
Products of purchased glass	323	8.81	8.78	8.89	8.81		365.62	364.37	367.16	362.09	
Cement, hydraulic	324	13.28	13.23	13.20	13.28		547.14	539.78	550.44	559.09	
Structural clay products	325	8.17	8.08	8.53	8.54		337.42	338.55	357.41	358.68	
Pottery and related products	326	8.86	8.75	8.89	8.97		346.43	353.50	356.49	352.52	
Concrete, gypsum, and plaster products	327	9.79	9.85	10.09	10.11		436.63	446.21	445.98	450.91	
Concrete block and brick	3271	8.73	8.70	8.95	9.06		402.45	401.07	414.39	409.51	
Concrete products, nec	3272	8.59	8.64	8.88	8.94		377.96	387.94	386.28	387.10	
Ready-mixed concrete	3273	10.69	10.76	10.99	10.94		473.57	482.05	481.36	494.49	
Misc. nonmetallic mineral products	329	10.22	10.26	10.44	10.41		418.00	420.66	434.30	427.85	
Abrasive products	3291	9.72	9.72	9.65	9.69		405.32	388.80	413.99	406.98	
Asbestos products	3292	10.21	10.23	10.34	10.54		434.95	438.87	441.52	420.55	
Primary metal industries	33	11.93	11.74	11.97	12.01	\$11.95	489.13	487.21	517.10	512.83	\$512.66
Blast furnaces and basic steel products	331	13.83	13.61	13.83	13.84	13.86	572.56	560.73	605.75	602.04	593.21
Blast furnaces and steel mills	3312	14.54	14.32	14.51	14.50	-	603.41	589.98	638.44	636.55	-
Steel pipe and tubes	3317	10.64	10.78	11.18	10.96		427.73	447.37	482.98	455.94	
Iron and steel foundries	332	10.48	10.52	10.67	10.56		418.15	434.48	458.81	444.58	
Gray iron foundries	3321	10.94	10.96	11.06	10.96		429.94	453.74	476.69	463.61	
Malleable iron foundries	3322	11.07	11.08	11.82	11.35		436.16	443.20	503.53	448.33	
Steel foundries, nec	3325	9.82	9.74	10.06	10.04		395.75	396.42	424.53	421.68	
Primary nonferrous metals	333	13.30	13.13	12.93	13.04		547.96	548.83	562.46	565.94	
Primary aluminum	3334	13.83	13.75	13.29	13.33		568.41	578.88	588.75	586.52	
Nonferrous rolling and drawing	335	11.16	11.09	11.41	11.47		462.02	469.11	494.05	492.06	
Copper rolling and drawing	3351	10.33	10.34	10.54	10.58		420.43	438.42	455.33	449.65	
Aluminum sheet, plate, and foil	3353	13.46	13.34	13.87	13.89		566.67	569.62	606.12	606.99	
Nonferrous wire drawing and insulating	3357	10.97	10.91	11.33	11.42		448.67	457.13	479.26	483.07	
Nonferrous foundries	336	9.54	9.51	9.50	9.52		385.42	389.91	397.10	387.46	
Aluminum foundries	3361	9.83	9.78	9.77	9.73		403.03	405.87	412.29	404.77	
Fabricated metal products	34	9.86	9.82	10.00	9.96	9.92	399.33	403.60	417.00	406.37	411.68
Metal cans and shipping containers	341	13.43	13.36	13.30	13.31	-	593.61	590.51	590.52	589.63	-
Metal cans	3411	14.11	14.05	14.07	14.06		627.90	625.23	624.71	627.08	
Cutlery, hand tools, and hardware	342	9.79	9.67	9.83	9.73		389.64	386.80	405.00	392.12	
Hand and edge tools, and hand saws and blades	3423,5	8.97	8.97	9.12	8.95		357.01	363.29	383.04	357.11	
Hardware, nec	3429	10.19	10.03	10.21	10.11		405.56	399.19	412.48	407.43	
Plumbing and heating, except electric	343	8.98	9.10	9.23	9.16		349.32	364.00	387.66	373.73	
Plumbing fittings and brass goods	3432	8.62	8.73	8.69	8.54		343.94	355.31	370.19	348.43	
Heating equipment, except electric	3433	8.80	8.89	9.22	9.25		327.36	344.04	373.41	371.85	
Fabricated structural metal products	344	9.06	9.08	9.26	9.25		366.93	373.19	379.66	374.63	
Fabricated structural metal	3441	9.52	9.63	9.88	9.94		396.03	408.31	410.02	408.53	
Metal doors, sash, and trim	3442	7.58	7.56	7.64	7.57		306.99	306.94	310.95	305.07	
Fabricated plate work (boiler shops)	3443	10.02	10.05	10.26	10.16		399.80	411.05	431.95	417.58	
Sheet metal work	3444	9.47	9.44	9.63	9.75		375.96	379.49	385.20	385.13	
Architectural metal work	3446	8.59	8.67	8.94	8.81		341.88	350.27	368.33	353.28	
Screw machine products, bolts, etc	345	9.41	9.39	9.78	9.71		391.46	393.44	421.52	405.88	
Screw machine products	3451	8.77	8.80	9.01	8.98		357.82	354.64	371.21	365.49	
Bolts, nuts, rivets, and washers	3452	10.04	9.94	10.51	10.44		425.70	433.38	472.95	448.92	
Metal forgings and stampings	346	11.77	11.64	11.88	11.73		482.57	485.39	506.09	477.41	
Iron and steel forgings	3462	12.44	12.38	12.46	12.56		515.02	506.34	522.07	516.22	
Automotive stampings	3465	13.69	13.64	13.87	13.74		573.61	583.79	610.28	563.34	
Metal stampings, nec	3469	9.05	8.96	9.20	9.17		360.19	363.78	377.20	366.80	
Metal services, nec	347	7.99	8.01	8.02	8.15		320.40	323.60	331.23	332.52	
Plating and polishing	3471	7.89	7.89	8.00	8.16		314.02	316.39	327.20	329.66	
Metal coating and allied services	3479	8.18	8.25	8.06	8.12		333.74	339.08	339.33	337.79	
Ordnance and accessories, nec	348	10.71	10.63	10.92	11.04		419.83	430.52	452.09	452.64	
Ammunition, except for small arms, nec	3483	10.33	10.35	10.48	10.54		407.00	415.04	419.20	416.33	
Misc. fabricated metal products	349	9.06	9.09	9.32	9.36		357.87	366.33	384.92	379.08	
Valves and pipe fittings	3494	9.78	9.76	9.91	9.96		378.49	386.50	414.24	403.38	
Misc. fabricated wire products	3496	8.13	8.22	8.45	8.41		319.51	330.44	347.30	344.81	
Machinery, except electrical	35	10.59	10.59	10.76	10.74	10.73	431.01	436.31	455.15	447.86	448.51
Engines and turbines	351	13.02	12.85	13.26	13.29	-	548.14	531.99	564.88	571.47	-
Turbines and turbine generator sets	3511	13.03	13.23	12.85	12.75		504.26	514.65	508.86	495.98	
Internal combustion engines, nec	3519	13.02	12.71	13.39	13.44		566.37	538.90	583.80	596.74	
Farm and garden machinery	352	10.53	10.18	10.26	10.35		421.20	410.25	431.95	435.74	
Farm machinery and equipment	3523	11.34	10.74	11.07	11.02		461.54	443.56	472.69	477.17	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	39.3	41.4	42.5	41.7		2.4	2.7	3.8	3.4	
Construction machinery	3531	38.3	42.1	43.7	42.3		1.9	2.2	3.5	3.0	
Mining machinery	3532	40.7	40.2	42.6	42.4		2.7	2.9	4.6	4.0	
Oil field machinery	3533	38.6	39.9	41.9	41.3		2.3	2.9	5.4	4.6	
Conveyors and conveying equipment	3535	42.2	41.9	42.3	42.1		4.1	3.4	3.7	3.7	
Industrial trucks and tractors	3537	38.3	41.8	39.7	39.6		2.3	3.2	2.9	2.7	
Metalworking machinery	354	41.8	41.9	42.6	42.1		4.3	4.4	4.5	4.4	
Machine tools, metal cutting types	3541	41.4	41.7	42.5	41.3		3.6	3.6	3.7	3.7	
Machine tools, metal forming types	3542	41.4	40.2	42.1	41.6		4.1	4.6	4.6	4.3	
Special dies, tools, jigs, and fixtures	3544	42.7	42.9	43.0	42.7		5.4	5.4	5.2	5.1	
Machine tool accessories	3545	40.0	39.8	41.6	40.9		3.2	3.2	3.7	3.7	
Power driven hand tools	3546	40.7	41.8	42.0	42.3		2.0	3.3	3.6	3.3	
Special industry machinery	355	40.6	41.5	42.1	41.3		3.0	3.5	4.1	3.7	
Food products machinery	3551	40.6	41.4	42.5	41.7		2.3	2.8	3.8	3.3	
Textile machinery	3552	40.7	42.5	43.4	41.7		3.1	3.9	4.3	3.9	
Printing trades machinery	3555	39.7	40.4	39.6	39.7		3.5	4.3	3.7	3.7	
General industrial machinery	356	41.0	41.1	42.2	41.5		3.2	3.2	3.8	3.7	
Pumps and pumping equipment	3561	40.3	40.9	43.2	41.5		2.1	2.3	4.0	3.4	
Ball and roller bearings	3562	42.2	42.2	43.8	43.5		4.8	4.4	5.3	5.0	
Air and gas compressors	3563	39.3	39.9	41.5	41.0		2.3	2.0	2.8	2.8	
Blowers and fans	3564	40.8	41.5	41.2	40.6		2.9	3.5	2.8	3.3	
Speed changers, drives, and gears	3566	41.5	41.9	41.0	40.7		3.8	4.4	3.3	3.5	
Power transmission equipment, nec	3568	42.0	40.7	41.8	41.3		3.9	3.8	4.3	4.2	
Office and computing machines	357	41.1	41.6	42.8	41.8		2.5	2.7	3.7	3.3	
Electronic computing equipment	3573	41.2	41.7	42.6	41.4		2.4	2.6	3.7	3.3	
Refrigeration and service machinery	358	40.4	40.6	42.2	41.8		3.1	2.8	3.6	3.7	
Refrigeration and heating equipment	3585	40.8	40.7	42.6	42.5		3.6	2.9	3.8	4.3	
Misc. machinery, except electrical	359	40.2	40.7	41.7	41.3		3.1	3.5	4.0	3.7	
Carburetors, pistons, rings, and valves	3592	38.6	41.4	42.3	40.2		2.6	4.4	4.4	3.4	
Machinery, except electrical, nec	3599	40.4	40.6	41.6	41.4		3.2	3.3	3.9	3.8	
Electrical and electronic equipment	36	40.4	40.9	41.1	40.4	40.8	2.5	2.8	3.0	2.8	
Electric distributing equipment	361	40.1	41.1	41.5	40.6	-	2.7	2.7	2.9	3.1	
Transformers	3612	41.0	42.5	42.5	40.5		2.8	2.8	3.0	2.7	
Switchgear and switchboard apparatus	3613	39.1	39.7	40.6	40.6		2.6	2.5	2.8	3.4	
Electrical industrial apparatus	362	40.3	40.4	41.5	40.9		2.7	2.7	3.4	3.1	
Motors and generators	3621	40.6	40.8	41.4	41.0		3.3	3.2	3.6	3.5	
Industrial controls	3622	39.6	40.1	40.6	39.6		1.8	2.0	2.6	1.8	
Household appliances	363	40.1	40.6	40.2	39.4		2.6	3.2	2.8	2.5	
Household refrigerators and freezers	3632	41.2	39.3	40.3	39.5		3.8	3.0	3.3	3.2	
Household laundry equipment	3633	40.6	42.0	40.6	42.4		2.2	4.0	3.3	4.1	
Electric housewares and fans	3634	39.4	40.5	40.4	38.4		2.7	3.0	2.4	1.9	
Electric lighting and wiring equipment	364	39.1	40.1	39.9	39.1		2.3	2.6	2.5	2.1	
Electric lamps	3641	39.4	40.6	40.0	39.4		2.4	2.8	2.7	2.3	
Current-carrying wiring devices	3643	39.7	40.0	39.6	38.9		2.0	2.3	2.5	2.4	
Noncurrent-carrying wiring devices	3644	38.2	40.6	40.8	39.6		1.4	2.3	2.6	1.6	
Residential lighting fixtures	3645	37.8	38.8	39.1	37.7		.8	1.3	1.4	1.1	
Radio and TV receiving equipment	365	41.4	42.6	41.3	40.2		2.8	3.3	2.1	2.1	
Radio and TV receiving sets	3651	41.9	43.1	41.2	39.7		2.7	3.1	1.6	1.4	
Communication equipment	366	41.0	41.1	41.3	41.1		2.4	2.5	2.6	2.6	
Telephone and telegraph apparatus	3661	40.9	41.1	42.0	42.1		1.8	2.0	2.5	2.4	
Radio and TV communication equipment	3662	41.0	41.0	41.0	40.8		2.6	2.8	2.6	2.6	
Electronic components and accessories	367	40.5	40.9	41.0	40.5		2.7	3.0	3.3	3.3	
Electronic tubes	3671-3	42.9	43.2	42.6	40.7		2.5	3.1	3.0	2.0	
Semiconductors and related devices	3674	40.8	41.0	40.9	40.9		3.1	3.2	3.6	4.2	
Electronic components, nec	3679	40.2	40.9	41.2	40.6		2.6	3.0	3.4	3.3	
Misc. electrical equipment and supplies	369	40.1	41.8	41.9	40.8		2.2	3.3	3.5	2.5	
Storage batteries	3691	39.2	44.1	42.3	40.4		2.4	4.0	3.5	3.1	
Engine electrical equipment	3694	40.4	41.8	43.3	41.5		2.3	3.8	4.6	2.7	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Durable goods—Continued											
Machinery, except electrical—Continued											
Construction and related machinery	353	\$10.98	\$11.16	\$11.13	\$11.11		\$431.51	\$462.02	\$473.03	\$463.29	
Construction machinery	3531	11.99	12.43	12.44	12.44		459.22	523.30	543.63	526.21	
Mining machinery	3532	11.57	11.42	11.39	11.62		470.90	459.08	485.21	492.69	
Oil field machinery	3533	11.32	11.21	11.24	10.96		436.95	447.28	470.96	452.65	
Conveyors and conveying equipment	3535	9.98	9.92	9.59	9.69		421.16	415.65	405.66	407.95	
Industrial trucks and tractors	3537	9.44	9.69	9.80	9.68		361.55	405.04	389.06	383.33	
Metalworking machinery	354	10.97	10.94	11.12	11.08		458.55	458.39	473.71	466.47	
Machine tools, metal cutting types	3541	10.99	10.93	11.18	11.16		454.99	455.78	475.15	460.91	
Machine tools, metal forming types	3542	11.55	11.34	11.33	11.34		478.17	455.87	476.99	471.74	
Special dies, tools, jigs, and fixtures	3544	11.66	11.62	11.86	11.82		497.88	498.50	509.98	504.71	
Machine tool accessories	3545	9.80	9.90	10.03	10.02		392.00	394.02	417.25	409.82	
Power driven hand tools	3546	8.54	8.47	8.44	8.30		347.58	354.05	354.48	351.09	
Special industry machinery	355	10.42	10.41	10.59	10.63		423.05	432.02	445.84	439.02	
Food products machinery	3551	10.65	10.56	10.62	10.59		432.39	437.18	451.35	441.60	
Textile machinery	3552	8.44	8.47	8.79	8.90		343.51	359.98	381.49	371.13	
Printing trades machinery	3555	11.06	11.06	11.21	11.37		439.08	446.82	443.92	451.39	
General industrial machinery	356	10.26	10.23	10.42	10.38		420.66	420.45	439.72	430.77	
Pumps and pumping equipment	3561	10.93	10.87	11.13	11.10		440.48	444.58	480.82	460.65	
Ball and roller bearings	3562	10.87	10.70	11.12	10.79		458.71	451.54	487.06	469.37	
Air and gas compressors	3563	9.90	9.96	10.26	10.36		389.07	397.40	425.79	424.76	
Blowers and fans	3564	9.01	9.11	9.18	9.28		367.61	378.07	378.22	376.77	
Speed changers, drives, and gears	3566	10.51	10.40	10.03	10.10		436.17	435.76	411.23	411.07	
Power transmission equipment, nec	3568	10.36	10.40	10.43	10.52		435.12	423.28	435.97	434.48	
Office and computing machines	357	10.01	10.08	10.31	10.32		411.41	419.33	441.27	431.38	
Electronic computing equipment	3573	10.00	10.06	10.32	10.33		412.00	419.50	439.63	427.66	
Refrigeration and service machinery	358	10.28	10.23	10.41	10.34		415.31	415.34	439.30	432.21	
Refrigeration and heating equipment	3585	10.58	10.42	10.68	10.62		431.66	424.09	454.97	451.35	
Misc. machinery, except electrical	359	10.19	10.24	10.44	10.36		409.64	416.77	435.35	427.87	
Carburetors, pistons, rings, and valves	3592	12.50	12.68	12.81	12.65		482.50	524.95	541.86	508.53	
Machinery, except electrical, nec	3599	9.85	9.83	10.06	10.00		397.94	399.10	418.50	414.00	
Electrical and electronic equipment	36	9.67	9.64	9.84	9.89	\$9.89	390.67	394.28	404.42	399.56	\$403.51
Electric distributing equipment	361	8.98	8.96	9.05	9.20	-	360.10	368.26	375.58	373.52	-
Transformers	3612	8.82	8.76	8.86	9.01		361.62	372.30	376.55	364.91	
Switchgear and switchboard apparatus	3613	9.14	9.16	9.24	9.37		357.37	363.65	375.14	380.42	
Electrical industrial apparatus	362	9.76	9.69	9.77	9.82		393.33	391.48	405.46	401.64	
Motors and generators	3621	9.70	9.61	9.67	9.68		393.82	392.09	400.34	396.88	
Industrial controls	3622	9.61	9.60	9.62	9.73		380.56	384.96	390.57	385.31	
Household appliances	363	9.69	9.64	9.74	9.93		388.57	391.38	391.55	391.24	
Household refrigerators and freezers	3632	11.02	11.38	11.16	11.30		454.02	447.23	449.75	446.35	
Household laundry equipment	3633	11.46	11.49	11.65	11.82		465.28	482.58	472.99	501.17	
Electric housewares and fans	3634	7.17	7.15	7.22	7.29		282.50	289.58	291.69	279.94	
Electric lighting and wiring equipment	364	8.82	8.82	9.08	9.11		344.86	353.68	362.29	356.20	
Electric lamps	3641	9.84	9.76	10.21	10.44		387.70	396.26	408.40	411.34	
Current-carrying wiring devices	3643	8.30	8.42	8.58	8.69		329.51	336.80	339.77	338.04	
Noncurrent-carrying wiring devices	3644	9.26	9.28	9.32	9.36		353.73	376.77	380.26	370.66	
Residential lighting fixtures	3645	6.64	6.50	6.80	6.82		250.99	252.20	265.88	257.11	
Radio and TV receiving equipment	365	9.48	9.45	9.21	9.20		392.47	402.57	380.37	369.84	
Radio and TV receiving sets	3651	9.78	9.71	9.51	9.48		409.78	418.50	391.81	376.36	
Communication equipment	366	11.16	11.21	11.68	11.81		457.56	460.73	482.38	485.39	
Telephone and telegraph apparatus	3661	10.43	10.62	11.13	11.15		426.59	436.48	467.46	469.42	
Radio and TV communication equipment	3662	11.45	11.44	11.87	12.04		469.45	469.04	486.67	491.23	
Electronic components and accessories	367	8.70	8.66	8.89	8.93		352.35	354.19	364.49	361.67	
Electronic tubes	3671-3	10.83	10.65	10.92	11.03		464.61	460.08	465.19	448.92	
Semiconductors and related devices	3674	10.23	10.29	10.53	10.62		417.38	421.89	430.68	434.36	
Electronic components, nec	3679	7.89	7.82	8.08	8.07		317.18	319.84	332.90	327.64	
Misc. electrical equipment and supplies	369	10.57	10.54	10.58	10.27		423.86	440.57	443.30	419.02	
Storage batteries	3691	11.22	11.09	11.14	11.01		439.82	489.07	471.22	444.80	
Engine electrical equipment	3694	11.10	11.10	11.31	10.70		448.44	463.98	489.72	444.05	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Durable goods—Continued											
Transportation equipment	37	41.5	41.6	41.9	41.1	41.1	4.0	4.1	4.1	3.8	
Motor vehicles and equipment	371	41.7	41.4	42.1	41.0	41.0	3.8	3.9	4.0	3.5	
Motor vehicles and car bodies	3711	41.3	40.3	41.4	40.8	-	3.3	3.6	3.6	3.3	
Truck and bus bodies	3713	40.3	41.1	42.1	42.8		3.2	3.4	4.0	5.4	
Motor vehicle parts and accessories	3714	42.3	42.4	42.9	41.0		4.5	4.3	4.5	3.6	
Truck trailers	3715	40.5	40.9	41.6	40.9		2.9	3.3	3.8	3.1	
Aircraft and parts	372	41.6	42.6	42.4	41.7		4.7	5.1	5.0	4.7	
Aircraft	3721	41.3	41.9	42.3	41.5		4.2	4.5	4.8	4.4	
Aircraft engines and engine parts	3724	41.5	42.6	42.2	41.5		5.4	5.6	4.6	4.3	
Aircraft equipment, nec	3728	42.0	43.5	42.7	42.0		4.9	5.6	5.5	5.6	
Ship and boat building and repairing	373	40.7	40.2	40.4	39.7		3.2	2.8	3.0	2.5	
Ship building and repairing	3731	41.5	40.6	40.0	39.9		3.5	3.1	2.7	2.7	
Boat building and repairing	3732	39.2	39.4	41.2	39.3		2.6	2.3	3.5	2.3	
Railroad equipment	374	39.9	41.1	41.2	41.1		2.2	3.0	1.8	2.1	
Guided missiles, space vehicles, and parts	376	41.5	42.4	41.9	41.3		4.3	4.4	4.1	3.6	
Guided missiles and space vehicles	3761	41.7	42.6	41.9	41.1		4.7	4.6	4.1	3.7	
Miscellaneous transportation equipment	379	40.2	40.8	39.9	39.6		3.5	3.6	3.4	3.7	
Travel trailers and campers	3792	38.3	39.0	37.7	38.8		2.5	2.6	1.7	2.6	
Instruments and related products	38	40.1	40.5	41.5	40.9	41.6	2.3	2.5	2.9	2.6	
Engineering and scientific instruments	381	41.2	41.7	41.0	41.0		2.8	2.9	3.2	3.1	
Measuring and controlling devices	382	39.6	40.2	41.6	40.6		1.8	2.1	2.6	2.2	
Environmental controls	3822	39.3	39.0	39.4	39.1		1.8	1.8	2.3	1.9	
Process control instruments	3823	39.6	40.6	43.1	41.1		2.1	2.5	3.2	2.8	
Instruments to measure electricity	3825	38.8	40.0	41.0	40.0		1.4	1.9	2.4	2.1	
Optical instruments and lenses	383	40.6	40.8	42.5	41.5		2.3	2.3	2.9	2.4	
Medical instruments and supplies	384	40.1	40.3	40.7	40.1		2.6	2.7	3.0	2.5	
Surgical and medical instruments	3841	40.3	40.6	41.0	40.0		2.9	2.7	3.1	2.5	
Surgical appliances and supplies	3842	40.2	40.2	40.3	40.1		2.5	2.7	2.7	2.5	
Ophthalmic goods	385	39.5	40.6	40.6	40.0		1.9	2.6	2.4	2.4	
Photographic equipment and supplies	386	40.5	40.8	44.1	43.8		2.7	2.8	3.8	3.3	
Watches, clocks, and watchcases	387	40.9	40.3	41.5	41.8		1.2	1.3	2.8	2.7	
Miscellaneous manufacturing	39	38.8	39.2	39.3	38.6	39.3	1.8	2.2	2.5	2.2	
Jewelry, silverware, and plated ware	391	37.4	37.8	38.2	37.3	-	.9	1.9	1.8	1.5	
Jewelry, precious metal	3911	36.1	36.8	37.4	36.4		.7	1.4	1.4	1.2	
Musical instruments	393	39.7	40.7	41.3	41.0		2.6	3.0	3.4	2.4	
Toys and sporting goods	394	39.0	39.2	39.0	38.4		1.9	1.8	2.0	1.9	
Dolls, games, toys, and children's vehicles	3942,4	38.0	38.5	38.2	37.3		1.6	2.0	1.8	1.4	
Sporting and athletic goods, nec	3949	39.8	39.8	39.7	39.3		2.1	1.6	2.3	2.2	
Pens, pencils, office, and art supplies	395	39.3	39.8	40.9	40.7		1.7	1.9	2.6	2.3	
Costume jewelry and notions	396	36.8	38.6	37.5	35.4		1.1	2.5	3.2	2.4	
Costume jewelry	3961	36.0	37.5	35.3	33.6		1.0	2.6	2.7	2.0	
Miscellaneous manufactures	399	39.4	39.8	40.1	39.6		2.3	2.7	2.7	2.5	
Signs and advertising displays	3993	39.8	39.9	39.8	39.2		2.4	2.5	2.5	2.2	
Nondurable goods		39.5	40.1	40.3	40.0	40.3	3.3	3.6	3.6	3.6	3.9
Food and kindred products	20	39.9	40.6	40.1	39.9	40.7	4.1	4.6	4.0	4.2	-
Meat products	201	39.6	40.1	39.7	39.5	-	3.9	4.0	3.7	3.6	
Meat packing plants	2011	41.1	41.4	40.6	40.7		4.5	4.7	4.0	4.2	
Sausages and other prepared meats	2013	40.6	40.6	41.0	40.8		4.2	4.0	3.9	4.0	
Poultry dressing plants	2016	38.3	39.1	38.8	38.4		3.3	3.3	3.5	3.1	
Dairy products	202	41.9	41.5	42.1	41.5		4.8	4.6	4.9	4.8	
Cheese, natural and processed	2022	40.2	39.9	40.1	39.2		3.9	4.0	4.1	4.0	
Fluid milk	2026	42.7	42.4	42.9	42.3		5.4	5.2	5.2	5.1	
Preserved fruits and vegetables	203	38.8	41.0	38.4	38.1		3.9	5.8	3.6	4.5	
Canned specialties	2032	40.3	43.0	38.8	41.5		2.9	7.0	2.9	4.9	
Canned fruits and vegetables	2033	38.3	40.8	36.6	36.1		4.5	6.3	3.8	4.8	
Frozen fruits and vegetables	2037	37.2	39.8	38.9	37.9		3.6	5.4	3.9	4.5	
Grain mill products	204	43.5	43.9	43.9	44.5		5.5	5.9	5.6	6.3	
Flour and other grain mill products	2041	45.7	47.4	46.7	47.5		5.1	6.4	6.7	7.0	
Prepared feeds, nec	2048	43.3	42.9	43.8	44.2		5.6	5.7	5.9	6.6	
Bakery products	205	39.9	39.7	40.1	39.8		3.8	3.8	3.8	4.0	
Bread, cake, and related products	2051	39.6	39.2	39.2	39.2		4.1	3.9	4.0	4.3	
Cookies and crackers	2052	40.8	41.2	42.3	41.5		3.0	3.6	3.3	3.5	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^a	Aug. 1987 ^a	July 1986	Aug. 1986	June 1987	July 1987 ^a	Aug. 1987 ^a
Durable goods—Continued											
Transportation equipment	37	\$12.73	\$12.70	\$12.88	\$12.83	\$12.91	\$528.30	\$528.32	\$539.67	\$527.31	\$530.60
Motor vehicles and equipment	371	13.33	13.29	13.47	13.35	13.43	555.86	550.21	567.09	547.35	550.63
Motor vehicles and car bodies	3711	14.85	15.00	15.19	15.25	-	613.31	604.50	628.87	622.20	-
Truck and bus bodies	3713	10.70	10.80	11.42	11.57	-	431.21	443.88	480.78	495.20	-
Motor vehicle parts and accessories	3714	12.71	12.56	12.66	12.56	-	537.63	532.54	543.11	514.96	-
Truck trailers	3715	9.59	9.60	9.39	9.46	-	388.40	392.64	390.62	386.91	-
Aircraft and parts	372	12.87	12.89	13.14	13.17	-	535.39	549.11	557.14	549.19	-
Aircraft	3721	(^b)	(^b)	(^b)	(^b)	-	-	-	-	-	-
Aircraft engines and engine parts	3724	\$13.14	\$13.15	\$13.16	\$13.27	-	545.31	560.19	555.35	550.71	-
Aircraft equipment, nec	3728	11.93	11.96	12.26	12.34	-	501.06	520.26	523.50	518.28	-
Ship and boat building and repairing	373	10.48	10.45	10.27	10.30	-	426.54	420.09	414.91	408.91	-
Ship building and repairing	3731	11.57	11.55	11.57	11.56	-	480.16	468.93	462.80	461.24	-
Boat building and repairing	3732	7.94	7.95	8.01	7.98	-	311.25	313.23	330.01	313.61	-
Railroad equipment	374	12.32	12.43	12.00	12.11	-	491.57	510.87	494.40	497.72	-
Guided missiles, space vehicles, and parts	376	12.12	12.18	12.56	12.78	-	502.98	516.43	526.26	527.81	-
Guided missiles and space vehicles	3761	12.37	12.49	12.98	13.10	-	515.83	532.07	543.86	538.41	-
Miscellaneous transportation equipment	379	10.54	10.35	10.63	10.57	-	423.71	422.28	424.14	418.57	-
Travel trailers and campers	3792	8.83	8.72	8.67	8.54	-	338.19	340.08	326.86	331.35	-
Instruments and related products	38	9.48	9.47	9.70	9.74	9.72	380.15	383.54	402.55	398.37	404.35
Engineering and scientific instruments	381	10.22	10.20	10.72	10.80	-	421.06	425.34	439.52	442.80	-
Measuring and controlling devices	382	9.27	9.32	9.58	9.61	-	367.09	374.66	398.53	390.17	-
Environmental controls	3822	8.75	8.80	8.93	8.93	-	343.88	343.20	351.84	349.16	-
Process control instruments	3823	9.35	9.47	9.45	9.54	-	370.26	384.48	407.30	392.09	-
Instruments to measure electricity	3825	9.46	9.50	9.86	9.81	-	367.05	380.00	404.26	392.40	-
Optical instruments and lenses	383	10.64	10.43	10.39	10.58	-	431.98	425.54	441.58	439.07	-
Medical instruments and supplies	384	8.45	8.46	8.71	8.64	-	338.85	340.94	354.50	346.46	-
Surgical and medical instruments	3841	8.63	8.61	8.82	8.81	-	347.79	349.57	361.62	352.40	-
Surgical appliances and supplies	3842	8.31	8.35	8.59	8.46	-	334.06	335.67	346.18	339.25	-
Ophthalmic goods	385	7.18	7.22	7.34	7.45	-	283.61	293.13	298.00	298.00	-
Photographic equipment and supplies	386	12.65	12.66	12.83	13.06	-	512.33	516.53	565.80	572.03	-
Watches, clocks, and watchcases	387	6.90	6.88	7.09	7.17	-	282.21	277.26	294.24	299.71	-
Miscellaneous manufacturing	39	7.57	7.51	7.74	7.71	7.66	293.72	294.39	304.18	297.61	301.04
Jewelry, silverware, and plated ware	391	8.14	8.15	8.23	8.22	-	304.44	308.07	314.39	306.61	-
Jewelry, precious metal	3911	8.15	8.14	8.34	8.28	-	294.22	299.55	311.92	301.39	-
Musical instruments	393	7.20	7.25	7.42	7.53	-	285.84	295.08	306.45	308.73	-
Toys and sporting goods	394	6.97	6.90	7.23	7.16	-	271.83	270.48	281.97	274.94	-
Dolls, games, toys, and children's vehicles	3942,4	6.84	6.78	7.07	6.90	-	259.92	261.03	270.07	257.37	-
Sporting and athletic goods, nec	3949	7.07	7.01	7.36	7.36	-	281.39	279.00	292.19	289.25	-
Pens, pencils, office, and art supplies	395	7.66	7.65	7.76	7.69	-	301.04	304.47	317.38	312.98	-
Costume jewelry and notions	396	6.05	6.04	6.15	6.20	-	222.64	233.14	230.63	219.48	-
Costume jewelry	3961	5.67	5.63	5.66	5.77	-	204.12	211.13	199.80	193.87	-
Miscellaneous manufactures	399	8.30	8.23	8.54	8.45	-	327.02	327.55	342.45	334.62	-
Signs and advertising displays	3993	8.63	8.66	8.86	8.75	-	343.47	345.53	352.63	343.00	-
Nondurable goods											
Food and kindred products	20	8.76	8.66	8.91	8.88	8.83	349.52	351.60	357.29	354.31	359.38
Meat products	201	7.34	7.31	7.41	7.39	-	290.66	293.13	294.18	291.91	-
Meat packing plants	2011	8.26	8.25	8.26	8.33	-	339.49	341.55	335.36	339.03	-
Sausages and other prepared meats	2013	8.78	8.75	8.93	8.86	-	356.47	355.25	366.13	361.49	-
Poultry dressing plants	2016	5.95	5.91	6.16	6.09	-	227.89	231.08	239.01	233.86	-
Dairy products	202	9.39	9.44	9.57	9.61	-	393.44	391.76	402.90	398.82	-
Cheese, natural and processed	2022	8.77	8.86	8.85	9.02	-	352.55	353.51	354.89	353.58	-
Fluid milk	2026	9.95	9.91	10.10	10.09	-	424.87	420.18	433.29	426.81	-
Preserved fruits and vegetables	203	8.03	7.81	8.23	8.15	-	311.56	320.21	316.03	310.52	-
Canned specialties	2032	10.03	9.78	10.34	10.24	-	404.21	420.54	401.19	424.96	-
Canned fruits and vegetables	2033	7.93	7.68	8.25	8.17	-	303.72	313.34	301.95	294.94	-
Frozen fruits and vegetables	2037	7.34	6.99	7.51	7.34	-	273.05	278.20	292.14	278.19	-
Grain mill products	204	10.69	10.64	10.71	10.89	-	465.02	467.10	470.17	484.61	-
Flour and other grain mill products	2041	10.12	10.21	10.61	10.83	-	462.48	483.95	495.49	514.43	-
Prepared feeds, nec	2048	8.09	8.17	8.25	8.31	-	350.30	350.49	361.35	367.30	-
Bakery products	205	9.92	9.88	10.04	10.01	-	395.81	392.24	402.60	398.40	-
Bread, cake, and related products	2051	9.86	9.77	10.01	10.02	-	391.25	382.98	392.39	392.78	-
Cookies and crackers	2052	10.04	10.14	10.12	10.00	-	409.63	417.77	428.08	415.00	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	39.5	40.7	39.5	39.2		2.4	3.4	2.4	2.4	
Cane and beet sugar	2061-3	41.7	42.7	41.4	41.2		4.1	5.5	4.0	3.7	
Confectionery products	2065	38.2	39.5	38.1	37.7		1.7	2.4	1.7	1.7	
Fats and oils	207	42.3	42.8	41.5	41.3		4.9	5.1	5.0	5.0	
Beverages	208	41.5	40.7	41.6	41.2		4.6	4.2	4.6	4.1	
Malt beverages	2082	42.7	42.4	42.8	43.8		5.9	5.5	5.5	5.3	
Bottled and canned soft drinks	2086	41.8	40.4	42.0	40.9		4.9	4.1	4.9	4.3	
Misc. food and kindred products	209	37.6	38.9	38.6	39.1		4.0	4.5	3.8	4.3	
Tobacco manufactures	21	36.4	36.2	40.1	35.4	35.8	1.0	1.1	4.0	1.8	
Cigarettes	211	35.9	36.0	40.7	34.3	-	.8	1.0	4.7	1.7	
Textile mill products	22	40.2	41.4	42.4	41.7	41.9	3.7	4.4	4.7	4.4	
Weaving mills, cotton	221	40.6	42.4	43.7	42.9	-	4.9	5.9	6.3	6.2	
Weaving mills, synthetics	222	40.3	41.4	42.6	42.2		3.4	4.1	5.0	4.6	
Weaving and finishing mills, wool	223	39.9	40.6	43.1	41.9		3.0	3.6	2.4	1.9	
Narrow fabric mills	224	39.7	40.5	41.3	40.4		2.4	2.9	3.6	3.7	
Knitting mills	225	38.7	39.4	40.6	40.1		2.9	3.2	3.7	3.3	
Women's hosiery, except socks	2251	37.5	38.0	39.2	38.5		2.6	2.7	3.1	3.2	
Hosiery, nec	2252	38.8	38.6	40.0	39.1		2.4	2.4	3.0	3.0	
Knit outerwear mills	2253	37.1	38.5	39.7	40.0		2.7	3.1	3.3	2.8	
Knit underwear mills	2254	39.5	40.0	40.4	39.3		2.1	2.7	2.9	2.5	
Circular knit fabric mills	2257	41.6	42.1	43.4	42.7		5.0	5.0	6.1	5.3	
Textile finishing, except wool	226	40.0	42.8	43.2	41.9		3.7	5.3	5.6	4.5	
Finishing plants, cotton	2261	40.7	43.1	42.9	43.0		4.3	5.3	4.9	4.4	
Finishing plants, synthetics	2262	38.3	42.1	43.2	40.6		3.6	5.5	5.8	3.9	
Floor covering mills	227	40.5	42.9	43.9	43.4		4.1	4.9	4.2	4.0	
Yarn and thread mills	228	42.1	43.0	43.0	42.3		4.4	5.1	5.3	5.2	
Yarn mills, except wool	2281	43.2	43.9	43.9	43.1		4.9	5.7	5.9	5.8	
Throwing and winding mills	2282	38.2	39.1	38.3	37.5		3.1	3.6	3.0	2.5	
Miscellaneous textile goods	229	41.9	42.3	43.2	42.4		3.9	4.1	4.6	4.2	
Apparel and other textile products	23	36.3	36.7	37.4	37.0	37.3	1.3	1.6	1.9	1.7	
Men's and boys' suits and coats	231	35.5	34.3	36.0	35.7	-	.8	.7	1.0	1.0	
Men's and boys' furnishings	232	36.9	37.1	37.9	37.2		1.0	1.3	1.8	1.5	
Men's and boys' shirts and nightwear	2321	36.6	37.1	38.2	37.7		1.0	1.3	1.7	1.5	
Men's and boys' separate trousers	2327	35.5	36.1	37.2	36.7		.6	.6	1.4	.9	
Men's and boys' work clothing	2328	37.2	36.2	37.6	37.2		1.1	1.2	1.8	1.7	
Women's and misses' outerwear	233	34.6	35.0	36.0	35.8		1.1	1.3	1.7	1.6	
Women's and misses' blouses and waists	2331	35.6	35.9	35.7	35.1		.9	1.4	1.3	1.0	
Women's and misses' dresses	2335	32.9	34.4	35.6	35.6		.9	1.3	1.5	1.5	
Women's and misses' suits and coats	2337	35.1	35.0	36.4	36.6		1.1	1.5	2.2	2.3	
Women's and misses' outerwear, nec	2339	35.0	35.0	36.1	36.0		1.2	1.3	1.7	1.6	
Women's and children's undergarments	234	36.9	38.0	38.1	37.5		1.2	1.7	1.4	1.3	
Women's and children's underwear	2341	37.4	38.3	38.6	38.2		1.2	1.7	1.4	1.3	
Brassieres and allied garments	2342	34.7	36.5	35.5	33.5		1.0	1.8	1.2	1.1	
Children's outerwear	236	37.2	36.7	38.4	38.0		1.6	1.4	2.0	2.0	
Children's dresses and blouses	2361	35.9	35.8	36.9	36.1		1.3	1.3	1.3	1.3	
Misc. apparel and accessories	238	36.9	37.7	38.7	37.7		1.1	1.5	2.0	1.6	
Misc. fabricated textile products	239	38.1	39.4	39.0	38.2		2.2	3.0	2.8	2.4	
Curtains and draperies	2391	36.7	38.2	37.6	37.2		1.7	1.5	1.9	1.3	
House furnishings, nec	2392	38.0	39.6	39.0	38.3		2.1	3.1	2.7	3.1	
Automotive and apparel trimmings	2396	39.6	40.9	39.5	39.4		3.8	5.3	4.5	3.4	
Paper and allied products	26	42.9	43.2	43.3	43.2	43.1	5.0	4.9	5.0	5.2	
Paper and pulp mills	261,2,6	45.5	44.8	45.2	45.8	-	7.0	6.6	6.3	6.8	
Paper mills, except building paper	262	45.6	45.0	45.4	45.9		7.0	6.7	6.5	7.0	
Paperboard mills	263	44.2	43.8	44.0	43.6		7.5	6.5	7.7	7.2	
Misc. converted paper products	264	41.3	42.1	41.9	42.1		3.4	3.5	3.8	4.0	
Paper coating and glazing	2641	42.8	43.0	44.4	44.4		3.3	3.0	4.4	4.5	
Envelopes	2642	40.4	42.1	41.3	41.0		2.8	3.5	2.9	3.1	
Bags, except textile bags	2643	41.4	42.0	42.0	41.7		3.9	4.2	4.1	4.3	
Paperboard containers and boxes	265	41.8	42.8	42.7	41.9		4.3	4.5	4.6	4.4	
Folding paperboard boxes	2651	41.7	42.3	42.7	41.7		3.8	4.0	4.7	4.4	
Corrugated and solid fiber boxes	2653	42.8	44.1	43.2	42.5		4.6	4.9	4.9	4.8	
Sanitary food containers	2654	39.2	41.3	42.3	41.6		5.0	5.0	4.3	4.7	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Nondurable goods—Continued											
Food and kindred products—Continued											
Sugar and confectionery products	206	\$9.03	\$9.05	\$9.37	\$9.42		\$356.69	\$368.34	\$370.12	\$369.26	
Cane and beet sugar	2061-3	10.86	10.96	11.06	11.05		452.86	467.99	457.88	455.26	
Confectionery products	2065	7.72	7.70	8.07	8.19		294.90	304.15	307.47	308.76	
Fats and oils	207	9.00	8.99	9.44	9.46		380.70	384.77	391.76	390.70	
Beverages	208	11.67	11.70	11.84	11.80		484.31	476.19	492.54	486.16	
Malt beverages	2082	16.22	16.26	16.79	16.51		692.59	689.42	718.61	723.14	
Bottled and canned soft drinks	2086	9.21	9.16	9.50	9.47		384.98	370.06	399.00	387.32	
Misc. food and kindred products	209	8.01	7.97	8.12	8.14		301.18	310.03	313.43	318.27	
Tobacco manufactures	21	13.73	13.55	15.57	14.84	\$14.13	499.77	490.51	624.36	525.34	\$505.85
Cigarettes	211	15.65	15.84	17.74	17.07	-	561.84	570.24	722.02	585.50	-
Textile mill products	22	6.88	6.97	7.15	7.14	7.19	276.58	288.56	303.16	297.74	301.26
Weaving mills, cotton	221	7.24	7.39	7.51	7.53	-	293.94	313.34	328.19	323.04	-
Weaving mills, synthetics	222	7.37	7.48	7.70	7.70	-	297.01	309.67	328.02	324.94	-
Weaving and finishing mills, wool	223	7.42	7.37	7.70	7.56	-	296.06	299.22	331.87	316.76	-
Narrow fabric mills	224	6.59	6.57	6.71	6.76	-	261.62	266.09	277.12	273.10	-
Knitting mills	225	6.32	6.36	6.50	6.50	-	244.58	250.58	263.90	260.65	-
Women's hosiery, except socks	2251	6.28	6.31	6.40	6.52	-	235.50	239.78	250.88	251.02	-
Hosiery, nec	2252	6.00	6.01	6.17	6.20	-	232.80	231.99	246.80	242.42	-
Knit outerwear mills	2253	6.28	6.33	6.40	6.35	-	232.99	243.71	254.08	254.00	-
Knit underwear mills	2254	5.81	5.87	6.13	6.13	-	229.50	234.80	247.65	240.91	-
Circular knit fabric mills	2257	6.90	6.97	7.18	7.12	-	287.04	293.44	311.61	304.02	-
Textile finishing, except wool	226	7.17	7.34	7.51	7.38	-	286.80	314.15	324.43	309.22	-
Finishing plants, cotton	2261	7.20	7.41	7.51	7.35	-	293.04	319.37	322.18	316.05	-
Finishing plants, synthetics	2262	7.53	7.70	7.78	7.62	-	288.40	324.17	336.10	309.37	-
Floor covering mills	227	7.30	7.29	7.48	7.46	-	295.65	312.74	328.37	323.76	-
Yarn and thread mills	228	6.41	6.55	6.72	6.75	-	269.86	281.65	288.96	285.53	-
Yarn mills, except wool	2281	6.41	6.55	6.72	6.75	-	276.91	287.55	295.01	290.93	-
Throwing and winding mills	2282	6.44	6.52	6.71	6.72	-	246.01	254.93	256.99	252.00	-
Miscellaneous textile goods	229	7.81	7.90	8.11	8.09	-	327.24	334.17	350.35	343.02	-
Apparel and other textile products	23	5.79	5.83	5.91	5.89	5.88	210.18	213.96	221.03	217.93	219.32
Men's and boys' suits and coats	231	6.60	6.58	6.69	6.65	-	234.30	225.69	240.84	237.41	-
Men's and boys' furnishings	232	5.36	5.36	5.44	5.42	-	197.78	198.86	206.18	201.62	-
Men's and boys' shirts and nightwear	2321	5.12	5.13	5.21	5.22	-	187.39	190.32	199.02	196.79	-
Men's and boys' separate trousers	2327	5.27	5.21	5.34	5.25	-	187.09	188.08	198.65	192.68	-
Men's and boys' work clothing	2328	5.43	5.47	5.56	5.56	-	202.00	198.01	209.06	206.83	-
Women's and misses' outerwear	233	5.59	5.62	5.73	5.76	-	193.41	196.70	206.28	206.21	-
Women's and misses' blouses and waists	2331	5.07	5.10	4.98	5.04	-	180.49	183.09	177.79	176.90	-
Women's and misses' dresses	2335	5.83	5.78	6.07	6.11	-	191.81	198.83	216.09	217.52	-
Women's and misses' suits and coats	2337	6.40	6.48	6.56	6.62	-	224.64	226.80	238.78	242.29	-
Women's and misses' outerwear, nec	2339	5.44	5.47	5.55	5.57	-	190.40	191.45	200.36	200.52	-
Women's and children's undergarments	234	5.34	5.33	5.49	5.49	-	197.05	202.54	209.17	205.88	-
Women's and children's underwear	2341	5.21	5.19	5.32	5.34	-	194.85	198.78	205.35	203.99	-
Brassieres and allied garments	2342	6.04	6.09	6.43	6.43	-	209.59	222.29	228.27	215.41	-
Children's outerwear	236	5.12	5.19	5.30	5.29	-	190.46	190.47	203.52	201.02	-
Children's dresses and blouses	2361	4.87	4.95	5.20	5.19	-	174.83	177.21	191.88	187.36	-
Misc. apparel and accessories	238	5.55	5.54	5.67	5.64	-	204.80	208.86	219.43	212.63	-
Misc. fabricated textile products	239	7.03	7.14	7.14	7.03	-	267.84	281.32	278.46	268.55	-
Curtains and draperies	2391	5.63	5.63	5.77	5.71	-	206.62	215.07	216.95	212.41	-
House furnishings, nec	2392	5.92	6.00	6.12	6.11	-	224.96	237.60	238.68	234.01	-
Automotive and apparel trimmings	2396	10.85	11.35	10.88	10.65	-	429.66	464.22	429.76	419.61	-
Paper and allied products	26	11.33	11.19	11.41	11.50	11.46	486.06	483.41	494.05	496.80	493.93
Paper and pulp mills	261,2,6	13.82	13.69	13.91	14.04	-	628.81	613.31	628.73	643.03	-
Paper mills, except building paper	262	13.88	13.78	13.99	14.14	-	632.93	620.10	635.15	649.03	-
Paperboard mills	263	14.16	13.97	14.45	14.35	-	625.87	611.89	635.80	625.66	-
Misc. converted paper products	264	9.70	9.64	9.91	10.01	-	400.61	405.84	415.23	421.42	-
Paper coating and glazing	2641	10.99	10.91	10.97	11.04	-	470.37	469.13	487.07	490.18	-
Envelopes	2642	8.81	8.82	9.17	9.31	-	355.92	371.32	378.72	381.71	-
Bags, except textile bags	2643	9.12	9.03	9.19	9.31	-	377.57	379.26	385.98	388.23	-
Paperboard containers and boxes	265	9.63	9.60	9.73	9.77	-	402.53	410.88	415.47	409.36	-
Folding paperboard boxes	2651	9.89	9.80	10.23	10.21	-	412.41	414.54	436.82	425.76	-
Corrugated and solid fiber boxes	2653	9.91	9.92	9.93	9.97	-	424.15	437.47	428.98	423.73	-
Sanitary food containers	2654	9.24	9.24	9.29	9.37	-	362.21	381.61	392.97	389.79	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Nondurable goods—Continued											
Printing and publishing	27	37.7	38.1	37.7	37.8	38.1	2.6	3.0	2.7	2.9	
Newspapers	271	33.5	33.7	33.5	33.4	-	1.4	1.7	1.5	1.5	
Periodicals	272	37.3	38.2	38.6	39.0		2.1	3.0	3.1	3.3	
Books	273	40.0	40.8	38.6	37.6		3.6	4.0	3.4	3.3	
Book publishing	2731	38.7	38.8	38.7	38.0		2.7	2.8	3.0	2.8	
Book printing	2732	42.3	44.3	38.5	36.9		5.1	6.0	4.0	4.2	
Miscellaneous publishing	274	35.5	36.6	35.8	36.2		1.6	2.0	2.1	2.2	
Commercial printing	275	38.9	39.5	39.0	39.2		3.0	3.6	3.1	3.3	
Commercial printing, letterpress	2751	38.6	38.9	38.7	38.9		2.5	2.8	2.7	2.8	
Commercial printing, lithographic	2752	38.9	39.6	38.9	39.2		3.1	3.8	3.1	3.4	
Manifold business forms	276	41.1	40.9	41.5	41.5		3.6	3.0	3.4	4.1	
Blankbooks and bookbinding	278	38.4	38.3	38.4	38.5		2.1	2.2	2.3	2.3	
Printing trade services	279	38.7	38.9	38.2	38.6		3.6	4.1	3.2	3.8	
Chemicals and allied products	28	41.6	41.7	42.1	41.9	42.0	3.8	3.6	3.8	3.9	
Industrial inorganic chemicals	281	41.8	41.9	42.3	41.9	-	3.7	3.6	3.7	4.1	
Industrial inorganic chemicals, nec	2819	42.4	42.4	42.6	42.4		3.7	3.6	3.6	4.0	
Plastics materials and synthetics	282	42.0	41.8	42.7	42.5		4.2	3.8	4.5	4.4	
Plastics materials and resins	2821	42.6	42.6	43.3	43.0		4.7	4.4	4.8	4.6	
Organic fibers, noncellulosic	2824	42.4	41.6	42.3	42.6		4.0	3.4	4.1	4.0	
Drugs	283	40.9	41.8	41.7	41.0		2.8	3.1	3.1	2.8	
Pharmaceutical preparations	2834	41.1	41.7	41.7	40.8		3.0	3.3	3.2	2.8	
Soap, cleaners, and toilet goods	284	40.9	40.8	41.1	41.2		3.4	3.5	3.2	3.5	
Soap and other detergents	2841	44.4	43.7	43.8	44.7		6.1	5.4	5.2	6.2	
Polishing, sanitation, and finishing preparations	2842,3	41.0	41.9	41.6	41.8		2.5	3.2	3.3	3.4	
Toilet preparations	2844	38.7	38.6	39.5	39.0		2.2	2.6	2.1	2.0	
Paints and allied products	285	41.7	41.2	42.0	42.1		3.5	3.2	4.0	4.3	
Industrial organic chemicals	286	43.1	42.9	43.4	43.4		4.9	4.4	4.9	5.4	
Cyclic crudes and intermediates	2865	42.3	41.5	42.8	42.3		5.0	4.8	5.3	5.5	
Gum, wood, and industrial organic chemicals, nec	2861,9	43.4	43.4	43.6	43.7		4.8	4.3	4.8	5.4	
Agricultural chemicals	287	41.8	41.6	42.5	41.8		4.2	3.7	4.2	3.8	
Miscellaneous chemical products	289	40.6	40.9	41.3	40.6		3.3	3.5	3.2	3.3	
Petroleum and coal products	29	43.9	44.4	43.3	44.7	44.9	4.7	4.8	4.8	5.2	
Petroleum refining	291	44.1	44.2	43.0	44.6	-	4.0	4.0	4.0	4.4	
Paving and roofing materials	295	44.8	46.3	45.5	46.4		7.6	8.3	8.4	8.9	
Rubber and misc. plastics products	30	40.4	41.2	41.8	41.1	41.5	3.4	3.8	4.1	3.9	
Tires and inner tubes	301	42.1	44.1	43.8	44.0	-	4.9	6.3	5.2	5.9	
Rubber and plastics footwear	302	37.9	39.2	43.0	42.1		.2	2.6	3.5	3.2	
Reclaimed rubber, and rubber and plastics hose and belting	303,4	41.6	42.9	42.2	41.6		2.9	4.4	3.5	4.2	
Fabricated rubber products, nec	306	40.5	41.1	41.6	40.2		3.1	3.3	3.6	3.2	
Miscellaneous plastics products	307	40.1	40.8	41.5	40.8		3.4	3.6	4.0	3.8	
Leather and leather products	31	37.0	36.8	39.3	38.4	38.4	1.3	1.5	2.5	2.2	
Leather tanning and finishing	311	39.8	39.7	42.0	39.5	-	2.5	2.9	4.3	2.8	
Footwear, except rubber	314	36.9	36.1	39.5	39.1		1.1	1.3	2.6	2.4	
Men's footwear, except athletic	3143	36.1	35.9	39.2	39.0		.6	1.1	2.1	2.3	
Women's footwear, except athletic	3144	38.0	36.5	40.1	39.7		1.8	1.5	3.2	3.1	
Luggage	316	35.0	38.0	40.0	37.7		1.9	1.8	2.3	2.1	
Handbags and personal leather goods	317	35.8	37.3	36.5	35.7		.9	1.7	1.8	1.6	
Transportation and public utilities		39.4	39.4	39.1	39.4	39.3					
Railroad transportation:											
Class I railroads ³	4011	43.9	44.3	42.7	42.7						
Local and interurban passenger transit	41	36.4	37.0	34.2	36.4						
Local and suburban transportation	411	37.9	38.7	38.3	38.6						
Intercity highway transportation	413	39.4	39.6	38.7	40.3						
Trucking and warehousing	42	38.3	38.6	38.8	38.7						
Trucking and trucking terminals	421,3	38.3	38.6	38.8	38.7						
Public warehousing	422	38.1	38.6	38.8	39.0						
Pipe lines, except natural gas	46	41.6	41.8	41.2	43.9						

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				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Nondurable goods—Continued											
Printing and publishing	27	\$9.98	\$10.02	\$10.19	\$10.24	\$10.28	\$376.25	\$381.76	\$384.16	\$387.07	\$391.67
Newspapers	271	10.04	9.97	10.12	10.16	-	336.34	335.99	339.02	339.34	-
Periodicals	272	10.58	10.67	10.67	10.65	-	394.63	407.59	411.86	415.35	-
Books	273	8.96	9.16	9.25	9.34	-	358.40	373.73	357.05	351.18	-
Book publishing	2731	8.44	8.59	8.75	8.84	-	326.63	333.29	338.63	335.92	-
Book printing	2732	9.77	10.01	10.08	10.17	-	413.27	443.44	388.08	375.27	-
Miscellaneous publishing	274	9.15	9.01	9.42	9.46	-	324.83	329.77	337.24	342.45	-
Commercial printing	275	10.24	10.33	10.46	10.53	-	398.34	408.04	407.94	412.78	-
Commercial printing, letterpress	2751	9.80	9.88	10.06	10.05	-	378.28	384.33	389.32	390.95	-
Commercial printing, lithographic	2752	10.39	10.49	10.61	10.68	-	404.17	415.40	412.73	418.66	-
Manifold business forms	276	10.43	10.35	10.71	10.89	-	428.67	423.32	444.47	451.94	-
Blankbooks and bookbinding	278	7.84	7.85	8.10	8.09	-	301.06	300.66	311.04	311.47	-
Printing trade services	279	12.02	12.13	12.32	12.42	-	465.17	471.86	470.62	479.41	-
Chemicals and allied products	28	12.05	11.99	12.27	12.36	12.35	501.28	499.98	516.57	517.88	518.70
Industrial inorganic chemicals	281	13.25	13.19	13.52	13.64	-	553.85	552.66	571.90	571.52	-
Industrial inorganic chemicals, nec	2819	13.33	13.31	13.63	13.77	-	565.19	564.34	580.64	583.85	-
Plastics materials and synthetics	282	12.22	12.13	12.49	12.50	-	513.24	507.03	533.32	531.25	-
Plastics materials and resins	2821	13.26	13.08	13.48	13.49	-	564.88	557.21	583.68	580.07	-
Organic fibers, noncellulosic	2824	11.80	11.72	11.88	11.90	-	500.32	487.55	502.52	506.94	-
Drugs	283	11.23	11.21	11.59	11.61	-	459.31	468.58	483.30	476.01	-
Pharmaceutical preparations	2834	10.91	10.96	11.24	11.33	-	448.40	457.03	468.71	462.26	-
Soap, cleaners, and toilet goods	284	10.74	10.64	10.73	10.81	-	439.27	434.11	441.00	445.37	-
Soap and other detergents	2841	13.89	13.80	13.99	14.01	-	616.72	603.06	612.76	626.25	-
Polishing, sanitation, and finishing preparations	2842,3	10.03	10.11	9.90	9.98	-	411.23	423.61	411.84	417.16	-
Toilet preparations	2844	8.89	8.94	9.20	9.20	-	344.04	345.08	363.40	358.80	-
Paints and allied products	285	10.32	10.45	10.72	10.80	-	430.34	430.54	450.24	454.68	-
Industrial organic chemicals	286	14.58	14.44	14.80	14.91	-	628.40	619.48	642.32	647.09	-
Cyclic crudes and intermediates	2865	14.33	14.11	14.73	14.71	-	606.16	585.57	630.44	622.23	-
Gum, wood, and industrial organic chemicals, nec	2861,9	14.66	14.54	14.82	14.97	-	636.24	631.04	646.15	654.19	-
Agricultural chemicals	287	11.66	11.65	11.80	12.02	-	487.39	484.64	501.50	502.44	-
Miscellaneous chemical products	289	11.04	11.10	11.22	11.42	-	448.22	453.99	463.39	463.65	-
Petroleum and coal products	29	14.16	14.06	14.43	14.46	14.46	621.62	624.26	624.82	646.36	649.25
Petroleum refining	291	15.36	15.21	15.63	15.63	-	677.38	672.28	672.09	697.10	-
Paving and roofing materials	295	10.95	11.12	11.42	11.43	-	490.56	514.86	519.61	530.35	-
Rubber and misc. plastics products	30	8.78	8.77	8.87	8.94	8.90	354.71	361.32	370.77	367.43	369.35
Tires and inner tubes	301	13.89	13.91	13.97	14.27	-	584.77	613.43	611.89	627.88	-
Rubber and plastics footwear	302	6.18	5.95	6.06	5.99	-	234.22	233.24	260.58	252.18	-
Reclaimed rubber, and rubber and plastics hose and belting	303,4	8.63	8.74	8.98	9.00	-	359.01	374.95	378.96	374.40	-
Fabricated rubber products, nec	306	8.51	8.43	8.54	8.60	-	344.66	346.47	355.26	345.72	-
Miscellaneous plastics products	307	8.10	8.10	8.26	8.28	-	324.81	330.48	342.79	337.82	-
Leather and leather products	31	5.92	5.92	6.04	5.97	6.05	219.04	217.86	237.37	229.25	232.32
Leather tanning and finishing	311	7.59	7.72	8.14	8.07	-	302.08	306.48	341.88	318.77	-
Footwear, except rubber	314	5.61	5.61	5.71	5.69	-	207.01	202.52	225.55	222.48	-
Men's footwear, except athletic	3143	6.02	5.99	6.10	6.15	-	217.32	215.04	239.12	239.85	-
Women's footwear, except athletic	3144	5.29	5.32	5.36	5.29	-	201.02	194.18	214.94	210.01	-
Luggage	316	5.94	6.16	6.39	6.15	-	207.90	234.08	255.60	231.86	-
Handbags and personal leather goods	317	5.86	5.80	5.99	5.88	-	209.79	216.34	218.64	209.92	-
Transportation and public utilities		11.67	11.67	11.91	11.99	12.07	459.80	459.80	465.68	472.41	474.35
Railroad transportation:											
Class I railroads ³	4011	13.81	13.96	14.28	14.28	-	606.26	618.43	609.76	609.76	-
Local and interurban passenger transit	41	8.20	8.20	8.24	8.54	-	298.48	303.40	281.81	310.86	-
Local and suburban transportation	411	8.49	8.51	8.81	9.07	-	321.77	329.34	337.42	350.10	-
Intercity highway transportation	413	11.74	11.57	11.67	11.63	-	462.56	458.17	451.63	468.69	-
Trucking and warehousing	42	10.63	10.64	10.80	10.76	-	407.13	410.70	419.04	416.41	-
Trucking and trucking terminals	421,3	10.80	10.82	10.97	10.93	-	413.64	417.65	425.64	422.99	-
Public warehousing	422	8.31	8.17	8.47	8.37	-	316.61	315.36	328.64	326.43	-
Pipe lines, except natural gas	46	14.82	15.00	15.30	15.03	-	616.51	627.00	630.36	659.82	-

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Transportation and public utilities—Continued											
Communication	48	40.4	39.9	39.8	40.4						
Telephone communication	481	41.8	41.1	41.1	42.0						
Radio and television broadcasting	483	36.7	36.7	36.4	36.0						
Electric, gas, and sanitary services	49	41.9	41.7	41.5	41.6						
Electric services	491	42.0	41.8	41.2	41.3						
Gas production and distribution	492	41.2	40.5	40.5	40.5						
Combination utility services	493	41.9	42.0	42.4	42.8						
Sanitary services	495	43.1	43.2	43.3	42.8						
Wholesale trade		38.5	38.5	38.4	38.3	38.5					
Durable goods	50	38.8	38.9	38.9	38.7						
Motor vehicles and automotive equipment	501	38.6	38.5	38.4	38.5						
Furniture and home furnishings	502	36.6	36.7	37.3	36.6						
Lumber and construction materials	503	39.8	40.0	39.6	39.7						
Sporting goods, toys, and hobby goods	504	36.6	36.6	36.1	36.5						
Metals and minerals, except petroleum	505	40.0	40.1	40.8	40.4						
Electrical goods	506	38.5	38.5	38.7	38.3						
Hardware, plumbing, and heating equipment	507	38.5	38.8	38.8	38.6						
Machinery, equipment, and supplies	508	39.3	39.3	39.3	39.1						
Miscellaneous durable goods	509	37.3	37.5	38.0	37.9						
Nondurable goods	51	38.0	37.9	37.6	37.6						
Paper and paper products	511	37.1	37.6	37.0	37.0						
Drugs, proprietaries, and sundries	512	37.5	37.4	37.1	37.6						
Apparel, piece goods, and notions	513	36.3	36.8	36.6	36.6						
Groceries and related products	514	38.7	38.4	38.2	38.3						
Chemicals and allied products	516	39.4	39.6	39.1	39.0						
Petroleum and petroleum products	517	39.7	39.3	39.3	39.0						
Beer, wine, and distilled beverages	518	36.6	36.8	35.9	36.2						
Miscellaneous nondurable goods	519	37.5	37.3	37.0	36.9						
Retail trade		29.9	29.9	29.6	30.0	30.3					
Building materials and garden supplies	52	36.9	37.1	37.2	37.4						
Lumber and other building materials	521	38.8	39.1	39.0	39.3						
Hardware stores	525	33.5	33.5	33.6	33.9						
General merchandise stores	53	29.6	29.2	28.6	28.9						
Department stores	531	29.5	29.0	28.3	28.6						
Variety stores	533	30.1	30.0	29.5	30.1						
Misc. general merchandise stores	539	30.5	30.6	30.9	31.8						
Food stores	54	31.1	30.8	30.7	31.1						
Grocery stores	541	31.3	31.1	31.0	31.3						
Retail bakeries	546	29.2	28.8	27.7	28.2						
Automotive dealers and service stations	55	36.9	37.1	36.8	36.9						
New and used car dealers	551.2	37.4	37.6	37.7	37.5						
Auto and home supply stores	553	39.9	40.0	39.5	39.9						
Gasoline service stations	554	34.6	34.9	34.4	34.7						
Apparel and accessory stores	56	27.2	27.5	27.2	28.0						
Men's and boys' clothing and furnishings	561	30.6	30.5	30.2	30.7						
Women's ready-to-wear stores	562	26.0	26.0	25.8	26.6						
Family clothing stores	565	27.0	27.6	27.2	27.9						
Shoe stores	566	28.3	28.9	28.3	29.2						
Furniture and home furnishings stores	57	33.1	33.4	33.1	33.5						
Furniture and home furnishings stores	571	33.0	33.3	33.2	33.4						
Household appliance stores	572	34.3	34.8	34.1	34.5						
Radio, television, and music stores	573	32.9	33.1	32.7	33.3						
Eating and drinking places ⁴	58	26.2	26.5	26.3	26.8						

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Transportation and public utilities—Continued											
Communication	48	\$12.11	\$12.00	\$12.33	\$12.46		\$489.24	\$478.80	\$490.73	\$503.38	
Telephone communication	481	12.81	12.75	13.07	13.21		535.46	524.03	537.18	554.82	
Radio and television broadcasting	483	10.72	10.57	10.90	10.93		393.42	387.92	396.76	393.48	
Electric, gas, and sanitary services	49	13.29	13.35	13.66	13.72		556.85	556.70	566.89	570.75	
Electric services	491	13.42	13.49	13.80	13.85		563.64	563.88	568.56	572.01	
Gas production and distribution	492	12.40	12.41	12.80	12.88		510.88	502.61	518.40	521.64	
Combination utility services	493	15.45	15.54	16.00	15.99		647.36	652.68	678.40	684.37	
Sanitary services	495	9.72	9.77	9.97	10.24		418.93	422.06	431.70	438.27	
Wholesale trade		9.30	9.32	9.57	9.57	\$9.63	358.05	358.82	367.49	366.53	\$370.76
Durable goods	50	9.40	9.43	9.70	9.70		364.72	366.83	377.33	375.39	
Motor vehicles and automotive equipment	501	8.39	8.37	8.64	8.60		323.85	322.25	331.78	331.10	
Furniture and home furnishings	502	8.62	8.68	8.92	8.95		315.49	318.56	332.72	327.57	
Lumber and construction materials	503	8.94	9.07	9.14	9.24		355.81	362.80	361.94	366.83	
Sporting goods, toys, and hobby goods	504	9.68	9.75	9.76	9.76		354.29	356.85	352.34	356.24	
Metals and minerals, except petroleum	505	10.10	10.11	10.33	10.32		404.00	405.41	421.46	416.93	
Electrical goods	506	9.59	9.65	9.97	9.97		369.22	371.53	385.84	381.85	
Hardware, plumbing, and heating equipment	507	8.94	8.95	9.22	9.22		344.19	347.26	357.74	355.89	
Machinery, equipment, and supplies	508	10.02	10.05	10.36	10.38		393.79	394.97	407.15	405.86	
Miscellaneous durable goods	509	7.53	7.54	7.74	7.77		280.87	282.75	294.12	294.48	
Nondurable goods	51	9.15	9.16	9.38	9.38		347.70	347.16	352.69	352.69	
Paper and paper products	511	9.82	9.82	10.03	10.05		364.32	369.23	371.11	371.85	
Drugs, proprietaries, and sundries	512	10.36	10.52	10.86	10.69		388.50	393.45	402.91	401.94	
Apparel, piece goods, and notions	513	8.75	8.73	9.13	9.13		317.63	321.26	334.16	334.16	
Groceries and related products	514	9.27	9.22	9.46	9.48		358.75	354.05	361.37	363.08	
Chemicals and allied products	516	11.36	11.39	12.01	12.07		447.58	451.04	469.59	470.73	
Petroleum and petroleum products	517	9.68	9.78	9.62	9.58		384.30	384.35	378.07	373.62	
Beer, wine, and distilled beverages	518	11.05	11.00	11.02	11.01		404.43	404.80	395.62	398.56	
Miscellaneous nondurable goods	519	7.42	7.49	7.72	7.67		278.25	279.38	285.64	283.02	
Retail trade		5.98	5.97	6.08	6.07	6.06	178.80	178.50	179.97	182.10	183.62
Building materials and garden supplies	52	6.74	6.77	6.94	6.96		248.71	251.17	258.17	260.30	
Lumber and other building materials	521	7.08	7.10	7.28	7.29		274.70	277.61	283.92	286.50	
Hardware stores	525	5.74	5.74	5.88	5.91		192.29	192.29	197.57	200.35	
General merchandise stores	53	6.30	6.27	6.46	6.43		186.48	183.08	184.76	185.83	
Department stores	531	6.58	6.56	6.78	6.74		194.11	190.24	191.87	192.76	
Variety stores	533	4.79	4.71	4.80	4.82		144.18	141.30	141.60	145.08	
Misc. general merchandise stores	539	4.89	4.84	5.01	4.96		149.15	148.10	154.81	157.73	
Food stores	54	6.98	6.92	6.90	6.90		217.08	213.14	211.83	214.59	
Grocery stores	541	7.14	7.08	7.05	7.05		223.48	220.19	218.55	220.67	
Retail bakeries	546	5.45	5.43	5.57	5.56		159.14	156.38	154.29	156.79	
Automotive dealers and service stations	55	7.63	7.72	7.80	7.79		281.55	286.41	287.04	287.45	
New and used car dealers	551,2	9.38	9.56	9.55	9.55		350.81	359.46	360.04	358.13	
Auto and home supply stores	553	6.49	6.50	6.67	6.71		258.95	260.00	263.47	267.73	
Gasoline service stations	554	5.43	5.43	5.48	5.50		187.88	189.51	188.51	190.85	
Apparel and accessory stores	56	5.34	5.30	5.59	5.53		145.25	145.75	152.05	154.84	
Men's and boys' clothing and furnishings	561	6.29	6.18	6.74	6.62		192.47	188.49	203.55	203.23	
Women's ready-to-wear stores	562	5.03	5.06	5.22	5.18		130.78	131.56	134.68	137.79	
Family clothing stores	565	5.29	5.21	5.60	5.51		142.83	143.80	152.32	153.73	
Shoe stores	566	5.36	5.31	5.53	5.54		151.69	153.46	156.50	161.77	
Furniture and home furnishings stores	57	7.29	7.29	7.46	7.51		241.30	243.49	246.93	251.59	
Furniture and home furnishings stores	571	7.29	7.32	7.51	7.60		240.57	243.76	249.33	253.84	
Household appliance stores	572	7.34	7.30	7.47	7.58		251.76	254.04	254.73	261.51	
Radio, television, and music stores	573	7.28	7.25	7.36	7.32		239.51	239.98	240.67	243.76	
Eating and drinking places ⁴	58	4.32	4.32	4.39	4.38		113.18	114.48	115.46	117.38	

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average weekly hours					Average overtime hours				
		July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Retail trade—Continued											
Miscellaneous retail	59	30.6	30.7	30.4	30.6						
Drug stores and proprietary stores	591	29.1	29.1	28.4	28.6						
Miscellaneous shopping goods stores	594	29.3	29.5	29.2	29.5						
Nonstore retailers	596	32.7	32.9	33.0	33.1						
Fuel and ice dealers	598	37.9	38.2	38.1	38.2						
Retail stores, nec	599	31.7	32.0	32.0	31.7						
Finance, insurance, and real estate⁵		36.3	36.5	36.4	36.1	36.6					
Banking	60	36.4	36.5	36.2	36.0						
Commercial and stock savings banks	602	36.4	36.5	36.2	36.0						
Credit agencies other than banks	61	36.8	37.0	36.9	36.3						
Savings and loan associations	612	36.3	36.3	36.4	35.9						
Personal credit institutions	614	36.1	36.5	36.6	36.5						
Insurance carriers	63	37.3	37.4	37.4	37.1						
Life insurance	631	36.8	36.9	36.8	36.8						
Medical service and health insurance	632	37.6	38.1	37.8	37.6						
Fire, marine, and casualty insurance	633	37.4	37.3	37.4	37.0						
Services		32.8	32.8	32.6	32.8	33.0					
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	31.2	31.7	30.8	30.8						
Personal services:											
Laundry, cleaning, and garment services	721	33.9	34.0	34.3	34.2						
Beauty shops ⁴	723	29.2	29.6	29.9	29.6						
Business services	73	33.6	33.7	33.8	33.6						
Advertising	731	36.2	36.4	36.7	36.5						
Services to buildings	734	28.5	28.8	29.2	28.8						
Computer and data processing services	737	38.2	38.0	37.7	37.6						
Auto repair, services, and garages	75	37.9	38.0	36.9	37.3						
Automotive repair shops	753	38.9	39.1	38.5	38.8						
Miscellaneous repair services	76	38.0	38.1	38.0	38.2						
Motion pictures	78	28.8	28.6	29.1	30.3						
Motion picture production and services	781	35.9	36.0	37.3	38.6						
Amusement and recreation services	79	30.2	30.1	29.2	30.7						
Health services	80	32.6	32.5	32.4	32.6						
Offices of physicians	801	30.9	30.9	30.8	30.8						
Offices of dentists	802	27.9	28.0	28.1	28.2						
Nursing and personal care facilities	805	31.9	31.5	31.6	32.0						
Hospitals	806	34.5	34.4	34.2	34.4						
Legal services	81	35.0	34.9	35.0	34.7						
Miscellaneous services	89	38.6	38.5	38.4	38.2						
Engineering and architectural services	891	39.9	39.7	39.7	39.5						
Accounting, auditing, and bookkeeping	893	37.0	37.0	36.7	36.4						

See footnotes at end of table.

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

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

Industry	1972 SIC Code	Average hourly earnings					Average weekly earnings				
		July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P	July 1986	Aug. 1986	June 1987	July 1987 ^P	Aug. 1987 ^P
Retail trade—Continued											
Miscellaneous retail	59	\$6.12	\$6.12	\$6.30	\$6.31		\$187.27	\$187.88	\$191.52	\$193.09	
Drug stores and proprietary stores	591	5.65	5.64	5.83	5.86		164.42	164.12	165.57	167.60	
Miscellaneous shopping goods stores	594	5.69	5.70	5.85	5.84		166.72	168.15	170.82	172.28	
Nonstore retailers	596	7.03	7.02	7.19	7.24		229.88	230.96	237.27	239.64	
Fuel and ice dealers	598	8.51	8.58	8.84	8.85		322.53	327.76	336.80	338.07	
Retail stores, nec	599	6.46	6.39	6.55	6.58		204.78	204.48	209.60	208.59	
Finance, insurance, and real estate⁵		8.30	8.34	8.68	8.66	\$8.79	301.29	304.41	315.95	312.63	\$321.71
Banking	60	7.14	7.19	7.44	7.41		259.90	262.44	269.33	266.76	
Commercial and stock savings banks	602	6.96	7.01	7.22	7.18		253.34	255.87	261.36	258.48	
Credit agencies other than banks	61	7.57	7.65	7.94	7.93		278.58	283.05	292.99	287.86	
Savings and loan associations	612	6.90	6.98	7.36	7.38		250.47	253.37	267.90	264.94	
Personal credit institutions	614	7.20	7.22	7.45	7.46		259.92	263.53	272.67	272.29	
Insurance carriers	63	9.06	9.10	9.56	9.63		337.94	340.34	357.54	357.27	
Life insurance	631	8.61	8.65	9.12	9.18		316.85	319.19	335.62	337.82	
Medical service and health insurance	632	9.10	9.01	9.36	9.45		342.16	343.28	353.81	355.32	
Fire, marine, and casualty insurance	633	9.38	9.44	9.89	9.93		350.81	352.11	369.89	367.41	
Services		8.04	8.04	8.35	8.33	8.40	263.71	263.71	272.21	273.22	277.20
Hotels and other lodging places:											
Hotels, motels, and tourist courts ⁴	701	5.81	5.76	6.03	5.93		181.27	182.59	185.72	182.64	
Personal services:											
Laundry, cleaning, and garment services	721	6.00	5.99	6.16	6.14		203.40	203.66	211.29	209.99	
Beauty shops ⁴	723	6.30	6.21	6.55	6.52		183.96	183.82	195.85	192.99	
Business services	73	8.42	8.37	8.66	8.67		282.91	282.07	292.71	291.31	
Advertising	731	11.47	11.36	11.82	11.71		415.21	413.50	433.79	427.42	
Services to buildings	734	6.66	6.54	6.77	6.79		189.81	188.35	197.68	195.55	
Computer and data processing services	737	11.58	11.61	12.07	12.10		442.36	441.18	455.04	454.96	
Auto repair, services, and garages	75	7.49	7.55	7.82	7.81		283.87	286.90	288.56	291.31	
Automotive repair shops	753	8.10	8.16	8.39	8.39		315.09	319.06	323.02	325.53	
Miscellaneous repair services	76	8.79	8.79	9.06	9.13		334.02	334.90	344.28	348.77	
Motion pictures	78	10.95	11.30	10.96	10.75		315.36	323.18	318.94	325.73	
Motion picture production and services	781	16.02	16.28	15.25	14.92		575.12	586.08	568.83	575.91	
Amusement and recreation services	79	6.16	6.14	6.53	6.35		186.03	184.81	190.68	194.95	
Health services	80	8.36	8.36	8.61	8.67		272.54	271.70	278.96	282.64	
Offices of physicians	801	8.13	8.18	8.29	8.35		251.22	252.76	255.33	257.18	
Offices of dentists	802	8.24	8.28	8.45	8.41		229.90	231.84	237.45	237.16	
Nursing and personal care facilities	805	5.82	5.78	5.96	6.01		185.66	182.07	188.34	192.32	
Hospitals	806	9.40	9.39	9.75	9.83		324.30	323.02	333.45	338.15	
Legal services	81	11.16	11.14	11.86	11.87		390.60	388.79	415.10	411.89	
Miscellaneous services	89	11.64	11.71	11.98	12.04		449.30	450.84	460.03	459.93	
Engineering and architectural services	891	12.42	12.50	12.78	12.78		495.56	496.25	507.37	504.81	
Accounting, auditing, and bookkeeping	893	9.98	10.01	10.29	10.46		369.26	370.37	377.64	380.74	

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	^p 13.68					
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	^p 14.37					

^p = preliminary.

**ESTABLISHMENT DATA
EARNINGS
NOT SEASONALLY ADJUSTED**

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

Industry	July 1986	Aug. 1986	June 1987	July 1987 ²	Aug. 1987 ²
Manufacturing	\$9.35	\$9.27	\$9.44	\$9.46	\$9.41
Durable goods	9.87	9.80	9.96	9.97	9.93
Lumber and wood products	7.94	7.95	8.04	8.08	(3)
Furniture and fixtures	7.24	7.25	7.40	7.46	(3)
Stone, clay, and glass products	9.48	9.48	9.69	9.70	(3)
Primary metal industries	11.38	11.18	11.33	11.37	(3)
Fabricated metal products	9.48	9.42	9.56	9.54	(3)
Machinery, except electrical	10.20	10.18	10.27	10.28	(3)
Electrical and electronic equipment	9.37	9.32	9.49	9.56	(3)
Transportation equipment	12.14	12.11	12.28	12.27	(3)
Instruments and related products	9.22	9.19	9.37	9.45	(3)
Miscellaneous manufacturing	7.40	7.30	7.50	7.50	(3)
Nondurable goods	8.64	8.56	8.72	8.77	\$8.71
Food and kindred products	8.34	8.20	8.49	8.44	(3)
Tobacco manufactures	13.54	13.35	14.83	14.47	(3)
Textile mill products	6.58	6.62	6.77	6.78	(3)
Apparel and other textile products	5.69	5.70	5.76	5.76	(3)
Paper and allied products	10.70	10.59	10.78	10.85	(3)
Printing and publishing	9.65	9.64	9.84	9.87	(3)
Chemicals and allied products	11.53	11.49	11.73	11.80	(3)
Petroleum and coal products	13.44	13.33	13.67	13.67	(3)
Rubber and misc. plastics products	8.42	8.38	8.45	8.54	(3)
Leather and leather products	5.81	5.80	5.86	5.81	(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 workers on private nonagricultural payrolls by major industry, in current and constant (1977) dollars.

Industry	Average hourly earnings					Average weekly earnings				
	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p	July 1986	Aug. 1986	June 1987	July 1987 ^p	Aug. 1987 ^p
Total private:										
Current dollars	\$8.70	\$8.70	\$8.92	\$8.91	\$8.95	\$303.63	\$305.37	\$312.20	\$311.85	\$315.94
Constant (1977) dollars	4.89	4.88	4.83	4.82	(¹)	170.67	171.36	169.21	168.66	(¹)
Mining:										
Current dollars	12.49	12.51	12.44	12.33	\$12.42	517.09	529.17	527.46	521.56	\$536.54
Constant (1977) dollars	7.02	7.02	6.74	6.67	(¹)	290.66	296.95	285.89	282.08	(¹)
Construction:										
Current dollars	12.34	12.44	12.61	12.57	\$12.68	471.39	476.45	480.44	485.20	\$489.45
Constant (1977) dollars	6.94	6.98	6.83	6.80	(¹)	264.97	267.37	260.40	262.41	(¹)
Manufacturing:										
Current dollars	9.74	9.68	9.87	9.88	\$9.86	391.55	393.98	405.66	401.13	\$403.27
Constant (1977) dollars	5.47	5.43	5.35	5.34	(¹)	220.10	221.09	219.87	216.94	(¹)
Transportation and public utilities:										
Current dollars	11.67	11.67	11.91	11.99	\$12.07	459.80	459.80	465.68	472.41	\$474.35
Constant (1977) dollars	6.56	6.55	6.46	6.48	(¹)	258.46	258.02	252.40	255.49	(¹)
Wholesale trade:										
Current dollars	9.30	9.32	9.57	9.57	\$9.63	358.05	358.82	367.49	366.53	\$370.76
Constant (1977) dollars	5.23	5.23	5.19	5.18	(¹)	201.26	201.36	199.18	198.23	(¹)
Retail trade:										
Current dollars	5.98	5.97	6.08	6.07	\$6.06	178.80	178.50	179.97	182.10	\$183.62
Constant (1977) dollars	3.36	3.35	3.30	3.28	(¹)	100.51	100.17	97.54	98.49	(¹)
Finance, insurance, and real estate:										
Current dollars	8.30	8.34	8.68	8.66	\$8.79	301.29	304.41	315.95	312.63	\$321.71
Constant (1977) dollars	4.67	4.68	4.70	4.68	(¹)	169.36	170.82	171.25	169.08	(¹)
Services:										
Current dollars	8.04	8.04	8.35	8.33	\$8.40	263.71	263.71	272.21	273.22	\$277.20
Constant (1977) dollars	4.52	4.51	4.53	4.51	(¹)	148.23	147.99	147.54	147.77	(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 Not available.

^p = preliminary.

NOTE: The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used to deflate the earnings series. Establishment survey estimates are currently projected from March 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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	34.7	34.7	34.7	34.8	34.6	34.7	34.9	34.8	34.7	34.9	34.8	34.8	35.0
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	40.8	40.8	40.7	40.8	40.8	40.9	41.1	40.9	40.6	41.0	41.0	41.0	41.0
<i>Overtime hours</i>	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.8	3.7	3.8	3.8
Durable goods	41.4	41.4	41.3	41.4	41.4	41.6	41.7	41.5	41.2	41.6	41.5	41.5	41.6
<i>Overtime hours</i>	3.6	3.6	3.5	3.5	3.6	3.7	3.7	3.7	3.6	3.9	3.8	3.8	4.0
Lumber and wood products	40.2	40.3	40.4	40.8	40.6	40.8	41.3	40.9	40.6	41.0	40.6	40.6	40.7
Furniture and fixtures	39.9	40.0	39.9	39.8	39.9	40.2	40.2	40.0	39.1	39.9	40.0	39.9	39.7
Stone, clay, and glass products	42.3	42.4	42.3	41.9	42.2	42.5	42.8	42.5	41.9	42.3	42.0	42.2	42.0
Primary metal industries	42.0	42.1	42.3	42.4	42.5	42.6	42.6	42.6	42.3	43.1	43.1	43.1	43.4
Blast furnaces and basic steel products ..	41.7	41.9	42.4	42.5	42.6	42.7	42.3	42.3	42.4	43.3	43.5	43.6	43.3
Fabricated metal products	41.3	41.5	41.3	41.4	41.2	41.6	41.6	41.5	41.2	41.6	41.5	41.4	41.8
Machinery, except electrical	41.6	41.7	41.7	41.7	41.7	42.0	42.2	42.0	41.8	42.2	42.2	42.4	42.2
Electrical and electronic equipment	41.1	41.2	41.0	41.0	41.0	41.0	41.1	40.9	40.6	40.8	41.1	41.1	41.0
Transportation equipment	42.4	42.4	42.1	42.2	42.1	42.3	42.5	42.3	41.9	42.2	41.9	41.8	41.9
Motor vehicles and equipment	42.5	42.7	42.1	42.4	42.4	42.9	43.0	42.9	42.1	42.5	42.0	41.8	42.1
Instruments and related products	40.9	40.7	40.9	41.1	41.1	41.2	41.3	41.3	41.0	41.5	41.5	41.6	42.0
Miscellaneous manufacturing	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Nondurable goods	40.0	39.9	39.9	40.0	40.0	40.1	40.3	40.1	39.7	40.2	40.2	40.3	40.3
<i>Overtime hours</i>	3.4	3.3	3.4	3.5	3.5	3.5	3.5	3.5	3.3	3.7	3.6	3.7	3.7
Food and kindred products	40.2	39.8	39.8	40.0	39.8	40.0	40.1	40.0	39.8	40.1	40.1	39.9	40.3
Tobacco manufactures	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Textile mill products	41.2	41.4	41.4	41.4	41.6	41.6	42.0	42.1	41.4	42.0	42.1	42.6	41.7
Apparel and other textile products	36.6	36.8	36.8	36.9	37.0	37.0	37.4	37.0	36.1	37.2	37.1	37.3	37.3
Paper and allied products	43.4	42.9	43.1	43.2	43.2	43.4	43.3	43.0	43.0	43.5	43.3	43.5	43.3
Printing and publishing	38.0	38.0	38.0	38.0	38.0	37.9	38.1	37.9	37.7	37.9	38.1	38.1	37.9
Chemicals and allied products	42.0	41.8	42.0	42.3	42.1	42.2	42.2	42.0	42.2	42.1	42.0	42.2	42.3
Petroleum and coal products	44.2	43.5	43.7	43.8	43.6	44.6	44.0	44.1	43.9	44.3	43.3	44.5	44.7
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	39.1	39.1	39.2	38.9	39.0	39.2	39.0	39.0	39.2	38.8	39.2	39.0
Wholesale trade	38.4	38.2	38.3	38.3	38.2	38.3	38.3	38.1	38.2	38.3	38.2	38.1	38.4
Retail trade	29.2	29.1	29.1	29.2	28.9	29.0	29.3	29.3	29.5	29.4	29.2	29.3	29.6
Finance, insurance, and real estate	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Services	32.4	32.4	32.4	32.5	32.4	32.4	32.6	32.5	32.4	32.5	32.5	32.5	32.6

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

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

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

NOTE: Establishment survey estimates are currently projected from March 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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Total private	117.6	117.6	117.7	118.2	117.9	118.7	119.7	119.6	119.6	120.2	120.0	120.6	121.2
Goods-producing	97.8	97.8	97.6	97.8	97.8	98.8	99.3	98.9	98.0	99.2	98.9	99.5	99.6
Mining	82.6	80.7	81.0	79.5	79.5	78.9	79.9	80.0	81.3	83.4	83.5	85.3	86.2
Construction	132.0	132.3	131.6	131.1	130.7	136.2	136.2	135.5	132.8	134.3	132.6	133.3	133.6
Manufacturing	91.9	91.9	91.8	92.2	92.3	92.5	93.1	92.8	92.1	93.1	93.1	93.6	93.7
Durable goods	89.9	89.8	89.5	89.8	89.8	90.0	90.6	90.2	89.6	90.5	90.5	90.5	91.1
Lumber and wood products	97.9	98.7	99.2	100.9	101.0	101.5	103.3	102.5	102.0	103.2	101.7	102.4	102.0
Furniture and fixtures	106.5	107.1	106.8	106.3	106.5	107.9	107.9	107.9	105.7	109.0	109.5	111.6	111.1
Stone, clay, and glass products	86.3	86.7	86.1	85.5	86.5	87.3	88.3	87.5	86.3	86.9	86.1	86.1	86.3
Primary metal industries	60.6	60.4	60.7	60.9	61.1	60.4	61.2	61.9	62.1	63.1	63.5	63.9	64.5
Blast furnaces and basic steel products	47.9	46.6	47.7	47.1	46.9	46.1	46.8	47.7	49.6	50.7	51.4	52.0	51.9
Fabricated metal products	88.4	88.9	88.3	88.5	88.3	89.1	89.1	88.9	88.4	89.0	89.1	89.0	89.9
Machinery, except electrical	86.0	85.0	84.4	84.1	83.8	84.2	85.1	84.7	84.8	86.0	86.5	87.0	87.4
Electrical and electronic equipment	101.3	101.3	100.8	101.1	101.5	100.8	100.8	99.9	99.0	99.4	99.9	100.5	100.3
Transportation equipment	97.5	97.5	96.8	97.9	97.2	97.5	98.9	98.2	96.6	97.3	96.6	94.5	96.5
Motor vehicles and equipment	86.8	87.1	84.9	87.0	86.3	87.5	89.0	88.0	85.6	86.1	85.1	81.2	84.7
Instruments and related products	102.1	101.9	101.8	102.1	102.1	101.8	102.0	101.7	101.0	102.0	102.2	103.0	103.5
Miscellaneous manufacturing	79.7	79.3	79.0	80.2	81.0	81.0	81.1	81.1	79.9	81.0	81.4	82.0	81.8
Nondurable goods	95.0	95.0	95.3	95.8	96.0	96.3	96.7	96.5	95.7	97.0	97.0	98.2	97.6
Food and kindred products	98.3	97.6	97.6	98.7	98.5	98.8	99.3	99.4	99.3	99.6	99.3	99.8	99.7
Tobacco manufactures	72.8	76.5	76.9	76.7	75.9	76.3	76.0	77.7	77.3	80.1	76.3	72.9	68.8
Textile mill products	78.8	79.2	79.6	80.1	80.8	81.2	82.3	82.9	81.3	82.9	83.3	85.4	82.9
Apparel and other textile products	84.6	85.0	85.1	85.2	86.3	85.8	86.1	85.3	83.5	85.8	85.9	88.2	86.5
Paper and allied products	99.2	98.9	99.7	100.1	100.5	100.6	100.6	99.7	99.5	100.5	100.0	100.6	100.2
Printing and publishing	128.1	128.4	128.9	129.1	129.4	129.5	130.2	129.4	128.7	130.0	131.1	131.6	131.1
Chemicals and allied products	93.1	92.5	92.8	93.4	92.7	93.2	93.4	93.1	93.4	93.7	92.8	94.5	94.9
Petroleum and coal products	83.5	81.4	81.8	82.0	81.6	84.3	83.1	83.3	82.9	84.5	83.4	84.9	86.8
Rubber and misc. plastics products	110.7	111.6	112.0	112.4	112.7	112.9	113.5	113.5	112.6	114.5	114.8	115.3	115.9
Leather and leather products	55.8	55.2	55.4	55.5	56.7	57.4	57.8	57.8	57.4	59.5	59.7	61.4	61.1
Service-producing	128.6	128.5	128.8	129.6	129.0	129.8	131.0	131.0	131.5	131.9	131.7	132.2	133.2
Transportation and public utilities	104.8	106.1	106.1	107.0	106.5	107.0	107.8	107.7	107.9	108.5	107.6	108.9	108.6
Wholesale trade	117.5	116.8	116.9	116.8	116.4	117.1	117.4	116.9	117.4	117.7	117.6	117.5	118.3
Retail trade	118.6	118.4	118.6	119.2	118.0	118.9	120.4	120.3	121.6	121.2	120.4	121.1	122.3
Finance, insurance, and real estate	138.6	137.8	139.0	140.3	139.8	140.4	141.0	141.5	142.0	142.5	142.7	141.6	144.0
Services	146.5	146.7	146.9	147.9	147.8	148.6	150.1	150.2	150.3	151.2	151.7	152.4	153.3

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							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^p	Aug. ^p
Hourly Earnings Index ² (1977 = 100)													
Total private (in current dollars)	169.5	169.8	170.2	171.2	171.1	171.2	171.8	172.2	172.6	172.9	172.9	173.2	173.9
Mining	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Construction	152.0	151.9	153.2	154.7	154.3	152.8	152.4	153.8	153.7	154.1	155.0	154.3	153.9
Manufacturing	172.7	172.7	173.0	173.2	173.4	173.4	173.7	174.3	175.0	174.4	174.7	174.8	175.3
Transportation and public utilities	171.2	171.7	171.9	172.9	173.5	173.6	174.3	174.6	175.2	176.2	175.6	176.2	176.6
Wholesale trade	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Retail trade	158.6	159.0	159.3	159.3	159.3	158.9	158.9	159.0	159.8	160.2	160.3	160.9	161.8
Finance, insurance, and real estate	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Services	174.6	174.7	175.7	177.1	176.6	177.5	178.4	179.0	179.4	179.9	179.9	180.5	181.7
Total private (in constant dollars) ⁴	95.2	95.0	95.1	95.5	95.3	94.7	94.6	94.4	94.2	94.0	93.8	93.7	(³)
Average hourly earnings													
Total private	\$8.77	\$8.78	\$8.82	\$8.86	\$8.84	\$8.86	\$8.88	\$8.91	\$8.91	\$8.95	\$8.94	\$8.96	\$9.03
Mining	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Construction	\$12.48	\$12.48	\$12.57	\$12.70	\$12.65	\$12.51	\$12.48	\$12.62	\$12.61	\$12.65	\$12.72	\$12.67	\$12.72
Manufacturing	9.75	9.75	9.77	9.78	9.79	9.79	9.81	9.83	9.86	9.88	9.88	9.88	9.93
Transportation and public utilities	11.71	11.73	11.77	11.82	11.83	11.86	11.89	11.92	11.96	12.05	11.97	12.03	12.11
Wholesale trade	9.37	9.35	9.40	9.48	9.42	9.47	9.50	9.53	9.52	9.59	9.58	9.59	9.69
Retail trade	6.03	6.05	6.06	6.07	6.09	6.05	6.04	6.05	6.08	6.09	6.10	6.11	6.13
Finance, insurance, and real estate	8.41	8.39	8.43	8.59	8.46	8.59	8.66	8.67	8.69	8.74	8.68	8.71	8.86
Services	8.17	8.18	8.22	8.29	8.25	8.30	8.35	8.38	8.39	8.41	8.40	8.44	8.54
Average weekly earnings													
Total private:													
In current dollars	304.32	304.67	306.05	308.33	305.86	307.44	309.91	310.07	309.18	312.36	311.11	311.81	316.05
In constant (1977) dollars ⁴	170.97	170.59	171.07	171.96	170.40	170.04	170.75	170.09	168.77	169.95	168.71	168.73	(³)

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		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Alabama	41.0	41.5	41.1	\$8.58	\$8.73	\$8.77	\$351.78	\$362.30	\$360.45
Birmingham	39.5	40.8	41.2	8.75	8.94	9.10	345.63	364.75	374.92
Mobile	43.1	41.9	42.0	9.27	10.12	10.14	399.54	424.03	425.88
Alaska	43.0	42.1	45.7	10.47	11.12	9.69	450.21	468.15	442.83
Arizona	41.0	40.9	41.0	9.89	9.91	10.04	405.49	405.32	411.64
Arkansas	40.0	41.4	40.9	7.78	7.92	7.96	311.20	327.89	325.56
Fayetteville-Springdale	40.8	39.5	41.9	6.95	7.06	7.20	283.56	278.87	301.68
Fort Smith	40.1	41.3	38.9	8.10	8.28	8.33	324.81	341.96	324.04
Little Rock-North Little Rock	40.7	41.7	40.6	8.35	8.37	8.40	339.85	349.03	341.04
Pine Bluff	42.2	44.3	44.5	10.10	10.46	10.54	426.22	463.38	469.03
California	39.8	40.5	40.0	10.41	10.78	10.82	414.32	436.59	432.80
Colorado	39.3	40.4	40.1	9.84	10.03	10.03	386.71	405.21	402.20
Denver	39.6	41.8	41.0	10.87	10.72	10.67	430.45	448.10	437.47
Connecticut	41.1	41.9	41.8	10.12	10.37	10.43	415.93	434.50	435.97
Bridgeport-Milford	39.0	42.2	41.4	10.38	10.77	10.85	404.82	454.49	449.19
Hartford	41.7	42.1	41.8	10.26	10.69	10.70	427.84	450.05	447.26
New Britain	41.2	43.4	42.9	10.73	10.79	10.77	442.08	468.29	462.03
New Haven-Meriden	39.9	40.7	40.5	9.63	10.10	10.11	384.24	411.07	409.46
Stamford	39.7	40.6	42.9	10.96	11.43	11.30	435.11	464.06	484.77
Waterbury	41.0	42.8	41.8	8.46	8.99	9.04	346.86	384.77	377.87
Delaware	40.0	40.7	39.5	9.61	10.53	10.25	384.40	428.57	404.88
Wilmington	39.3	41.9	39.8	11.77	12.14	12.40	462.56	508.67	493.52
District of Columbia:									
Washington MSA	37.9	39.0	38.0	10.36	10.67	10.92	392.64	416.13	414.96
Florida	40.5	40.8	40.2	8.05	8.11	8.15	326.03	330.89	327.63
Fort Lauderdale-Hollywood-Pompano Beach	40.6	42.3	41.2	7.94	8.15	8.10	322.36	344.75	333.72
Jacksonville	43.1	40.1	40.9	8.78	8.72	8.77	378.42	349.67	358.69
Lakeland-Winter Haven	38.5	41.3	41.7	7.71	7.95	8.03	296.84	328.34	334.85
Miami-Hialeah	38.6	39.0	38.1	7.13	7.17	7.20	275.22	279.63	274.32
Orlando	41.0	40.7	40.7	8.32	8.39	8.38	341.12	341.47	341.07
Pensacola	42.6	42.0	41.4	9.85	10.05	10.01	419.61	422.10	414.41
Tampa-St. Petersburg-Clearwater	39.1	40.5	39.6	7.47	7.70	7.70	292.08	311.85	304.92
West Palm Beach-Boca Raton-Delray Beach	38.5	40.8	40.6	8.46	9.04	8.90	325.71	368.83	361.34
Georgia	40.3	42.4	42.3	8.32	8.29	8.30	335.30	351.50	351.09
Atlanta	40.6	42.4	43.2	9.78	10.00	10.06	397.07	424.00	434.59
Savannah	44.0	46.1	45.5	10.62	10.95	10.96	467.28	504.80	498.68
Hawaii	38.5	38.2	38.8	8.56	9.29	9.24	329.56	354.88	358.51
Honolulu	38.0	38.4	38.4	8.61	9.40	9.44	327.18	360.96	362.50
Idaho	37.4	38.9	36.3	10.05	10.38	9.61	375.87	403.78	348.84
Illinois	40.4	41.8	41.4	10.71	10.88	10.89	432.68	454.78	450.85
Aurora-Elgin	40.4	42.1	41.8	9.96	10.34	10.32	402.38	435.31	431.38
Bloomington-Normal	41.1	42.5	40.6	10.83	10.81	10.72	445.11	459.43	435.23
Champaign-Urbana-Rantoul	40.9	40.9	39.8	9.14	9.10	8.96	373.83	372.19	356.61
Chicago	41.0	42.0	41.4	10.51	10.61	10.60	430.91	445.62	438.84
Davenport-Rock Island-Moline	40.5	41.0	40.3	12.91	12.80	12.99	522.86	524.80	523.50
Decatur	38.9	41.1	40.5	13.73	13.87	13.89	534.10	570.06	562.55
Joliet	40.3	41.9	41.8	11.61	11.83	11.92	467.88	495.68	498.26
Kankakee	38.0	38.7	39.1	10.43	9.84	9.93	396.34	380.81	388.26
Lake County	39.9	39.4	39.1	10.55	10.81	10.84	420.95	425.91	423.84
Peoria	38.6	44.7	44.4	12.65	13.07	13.06	488.29	584.23	579.86
Rockford	42.4	41.7	41.4	11.24	11.08	11.17	476.58	462.04	462.44
Springfield	44.4	41.7	42.2	11.34	11.49	11.76	503.50	479.13	496.27

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Indiana	40.9	41.9	41.5	\$10.76	\$11.02	\$10.99	\$440.08	\$461.74	\$456.09
Iowa	39.9	41.4	41.1	10.45	10.64	10.70	416.96	440.50	439.77
Cedar Rapids	39.2	40.0	39.3	11.60	11.99	12.65	454.72	479.60	497.15
Des Moines	39.1	40.8	41.5	11.26	11.42	11.55	440.27	465.94	479.33
Dubuque	39.3	42.6	41.7	12.05	12.38	12.47	473.57	527.39	520.00
Sioux City	37.4	38.0	38.2	8.46	8.19	8.26	316.40	311.22	315.53
Kansas	39.6	41.3	40.4	9.71	9.90	9.95	384.52	408.87	401.98
Topeka	39.5	41.5	40.9	10.91	10.73	11.08	430.95	445.30	453.17
Wichita	36.0	41.1	40.1	10.08	10.99	11.01	362.88	451.69	441.50
Kentucky	38.2	40.5	39.6	9.97	10.02	10.04	380.85	405.81	397.58
Lexington-Fayette	34.4	39.8	38.7	10.07	10.38	10.41	346.41	413.12	402.87
Louisville	40.5	41.5	40.5	11.06	11.54	11.46	447.93	478.91	464.13
Louisiana	41.7	41.7	41.1	10.69	10.78	10.95	445.77	449.53	450.05
Baton Rouge	41.2	42.0	41.6	12.36	12.50	12.33	509.23	525.00	512.93
New Orleans	41.1	40.6	40.8	10.81	10.49	10.61	444.29	425.89	432.89
Shreveport	39.6	38.9	38.9	10.87	11.52	11.35	430.45	448.13	441.52
Maine	40.4	41.7	40.8	8.73	8.73	8.80	352.69	364.04	359.04
Lewiston-Auburn	37.5	41.9	40.1	7.40	7.32	7.32	277.50	306.71	293.53
Portland	38.2	39.1	38.9	8.91	9.14	9.10	340.36	357.37	353.99
Maryland	40.3	40.7	40.5	9.92	9.95	10.08	399.78	404.97	408.24
Baltimore MSA	40.8	41.6	41.4	10.43	10.73	10.90	425.55	446.37	451.26
Massachusetts	41.0	41.5	41.2	9.29	9.68	9.72	380.89	401.72	400.46
Boston	40.0	40.8	40.3	10.06	10.64	10.68	402.40	434.11	430.40
Springfield	42.8	42.3	42.0	9.01	9.16	9.29	385.63	387.47	390.18
Worcester	40.8	41.2	40.6	9.53	9.63	9.63	388.82	396.76	392.60
Michigan	41.6	41.8	40.8	12.79	12.90	12.74	532.06	539.22	519.79
Ann Arbor	41.3	44.2	41.1	13.52	14.02	13.61	558.38	619.68	559.37
Battle Creek	42.8	43.7	42.6	13.53	14.02	14.02	579.08	612.67	597.25
Detroit	42.3	43.2	41.5	13.64	13.83	13.55	576.97	597.46	562.32
Flint	44.3	41.2	41.8	14.84	15.06	15.40	657.41	620.47	643.72
Grand Rapids	39.8	39.8	39.0	10.80	11.11	10.99	429.84	442.18	428.61
Jackson	40.0	42.0	40.1	10.03	10.12	9.82	401.20	425.04	393.78
Kalamazoo	41.7	42.8	40.9	11.94	11.90	12.17	497.90	509.32	497.75
Lansing-East Lansing	42.3	42.8	43.0	14.44	14.09	13.84	610.81	603.05	595.12
Muskegon	38.3	40.6	39.7	11.49	11.64	11.80	440.07	472.58	468.46
Saginaw-Bay City-Midland	43.1	43.1	42.3	14.15	14.37	14.30	609.86	619.35	604.89
Minnesota	40.1	40.9	40.5	10.15	10.42	10.41	407.02	426.18	421.61
Duluth	33.7	40.2	36.0	10.83	10.93	10.92	364.97	439.39	393.12
Minneapolis-St. Paul	40.3	41.3	40.2	10.95	11.07	11.13	441.29	457.19	447.43
St. Cloud	39.4	38.4	38.3	9.57	9.42	9.32	377.06	361.73	356.96
Mississippi	39.3	40.2	39.9	7.42	7.56	7.53	291.61	303.91	300.45
Jackson	39.6	40.4	39.6	8.24	8.60	8.44	326.30	347.44	334.22
Missouri	40.0	40.6	39.8	9.71	9.84	9.75	388.40	399.50	388.05
Kansas City	40.4	40.8	39.7	10.98	11.07	10.80	443.59	451.66	428.76
St. Joseph	41.1	41.0	40.6	9.26	9.92	9.69	380.59	406.72	393.41
St. Louis	39.8	41.1	40.3	11.19	11.62	11.57	445.36	477.58	466.27
Springfield	41.8	39.9	39.2	8.93	8.69	8.71	373.27	346.73	341.43
Montana	39.2	39.4	38.4	11.29	10.71	10.73	442.57	421.97	412.03
Nebraska	39.0	40.0	39.5	9.19	9.25	9.29	358.41	370.00	366.96
Lincoln	38.1	39.2	39.3	9.40	9.62	9.62	358.14	377.10	378.07
Omaha	39.4	40.0	39.9	9.77	9.92	10.03	384.94	396.80	400.20
Nevada	40.1	40.8	39.4	9.34	9.73	9.79	374.53	396.98	385.73
Las Vegas	39.7	40.8	39.7	11.24	11.89	12.13	446.23	485.11	481.56

See footnotes at end of table.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
New Hampshire	40.1	41.1	40.1	\$8.93	\$9.31	\$9.42	\$358.09	\$382.64	\$377.74
Nashua	40.3	42.1	40.8	10.58	11.39	11.47	426.37	479.52	467.98
New Jersey	40.5	41.0	40.7	10.15	10.46	10.50	411.08	428.86	427.35
New Mexico	39.7	39.8	41.2	8.93	8.67	8.64	354.52	345.07	355.97
Albuquerque	40.1	39.8	39.5	9.09	9.14	9.17	364.51	363.77	362.22
New York	39.4	40.2	39.4	9.91	9.99	10.07	390.45	401.80	396.78
Albany-Schenectady-Troy	39.1	40.3	39.8	10.33	10.44	10.50	403.90	420.73	417.90
Binghamton	40.1	40.6	40.3	9.00	9.08	9.27	360.90	368.65	373.58
Buffalo	42.1	41.3	40.8	11.90	11.85	11.84	500.99	489.41	483.07
Elmira	40.4	42.9	40.6	9.41	9.48	9.49	380.16	406.69	385.29
Glens Falls	39.9	(¹)	(¹)	9.63	(¹)	(¹)	384.24	(¹)	(¹)
Nassau-Suffolk	40.7	40.7	40.2	10.18	10.74	10.88	414.33	437.12	437.38
New York PMSA	36.9	37.9	36.9	9.19	9.41	9.51	339.11	356.64	350.92
New York City	36.4	37.6	36.5	9.02	9.33	9.39	328.33	350.81	342.74
Niagara Falls	41.3	40.8	40.2	13.05	12.76	12.70	538.97	520.61	510.54
Orange County	38.8	38.3	37.6	7.91	7.92	7.84	306.91	303.34	294.78
Poughkeepsie	42.8	42.5	41.5	9.17	9.31	9.51	392.48	395.68	394.67
Rochester	40.8	42.1	41.4	11.88	11.70	11.91	484.70	492.57	493.07
Rockland County	40.6	39.3	39.3	9.66	10.13	10.32	392.20	398.11	405.58
Syracuse	39.4	41.6	40.6	11.19	11.05	11.02	440.89	459.68	447.41
Utica-Rome	40.5	41.5	41.4	9.33	9.72	9.71	377.87	403.38	401.99
Westchester County	39.1	40.5	39.4	10.24	9.73	10.20	400.38	394.07	401.88
North Carolina	40.1	41.5	40.6	7.52	7.82	7.81	301.55	324.53	317.09
Asheville	41.2	42.3	42.7	7.57	7.77	7.82	311.88	328.67	333.91
Charlotte-Gastonia-Rock Hill	41.1	43.3	42.3	7.74	8.06	8.03	318.11	349.00	339.67
Greensboro-Winston-Salem-High Point	39.7	41.2	39.6	8.28	8.77	8.66	328.72	361.32	342.94
Raleigh-Durham	41.5	42.0	41.5	8.59	8.91	8.91	356.49	374.22	369.77
North Dakota	38.5	38.3	38.5	8.10	8.41	8.35	311.85	322.10	321.48
Fargo-Moorhead	37.0	37.1	35.9	8.29	8.43	8.42	306.73	312.75	302.28
Ohio	41.4	42.6	42.0	11.49	11.70	11.60	475.69	498.42	487.20
Akron	42.6	43.1	42.1	11.10	11.33	11.16	472.86	488.32	469.84
Canton	40.1	42.2	41.4	11.21	11.36	11.38	449.52	479.39	471.13
Cincinnati	41.7	42.8	41.9	10.67	10.90	10.86	444.94	466.52	455.03
Cleveland	40.6	42.9	41.8	11.25	11.52	11.42	456.75	494.21	477.36
Columbus	40.8	41.5	41.4	11.23	11.40	11.47	458.18	473.10	474.86
Dayton-Springfield	42.5	42.2	41.6	12.03	11.90	11.89	511.28	502.18	494.62
Toledo	42.1	41.8	41.3	12.50	12.66	12.66	526.25	529.19	522.86
Youngstown-Warren	41.1	42.8	42.3	13.21	13.24	12.94	542.93	566.67	547.36
Oklahoma	40.2	41.0	40.9	9.73	10.07	10.10	391.15	412.87	413.09
Oklahoma City	39.3	41.2	40.4	10.81	11.13	10.87	424.83	458.56	439.15
Tulsa	39.4	40.5	40.7	10.61	10.53	10.69	418.03	426.47	435.08
Oregon	37.9	39.6	38.8	10.53	10.53	10.39	399.09	416.99	403.13
Eugene-Springfield	37.5	39.7	37.2	10.81	10.72	10.61	405.38	425.58	394.69
Portland	38.8	39.5	39.9	10.85	10.69	10.68	420.98	422.26	426.13
Salem	35.9	40.3	38.4	9.12	9.00	7.81	327.41	362.70	299.90

See footnotes at end of table.

ESTABLISHMENT DATA
STATE AND AREA HOURS AND EARNINGS
NOT SEASONALLY ADJUSTED

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Pennsylvania	40.0	41.1	40.8	\$9.73	\$9.95	\$9.93	\$389.20	\$408.95	\$405.14
Allentown-Bethlehem	39.1	39.6	40.1	10.24	10.43	10.54	400.38	413.03	422.65
Altoona	38.9	40.9	39.5	8.62	8.68	8.77	335.32	355.01	346.42
Beaver County	41.6	42.2	41.2	11.95	11.07	11.01	497.12	467.15	453.61
Erie	41.8	41.8	41.8	10.34	10.24	10.32	432.21	428.03	431.38
Harrisburg-Lebanon-Carlisle	39.4	40.0	40.1	9.20	9.35	9.31	362.48	374.00	373.33
Johnstown	38.6	39.3	39.1	8.19	8.47	8.41	316.13	332.87	328.83
Lancaster	39.6	40.7	40.0	9.40	9.71	9.67	372.24	395.20	386.80
Philadelphia PMSA	39.6	41.1	40.7	10.44	10.80	10.79	413.42	443.88	439.15
Pittsburgh	41.4	42.2	41.6	11.17	11.23	11.32	462.44	473.91	470.91
Reading	40.1	40.8	40.7	9.98	9.98	10.00	400.20	407.18	407.00
Scranton-Wilkes-Barre	38.9	39.3	39.1	8.62	8.67	8.72	335.32	340.73	340.95
Sharon	38.4	42.6	41.3	11.34	11.30	11.22	435.46	481.38	463.39
State College	36.6	39.7	39.0	8.06	8.09	8.08	311.12	321.17	315.12
Williamsport	39.2	42.4	41.3	8.60	8.51	8.48	337.12	360.82	350.22
York	41.1	42.6	43.0	9.14	9.40	9.32	375.65	400.44	400.76
Rhode Island	40.1	40.4	40.0	7.91	8.21	8.25	317.19	331.68	330.00
Pawtucket-Woonsocket-Attleboro	39.8	40.4	40.0	7.45	7.69	7.73	296.51	310.68	309.20
Providence	39.8	40.2	40.0	7.96	8.17	8.20	316.81	328.43	328.00
South Carolina	40.5	41.9	41.5	7.95	8.08	8.11	321.98	338.55	336.56
Charleston	41.3	41.9	41.3	9.19	8.99	9.01	379.55	376.68	372.11
Columbia	39.5	41.4	40.7	7.73	7.86	7.89	305.34	325.40	321.12
Greenville-Spartanburg	40.7	41.9	41.8	7.72	7.99	7.98	314.20	334.78	333.56
South Dakota	42.3	41.1	41.6	7.67	7.86	7.89	324.44	323.05	328.22
Sioux Falls	46.6	42.2	43.1	7.95	7.73	7.52	370.47	326.21	324.11
Tennessee	41.0	41.7	40.4	8.63	8.79	8.91	353.83	366.54	359.96
Chattanooga	42.4	41.7	41.1	7.63	7.93	7.89	323.51	330.68	324.28
Johnson City-Kingsport-Bristol	43.5	43.5	41.3	9.13	9.11	9.27	397.16	396.29	382.85
Knoxville	39.9	40.0	38.9	8.91	8.95	8.61	355.51	358.00	334.93
Memphis	43.6	41.4	42.6	8.84	8.76	8.89	385.42	362.66	378.71
Nashville	39.2	41.3	40.9	9.66	10.06	10.32	378.67	415.48	422.09
Texas	41.1	41.3	41.2	9.68	9.84	9.89	397.85	406.39	407.47
Dallas	41.8	41.4	41.2	9.42	9.71	9.73	393.76	401.99	400.88
Ft. Worth-Arlington	41.5	41.6	40.8	9.64	9.59	9.66	400.06	398.94	394.13
Houston	41.7	43.4	43.0	11.26	11.09	11.12	469.54	481.31	478.16
San Antonio	40.1	39.9	39.8	7.43	7.79	7.77	297.94	310.82	309.25
Utah	39.9	39.8	40.3	10.11	9.63	9.81	403.39	391.23	395.34
Salt Lake City-Ogden	40.4	39.9	40.9	9.83	9.85	9.78	397.13	393.02	400.00
Vermont	40.1	40.8	40.3	8.93	9.09	9.21	358.09	370.87	371.16
Burlington	42.9	40.9	39.7	9.72	9.92	10.06	416.99	405.73	399.38
Virginia	39.9	41.0	40.3	8.88	9.04	9.03	354.31	370.64	363.91
Bristol	41.0	40.7	40.8	7.59	7.60	7.78	311.19	309.32	317.42
Charlottesville	40.7	41.1	41.1	7.45	7.55	7.48	303.22	310.31	307.43
Danville	40.3	44.3	42.2	8.38	8.27	8.50	337.71	366.36	358.70
Lynchburg	40.6	41.6	40.8	8.34	8.45	8.44	338.60	351.52	344.35
Northern Virginia	39.9	40.0	39.5	9.33	9.80	9.75	372.27	392.00	385.13
Richmond-Petersburg	40.4	40.9	40.3	11.37	11.67	11.66	459.35	477.30	469.90
Roanoke	40.2	40.6	40.9	8.18	8.74	8.70	328.84	354.84	355.83

See footnotes at end of table.

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

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

State and area	Average weekly hours			Average hourly earnings			Average weekly earnings		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Washington	38.5	40.3	39.6	\$11.91	\$11.60	\$11.71	\$458.54	\$467.48	\$463.72
West Virginia	39.2	40.5	39.8	10.56	10.67	10.84	413.95	432.14	431.43
Charleston	41.5	42.0	41.4	12.88	13.27	13.39	534.52	557.34	554.35
Huntington-Ashland	39.0	39.4	39.7	12.12	12.05	12.17	472.68	474.77	483.15
Parkersburg-Marietta	41.3	42.2	41.6	12.17	12.32	11.87	502.62	519.90	493.79
Wheeling	39.3	41.3	41.3	12.09	11.61	12.42	475.14	479.49	512.95
Wisconsin	41.0	41.2	41.2	10.29	10.46	10.42	421.89	430.95	429.30
Appleton-Oshkosh	43.6	42.4	41.8	10.32	10.78	10.84	449.95	457.07	453.11
Eau Claire	39.9	41.8	41.6	10.36	10.78	10.81	413.36	450.60	449.70
Green Bay	42.4	41.7	42.1	11.02	11.19	10.87	467.25	466.62	457.63
Janesville-Beloit	37.4	38.6	38.9	11.98	12.26	12.27	448.05	473.24	477.30
Kenosha	39.2	40.5	38.9	11.24	12.29	12.17	440.61	497.75	473.41
La Crosse	38.0	39.3	38.1	9.44	9.29	9.28	358.72	365.10	353.57
Madison	40.7	40.6	40.8	9.59	9.82	9.70	390.31	398.69	395.76
Milwaukee	41.1	41.1	41.2	11.72	11.59	11.68	481.69	476.35	481.22
Racine	39.0	40.7	39.2	10.65	11.17	10.95	415.35	454.62	429.24
Sheboygan	38.8	41.8	41.4	9.27	9.49	9.53	359.68	396.68	394.54
Wausau	42.0	43.3	43.1	9.90	9.88	9.89	415.80	427.80	426.26
Wyoming	38.7	39.4	40.3	9.76	9.81	10.27	377.71	386.51	413.88
Puerto Rico	39.0	39.7	39.0	5.28	5.41	5.38	205.92	214.78	209.82
Virgin Islands	42.4	42.5	42.7	9.88	10.01	9.81	418.91	425.42	418.89

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		
	June 1987 ^r	July 1987 ^r	Aug. 1987 ^p	Aug. 1986 to Aug. 1987 ^p	June 1987 to July 1987 ^r	July 1987 to Aug. 1987 ^p
Total	189,413	189,916	190,918	2.9	0.3	0.5
Private sector	155,374	155,972	156,998	3.0	.4	.7
Mining	1,624	1,634	1,682	2.1	.6	2.9
Construction	9,759	9,820	9,849	2.1	.6	.3
Manufacturing	40,370	40,550	40,589	1.2	.4	.1
Durable goods	23,984	23,995	24,098	.5	.0	.4
Nondurable goods	16,386	16,555	16,491	2.4	1.0	-.4
Transportation and public utilities	10,871	10,938	10,925	3.2	.6	-.1
Wholesale trade	11,495	11,496	11,579	1.1	.0	.7
Retail trade	27,673	27,812	28,087	3.3	.5	1.0
Finance, insurance, and real estate	12,483	12,427	12,621	4.7	-.4	1.6
Services	41,099	41,294	41,666	5.0	.5	.9
Government	34,038	33,944	33,920	2.2	-.3	-.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	1984	1985				1986				1987	
			IV	I	II	III	IV	I	II	III	IV	I	II'
Business sector													
Output per hour of all persons	107.5	109.5	105.9	106.5	107.2	108.2	107.9	109.5	109.7	109.6	109.6	109.7	110.0
Output	123.9	128.0	120.8	122.2	123.3	124.7	125.3	127.3	127.5	128.1	129.0	130.2	131.1
Hours	115.2	116.9	114.0	114.7	115.0	115.2	116.1	116.3	116.3	116.9	117.8	118.7	119.1
Compensation per hour	175.9	182.8	170.3	172.4	174.6	177.0	179.3	180.7	182.2	183.6	185.2	185.8	187.3
Real compensation per hour	99.1	101.0	98.1	98.5	98.6	99.4	99.7	100.1	101.3	101.4	101.6	100.7	100.3
Unit labor costs	163.6	166.9	160.8	161.9	162.8	163.6	166.1	165.0	166.2	167.5	169.0	169.4	170.2
Unit nonlabor payments	160.3	163.8	157.9	158.7	160.4	161.8	160.2	163.1	163.9	165.7	162.4	166.0	169.1
Implicit price deflator	162.4	165.8	159.8	160.8	162.0	163.0	164.0	164.3	165.4	166.9	166.7	168.2	169.8
Nonfarm business sector													
Output per hour of all persons	105.8	107.5	104.8	105.2	105.7	106.4	105.9	107.7	107.7	107.5	107.5	107.6	107.9
Output	123.6	127.5	120.7	122.0	123.1	124.3	124.9	126.9	127.1	127.6	128.5	129.7	130.7
Hours	116.8	118.6	115.2	115.9	116.4	116.9	117.9	117.9	118.0	118.7	119.6	120.6	121.1
Compensation per hour	175.2	182.0	170.2	172.2	174.1	176.2	178.3	180.0	181.3	182.6	184.4	184.9	186.3
Real compensation per hour	98.7	100.6	98.0	98.4	98.3	98.9	99.2	99.7	100.8	100.9	101.2	100.2	99.7
Unit labor costs	165.6	169.3	162.4	163.6	164.7	165.7	168.3	167.2	168.4	169.8	171.5	171.8	172.6
Unit nonlabor payments	161.3	165.2	158.5	159.5	161.5	163.4	160.8	164.7	165.2	167.0	163.9	167.4	169.3
Implicit price deflator	164.1	167.8	161.0	162.2	163.6	164.9	165.7	166.4	167.3	168.8	168.8	170.3	171.4
Manufacturing													
Output per hour of all persons	124.2	128.8	120.0	121.5	124.0	125.2	126.0	127.6	128.3	129.4	129.9	131.0	132.6
Output	122.5	125.9	119.6	120.7	122.1	123.2	124.1	125.2	125.1	126.1	127.2	128.5	129.6
Hours	98.7	97.8	99.7	99.4	98.5	98.3	98.4	98.1	97.5	97.5	97.9	98.1	97.8
Compensation per hour	176.9	182.7	171.1	173.3	176.1	178.0	180.2	181.0	182.1	183.1	184.3	183.9	184.7
Real compensation per hour	99.6	100.9	98.5	99.0	99.5	99.9	100.2	100.3	101.2	101.2	101.2	99.6	98.9
Unit labor costs	142.4	141.8	142.5	142.7	142.0	142.1	143.0	141.9	142.0	141.5	141.9	140.4	139.3
Durable goods													
Output per hour of all persons	130.1	136.8	123.8	126.3	129.6	131.5	133.1	135.3	135.9	137.5	138.4	139.8	141.2
Output	129.9	134.1	125.2	127.2	129.2	130.7	132.2	133.7	133.1	134.1	135.4	136.8	137.4
Hours	99.8	98.0	101.1	100.7	99.8	99.4	99.4	98.8	98.0	97.5	97.8	97.8	97.3
Compensation per hour	175.4	181.4	169.1	171.4	174.4	176.6	179.4	179.9	180.8	181.6	183.1	182.2	182.9
Real compensation per hour	98.8	100.2	97.3	97.9	98.5	99.2	99.8	99.7	100.5	100.3	100.5	98.7	97.9
Unit labor costs	134.9	132.6	136.5	135.7	134.6	134.3	134.8	132.9	133.1	132.0	132.3	130.3	129.5
Nondurable goods													
Output per hour of all persons	115.1	116.8	114.2	114.0	115.4	115.6	115.3	115.8	116.9	117.3	117.1	117.9	119.8
Output	111.6	113.7	111.4	111.0	111.5	111.9	111.9	112.5	113.3	114.2	114.9	116.2	118.1
Hours	97.0	97.4	97.6	97.4	96.6	96.8	97.1	97.2	96.9	97.3	98.1	98.6	98.5
Compensation per hour	178.9	184.8	174.1	176.1	178.6	180.0	181.2	182.7	184.3	185.8	186.5	186.9	188.2
Real compensation per hour	100.8	102.1	100.2	100.5	100.8	101.0	100.8	101.2	102.4	102.7	102.4	101.2	100.7
Unit labor costs	155.5	158.3	152.5	154.4	154.7	155.6	157.2	157.8	157.7	158.4	159.3	158.5	157.0
Nonfinancial corporations¹													
Output per all-employee hour	108.2	109.9	106.4	107.0	107.7	109.2	108.9	109.8	109.7	109.9	110.5	109.7	110.0
Output	126.1	129.4	122.7	124.0	125.4	127.4	127.7	129.1	128.8	129.3	130.4	130.9	131.8
Hours	116.5	117.7	115.3	115.9	116.4	116.6	117.3	117.6	117.4	117.6	118.0	119.3	119.8
Compensation per hour	172.8	178.9	168.1	169.9	171.8	173.8	175.7	177.2	178.4	179.5	181.0	180.8	182.0
Real compensation per hour	97.4	98.9	96.8	97.0	97.0	97.6	97.7	98.2	99.1	99.2	99.3	98.0	97.4
Total unit costs	164.4	167.7	162.8	163.6	164.3	163.7	166.0	166.3	167.2	168.5	168.7	169.7	170.7
Unit labor costs	159.7	162.8	158.0	158.9	159.5	159.1	161.4	161.5	162.6	163.2	163.8	164.8	165.4
Unit nonlabor costs	178.3	182.2	176.8	177.5	178.7	177.5	179.4	180.7	180.6	184.2	183.2	184.1	186.4
Unit profits	133.9	129.3	134.2	132.0	132.2	142.5	128.7	129.7	129.5	130.6	127.7	132.2	131.8
Implicit price deflator	160.7	163.1	159.4	159.8	160.5	161.2	161.5	161.9	162.7	164.0	163.8	165.2	166.0

Measures for the second quarter of 1987 are 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

	Percent change from											
	Previous quarter						Same quarter, previous year					
	I 1986	II 1986	III 1986	IV 1986	I 1987	II 1987*	I 1986	II 1986	III 1986	IV 1986	I 1987	II 1987*
Business sector												
Output per hour of all persons	5.8	0.6	-0.3	-0.1	0.5	1.3	2.8	2.3	1.3	1.5	0.2	0.4
Output	6.4	.7	1.8	3.0	3.5	3.0	4.2	3.4	2.7	2.9	2.3	2.8
Hours .....	.5	.1	2.1	3.1	3.0	1.6	1.3	1.1	1.5	1.4	2.1	2.5
Compensation per hour	3.2	3.5	3.0	3.6	1.4	3.3	4.8	4.4	3.7	3.3	2.8	2.8
Real compensation per hour	1.6	4.8	.5	.9	-3.7	-1.5	1.7	2.7	2.0	1.9	.6	-1.0
Unit labor costs	-2.5	2.8	3.3	3.7	.9	1.9	1.9	2.1	2.4	1.8	2.7	2.4
Unit nonlabor payments	7.5	2.1	4.5	-7.7	9.0	7.8	2.8	2.2	2.4	1.4	1.8	3.2
Implicit price deflator .....	.9	2.6	3.7	-5	3.7	4.0	2.2	2.1	2.4	1.7	2.3	2.7
Nonfarm business sector												
Output per hour of all persons	6.6	.1	-6	.0	.4	1.3	2.3	1.9	1.1	1.5	-1	.3
Output	6.4	.6	1.7	2.9	3.8	3.0	4.0	3.3	2.6	2.9	2.2	2.8
Hours	-2	.6	2.3	2.9	3.4	1.7	1.7	1.4	1.6	1.4	2.3	2.6
Compensation per hour	3.9	2.9	2.8	4.0	1.1	3.0	4.5	4.1	3.6	3.4	2.7	2.7
Real compensation per hour	2.3	4.2	.4	1.3	-3.9	-1.8	1.4	2.5	1.9	2.0	.5	-1.0
Unit labor costs	-2.6	2.8	3.5	4.0	.8	1.7	2.2	2.2	2.5	1.9	2.8	2.5
Unit nonlabor payments	10.0	1.3	4.2	-7.2	8.8	4.7	3.2	2.3	2.2	1.9	1.6	2.5
Implicit price deflator	1.6	2.3	3.7	.0	3.4	2.8	2.6	2.3	2.4	1.9	2.4	2.5
Manufacturing												
Output per hour of all persons	4.9	2.3	3.6	1.4	3.5	4.9	5.0	3.4	3.3	3.0	2.7	3.4
Output	3.6	-1	3.2	3.4	4.3	3.4	3.7	2.5	2.4	2.5	2.7	3.6
Hours	-1.3	-2.3	-4	2.0	.8	-1.5	-1.3	-9	-9	-5	.0	.2
Compensation per hour	1.8	2.5	2.2	2.7	-1.0	2.0	4.4	3.4	2.9	2.3	1.6	1.4
Real compensation per hour .....	.2	3.8	-2	.0	-6.0	-2.8	1.3	1.8	1.2	.9	-7	-2.3
Unit labor costs	-3.0	.2	-1.3	1.3	-4.4	-2.9	-5	.0	-4	-7	-1.1	-1.9
Durable goods												
Output per hour of all persons	7.0	1.5	5.0	2.6	4.2	4.1	7.1	4.9	4.6	4.0	3.3	4.0
Output	4.4	-1.7	3.2	3.8	4.2	1.7	5.0	3.0	2.6	2.4	2.3	3.2
Hours	-2.4	-3.2	-1.7	1.1	.0	-2.3	-2.0	-1.8	-1.9	-1.5	-9	-7
Compensation per hour	1.2	1.9	1.7	3.4	-1.9	1.5	4.9	3.6	2.8	2.1	1.3	1.2
Real compensation per hour	-4	3.3	-7	.7	-6.8	-3.2	1.8	2.0	1.1	.7	-9	-2.5
Unit labor costs	-5.4	.4	-3.1	.8	-5.9	-2.4	-2.0	-1.2	-1.7	-1.9	-2.0	-2.7
Nondurable goods												
Output per hour of all persons	1.7	3.9	1.5	-6	2.6	6.8	1.5	1.2	1.4	1.6	1.8	2.5
Output	2.3	2.8	3.1	2.7	4.6	6.5	1.3	1.6	2.0	2.7	3.3	4.2
Hours .....	.5	-1.0	1.6	3.3	1.9	-2	-2	.4	.6	1.1	1.4	1.6
Compensation per hour	3.2	3.6	3.4	1.5	.7	2.9	3.7	3.2	3.3	2.9	2.3	2.1
Real compensation per hour	1.6	5.0	.9	-1.1	-4.4	-2.0	.6	1.6	1.6	1.6	.1	-1.6
Unit labor costs	1.4	-2	1.9	2.1	-1.9	-3.7	2.2	1.9	1.8	1.3	.4	-4
Nonfinancial corporations¹												
Output per all-employee hour	3.3	-2	.9	2.1	-2.9	1.2	2.6	1.8	.7	1.5	.0	.3
Output	4.4	-9	1.6	3.4	1.5	2.8	4.1	2.7	1.5	2.1	1.4	2.4
Hours	1.0	-6	.7	1.3	4.6	1.6	1.4	.8	.8	.6	1.5	2.0
Compensation per hour	3.5	2.6	2.5	3.5	-.5	2.7	4.3	3.9	3.3	3.0	2.0	2.0
Real compensation per hour	1.8	4.0	.0	.8	-5.5	-2.1	1.2	2.2	1.6	1.6	-2	-1.7
Total unit costs .....	.9	2.0	3.3	.3	2.4	2.4	1.7	1.7	2.9	1.6	2.0	2.1
Unit labor costs .....	.1	2.9	1.5	1.3	2.5	1.4	1.6	2.0	2.6	1.5	2.1	1.7
Unit nonlabor costs	3.0	-2	8.2	-2.3	2.2	4.9	1.8	1.0	3.8	2.1	1.9	3.2
Unit profits	3.0	-5	3.3	-8.5	14.7	-1.2	-1.7	-2.1	-8.4	-8	1.9	1.8
Implicit price deflator	1.1	1.8	3.3	-5	3.5	2.0	1.3	1.4	1.7	1.4	2.0	2.1

¹ Measures for the second quarter of 1987 are preliminary.
=revised.

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

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Alabama	1,909.1	1,899.3	1,906.5	197.6	146.5	146.3	10.3	7.7	7.7
Birmingham	447.5	451.6	454.1	39.8	29.7	30.2	8.9	6.6	6.6
Huntsville	128.6	129.7	130.3	9.7	6.7	6.8	7.5	5.1	5.2
Mobile	215.9	213.4	214.2	23.7	19.6	19.6	11.0	9.2	9.1
Montgomery	136.8	138.1	138.4	10.7	9.1	9.0	7.9	6.6	6.5
Tuscaloosa	67.7	69.0	69.3	5.5	4.3	4.4	8.2	6.3	6.3
Alaska	276.9	262.9	265.3	28.3	29.3	25.8	10.2	11.1	9.7
Arizona	1,590.5	1,602.5	1,600.7	123.3	111.2	107.8	7.8	6.9	6.7
Phoenix	986.8	995.6	995.5	57.8	55.9	52.9	5.9	5.6	5.3
Tucson	305.7	307.8	304.0	18.6	16.1	15.2	6.1	5.2	5.0
Arkansas	1,086.4	1,082.3	1,088.8	93.6	88.5	85.7	8.6	8.2	7.9
Fayetteville-Springdale	54.4	55.8	56.3	2.8	2.3	2.2	5.2	4.2	3.8
Fort Smith	89.7	88.7	90.1	6.5	5.5	5.3	7.2	6.2	5.9
Little Rock-North Little Rock	254.1	254.3	257.0	18.1	19.4	19.5	7.1	7.6	7.6
Pine Bluff	38.5	36.9	36.4	3.0	3.4	3.3	7.7	9.1	9.0
California¹	13,579.2	13,830.1	13,980.7	1,023.5	750.6	838.6	7.5	5.4	6.0
Anaheim-Santa Ana	1,260.0	1,311.3	1,319.0	58.4	42.3	45.7	4.6	3.2	3.5
Bakersfield	231.6	226.4	230.8	27.6	21.7	21.4	11.9	9.6	9.3
Fresno	299.9	301.9	301.9	35.9	27.4	28.0	12.0	9.1	9.3
Los Angeles-Long Beach ¹	4,157.0	4,205.0	4,272.0	339.0	238.0	282.0	8.1	5.7	6.6
Modesto	151.2	149.2	153.8	21.2	18.8	17.1	14.0	12.6	11.1
Oakland	1,030.9	1,053.8	1,065.5	67.5	51.4	56.3	6.5	4.9	5.3
Oxnard-Ventura	330.6	337.7	342.6	25.6	17.3	20.7	7.8	5.1	6.0
Riverside-San Bernardino	864.4	914.2	917.9	66.4	48.9	58.9	7.7	5.4	6.4
Sacramento	654.0	676.4	682.5	42.7	35.4	38.0	6.5	5.2	5.6
Salinas-Seaside-Monterey	156.5	156.0	159.6	14.0	10.0	10.5	8.9	6.4	6.6
San Diego	1,029.3	1,065.0	1,078.0	60.1	46.5	52.6	5.8	4.4	4.9
San Francisco	880.8	886.6	894.3	47.3	34.0	36.9	5.4	3.8	4.1
San Jose	810.5	802.0	813.5	53.5	36.8	37.9	6.6	4.6	4.7
Santa Barbara-Santa Maria-Lompoc	179.0	182.1	182.0	9.8	7.8	8.1	5.4	4.3	4.4
Santa Rosa-Petaluma	183.0	188.4	190.3	11.4	8.7	9.3	6.2	4.6	4.9
Stockton	188.2	190.5	189.0	22.4	17.9	18.0	11.9	9.4	9.5
Vallejo-Fairfield-Napa	186.0	189.5	193.6	13.1	10.1	11.3	7.1	5.3	5.8
Colorado	1,704.8	1,692.5	1,663.3	125.5	135.5	118.4	7.4	8.0	7.1
Boulder-Longmont	129.5	129.1	127.6	8.0	8.0	7.0	6.2	6.2	5.5
Denver	902.4	898.4	882.3	59.9	66.9	58.8	6.6	7.4	6.7
Connecticut	1,748.6	1,778.5	1,784.8	68.7	57.7	60.1	3.9	3.2	3.4
Bridgeport-Milford	228.4	232.4	232.4	11.2	9.0	9.5	4.9	3.9	4.1
Hartford	421.0	429.8	432.4	13.8	12.9	12.8	3.3	3.0	3.0
New Britain	73.5	74.4	74.5	3.3	2.7	2.8	4.4	3.6	3.8
New Haven-Meriden	273.5	277.0	279.0	10.6	8.9	9.1	3.9	3.2	3.3
Stamford	119.3	120.1	121.0	3.4	2.9	2.8	2.9	2.4	2.3
Waterbury	102.9	103.9	102.4	6.2	4.5	5.4	6.0	4.3	5.3
Delaware	336.0	342.7	341.5	17.2	10.5	11.8	5.1	3.1	3.4
Wilmington	285.9	290.3	287.6	18.5	10.8	12.8	6.5	3.7	4.4
District of Columbia	344.7	342.8	360.4	26.4	21.7	22.4	7.7	6.3	6.2
Washington	2,081.6	2,143.7	2,161.4	76.4	73.2	72.6	3.7	3.4	3.4
Florida¹	5,733.6	5,882.9	5,985.4	392.9	312.6	355.8	6.9	5.3	5.9
Daytona Beach	143.2	147.2	149.2	7.8	6.1	6.7	5.5	4.2	4.5
Fort Lauderdale-Hollywood-Pompano Beach	594.7	608.6	618.1	29.8	24.9	28.5	5.0	4.1	4.6
Fort Myers-Cape Coral	123.3	135.2	137.3	6.2	4.9	5.7	5.1	3.6	4.1
Gainesville	101.0	103.7	106.2	4.0	3.5	3.5	3.9	3.4	3.3
Jacksonville	431.2	445.3	454.0	26.8	24.7	26.4	6.2	5.5	5.8
Lakeland-Winter Haven	174.1	175.8	180.5	25.6	16.2	21.0	14.7	9.2	11.6
Melbourne-Titusville-Palm Bay	176.5	174.7	180.0	11.6	9.2	10.4	6.6	5.2	5.8
Miami-Hialeah	920.1	912.5	936.7	69.8	52.4	58.4	7.6	5.7	6.2
Orlando	541.5	572.7	581.4	29.7	25.8	28.7	5.5	4.5	4.9
Pensacola	151.1	151.2	153.8	10.6	8.6	9.5	7.0	5.7	6.2
Sarasota	110.0	114.4	115.3	5.1	4.1	4.3	4.6	3.6	3.7
Tallahassee	118.8	126.3	126.8	5.3	5.2	5.5	4.5	4.1	4.3
Tampa-St. Petersburg-Clearwater	945.4	957.9	974.5	56.3	47.4	49.5	6.0	5.0	5.1
West Palm Beach-Boca Raton-Delray Beach	370.1	394.8	399.0	30.1	22.3	28.7	8.1	5.6	7.2

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Georgia	3,041.3	3,104.4	3,075.4	193.4	159.7	158.0	6.4	5.1	5.1
Albany	56.5	55.9	55.4	8.0	5.1	4.7	14.1	9.1	8.6
Athens	71.7	74.1	72.9	4.4	2.8	2.8	6.2	3.8	3.8
Atlanta	1,417.9	1,470.5	1,462.5	67.2	65.0	64.8	4.7	4.4	4.4
Augusta	173.1	177.2	176.4	9.8	9.9	9.3	5.7	5.6	5.3
Columbus	99.3	99.9	98.8	7.4	5.9	5.5	7.5	5.9	5.6
Macon-Warner Robins	126.9	130.1	128.0	7.5	7.1	6.0	5.9	5.5	4.7
Savannah	108.5	110.8	110.0	7.1	6.3	5.9	6.5	5.7	5.4
Hawaii	495.0	508.9	510.6	24.9	22.1	20.2	5.0	4.3	4.0
Honolulu	370.0	382.3	382.8	16.6	14.8	13.7	4.5	3.9	3.6
Idaho	481.7	475.7	476.6	41.1	34.0	35.3	8.5	7.1	7.4
Boise City	103.8	103.0	104.0	5.7	5.6	5.3	5.5	5.4	5.1
Illinois ¹	5,798.0	5,817.6	5,874.0	451.2	451.6	419.3	7.8	7.8	7.1
Aurora-Elgin	173.4	177.9	178.6	11.1	10.2	9.6	6.4	5.7	5.4
Bloomington-Normal	61.9	63.5	62.8	3.1	3.0	2.9	5.0	4.8	4.7
Champaign-Urbana-Rantoul	83.9	85.1	85.1	3.9	4.1	3.7	4.7	4.8	4.3
Chicago	3,183.2	3,200.5	3,229.4	228.7	229.7	212.8	7.2	7.2	6.6
Davenport-Rock Island-Moline	185.8	181.9	182.2	16.8	13.2	13.2	9.1	7.3	7.2
Decatur	60.3	58.7	59.4	6.2	5.6	5.7	10.3	9.6	9.6
Joliet	190.6	191.7	191.1	13.2	15.6	15.3	6.9	8.1	8.0
Kankakee	45.4	45.7	46.2	4.2	4.4	4.1	9.2	9.7	8.9
Lake County	260.5	265.1	266.2	12.4	12.4	11.1	4.8	4.7	4.2
Peoria	155.7	154.2	155.8	13.0	13.2	11.9	8.4	8.5	7.6
Rockford	148.8	150.6	151.0	12.4	16.5	15.1	8.3	11.0	10.0
Springfield	107.4	105.6	106.5	5.7	5.7	5.3	5.3	5.4	5.0
Indiana	2,748.4	2,772.3	2,771.8	173.8	172.9	171.2	6.3	6.2	6.2
Anderson	61.1	59.3	59.4	4.1	3.8	4.3	6.7	6.3	7.3
Bloomington	54.6	57.1	57.3	1.9	2.2	2.2	3.4	3.8	3.8
Elkhart-Goshen	90.6	93.9	93.9	4.7	4.3	4.9	5.2	4.6	5.2
Evansville	144.8	143.7	142.6	9.8	10.2	10.1	6.7	7.1	7.0
Fort Wayne	191.1	194.4	195.1	10.3	10.0	10.3	5.4	5.2	5.3
Gary-Hammond	258.4	254.1	253.2	25.6	23.7	21.9	9.9	9.3	8.6
Indianapolis	648.9	664.0	664.0	31.4	33.5	34.0	4.8	5.0	5.1
Kokomo	52.1	50.4	50.4	4.8	5.0	4.6	9.2	10.0	9.1
Lafayette	61.7	62.9	62.8	2.1	2.3	2.6	3.3	3.7	4.2
Muncie	57.2	57.3	57.2	3.8	3.5	3.7	6.6	6.1	6.4
South Bend-Mishawaka	124.3	126.4	127.6	8.3	7.2	8.5	6.7	5.7	6.7
Terre Haute	58.8	57.8	57.1	3.7	3.8	3.9	6.2	6.6	6.9
Iowa	1,461.0	1,474.6	1,446.8	94.8	66.6	65.4	6.5	4.5	4.5
Cedar Rapids	88.6	88.9	88.0	5.5	4.1	4.0	6.2	4.7	4.5
Des Moines	216.1	222.7	219.1	11.8	8.5	8.2	5.5	3.8	3.7
Dubuque	43.0	43.1	42.9	3.0	2.0	2.1	6.9	4.8	4.8
Iowa City	53.4	54.4	53.5	1.4	.9	1.0	2.7	1.7	1.8
Sioux City	59.1	61.0	59.4	4.6	5.2	4.3	7.7	8.5	7.3
Waterloo-Cedar Falls	68.1	67.8	66.6	7.7	4.6	4.3	11.3	6.7	6.4
Kansas	1,237.3	1,277.7	1,254.0	68.0	59.3	55.6	5.5	4.6	4.4
Lawrence	35.0	37.3	36.9	1.6	1.5	1.5	4.5	4.0	4.1
Topeka	87.6	89.9	89.1	4.4	3.8	3.8	5.1	4.2	4.3
Wichita LMA	225.6	235.3	235.7	14.1	11.1	10.6	6.2	4.7	4.5
Kentucky	1,694.7	1,700.5	1,679.3	167.4	155.8	148.3	9.9	9.2	8.8
Lexington-Fayette	178.6	179.3	177.7	10.8	9.4	9.8	6.0	5.2	5.5
Louisville	496.7	494.4	493.1	35.2	37.3	34.4	7.1	7.5	7.0
Owensboro	45.1	43.8	43.5	4.7	5.2	4.8	10.5	11.8	11.0
Louisiana	1,995.3	1,963.6	1,960.1	278.6	221.7	209.9	14.0	11.3	10.7
Alexandria	60.9	62.2	61.7	6.9	5.7	5.6	11.3	9.1	9.1
Baton Rouge	264.3	264.3	264.0	30.8	25.7	24.2	11.7	9.7	9.2
Houma-Thibodaux	77.7	74.1	73.0	14.6	10.8	9.9	18.8	14.5	13.6
Lafayette	108.1	101.2	100.9	17.0	12.1	11.2	15.7	12.0	11.1
Lake Charles	76.5	77.8	77.4	11.8	9.9	9.1	15.4	12.7	11.7
Monroe	70.4	70.6	70.8	6.9	6.7	6.4	9.9	9.4	9.1
New Orleans	607.7	601.3	605.0	68.7	57.0	54.8	11.3	9.5	9.1
Shreveport	168.3	164.6	164.4	20.2	16.8	16.3	12.0	10.2	9.9
Maine	589.8	589.6	605.2	42.2	23.7	29.9	7.2	4.0	4.9
Lewiston-Auburn	41.9	41.2	41.9	5.4	2.2	2.8	12.9	5.4	6.7
Portland	121.6	120.9	124.9	4.0	2.6	3.3	3.3	2.2	2.6

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Maryland	2,401.0	2,441.4	2,432.5	106.2	101.7	102.9	4.4	4.2	4.2
Baltimore	1,171.9	1,176.8	1,171.9	58.6	53.5	53.3	5.0	4.5	4.5
Massachusetts ¹	3,120.5	3,136.8	3,132.0	119.3	97.0	79.9	3.8	3.1	2.6
Boston	1,540.3	1,545.0	1,546.5	50.3	41.9	34.1	3.3	2.7	2.2
Brockton	96.8	97.8	97.9	4.3	3.5	2.8	4.5	3.6	2.9
Fall River	76.2	77.3	75.7	5.5	3.6	3.6	7.3	4.6	4.8
Fitchburg-Leominster	45.9	45.6	44.6	2.4	1.9	1.6	5.3	4.2	3.5
Lawrence-Haverhill	183.2	186.7	184.5	9.3	8.3	7.5	5.1	4.4	4.0
Lowell	150.4	149.8	148.1	5.9	5.1	4.1	3.9	3.4	2.8
New Bedford	86.0	86.2	83.7	5.3	4.0	3.4	6.1	4.6	4.1
Pittsfield	42.8	42.8	42.6	1.8	1.5	1.3	4.2	3.6	3.1
Springfield	251.2	256.1	254.1	10.4	8.3	6.3	4.1	3.3	2.5
Worcester	210.0	214.4	212.3	8.0	6.1	5.5	3.8	2.9	2.6
Michigan ¹	4,475.4	4,574.7	4,598.8	411.7	408.3	406.9	9.2	8.9	8.8
Ann Arbor	144.9	155.0	155.5	8.1	7.9	7.0	5.6	5.1	4.5
Battle Creek	62.3	63.7	64.1	5.2	5.4	4.9	8.4	8.4	7.7
Benton Harbor	78.0	77.3	78.7	7.2	6.5	5.5	9.3	8.4	7.0
Detroit	2,189.3	2,242.4	2,253.7	197.7	199.1	214.6	9.1	8.9	9.5
Flint	203.7	205.1	204.7	22.6	26.6	26.4	11.1	13.0	12.9
Grand Rapids	335.2	341.6	342.8	26.3	24.0	23.2	7.8	7.0	6.8
Jackson	62.6	63.1	63.0	6.0	5.7	4.8	9.6	9.0	7.7
Kalamazoo	112.0	113.3	114.5	6.7	6.8	7.3	5.9	6.0	6.4
Lansing-East Lansing	227.1	237.1	234.2	16.4	16.9	19.7	7.2	7.1	8.4
Muskegon	69.3	69.1	68.2	7.4	7.7	5.8	10.6	11.1	8.5
Saginaw-Bay City-Midland	184.1	188.4	188.2	19.2	18.8	15.5	10.4	10.0	8.2
Minnesota	2,234.6	2,285.1	2,267.5	105.0	110.4	103.7	4.7	4.8	4.6
Duluth	101.1	105.5	104.5	8.5	9.1	8.8	8.4	8.7	8.4
Minneapolis-St. Paul	1,317.8	1,348.6	1,347.1	51.4	55.3	52.6	3.9	4.1	3.9
Rochester	56.3	58.7	59.7	1.9	2.0	1.9	3.3	3.5	3.2
St. Cloud	87.6	90.7	90.3	4.3	4.8	4.4	4.9	5.3	4.9
Mississippi	1,180.6	1,162.6	1,162.2	154.4	112.9	112.6	13.1	9.7	9.7
Jackson	196.7	200.1	199.4	17.4	13.6	14.2	8.9	6.8	7.1
Missouri	2,550.9	2,603.8	2,605.4	151.6	157.7	171.6	5.9	6.1	6.6
Kansas City	800.9	823.0	823.0	36.7	47.5	49.7	4.6	5.8	6.0
St. Joseph	41.0	41.4	40.8	2.8	2.9	2.9	6.9	7.0	7.0
St. Louis	1,255.0	1,264.3	1,270.8	88.7	89.4	91.6	7.1	7.1	7.2
Springfield	115.7	119.0	120.8	4.8	5.6	5.7	4.2	4.7	4.7
Montana	419.2	408.5	401.3	31.9	24.7	23.3	7.6	6.0	5.8
Nebraska	826.3	824.8	819.4	37.6	38.7	36.3	4.5	4.7	4.4
Lincoln	117.9	117.1	117.8	3.4	3.6	4.1	2.9	3.1	3.5
Omaha	317.6	316.8	314.9	16.7	16.5	15.4	5.3	5.2	4.9
Nevada	548.2	568.2	569.4	29.7	32.7	33.3	5.4	5.8	5.8
Las Vegas	312.3	329.7	328.9	18.9	20.3	21.4	6.1	6.2	6.5
Reno	138.5	140.1	140.5	5.8	6.9	6.7	4.2	5.0	4.8
New Hampshire	575.9	601.2	605.9	18.6	14.8	16.0	3.2	2.5	2.6
Nashua	92.1	97.1	95.9	2.8	2.7	2.5	3.1	2.8	2.6
Portsmouth-Dover-Rochester	130.9	134.5	136.3	4.6	2.9	3.4	3.5	2.2	2.5
New Jersey ¹	3,998.8	4,028.8	4,025.0	226.5	166.8	181.5	5.7	4.1	4.5
Atlantic City	192.6	191.7	195.4	11.8	9.3	9.1	6.1	4.9	4.7
Bergen-Passaic	715.7	719.1	713.4	38.3	26.3	29.5	5.3	3.7	4.1
Jersey City	271.9	272.3	271.5	25.3	18.1	19.5	9.3	6.6	7.2
Middlesex-Somerset-Hunterdon	546.0	551.0	551.6	25.2	17.0	19.0	4.6	3.1	3.4
Monmouth-Ocean	479.5	484.0	487.5	20.8	18.4	17.2	4.3	3.4	3.5
Newark	983.5	981.3	980.8	60.0	43.2	46.9	6.1	4.4	4.8
Trenton	170.2	174.3	172.3	8.3	6.1	6.6	4.9	3.5	3.8
Vineland-Millville-Bridgeton	58.3	58.6	58.9	5.5	4.2	4.7	9.5	7.2	7.9
New Mexico	879.0	681.0	679.1	64.9	62.0	60.2	9.6	9.1	8.9
Albuquerque	255.0	259.1	258.2	16.9	17.3	16.8	6.6	6.7	6.5
Las Cruces	54.6	54.8	53.8	4.3	4.4	4.6	8.0	8.1	8.5
Santa Fe	66.2	67.3	68.1	3.7	3.9	3.7	5.6	5.8	5.5

See footnotes at end of table.

STATE AND AREA LABOR FORCE DATA
NOT SEASONALLY ADJUSTED

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
New York¹	8,597.0	8,554.1	8,674.0	540.9	392.0	393.6	6.3	4.6	4.5
Albany-Schenectady-Troy	424.8	425.4	428.4	20.6	14.6	14.0	4.8	3.4	3.3
Binghamton	127.8	128.2	128.5	7.1	4.7	4.3	5.6	3.7	3.3
Buffalo	450.6	450.2	456.9	32.6	20.8	24.2	7.2	4.6	5.3
Elmira	40.7	42.2	43.0	2.3	1.5	1.4	5.7	3.5	3.3
Glens Falls	57.2	56.2	59.6	3.0	2.3	1.9	5.2	4.1	3.2
Nassau-Suffolk	1,459.2	1,467.8	1,472.0	65.8	45.0	43.2	4.5	3.1	2.9
New York	3,916.2	3,882.3	3,954.9	279.9	210.8	216.2	7.1	5.4	5.5
New York City ¹	3,217.0	3,190.0	3,246.0	254.0	191.0	195.0	7.9	6.0	6.0
Orange County	130.6	131.7	132.0	6.2	4.6	4.1	4.8	3.5	3.1
Poughkeepsie	131.3	129.4	131.7	4.7	3.4	2.8	3.6	2.6	2.1
Rochester	502.7	502.0	505.6	28.5	20.4	19.4	5.7	4.1	3.8
Syracuse	324.7	321.9	323.6	23.1	17.5	17.0	7.1	5.4	5.3
Utica-Rome	140.4	137.1	139.3	8.5	6.0	5.5	6.1	4.4	3.9
North Carolina¹	3,275.9	3,316.2	3,389.4	167.8	161.5	160.2	5.1	4.9	4.7
Asheville	89.3	89.0	91.3	4.1	4.1	4.3	4.6	4.6	4.7
Charlotte-Gastonia-Rock Hill	604.8	626.8	638.6	28.6	26.0	25.7	4.7	4.2	4.0
Greensboro-Winston-Salem-High Point	508.9	516.0	525.8	22.6	21.9	22.0	4.4	4.2	4.2
Raleigh-Durham	387.3	397.2	407.2	12.1	14.1	13.9	3.1	3.6	3.4
North Dakota	352.5	341.7	347.3	20.8	14.4	13.7	5.9	4.2	4.0
Bismarck	45.6	45.8	45.6	2.8	1.9	1.7	6.2	4.2	3.7
Fargo-Moorhead	81.7	84.8	85.0	3.4	2.6	2.5	4.1	3.0	2.9
Grand Forks	35.7	35.5	35.6	1.3	1.1	1.1	3.6	3.2	3.1
Ohio¹	5,294.6	5,293.4	5,325.5	412.7	384.4	358.0	7.8	7.3	6.7
Akron	319.0	317.3	321.2	23.2	23.1	21.6	7.3	7.3	6.7
Canton	192.4	189.7	189.2	18.6	16.2	14.1	9.7	8.5	7.5
Cincinnati	734.7	747.8	756.7	47.2	48.9	44.3	6.4	6.5	5.9
Cleveland	954.6	940.0	954.9	71.6	60.3	56.7	7.5	6.4	5.9
Columbus	679.6	696.4	696.7	39.5	40.3	35.9	5.8	5.8	5.1
Dayton-Springfield	463.0	467.3	467.1	29.2	28.4	24.8	6.3	6.1	5.3
Toledo	309.9	313.7	314.9	28.1	24.4	22.0	9.1	7.8	7.0
Youngstown-Warren	226.0	227.2	231.1	22.8	21.8	29.8	10.1	9.6	12.9
Oklahoma	1,614.3	1,585.8	1,567.6	139.5	120.2	110.7	8.6	7.6	7.1
Enid	31.8	30.3	30.1	2.6	2.2	1.8	8.2	7.1	6.1
Lawton	49.6	48.4	48.3	2.5	2.6	2.3	5.0	5.3	4.8
Oklahoma City	526.9	509.7	509.3	35.9	31.7	29.5	6.8	6.2	5.8
Tulsa	368.2	364.4	360.4	32.4	29.9	27.3	8.8	8.2	7.6
Oregon	1,353.4	1,381.4	1,360.1	108.8	75.8	76.9	8.0	5.5	5.7
Eugene-Springfield	131.2	136.4	131.4	10.4	7.1	6.7	8.0	5.2	5.1
Portland	605.6	623.0	613.4	44.1	31.1	31.5	7.3	5.0	5.1
Salem	125.7	129.6	131.2	9.9	7.0	6.8	7.9	5.4	5.2
Pennsylvania¹	5,786.6	5,713.3	5,787.3	389.1	354.2	334.7	6.7	6.2	5.8
Allentown-Bethlehem	325.7	318.2	323.7	24.6	15.8	17.3	7.6	5.0	5.3
Altoona	61.1	59.6	59.8	5.6	4.6	4.0	9.2	7.7	6.6
Beaver County	65.3	63.9	64.3	7.1	7.4	7.2	11.0	11.7	11.2
Erie	131.0	129.9	130.5	10.7	10.8	9.9	8.2	8.3	7.6
Harrisburg-Lebanon-Carlisle	313.0	312.7	318.6	14.7	11.3	10.5	4.7	3.6	3.3
Johnstown	98.1	96.0	97.6	10.0	8.7	7.9	10.2	9.0	8.1
Lancaster	214.9	214.4	220.0	8.3	6.4	6.5	3.9	3.0	3.0
Philadelphia	2,412.0	2,423.7	2,448.8	127.3	124.3	121.9	5.3	5.1	5.0
Pittsburgh	978.9	965.6	972.4	73.5	74.2	68.8	7.5	7.7	7.1
Reading	171.9	171.7	170.6	11.4	9.2	7.7	6.6	5.4	4.5
Scranton-Wilkes-Barre	361.6	343.6	351.7	34.0	22.9	24.2	9.4	6.7	6.9
Sharon	50.5	50.8	51.4	3.7	3.7	3.3	7.3	7.3	6.5
State College	56.8	57.1	57.9	3.2	3.5	3.0	5.7	6.2	5.2
Williamsport	57.2	57.9	59.0	3.4	3.1	2.7	6.0	5.3	4.6
York	211.4	208.6	212.0	11.7	9.7	8.7	5.5	4.7	4.1
Rhode Island	512.6	518.4	514.5	23.7	20.0	20.6	4.6	3.9	4.0
Pawtucket-Woonsocket-Attleboro	166.5	167.4	166.1	9.3	7.3	7.2	5.6	4.3	4.3
Providence	330.8	335.9	332.7	15.1	12.7	13.2	4.6	3.8	4.0
South Carolina	1,618.6	1,663.5	1,653.5	107.7	97.6	91.5	6.7	5.9	5.5
Charleston	220.6	232.3	233.2	11.4	11.4	10.6	5.1	4.9	4.5
Columbia	222.3	232.3	229.2	9.5	10.0	9.1	4.3	4.3	4.0
Greenville-Spartanburg	318.1	335.1	330.0	18.7	16.0	14.9	5.9	4.8	4.5
South Dakota	359.3	367.7	362.9	14.5	14.4	14.0	4.0	3.9	3.8
Rapid City	39.0	39.6	39.3	1.3	1.5	1.4	3.4	3.7	3.6
Sioux Falls	68.7	71.2	71.3	2.1	2.2	2.7	3.1	3.0	3.8

See footnotes at end of table.

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

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

(Numbers in thousands)

State and area	Civilian labor force			Unemployed					
				Number			Percent of labor force		
	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P	July 1986	June 1987	July 1987 ^P
Tennessee	2,320.3	2,332.2	2,335.3	200.5	158.7	164.4	8.6	6.8	7.0
Chattanooga	202.0	201.5	201.4	14.5	12.3	12.2	7.2	6.1	6.1
Johnson City-Kingsport-Bristol	209.6	213.3	215.2	16.9	15.7	15.9	8.1	7.3	7.4
Knoxville	277.5	278.9	278.7	21.5	18.2	18.1	7.8	6.5	6.5
Memphis LMA	436.0	444.5	441.2	29.9	26.7	26.1	6.9	6.0	5.9
Nashville	505.2	506.9	506.8	26.6	22.8	24.2	5.3	4.5	4.8
Texas¹	8,337.6	8,483.0	8,636.3	779.0	815.8	753.8	9.3	9.6	8.7
Abilene	55.8	57.0	57.9	5.7	5.4	4.9	10.3	9.5	8.5
Amarillo	100.3	103.3	106.0	7.0	7.4	7.0	7.0	7.2	6.6
Austin	422.5	438.0	444.2	24.6	32.9	30.7	5.8	7.5	6.9
Beaumont-Port Arthur	166.8	166.7	169.1	25.5	24.3	22.1	15.3	14.6	13.1
Brazoria	82.2	84.4	86.1	9.8	9.4	8.9	11.9	11.1	10.3
Brownsville-Harlingen	95.8	98.9	100.4	15.5	15.3	14.6	16.2	15.5	14.6
Bryan-College Station	57.6	57.6	59.4	4.3	4.0	3.7	7.4	6.9	6.2
Corpus Christi	168.6	170.9	171.9	21.3	23.4	20.6	12.6	13.7	12.0
Dallas	1,443.9	1,454.5	1,488.8	84.1	106.2	99.7	5.8	7.3	6.7
El Paso	229.0	239.0	241.7	27.4	29.2	26.5	12.0	12.2	11.0
Fort Worth-Arlington	668.2	693.0	711.4	46.0	56.6	53.5	6.9	8.2	7.5
Galveston-Texas City	110.6	112.1	113.5	12.7	14.1	12.7	11.5	12.5	11.2
Houston	1,645.2	1,653.0	1,682.1	181.6	172.2	156.6	11.0	10.4	9.3
Killeen-Temple	91.5	95.6	97.7	7.4	8.3	7.7	8.1	8.7	7.9
Laredo	45.2	46.9	47.3	7.4	7.9	7.1	16.4	16.8	15.1
Longview-Marshall	82.8	82.0	83.7	11.3	10.0	9.3	13.7	12.2	11.1
Lubbock	112.1	112.3	115.6	7.8	8.2	7.9	7.0	7.3	6.8
McAllen-Edinburg-Mission	140.8	148.9	147.7	26.4	25.7	26.6	18.8	17.3	18.0
Midland	53.4	52.9	53.4	6.8	5.6	4.9	12.7	10.8	9.2
Odessa	60.9	58.7	58.3	11.1	7.4	6.2	18.3	12.5	10.7
San Angelo	46.4	46.9	47.6	3.8	3.2	3.0	8.3	6.9	6.2
San Antonio	591.4	615.0	627.1	43.3	56.0	52.2	7.3	9.1	8.3
Sherman-Denison	49.0	50.2	51.6	4.0	4.3	4.1	8.1	8.6	8.0
Texarkana	58.2	58.6	59.5	5.3	5.5	5.0	9.2	9.4	8.4
Tyler	77.2	78.9	80.5	6.8	7.8	7.3	8.7	9.8	9.0
Victoria	39.2	39.4	40.2	4.6	4.1	3.5	11.6	10.5	8.8
Waco	91.1	95.3	96.7	7.5	8.5	7.9	8.3	8.9	8.2
Wichita Falls	58.1	59.5	60.2	5.0	5.2	4.6	8.6	8.8	7.6
Utah	755.9	762.0	753.9	44.6	49.7	47.8	5.9	6.5	6.3
Provo-Orem	95.8	96.7	95.8	5.1	7.0	6.5	5.3	7.2	6.8
Salt Lake City-Ogden	500.3	505.0	501.2	26.9	30.1	29.1	5.4	6.0	5.8
Vermont	296.6	293.7	295.5	12.8	9.8	9.5	4.3	3.3	3.2
Burlington	72.7	74.4	74.9	2.4	1.8	1.8	3.4	2.4	2.4
Virginia	2,903.9	3,018.2	3,016.4	147.3	138.9	129.7	5.1	4.6	4.3
Charlottesville	62.1	64.0	63.8	2.1	2.3	1.9	3.5	3.5	3.0
Danville	50.2	50.7	50.5	4.9	3.4	3.2	9.8	6.8	6.4
Lynchburg	68.6	71.2	69.7	4.5	4.0	3.5	6.6	5.6	5.0
Norfolk-Virginia Beach-Newport News	580.0	605.8	604.2	28.2	30.3	28.4	4.9	5.0	4.7
Richmond-Petersburg	408.0	429.3	428.4	18.4	17.8	16.0	4.5	4.2	3.7
Roanoke	118.2	123.6	124.2	5.8	4.8	4.7	4.9	3.9	3.8
Washington	2,230.6	2,251.9	2,225.3	181.5	164.8	156.3	8.1	7.3	7.0
Seattle	966.3	985.1	987.9	63.6	60.8	56.6	6.6	6.2	5.7
West Virginia	752.8	745.1	751.1	86.4	67.4	72.9	11.5	9.1	9.7
Charleston	118.0	118.5	119.8	10.4	9.3	9.7	8.8	7.8	8.1
Huntington-Ashland	127.6	126.5	126.8	14.5	12.7	12.2	11.3	10.1	9.6
Parkersburg-Marietta	72.1	73.1	73.0	7.5	5.8	5.5	10.3	7.9	7.6
Wheeling	73.5	72.1	71.6	8.6	6.2	5.6	11.7	8.7	7.9
Wisconsin	2,426.8	2,527.8	2,510.8	156.4	140.2	128.7	6.4	5.5	5.1
Appleton-Oshkosh-Neenah	160.1	167.4	167.1	10.3	8.7	7.8	8.4	5.2	4.7
Eau Claire	68.0	72.2	71.6	4.0	3.8	3.5	5.9	5.3	4.9
Green Bay	100.2	106.0	104.2	5.4	5.8	5.0	5.4	5.5	4.8
Janesville-Beloit	68.7	71.6	70.7	5.2	5.0	4.6	7.5	7.1	6.5
Kenosha	51.2	54.5	54.1	5.7	3.9	3.6	11.2	7.2	6.6
La Crosse	49.4	52.0	51.8	2.8	2.5	2.2	5.6	4.9	4.2
Madison	203.3	213.5	212.8	8.5	7.3	7.5	4.2	3.4	3.5
Milwaukee	709.3	744.3	734.3	42.9	39.5	34.7	6.1	5.3	4.7
Racine	84.3	87.1	86.6	6.9	5.7	5.7	8.2	6.6	6.6
Sheboygan	53.1	56.7	56.1	3.3	3.4	3.1	6.3	6.1	5.5
Wausau	58.6	61.1	61.1	3.7	3.4	3.0	6.3	5.6	4.9
Wyoming	257.7	253.7	246.7	21.6	18.6	17.2	8.4	7.3	7.0

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

² Not available.

^P = preliminary.

NOTE: Data refer to place of residence. Estimates for 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-

bile 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	1,330	1,500	6,000
Jan. 1960 to Feb. 1963 .	33,500	2,333	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	Occupation—Continued		
Men, 20 years and over . . . . .	.15	.15	Precision production, craft, and repair	0.32	0.35
Women, 20 years and over . . . . .	.17	.18	Machine operators, assemblers, and inspectors . . . . .	.50	.57
Both sexes, 16 to 19 years . . . . .	.65	.77	Transportation and material moving . . . . .	.57	.64
White workers . . . . .	.11	.12	Handlers, equipment cleaners, helpers, and laborers . . . . .	.70	.80
Black workers . . . . .	.52	.54	Farming, forestry, and fishing . . . . .	.65	.73
Married men, spouse present . . . . .	.15	.16	Industry		
Married women, spouse present . . . . .	.21	.23	Nonagricultural private wage and salary workers . . . . .	.13	.14
Full-time workers . . . . .	.12	.12	Mining	1.37	1.56
Part-time workers . . . . .	.34	.42	Construction . . . . .	.65	.74
Unemployed 15 weeks and over . . . . .	.06	.08	Manufacturing . . . . .	.27	.30
			Durable goods . . . . .	.34	.38
Occupation			Nondurable goods . . . . .	.42	.48
Executive, administrative, and managerial . . . . .	.21	.24	Transportation, communications, and public utilities . . . . .	.41	.46
Professional specialty . . . . .	.18	.20	Wholesale and retail trade . . . . .	.26	.29
Technicians and related support . . . . .	.49	.55	Finance and services . . . . .	.20	.22
Sales . . . . .	.29	.32	Government workers . . . . .	.18	.19
Administrative support, including clerical . . . . .	.24	.26	Agricultural wage and salary workers	1.22	1.40
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	10	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		63	55
4,000	120	93	88	95	84	80		87	66
6,000	146	113	99	116	94	86		105	58
8,000		129	-	133	97	83		120	23
10,000		143		147	94	70		132	-
15,000		172		177	50			155	
20,000		195		201				170	
30,000		-		236				188	
40,000				261				189	
50,000				278				175	
60,000				288				141	
70,000				293				61	
80,000				293					
100,000				273					
120,000				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	12	8	8	13	13
100	16	18	17	18	11	11	18	18
500	37	40	38	35	25	25	39	34
1,000	51	54	52	37	36	35	54	36
2,000	72	70	69		50	47	72	-
4,000	99	78	85		70	62	88	
6,000	118	60	87		86	70	88	
8,000	132				98	73	71	
10,000	143				109	71		
15,000	160				131	42		
20,000	165				148			
30,000	-				174			
40,000					191			
50,000					203			
60,000					210			
70,000					212			
80,000					211			
100,000					193			
120,000					153			

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 =

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

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)									
	1	2	5	10	15	20	25	30	35	50
50	2.09	2.94	4.57	6.28	7.46	8.34	9.01	9.05	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

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	14.48
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	
10,000 . . . . .	.16	.23	.36	.50	.60	.68	.75	.80		
20,000 . . . . .	.12	.16	.25	.35	.42	.47	.51	.54		
60,000 . . . . .	.07	.09	.14	.19	.22	.23	.24			
100,000 . . . . .	.05	.07	.11	.14	.15	.15				

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		127	
10,000	149	165	102	144	157	155		145	
15,000	180	198	-	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		236	201	174		242	
50,000	296	301		-	-			-	
75,000	331	304							
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 as they occur. Additional industry detail may be obtained from the State agencies listed on the inside back cover of each issue. These statistics are based on the same

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

Table Q. Errors of preliminary employment estimates

Industry	Root-mean-square error of—		Industry	Root-mean-square error of—	
	Monthly level	Month-to-month change		Monthly level	Month-to-month change
Total	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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